

Chapter 4: The Rural Water Supply and Sanitation (RWSS) Programme

A. Subsector Issues and NWSSIP I

NWSSIP I was based on the fact that rural water supply and sanitation are vital to rural people, with significant effects on health, education and gender, and with a consequent large role in poverty reduction. Before NWSSIP I, implementation by the public sector had been inefficient, and external financing was largely channeled through projects. Implementation by communities had been much more successful. Overall, resources allocated and implementation capacity in the rural water sector were well below those of the urban water sector.

With this background, NWSSIP I targeted an ambitious objective of rapid expansion in services in rural areas. Targeting "half the MDGs", the programme aimed at providing services to more than 5 million inhabitants by 2015 and at improving sustainability of implemented schemes.

In pursuit of the set objectives, NWSSIP I adopted four policies: (1) decentralized implementation mechanisms; (2) enhancement of beneficiary community role; (3) adopting a demand responsive approach (DRA) to identify targeted communities and making this approach the standard practice; and (4) targeting and cost effectiveness by identifying means to implement projects that meet the needs at lower cost.

The NWSSIP I action plan provided for nine actions grouped under four strategic heads:

Increasing coverage and implementation capacity through: setting up sector strategy and coordination of activities; improving project/scheme implementation; and broadening the range of partners

Improving technology choice by: broadening available technology choices; and integrating sanitation and hygiene in rural water schemes

Sourcing the water by: ensuring and protecting water resources and their quality

Improving targeting and sustainability by: adopting bottom-up approaches throughout and mainstreaming gender issues; promoting sustainability through broadening the range of partners so as to include, for instance, more NGOs and community institutions; and directing available finance to the greatest need (targeting).

During the implementation of NWSSIP I considerable gains have been registered. According to JAR III, safe water coverage increased from 25% of the rural population in the base year (2002-2003) to 44% by the end of 2007. Sector agencies brought safe water to 3.3 million new beneficiaries through nearly 1,300 new schemes during the five year period 2003-7, with GARWSP accounting for 58%, PWP for 17% and SFD and RWSSP for 10% each. In 2007 alone, the subsector agencies reported that they had delivered coverage in safe water to a further two thirds of a million beneficiaries (see table 4.1).

Table 4.1: Numbers of schemes and of beneficiaries by agency and by year 2003-7 (beneficiaries in 000s)

Agency	2003		2004		2005		2006		2007		2003-7	
	Sch	Benef 000s	Sch.	Benef 000s	Sch.	Benef 000s	Sch.	Benef 000s	Sch.	Benef 000s	Total benef	%
GARWSP	154	427	145	362	127	321	215	498	106	318	1,926	58
PWP	33	139	23	124	26	88	33	69	48	133	553	17
SFD	40	121	23	98	3	2			67	97	318	10
UNICEF	9	29	8	31	9	12	4	24			96	3
CARE			6	2	28	12					14	1
DIA	2	6			3	9	2	5	2	5	25	1
COOPI							1	13			13	-
RWSSP	13	40	14	42	56	58	40	84	42	117	341	10
Red Cross							5	9			9	-
Triangle							4	12			12	-
Total	251	762	219	659	252	502	304	714	265	670	3,307	100
Coverage	31%		35%		38%		41%		44%			

Sanitation coverage also increased, but by considerably less, from 20% to 21% over the same period. The performance of GARWSP has improved, and public and NGO agencies are working together, in general satisfactorily. Decentralization, the demand responsive approach and user responsibility have all been implemented with some success. GARWSP is launching an appraisal study on the future role of its head office in the framework of decentralization of most functions to the branches. JAR III recorded important investments in capacity building, including a staff incentives scheme in place at GARWSP and significant investment in training across the sub-sector.

There are however a number of continuing concerns. Despite many years of effort, the rural water sector still lacks the clear agreed strategy that is, for example, enjoyed by the urban water sector. GARWSP and the agencies working in the rural water sub sector (PWP, SFD, RWSSP) are increasingly cooperating but are still developing procedures for joint programming and for alignment of their approaches. The tubewell still predominates as the water source, despite the dim outlook for groundwater. The depletion of water resources increases costs and threatens the sustainability of schemes. Some implementation problems persist. There is a lack of good information, and monitoring and evaluation systems need to be completed.

A constraint in rural water has been the lower than expected allocation of financial resources to the sub-sector. Financing allocated by government and donors averaged only 58% of the NWSSIP I targets, and actual spending has averaged barely half of the

originally planned levels (see Table 4.2). However, two positive factors have emerged. First, absorptive capacity has been going up – sub-sector disbursements have risen from \$31 million in 2005 to \$50 million in 2007. Second, implementation efficiency has been quite high, with sector agencies able to disburse 90% or more of the approved budgets.

Table 4.2: Budgets and disbursements 2005-7 (\$ millions)

	NWSSIP I target	Approved	% of NWSSIP I target	Disbursed	% of NWSSIP I target
2005	61	31	51%	31	51%
2006	79	47	59%	40	51%
2007	98	59	60%	50	51%
2005-7 average	79	46	58%	40	51%

Source: JAR III

The NWSSIP Update has therefore introduced some key changes and improvements that are expected to get the programme fully on track and up to speed. These changes and improvements are discussed in Sections B and C below. The changes and improvements will be introduced progressively over several years (see the Action Plan summarized in Section C below) but some will be started as early as 2008. For example, JAR III recorded preparations for a joint field inventory of rural water schemes, agreement on a common definition of coverage, and launch of an “interventions map” to allow joint planning by agencies.

B. The NWSSIP Update

Programme overview

The objectives set in the NWSSIP Update are broadly similar to those of NWSSIP I, slightly reordered and strengthened. The goal is to *provide safe, sustainable, affordable and equitable water along with appropriate sanitation*. Three objectives are targeted: (1) to increase access for the entire rural population; (2) to keep services sustainable and affordable; (3) and to ensure that agencies operating in the sub-sector deliver efficient, least cost projects on a demand-driven basis. The attached Results Chain shows how the outputs and outcomes of the Update contribute to these objectives.

In summary, the main themes and changes of the Update are as follows:

- There is a clear and appropriate investment programme. The large investment in accompanying measures such as decentralization, partnership approaches and interagency coordination is expected to increase absorptive capacity and the efficiency and sustainability of outcomes.
- All agencies operating in the subsector will be aligned on the NWSSIP Update strategy with harmonized programming mechanisms and

implementation procedures. Joint approaches will be aided by the preparation of the interventions map and a common implementation manual, by joint planning and selection of appropriate technology, and by strengthened coordination led by GARWSP.

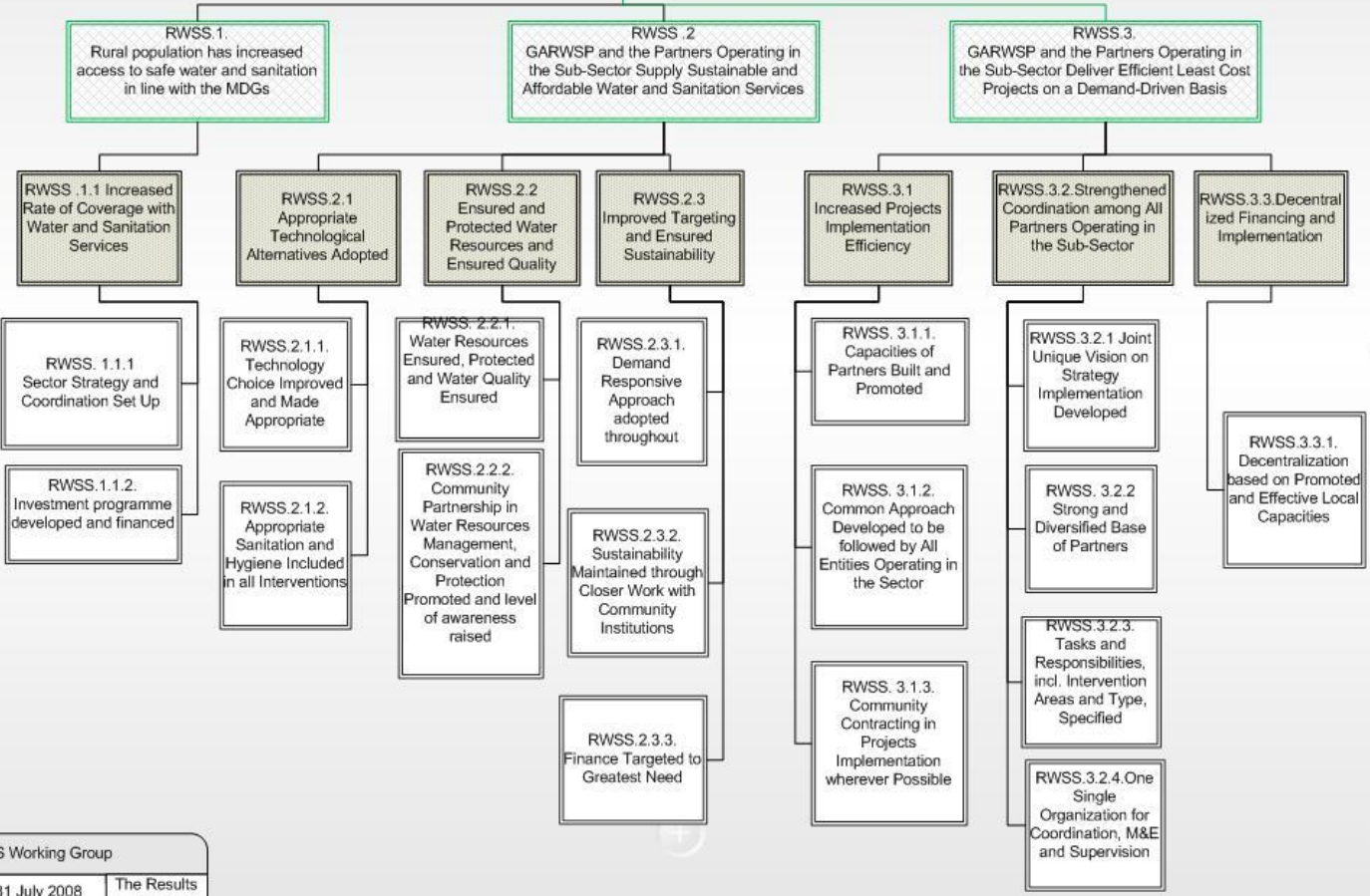
- The water resource constraint is factored in, and there is a move to work more closely with communities and with NWRA on this.
- Participatory approaches are to be institutionalized, including the Demand Responsive Approach, water users committees and societies, and community contracting.
- Sanitation and hygiene education will be systematically factored in to projects.
- NGOs will be encouraged to participate in service provision.

It is expected that these changes will allow GARWSP and the other agencies operating in the sub-sector to increase their effectiveness in delivering expanded, sustainable rural water and sanitation services.

RWSS – The results Chain, 31 July

Long-term Outcome Impact
Outcome
Outputs

RWSS. Providing Safe, Sustainable and Equitable Water along with Appropriate Sanitation



RWSS Working Group		
NWSSIP Update	31 July 2008	The Results Chain

The investment programme

A large investment (Table 4.3) over the eight years 2008-2015 of \$828.8 million by GARWSP and the other public agencies operating in the sub-sector is expected to bring safe water to an additional 6.4 million rural people, and ensure that appropriate safe sanitation facilities accompany each water supply investment.¹

Table 4.3: Public sector investment in rural water and sanitation 2008-2015 (\$ 000s)

	2008-2010		2011-2015		Total 2008-2015	
	\$ mn	Coverage	\$ mn	Coverage	\$ mn	Coverage
Mechanized systems						
- GARWSP	178.3	1,355,000	373.5	2,838,000	551.7	4,193,000
- Public Works Project	35.8	276,000	59.7	459,000	95.6	735,000
- Rural Water Supply Project ²	21.5	144,000	8.6	57,000	30.1	201,000
- Other schemes	0.5		-		0.5	
Water harvesting systems						
- Social Fund for Development	46.5	522,000	72.9	817,000	119.4	1,339,000
Sub-total: water supply	282.6	2,297,000	514.7	4,171,000	797.3	6,468,000
- SFD rural sanitation	5.4		6.5		11.9	
Total physical investment	288.0		521.2		809.2	
Policy implementation, institutional development	13.4		6.2		19.6	
TOTAL	301.4		527.4		828.8	

Source: EAYRB

GARWSP, which covered an additional 318,000 beneficiaries in 2007, will remain the largest investor in the sub-sector, spending between \$60 million and \$80 million a year and bringing an annual increment of coverage of 450-600,000 people served by mechanized systems. Over the period 2008-2015, GARWSP is projecting to cover an additional 4.2 million people, about 65% of the additional population to be served 2008-2015, for a total expenditure of \$552 million.

The Public Works Project (PWP), which covered an additional 133,000 beneficiaries in 2007, will continue to spend about \$12 million a year to cover an annual increment of 92,000 people. Over the plan period PWP is expecting to cover an additional 735,000 people (11% of the total) through mechanized systems for a total cost of \$96 million.

RWSSP, which covered an additional 116,000 beneficiaries in 2007, is expected to phase out its operations in 2011. It will invest about \$30 million in 2008-2011 to cover an extra 201,000 people (3% of the total) through mechanized systems.

The Social Fund for Development will continue to specialize in potable water schemes based on water harvesting. In 2007, SFD covered an additional 97,000 beneficiaries. SFD investment is expected to increase, with SFD serving an annual incremental

¹ The Update proposes that 10% of the investment cost of water projects should be allocated to sanitation. The population covered by safe sanitation will thus increase rapidly.

² RWSSP is expected to phase out its operations in 2011

population of about 162,000 people for an average annual investment of \$15 million. Over the period 2008-2015, it is expected that about 1.3 million extra people (21% of the total) will be served, for a total investment of \$11.9 million.

Per capita investment costs have been calculated by dividing the investment costs for projects by the population to be covered. On this basis, costs for mechanical systems are in the range of about \$125 per person connected. The per capita cost for the SFD water harvesting schemes is about \$85 per person.

In addition, SFD will continue to implement the community-led “Total Sanitation” approach, covering about 81,000 people annually with local sanitation for an annual investment of about \$300,000. Over the period 2008-2015, it is expected that about 650,000 extra rural people will be served. Total SFD investment in rural sanitation will be about \$11.9 million.

The programme also considers the role of NGOs and CBOs in service provision. These organizations will be brought within the coordination mechanism for sub-sector agencies, and are expected to provide community mobilization and training services (see Output 3.2.2 below). It is also possible that existing CBOs and qualified NGOs could benefit from output-based aid under the proposed Sector Wide Approach (SWAp).

Coverage targets

Table 4.4: Rural population covered by water supply and sanitation

		Rural population	Water supply		Sanitation	
			Coverage	%	Coverage	%
Base year	2002	13.80 mn	3.40 mn	25%	2.80 mn	20%
Actual	2007	14.96 mn	6.80 mn	45%	3.14 mn	21%
NWSSIP Update Target	2015	19.50 mn	14.0 mn	> 72%	-	-

NWSSIP I had set ambitious targets: an extra 3.5 million people served with safe water 2004-9, and a further 5.4 million people served 2010-2015. In practice, implementation appears to have been ahead of even these ambitious targets, with a further 3.4 million rural people covered 2004-2007, raising coverage from 25% in 2002/3 to 44% in 2007. It appears that the NWSSIP I 2009 target of 47% coverage could thus be readily achieved. The NWSSIP Update therefore proposes more ambitious targets of 60% coverage by 2010, and 72-85% coverage by 2015.³

By contrast with water supply, progress on sanitation against NWSSIP I targets has been disappointing. The target for 2004-9 was to bring sanitation services to an extra 3.7 million rural people, and to attain 37% coverage. Actual achievement in 2007 was below target, with coverage at the end of 2007 of only 21%. The NWSSIP Update investment

³ In order to ensure that reliable empirical data are established and to provide for accurate tracking over time, sub-sector partners have agreed to carry out a field inventory, to be initiated in late 2008 (see 2.3.3 in Part C below). This inventory will effectively establish a new and reliable baseline for planning and monitoring under the NWSSIP Update.

programme provides for an average 10% of every project value to be allocated to sanitation investment, along with the appropriate health and hygiene education, so that sanitation investments can be made that are appropriate to each community situation and expressed need.

The NWSSIP Update process also allowed partners in the subsector to agree on a definition of “coverage” (see box).

The agreed definitions of water supply and sanitation coverage

- **Water supply coverage:** *the availability of 30 litres per capita per day of safe water within a fetching time not exceeding 30 minutes round trip*
- **Sanitation coverage:** *the availability of adequate means of human waste disposal without causing threats to public health or the environment*

As for urban water, achievement of these ambitious targets depends upon the availability of financing and on the implementation capacity of GARWSP and other agencies operating in the sub-sector. It is expected that the introduction of the SWAp approach based on the NWSSIP Update will increase the finance available. The considerable investment in capacity building and the completion of the GARWSP decentralization process should increase implementation capability. Nonetheless, the targets remain indicative. Lower levels of financing, or slower than expected improvements in implementation capacity, will result in slower extension of coverage.

In view of the uncertainties about financing levels and the pace of implementation, the proposed investment program and related targets will be reviewed and adjusted after three years in a “mid-term review”, the results being presented at the JAR 2011.

Policy implementation and institutional development

Total investment in policy implementation and institutional development (Table 4.5) is expected to be a very sizable \$19.6 million 2008-2015. This high level of investment in institution building is well justified by the need to achieve further efficiency gains in order to deliver the massive improvements in sustainable coverage which are being targeted.

About one third of the proposed investment (\$6.5 million, 3.3) will be devoted to the completion of the GARWSP decentralization programme, which is expected to be completed by 2010-2011. GARWSP branches will be equipped and staffed to function as fully empowered decentralized agencies working with local government and communities on a demand driven basis and with authority to allocate, commit and expend the resources allocated to them.

Significant investments (\$3.8 million, 2.2) will also be made in ensuring sustainability of water resources, largely through collaboration with NWRA and communities on sustainable management plans.

Other major institutional investments will be in adopting improved common approaches to implementation (\$3.1 million, 3.1) and in enlarging the technology choice and ensuring that sanitation is systematically factored in (\$2.3 million, 2.3).

Investment will also be made in improving poverty targeting and community self-management (\$1.4 million, 2.3), and in institutionalizing coordination (\$0.4 million, 3.2).

The NWSSIP Update outcomes, outputs and costs are summarized in Table 4.6 and discussed in more detail in Section C below.

Actions that will need to be jointly planned and implemented

For rural water supply, the principal program areas that need to be jointly planned and implemented are⁴:

Table 4.5: Inter-agency approaches for rural water and sanitation (lead agency in bold)

Cross cutting topic	Agencies	Joint actions	Reference
2. Developing WUAs as the basic building block of water management	RWSS agencies , NWRA, MAI, NGOs, WUAs	Capacity building of effective and sustainable WUAs for rural water	2.3.2
3. Sourcing water	RWSS agencies , NWRA, EPA, basin committees, local authorities, WUAs	Map, identify and monitor resources within basin plans	2.2.1
		Sustainable management of RWSS sources	2.2.2
4. Alternative water sources	RWSS agencies , NWRA, SFD, private sector	Development and distribution of low cost technologies for drinking water supply	2.1.1

⁴ See Chapter 1B for a discussion of the whole range of actions that need to be jointly planned and implemented within an IWRM approach.

**Table 4.6: NWSSIP Update of the rural water supply and sanitation programme
Outcomes, key outputs and costs**

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
Objective 1: to increase access for the entire rural population					
1.1 Increased coverage	NWSSIP Update approved and becomes obligatory for all sub-sector agencies and a tool for coordinating implementation (1.1.1)	NWSSIP Update approved in early 2009	408	-	408
	Physical investment programme implemented	6.4 million extra rural people get water supply All water supply schemes have provision for appropriate sanitation	288,024	521,183	809,207
Objective 2: to keep services sustainable and affordable					
2.1 Selection of appropriate technologies	Technology choice improved (2.1.1)	Decrease of per capita cost	2,000	1,427	3,427
	Sanitation and hygiene included (2.1.2)	Number of projects with appropriate sanitation			
2.2 Sustainable quality water sources	Water quality and quantity protected (2.2.1)	All rural water supply wells are NWRA licensed	1,642	2,091	3,733
	Community partnership in water resources management (2.2.2)	Number of water user committees and societies operational			
2.3 Targeted interventions and sustainable community institutions	Demand responsive approach applied systematically (2.3.1)	Increased coverage in poverty target areas	1,326	765	2,091
	All projects managed by committees or societies (2.3.2)	Target 100%			
	Inventory of schemes (2.3.3)	Inventory complete by 2009			
Objective 3: to ensure that agencies deliver efficient, least cost projects on a demand-driven basis					
3.1 Increased project implementation efficiency	Agency capacity built (3.1.1)	Average project cycle shortened	1,684	1,530	3,214
	Common approach (3.1.2)	Adoption of common implementation manual in 2008			
	Community contracting (3.1.3)	Number of projects adopting community contracting			
3.2 Strengthened coordination	Coordinated annual planning (3.2.1)	Unified agreed annual plan from 2009	174	76	250
	NGO participation (3.2.2)	Number of projects involving NGOs			
	Intervention areas specified (3.2.3)				

	Common evaluation (3.2.4)	Regular evaluation reports			
3.3 GARWSP decentralization	GARWSP branches fully empowered (3.3.1)	Decentralization compete by 2010	6,135	330	6,465
Total Physical investment			288,024	521,183	809,207
Total Policy implementation and institutional development			13,367	6,221	19,588
TOTAL			301.391	527,403	828,794

Source: Log Frame, Action Plan, EAYRB

C. The Action Plan

Outcome 1.1 Increased coverage

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
1.1 Increased coverage	NWSSIP Update approved and becomes obligatory for all sub-sector agencies and a tool for coordinating implementation (1.1.1)	NWSSIP Update approved in early 2009	408	-	408
	Physical investment programme implemented	6.4 million extra rural people get water supply All water supply schemes have provision for appropriate sanitation	288,024	521,183	809,207

In order to achieve the outcome of increased coverage, the action plan provides for adoption of the NWSSIP Update as the *sector strategy* and for a well-articulated and enlarged *investment programme*.

Following several years of increasing coordination between agencies in the sub-sector, the NWSSIP Update process brought together all key stakeholders and facilitated agreement on a unified strategy, with harmonized programming mechanisms and implementation procedures. The action plan reflects this agreement, and the NWSSIP Update, once approved, will become the shared strategy, guiding all agencies.

Outcome 2.1 Appropriate technologies

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
2.1 Selection of appropriate technologies	Technology choice improved (2.1.1)	Decrease of per capita cost	2,000	1,427	3,427
	Sanitation and hygiene included in all interventions (2.1.2)	Number of projects with appropriate sanitation			

Current rural water programs offer a limited choice of technologies (the most common choice being mechanical systems). In some areas this may not be the most appropriate or cost effective solution, for example where groundwater resources are inadequate or not sustainable. SFD, PWP and other agencies operating in the sub-sector are already specializing in water harvesting-based supply, and under the NWSSIP Update a planning process will be undertaken at the district level to agree between GARWSP and the agencies operating in the sub-sector on the *most appropriate technology* for each

proposed site and then to assign the project to whichever agency has the most appropriate technology to offer (2.1.1).

In addition, comprehensive manuals on technological options appropriate for rural water and sanitation will be developed, and research and development will be conducted to develop a wider range of technology choices (e.g. the “Total Sanitation” approach, low-cost drinking water treatment means such as silver-coated clay pots etc.). The private sector would be encouraged to participate in production and distribution of these and other low cost drinking water mechanisms.

The NWSSIP Update provides for *sanitation and hygiene* appropriate to local needs and situations to be systematically factored in to all water projects (2.1.2), and for 10% of every project value to be assigned to appropriate on-site or communal sanitation. In addition, hygiene education will be adopted for all projects. The experience of SFD in community-led “Total Sanitation” will be scaled up in coordination between GARWSP and other partners. A budget of \$1.2 million has been allocated to produce booklets and posters, to train staff, and to work through community mechanisms, mass media and education.

Outcome 2.2 Sustainable quality water sources

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
2.2 Sustainable quality water sources	Water quality and quantity protected (2.2.1)	All rural water supply wells are NWRA licensed	1,642	2,091	3,733
	Community partnership in water resources management (2.2.2)	Number of water user committees and societies operational			

As Yemen’s water resources are fully developed, rural water projects are increasingly encountering problems of obtaining a viable water source and many existing sources are drying up. About one third of wells drilled for rural water supply prove dry, and communities managing schemes have to seek new sources frequently. What is needed is *better initial prospection* by the community, the agency and NWRA, and provision for *sustainable community management* to ensure source protection from depletion and pollution. Therefore the action plan (2.2.1, 2.2.2) provides for:

- cooperation with NWRA, EPA and the local authorities within basin plans and under the guidance of basin committees to map, identify and monitor resources
- establishment of water user committees and societies with responsibility for sustainable management
- protection measures and a protection zone around each well
- calling on traditional water source protection rules and practices e.g. the “500 m between wells” rule
- protection and monitoring of water quality

Outcome 2.3 Targeting interventions and sustainable community institutions

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
2.3 Targeting interventions and sustainable community institutions	Demand responsive approach applied systematically (2.3.1)	Increased coverage in poverty target areas	1,326	765	2,091
	All projects managed by water user committees and societies (2.3.2)	Target 100%			
	Inventory of schemes (2.3.3)	Inventory complete by 2009.			

The action plan provides for the *demand responsive approach (DRA)* to be adopted as standard by all agencies, taking poor groups into consideration (2.3.1), and for all projects to be implemented with and managed by *community-based water user committees and societies* (2.3.2).

A DRA manual will be prepared, and systematic capacity building will be provided to water user associations and committees. Agencies which lack skills in social mobilization and community capacity building, particularly GARWSP, will strengthen their capability through recruitment, training and inter-agency collaboration.

In order to target financing to the areas of greatest need, the action plan provides (2.3.3) for a complete *inventory of all rural water supply schemes* in 2008/9, and for the development of an *interventions map* which will provide the basis for planning, allocation of areas of intervention to the agencies, and poverty targeting. A budget of \$800,000 has been assigned for this exercise.

Outcome 3.1 Increasing the efficiency of project implementation

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
3.1 Increased project implementation efficiency	Agency capacity built (3.1.1)	Average project cycle shortened	1,684	1,530	3,214
	Common approach (3.1.2)	Adoption of common implementation manual in 2008			
	Community contracting (3.1.3)	# of projects adopting community contracting			

To achieve this outcome, a programme to build the *implementation capacity* of the agencies will be undertaken (3.1.1). A sector-wide M&E system, to be managed by GARWSP, will be finalized and this will allow development and maintenance of a data base for the entire rural water sub-sector. A training needs assessment will be carried out

during 2008, and from 2009 a coordinated training programme for subsector staff will be implemented (cost \$1.0 million 2009-2010).

Consultations will be held between all sector agencies to align upon a *common approach* (3.1.2), and a common implementation manual will be prepared in 2008. The interventions map (see 2.3.3) will be used as the basis for coordinated planning. *Community contracting* will be introduced wherever possible. Relying on SFD experience, the necessary procedures, handbook and formats will be prepared, and agency staff will be trained (3.1.3).

Outcome 3.2 Strengthening coordination

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
3.2 Strengthened coordination	Coordinated annual planning (3.2.1)	Unified agreed annual plan from 2009	174	76	250
	NGO participation (3.2.2)	Number of projects involving NGOs			
	Intervention areas specified according to the interventions maps (3.2.3)				
	Common evaluation (3.2.4)	Regular evaluation reports			

To achieve stronger coordination, the action plan provides for *joint annual planning* and the adoption of a unified agreed annual programme of interventions, beginning in 2008 for the 2009 programme (3.2.1). This will be supported by the interventions map (2.3.3 and 3.1.2) and by information sharing through a GARWSP-administered website. This heightened level of coordination will be reflected at governorate level, where a system of meetings between all the agencies at least every two months will be introduced from 2008.

The action plan (3.2.2) provides for *encouragement of NGOs to participate* particularly in the poorest communities, and for partnerships under which NGOs will provide community mobilization and training services as an accompaniment to GARWSP hardware investments. The action plan also provides for development of a mechanism to support start up and capacity building for community or privately run schemes, especially in remote or mountainous areas (with cooperation of NGOs and SFD). Limited financing for this is available with SFD, and other donors and/or WSSP may co-finance. As mentioned above, it is also possible that existing CBOs and qualified NGOs could benefit from output-based aid under the proposed Sector Wide Approach (SWAp).

The action plan also provides for *intervention areas for the agencies working in rural water to be mapped onto the interventions maps* (3.2.3). The action plan also provides (3.2.4) for all agencies to align under the GARWSP umbrella for *sub-sector coordination*, and to agree on principles and criteria for monitoring and evaluation.

Outcome 3.3 GARWSP decentralization

Outcome	Key outputs	Leading indicators	Costs (\$ '000s)		
			2008-10	2011-15	2008-15
3.3 GARWSP decentralization	GARWSP branches fully empowered (3.3.1)	Decentralization compete by 2010	6,135	330	6,465

In order to ensure responsiveness to community needs and coordination with local authorities, GARWSP has been pursuing *decentralization*. It has classified all of its 20 branches according to their capacity, and is systematically decentralizing human and financial resource allocation and procurement responsibility, matched with a programme to equip the branches and to develop their human resources. JAR III reported that 11 branches are already empowered to carry out the full range of activities, except for disbursement from the investment budget, which is likely also to be decentralized by 2009. Four further branches were similarly empowered in the second quarter of 2008. A Management Information System has been developed, and branches are linked to headquarters through an information network. The action plan (3.3.1) provides for the decentralization process to be completed by 2010. Investments include capacity building, buildings, vehicles, furniture, equipment, and office machinery. In addition, the action plan provides for associating local authorities in development of district level planning, and for training of water user committees and societies.

RWSS Sub Sector: Log Frame

Goal: Providing safe, sustainable, affordable and equitable water along with appropriate sanitation

Hierarchy of Results	Performance Indicators
Overall impact	
Coverage of safe, sustainable, affordable and equitable water along with appropriate sanitation increased	<ul style="list-style-type: none"> ▶ Water supply service coverage increases from 45% in 2007 to 60% by 2010 and to >72% by 2015 ▶ All water supply projects have provision for appropriate sanitation and health and hygiene education
Outcome 1.1	
Increased rate of coverage of water and appropriate sanitation services	<ul style="list-style-type: none"> ▶ Rate/percentage of annual increase of coverage with water and sanitation services (5% annually) ▶ 6.4 million extra rural people get access to safe water supply 2008-2015
Outputs	
1.1.1 NWSSIP Update approved and becomes obligatory to all agencies operating in the sub sector and a tool for coordinating implementation	▶ NWSSIP Update approved in early 2009
1.1.2 Investment program developed and financed	<ul style="list-style-type: none"> ▶ Investment for hardware components averages (\$100 million) annually ▶ Investment for policy implementation and institutional development averages \$4.0 million annually 2008-2010 and \$1.0 million 2011-2015.
Outcome 2.1	
Appropriate technological alternatives adopted	<ul style="list-style-type: none"> ▶ Decrease of per-head cost ▶ Percentage of implemented projects with alternative technological alternatives that achieve the objectives
Outputs	
2.1.1 Technology choice improved and made appropriate	<ul style="list-style-type: none"> ▶ Comprehensive set of manuals produced by (end 2009) Number of projects with low cost technology

Hierarchy of Results	Performance Indicators
2.1.2 Appropriate sanitation and hygiene Included in all interventions	▶ 10% of cost of all projects is for sanitation and hygiene investments
Outcome 2.2	
Water resources are ensured and protected, and water quality is assured	▶ All rural water supply wells are licenced by NWRA and protected
Outputs	
2.2.1 Water resources ensured and protected, and water quality ensured	▶ Number of water quality laboratories established ▶ Number of water quality laboratories adequately functioning ▶ Number of sources tested
2.2.2 Community partnership in water resources management, conservation and protection promoted, and level of awareness raised	▶ Number of water user committees and societies operational ▶ Number of education campaigns containing water resource management and protection messages
Outcome 2.3	
Targeting improved and sustainability ensured	▶ Field survey of water and sanitation projects coverage conducted and completed by the end of 2008 and results shared by mid 2009 ▶ Interventions map published in 2009
Outputs	
2.3.1 Demand Responsive Approach (DRA) adopted throughout	▶ Number of projects implemented according to the DRA (target 100%)
2.3.2 Sustainability maintained through closer work with community institutions	▶ Percentage of working and non-working projects ▶ Rural schemes implemented involving and organizing water user committees and societies (target 100%) ▶ Local agencies actively participating as implementing partners ▶ Continuity of water supply service in hours (daily, weekly, monthly) ▶ Decrease of projects operation & maintenance costs
2.3.3 Finance targeted to greatest need	▶ Rate of coverage in remote areas with scarce water resources and in poorest districts

Hierarchy of Results	Performance Indicators
Outcome 3.1	
Increased project implementation efficiency	<ul style="list-style-type: none"> ▶ Project implementation period and number of projects implemented accordingly ▶ Rate of coincidence/agreement of results with implementation plans and programs
Outputs	
3.1.1 Capacities of partners operating in the sub-sector and target groups built and promoted	<ul style="list-style-type: none"> ▶ Number of trainees in administrative, technical and social aspects ▶ Establishment of a joint database and a mechanism for information exchange in 2009
3.1.2 Common approach developed and followed by all entities operating in the sub-sector	<ul style="list-style-type: none"> ▶ Issue of a manual for common approach in 2009
3.1.3 Community contracting wherever possible	<ul style="list-style-type: none"> ▶ Number of projects implemented through community contracting
Outcome 3.2	
Strengthened coordination among all partners operating in the sub-sector	<ul style="list-style-type: none"> ▶ Number of sub-sector coordination group meetings for sub-sector partners ▶ GARWSP M&E system and website operational
Outputs	
3.2.1 Joint unified vision on strategy implementation developed	<ul style="list-style-type: none"> ▶ Unified agreed annual plan
3.2.2 Strong and diversified base of partners	<ul style="list-style-type: none"> ▶ Number of projects implemented by NGOs ▶ Number of NGOs active in the sub sector
3.2.3 Tasks and responsibilities, including intervention areas and types, specified	<ul style="list-style-type: none"> ▶ Availability of intervention map showing type of intervention and intervention agencies (based on hydrogeological information) with periodic updating
3.2.4 Single organization for coordination, monitoring & evaluation (M&E) and supervision	<ul style="list-style-type: none"> ▶ Regular periodic reports to supervisory entity
Outcome 3.3	
3.3 Decentralized financing and implementation	<ul style="list-style-type: none"> ▶ GARWSP decentralization complete by 2010
Outputs	
3.3.1 Decentralization based on developed and effective local capacities	<ul style="list-style-type: none"> ▶ Delegation of authorities and responsibilities to GARWSP branches (according to branch class) ▶ Percentage by value of procurement by GARWSP branches ▶ Number of councils preparing plans and implementing projects

NWSSIP Update

RWSS Sector: Action Plan and Budget

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
Output # 1.1.1 : NWSSIP Update approved and becomes obligatory for all sub-sector agencies and a tool for coordinating implementation						
1.1.1.1 Approval of NWSSIP Update	1	<ul style="list-style-type: none"> Follow up Cabinet 	Early 2009	Minister MWE, Council of Ministers		
1.1.1.2 Assess and review GARWSP (head office) tasks, function and future role	1	<ul style="list-style-type: none"> Prepare an appraisal study on GARWSP (head office) actual and future role within the framework of decentralization executive steps 	2009	GARWSP + Partners	\$200,000	MoF, donors (Water Sector Support Program) Mainly RWSSP
		<ul style="list-style-type: none"> Organize workshops (central and provincial) 				
		<ul style="list-style-type: none"> Prepare action plan on GARWSP (head office) role and tasks till 2015 	End of 2010			
		<ul style="list-style-type: none"> Complete legislative framework and legal measures 				
		<ul style="list-style-type: none"> Implement a.m. action plan (especially, capacity building) 				
1.1.1.3 Continue rural water working group joint planning and programming and develop its activity	1	<ul style="list-style-type: none"> Hold periodic meetings for all parties active in the sub-sector (every two months) Prepare joint annual plans and programs 	Continuous	GARWSP and Partners		Within GARWSP Budget + Partners

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
Output # 1.1.2 : Investment program developed and financed						
1.1.2.1 Implementation of RWSS projects through GARWSP and Partners		- Details in the Investment Program -	2008 - 2015	GARWSP and Partners		MoF + Donors (Water Sector Support Program)
Output # 2.1.1: Technology choice improved and made appropriate						
2.1.1.1 Adopt appropriate sanitation systems that work well under low water consumption per head at rural areas	2	<ul style="list-style-type: none"> Organize workshop to present experience of partners in rural areas in this field 	Mid 2009	GARWSP + Partners	\$ 50000	SFD + Donors
		<ul style="list-style-type: none"> Organize training courses for parties working in the sub sector 	Continuous (annually)		\$ 60000	
2.1.1.2 Develop comprehensive manuals on technological options appropriate for rural water and sanitation	2	<ul style="list-style-type: none"> Collect technical manuals available at all partners (technical, designs, social and environmental studies, project supervision) Design unified manuals for all parties operating in the sub sector, taking specialty of each area into consideration 	2009	GARWSP + Partners	\$ 100000	GARWSP + Partners + Donors
		<ul style="list-style-type: none"> Organize workshops to approve draft manuals 				
		<ul style="list-style-type: none"> Publish and disseminate manuals 				
2.1.1.3 Encourage low-cost objective-achieving technologies through involving the private sector in production and providing of low-cost drinking water treatment means	1	<ul style="list-style-type: none"> Organize a workshop to present drinking water treatment means for rural areas (results achieved by SFD and GTZ of manufacturing and application of silver-coated clay pots) 	Second half 2008	GARWSP + Partners + SFD	\$ 30000	GARWSP + SFD + UNICEF + GTZ + Partners + Donors
		<ul style="list-style-type: none"> Support the experience of GARWSP with UNICEF to conclude and agree on Fluoride reduction means Organize a workshop to present and agree on Fluoride reduction means 	Till end 2008		\$ 20000	UNICEF + Donors
		<ul style="list-style-type: none"> Encourage private sector to manufacture and provide water treatment and purification means 	Continuous till 2015		\$ 160000	SFD + Donors
		<ul style="list-style-type: none"> Continue providing technical support to private sector on 	Continuous (annually)	GARWSP + Partners	Within partners budgets	Donors (Water Sector Support

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
		manufacturing water treatment alternatives and purification units on household level				Program)
RWSS 2.1.2: Appropriate sanitation and hygiene included in all interventions						
2.1.2.1 Water service and sanitation to be combined and appropriate to project area (on-site or communal sanitation)	1	<ul style="list-style-type: none"> • Include appropriate sanitation service in projects study and implementation • Implement all projects with appropriate provision for wastewater evacuation and for sanitation 	continuous	GARWSP + Partners	Investment Program	GARWSP + Partners
2.1.2.2 Hygiene education to be systematic in the sub sector work program, incl. adopting the community-led Total Sanitation (SFD experience) in coordination between GARWSP and partners working in the sub-sector	1	<ul style="list-style-type: none"> • Produce and disseminate awareness raising materials (brochures, booklets, posters, ... etc) • Train staff of the agencies working in the sub sector in wastewater and sanitation issues • Hold awareness raising seminars and organize community awareness campaigns and involve mass media for this purpose • Introduce sanitation and hygiene concepts into school curricula 	2008 - 2010 Continuous/ annually	GARWSP + Partners active in the sub sector + Ministry of Health (MoH) + World Health Organization (WHO)	\$ 1200000 Total	GARWSP + Partners + Donors

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 2.2.1: Water resources ensured, protected and water quality ensured						
2.2.1.1 Set up water users associations WUAs/water users committees WUCs as accompanying obligatory measure for each project	1	<ul style="list-style-type: none"> Organize training programs for WUAs/WUCs Build capacity in community mobilization through recruitment, training and inter-agency collaboration Develop and implement a program for learning lessons from the agencies working in the sub sector Develop a program for integrating or deploying RWSSP community mobilization staff 	continuous	GARWSP + Partners + EPA + NWRA+ WUAs/WUCs + basins committees	\$ One million	Within budgets of GARWSP + Partners
		<ul style="list-style-type: none"> Train GARWSP staff on Set up of water users committees and community participation 	2008 - 2010			
2.2.1.2 Coordinate with NWRA and EPA	1	<ul style="list-style-type: none"> Hold regular coordination meetings with NWRA and EPA 	Continuous	GARWSP + Partners		
		<ul style="list-style-type: none"> Cooperate with NWRA in producing the intervention map 	Continuous			

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
2.2.1.3 Give priority to household demand (Priority to drinking water)	1	<ul style="list-style-type: none"> Define sufficient protection zone and urge NWRA for enforcement 	2008	GARWSP + Partners + NWRA+ WUAs/WUCs + basins committees + local councils		
		<ul style="list-style-type: none"> Develop cooperation agreements at governorate level between RWSS agencies and NWRA to ensure priority to household demand Collaborate with NWRA on site selection, and only drill wells that are licensed and confirmed to have water resource availability Collaborate with NWRA to inventory and subsequently monitor all public and private RWSS schemes 	Continuous			
2.2.1.5 Monitor water quality	1	<ul style="list-style-type: none"> Equip remaining GARWSP branches with laboratories Provide GARWSP and its branches with field/mobile laboratories 		GARWSP + Netherlands		Yemen government + Netherlands + Donors

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
2.2.1.6 Adopt the hydrogeological map to prepare the alternatives and to specify areas of intervention	1	<ul style="list-style-type: none"> • Agree with partners on process to produce the hydrogeological map and how to use it • Develop and agree each year the program of interventions, and map them 	End of 2008			
2.2.1.7 Coordinate and follow up NWRA to implement & enforce the water law to control random drilling	1	<ul style="list-style-type: none"> • NWRA takes the lead in the initiative with support of political will and authorities 		GARWSP + Partners + NWRA		Within budgets of GARWSP + Partners
2.2.1.8 Revive and activate inherited practices and traditions for water resources protection ('Mahager' System)	2	<ul style="list-style-type: none"> • Develop concrete protection zone for each project 	Continuous	GARWSP + Partners + NWRA+ WUAs/WUCs + basins committees + local councils		
		<ul style="list-style-type: none"> • Work with community to prohibit drilling in the protection zone 				
2.2.1.9 Cooperate with MAI to control application of pesticides and fertilizers	1	<ul style="list-style-type: none"> • Organize awareness raising campaigns on safe application of pesticides and fertilizers • Disseminate corresponding awareness material 	Continuous	GARWSP + Partners + MAI		
2.2.1.10 Activate the role of basins committees to protect water basins	1	<ul style="list-style-type: none"> • Hold regular meetings with basins committees 		GARWSP + Partners + NWRA		

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 2.2.2: Community partnership in water resources management, conservation and protection promoted and level of awareness raised						
2.2.2.1 Collect, document and disseminate inherited practices and traditions that support water resources protection and legalize their use	2	<ul style="list-style-type: none"> Record inherited practices and traditions and their effect on services sustainability Produce, publish and disseminate a manual documenting traditions and inherited practices for each area Integrate in community training and education curricula Prepare documentary films about existing and inherited traditions and practices in community management of its water resources Publish awareness material, reflecting information and knowledge gathered & documented 	2009	GARWSP + Partners	\$ 150000	GARWSP + Partners + Donors
2.2.2.2 Encourage and support local community and NGOs initiatives in conservation and protection of water resources	2	<ul style="list-style-type: none"> Conclude mutual agreements within local community to conserve and protect water resources (prohibit pasture, waste disposal, any kind of pollution close to water resources) Hold regular meetings, seminars, consultations Disseminate manuals, brochures and other awareness material Use mass media to raise awareness 	2009	GARWSP + Partners	\$ 150000	GARWSP + Partners + donors + (water sector support program)
2.2.2.3 Identify sites where inherited practices and traditions are successfully functioning to be studied for potential replication	2	<ul style="list-style-type: none"> Survey study to be implemented Develop study document 				
2.2.2.4 Prepare case studies in consultation with knowledgeable rural people at selected sites to revive and improve abandoned systems, techniques, practices, skills and methods	2	<ul style="list-style-type: none"> Conduct case studies 				

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
2.2.2.5 Beneficiaries to contribute in water resources and schemes protection	1	<ul style="list-style-type: none"> • Support community projects based on traditional WRM practices • Encourage cooperation and mutual integration principle among beneficiaries/ community members 				
2.2.2.6 Work with appropriate sustainable inherited practices and traditions/Adopt inherited practices and traditions in projects implementation	1	<ul style="list-style-type: none"> • Incorporate sustainable conventional methods into agency projects 				
2.2.2.7 Get the local community be acquainted with the economic, social, health and environmental benefits of reviving inherited practices and traditions in the conservation and protection of water resources and schemes	2	<ul style="list-style-type: none"> • Form awareness groups and involve them in environmental awareness raising activities • Conduct awareness raising campaigns and disseminate awareness materials to all target groups (women, schools, community-based organizations CBOs, ... etc) • Utilize national and local mass media to promote role of individuals and society in the conservation of natural resources 				

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 2.3.1: Demand responsive approach (DRA) adopted throughout						
2.3.1.1. Involve local communities and local authority in the prioritization and implementation	1	<ul style="list-style-type: none"> Parties operating in the sub sector work in coordination with local councils and local community on developing criteria for intervention priorities during preparation of 2009 plans Adopt and implement DRA as standard Develop DRA manual Carry out training in DRA 	End of 2008	GARWSP + Partners	From sub sector budget	
2.3.1.2 Support establishment and capacity building of beneficiaries committees in planning, implementation and operation towards decentralized needs planning	1	<ul style="list-style-type: none"> Provide technical, financial and administrative training Provide logistic requirements Provide support in projects economic and technical assessment, and support in rectifying deviations/dealing with failures Capacity building of beneficiaries committees and executive administrations to enable efficient economic management to assure necessary revenue for management, operation and maintenance Exchange of experience among projects management committees through organizing and financing mutual visits 	continuous			

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 2.3.2: Sustainability maintained through closer work with community institutions						
2.3.2.1 Consider criteria that ensure projects sustainability	1	<ul style="list-style-type: none"> • Ensure work based on DRA • Take into consideration areas of intervention • Prior knowledge of intervention adequate technology 	continuous	GARWSP + Partners	From sub sector budget	
RWSS 2.3.3: Finance targeted to greatest need						
3.3.3.1 Conduct accurate survey to know areas covered and those uncovered with service	1	<ul style="list-style-type: none"> • Complete and finalize preparations to implement the survey • Conduct experimental survey (Al-Mahra + Al-Gawf) • Prepare all necessary documents, incl. forms and templates • Design necessary software programs • Hold workshops (inauguration/initial, interim and final) • Train survey teams • Conduct data analysis, prepare and publish final report • Map the results of survey on the intervention map (to show service coverage). 	2008	GARWSP + Partners	\$800000	GARWSP, Netherlands, RWSSP, PWP, UNICEF, SFD, Local Councils

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
2.3.3.2 Develop criteria to determine areas of greatest need and specify priority intervention areas (within the unified approach and results of survey)	1	<ul style="list-style-type: none"> Develop areas of greatest need criteria matrix Develop annual sector budget prioritized according to the criteria (jointly with local authorities and key stakeholders) 	2008	GARWSP + Partners		
2.3.3.3 Target poorest areas (according to poverty indicators for each district)		<ul style="list-style-type: none"> Make list of target areas (poorest areas) 				
RWSS 3.1.1: Capacity of partners built and promoted						
3.1.1.1 Complete M&E system	1	<ul style="list-style-type: none"> GARWSP develops information system/database for whole sub sector Other partners join in the data base (regular submission of data and periodic plans, coordination meetings, system at GARWSP with access for GARWSP branches and partners/sub sector agencies) Link M&E system with GARWSP financial and administrative system Train staff of GARWSP and its branches on the M&E system 	2008 - 2009	GARWSP + Partners	\$ 150000	Netherlands + WB+ SFD + PWP
3.1.1.2 Complete unified database at GARWSP	1	<ul style="list-style-type: none"> GARWSP branches and partners provide GARWSP with plans, performance reports and periodic reports 	End of 2009	GARWSP + Partners	250000 \$	GARWSP + donors (Holland, SFD, WB), Water Sector Support Program
3.1.1.3 Conduct training needs assessment study for whole sub sector		<ul style="list-style-type: none"> Prepare training needs assessment study/document for whole sub sector 	End of 2008		100000 \$	
		<ul style="list-style-type: none"> Implement training programs 	2009 - 2010		1000000 \$	

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 3.1.2: Common approach developed to be followed by all entities operating in the sub sector						
3.1.2.1 Develop common approach including work mechanism taking into consideration definition of areas of intervention and distribution of tasks and roles	1	<ul style="list-style-type: none"> Hold Consultations, workshops (initial and final workshops) Issue manual on agreed common approach Issue implementation mechanisms manuals (contracts, community contracts) 	End of 2008	GARWSP + Partners	50000 \$	GARWSP + Partners + Donors
		<ul style="list-style-type: none"> Develop interventions map and identify appropriate interventions for each area by participation 			50000 \$	
RWSS 3.1.3: Community contracting in project implementation wherever possible						
3.1.3.1 Develop mechanisms to allow partners working in the sub sector to implement projects by community contracting (especially those with mechanisms that do not allow community contracting)	1	<ul style="list-style-type: none"> Discuss and agree on community contracting mechanism in the agenda of coordination meetings of parties working in the sub sector Modify mechanisms to adopt community contracting for projects implementation 	Second half of 2008	GARWSP + Partners		Within GARWSP & Partners Budget
3.1.3.2 Organize training programs on community contracting mechanism	1	<ul style="list-style-type: none"> Draft and implement training programs for agencies/parties working in the sub sector Develop and implement training programs for water users committees (WUAs and WUCs) 	End of 2008 (annually)	GARWSP + SDF + remaining Partners	200000 \$	SDF

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 3.2.1: Joint unique vision on strategy implementation developed						
3.2.1.1 Overall coordination among all parties operating in the sub sector at plans development to reach one unified plan <i>(Cooperation agreement realized through regular coordination meetings of GARWSP and partners, agreement on intervention map, then preparation of plans accordingly)</i>	1	<ul style="list-style-type: none"> Each party/partner submit its next year plan to GARWSP for discussion and inclusion in one unified agreed plan Submission of reports of achievement every 3 months 	2008	GARWSP + Partners		
		<ul style="list-style-type: none"> Establish and launch a web site for rural water and sanitation sub sector under GARWSP supervision (within information system) with access enabled to all partners Each party/partner uploads the information and data to and communicate through the web site 	Second half of 2008	GARWSP + Partners		
3.2.1.2 Hold obligatory periodic meetings for all parties on governorate level	1	<ul style="list-style-type: none"> Hold periodic meetings (every 2 months) 	continuous	GARWSP + Partners		

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 3.2.2: Strong and diversified base of partners						
3.2.2.1 Encourage the private sector and NGOs to invest in rural water and sanitation	2	<ul style="list-style-type: none"> Encourage NGOs to participate, particularly in the poorest communities Negotiate GARWSP/NGO partnership, with NGOs carrying out community mobilization and training, developing schemes in poorer areas etc. (NGOs especially acting in reviving Indigenous Traditional Practices on Community Role in Water Resources Management) Provide technical advice (studies, statistics) Provide options for intervention areas Facilitate in order to overcome difficulties and obstacles and promotion (to attract private sector) Develop a mechanism to support start up and capacity building for community or privately run schemes, especially in remote or mountainous areas (with cooperation of NGOs and SFD) 	Continuous	GARWSP + Agencies working in the sub sector	\$15000 (2008) \$ 30000 (2009) \$ 60000 (2010)	SFD
RWSS 3.2.3: Tasks and responsibilities, including intervention areas and type, specified						
3.2.3.1. Adopt intervention techniques map to select the appropriate technology to provide the population with water and to specify areas of intervention	1	<ul style="list-style-type: none"> Map the hydrogeological information into the intervention map Specify intervention type and areas Agree on roles allocation among the agencies working in the sub sector 	2008	Partners GARWSP +		

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
RWSS 3.2.4: One single organization for coordination, M&E and supervision						
3.2.4.1 GARWSP undertakes the supervision and works on continuity of the coordination meetings among all parties operating in the sub sector	1	<ul style="list-style-type: none"> Assure soundness of coordination and intervention and assure non repetition Assure fair allocation of available resources Assure soundness of unified methodological activity and avoid randomness Make use of and exchange accumulated experience Assure soundness of unified information on reality and coverage 	continuous	GARWSP + Partners		Within GARWSP + Partners budget
3.2.4.2 Agree on clear principles and criteria for the evaluation of the accomplishments of the parties operating in the sub sector	1	<ul style="list-style-type: none"> Complete and approve the concept of coverage with water and sanitation Agree on criteria for accomplishment assessment 	2008			
RWSS 3.3.1: Decentralization based on promoted and effective local capacities						
3.3.1.1 Continue GARWSP decentralization measures through its branches at the provinces	1	<ul style="list-style-type: none"> Establish and equip GARWSP branches with lands, buildings, vehicles & trucks, furniture, equipment & machines, stationary and mobile labs <i>(Annex1_GARWSP_5YP_institutional development plan)</i> Gradual transfer of authorities/responsibilities from the center to the branches as per prepared plans for this purpose 	Annually till End 2010	GARWSP	Total Mio US \$ 8.1974	MoF + Donors (Water Sector Support Program)
		<ul style="list-style-type: none"> Authorize GARWSP branches to prepare and implement the investment program 	by 2010			

Activities	P	Monitorable steps	Due date	Key actor	Budget	Financing
3.3.1.2 Build the capacity of GARWSP branches in tendering (preparation, announcement, ... etc)	1	<ul style="list-style-type: none"> • Achieve appropriate staffing for GARWSP branches • Organize training courses on tendering and general business management skills 				
3.3.1.3 Continue capacity building for whole sub sector		<ul style="list-style-type: none"> • Build capacity of community (WUAs/WUC) through organizing consultations, meetings, seminars, training workshops • Provide materials and spaces for WUAs/WUC • Enable the local authorities in plans development and projects implementation through objective-oriented training programs 	<p style="text-align: center;">2009</p> <p style="text-align: center;">Continuous</p> <p style="text-align: center;">For each project</p>			

Yemen
NWSSIP
Expenditure Accounts by Years -- Base Costs
Rural Water Supply and Sanitation (US\$ '000)

	Base Costs								
	2008	2009	2010	2011	2012	2013	2014	2015	Total
1. Physical Infrastructure									
a. Mechanized Systems									
GARWSP Schemes	60,436	58,388	59,443	64,732	72,944	75,699	78,597	81,502	551,741
PWP Schemes	11,945	11,945	11,945	11,945	11,945	11,945	11,945	11,945	95,562
RWSSP Schemes	6,438	7,522	7,522	7,522	1,084	-	-	-	30,089
Other Schemes	492	-	-	-	-	-	-	-	492
Subtotal Mechanized Systems	79,311	77,855	78,910	84,199	85,974	87,644	90,542	93,448	677,883
b. Water Harvesting Schemes									
SFD Schemes	17,497	14,464	14,574	14,574	14,574	14,574	14,574	14,574	119,404
c. Rural Sanitation									
SFD Rural Sanitation	2,810	1,301	1,301	1,301	1,301	1,301	1,301	1,301	11,919
Subtotal physical Infrastructure	99,619	93,620	94,785	100,075	101,849	103,519	106,417	109,323	809,207
2. RWSS Institutional Support									
Sector Strategy 1.1.1	-	204	204	-	-	-	-	-	408
Develop of Appropriate Technology 2.1	449	857	694	286	286	286	286	286	3,427
Protect Water Resources and Ensured Quality 2.2	408	816	418	418	418	418	418	418	3,733
Improve Targeting and Sustainability 2.3	1,020	153	153	153	153	153	153	153	2,091
Increased Projects Implementation 3.1	281	944	459	714	204	204	204	204	3,214
Strengthened Coordination 3.2	31	66	77	15	15	15	15	15	250
GARWSP Decentralization 3.3	3,240	1,690	1,205	165	165	-	-	-	6,465
Subtotal WSS Institutional Support	5,428	4,730	3,209	1,751	1,241	1,076	1,076	1,076	19,588
Total Investment Costs	105,047	98,350	97,994	101,826	103,090	104,595	107,493	110,399	828,794
Physical Contingencies	8,446	8,075	7,828	8,228	8,130	8,214	8,421	8,627	65,968
Price Contingencies	4,146	8,417	17,660	29,043	41,144	54,799	70,996	89,416	315,622
TOTAL	117,639	114,842	123,482	139,097	152,364	167,609	186,909	208,442	1,210,384

File: EAYRB

Yemen
NWSSIP
Project Components by Year -- Base Costs
Rural Water Supply and Sanitation (US\$ '000)

	Base Cost								
	2008	2009	2010	2011	2012	2013	2014	2015	Total
1. Institutional Support									
Sector Strategy 1.1									
Sector Strategy and Coordination 1.1.1	-	204	204	-	-	-	-	-	408
Research & Development of Appropriate Technologies 2.1									
Appropriate Technologies for Water Supply 2.1.1	-	265	214	214	214	214	214	214	1,550
Appropriate Technologies for Rural Sanitation 2.1.2	-	163	61	61	61	61	61	61	530
Hygiene Education 2.1.3	408	408	408	-	-	-	-	-	1,224
Private Sector Involvement 2.1.4	41	20	10	10	10	10	10	10	122
Subtotal Research & Development of Appropriate Technologies 2.1	449	857	694	286	286	286	286	286	3,427
Water Supply Security and Good Quality 2.2									
Water Ensured and of Good Quality 2.2.1	408	510	418	418	418	418	418	418	3,427
Community Partnership 2.2.2	-	306	-	-	-	-	-	-	306
Subtotal Water Supply Security and Good Quality 2.2	408	816	418	418	418	418	418	418	3,733
Improve Targeting and Sustainability 2.3									
Promotion of DRA 2.3.1	204	153	153	153	153	153	153	153	1,275
Partnership with Community Institutions 2.3.2	816	-	-	-	-	-	-	-	816
Subtotal Improve Targeting and Sustainability 2.3	1,020	153	153	153	153	153	153	153	2,091
Increased Projects Implementation 3.1									
Capacities of Partners Built 3.1.1	77	689	255	510	-	-	-	-	1,530
Development of Common Approach 3.1.2	1	51	-	-	-	-	-	-	52
Community Contracting 3.1.3	204	204	204	204	204	204	204	204	1,632
Subtotal Increased Projects Implementation 3.1	281	944	459	714	204	204	204	204	3,214
Strengthened Coordination 3.2									
Range of Partners Broadened 3.2.2	15	31	61	-	-	-	-	-	107
Specification of Tasks and Responsibilities 3.2.3	-	20	-	-	-	-	-	-	20
Single Organization for Supervision and Evaluation 3.2.4	15	15	15	15	15	15	15	15	122
Subtotal Strengthened Coordination 3.2	31	66	77	15	15	15	15	15	250
Subtotal institutional Support	2,188	3,040	2,004	1,586	1,076	1,076	1,076	1,076	13,123

	2008	2009	2010	2011	2012	2013	2014	2015	Total
2. Sana'a Rural Water Supply and Sanitation									
a. Sana'a RWS									
Mechanized Systems GARWSP	5,131	5,285	5,444	5,607	5,775	5,948	6,127	6,298	45,615
Mechanized Systems PWP	794	794	794	794	794	794	794	794	6,353
Water Harvesting Sana'a	1,544	1,267	1,271	1,271	1,271	1,271	1,271	1,271	10,437
Subtotal Sana'a RWS	7,470	7,346	7,509	7,672	7,840	8,014	8,192	8,363	62,406
b. Sana'a Rural Sanitation	8	4	4	4	4	4	4	4	37
c. Sana'a Branch Institution Building	144	82	82	-	-	-	-	-	309
Subtotal Sana'a Rural Water Supply and Sanitation	7,622	7,433	7,595	7,676	7,845	8,018	8,196	8,367	62,752
3. Hajjah Rural Water and Sanitation									
Hajjah Rural Water Supply									
RW Mechanized Systems GARWSP Hajjah	5,187	4,201	2,983	4,673	6,359	6,617	6,882	7,155	44,059
RW Mechanized Systems PWP Hajjah	1,139	1,139	1,139	1,139	1,139	1,139	1,139	1,139	9,116
RW Mechanized Systems RWSSP Hajjah	1,640	1,640	1,640	1,640	-	-	-	-	6,559
Water Harvesting Hajjah	1,755	1,452	1,460	1,460	1,460	1,460	1,460	1,460	11,968
Subtotal Hajjah Rural Water Supply	9,721	8,432	7,223	8,913	8,959	9,217	9,482	9,755	71,702
b. Hajjah Rural Sanitation	1,036	414	414	414	414	414	414	414	3,937
c. Hajjah Branch Institutional Building	165	82	57	-	-	-	-	-	304
Subtotal Hajjah Rural Water and Sanitation	10,923	8,929	7,694	9,327	9,374	9,631	9,896	10,169	75,943
4. Ibb Rural Water and Sanitation									
a. Ibb Rural Water Supply									
RW Mechanized Systems GARWSP Ibb	8,739	7,868	8,179	8,523	10,162	10,527	10,902	11,288	76,188
RW Mechanized Systems PWP Ibb	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	11,953
RW Mechanized Systems RWSSP Ibb	1,468	1,468	1,468	1,468	-	-	-	-	5,874
Subtotal Ibb Rural Water Supply	11,701	10,831	11,142	11,485	11,656	12,021	12,396	12,782	94,014
b. Ibb Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Ibb Rural Water and Sanitation	11,908	10,913	11,173	11,485	11,656	12,021	12,396	12,782	94,334
5. Amran Rural Water and Sanitation									
a. Amran Rural Water Supply									
RW Mechanized Systems GARWSP Amran	3,184	2,477	2,610	2,752	3,847	3,997	4,152	4,311	27,329
RW Mechanized Systems PWP Amran	619	619	619	619	619	619	619	619	4,955
RW Mechanized Systems RWSSP Amran	2,474	2,474	2,474	2,474	-	-	-	-	9,895
Water Harvesting Amran	865	715	721	721	721	721	721	721	5,907
Subtotal Amran Rural Water Supply	7,142	6,286	6,424	6,566	5,187	5,337	5,492	5,651	48,086
b. Amran Rural Sanitation	4	4	4	4	4	4	4	4	33
c. Amran Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Amran Rural Water and Sanitation	7,353	6,372	6,459	6,570	5,192	5,342	5,496	5,655	48,439

	2008	2009	2010	2011	2012	2013	2014	2015	Total
6. Dhamar Rural Water and Sanitation									
a. Dhamar Rural Water Supply									
RW Mechanized Systems GARWSP Dhamar	3,663	4,204	4,405	4,616	4,833	5,057	5,288	5,526	37,592
RW Mechanized Systems PWP Dhamar	973	973	973	973	973	973	973	973	7,783
Water Harvesting Dhamar	2,716	2,247	2,254	2,254	2,254	2,254	2,254	2,254	18,485
Subtotal Dhamar Rural Water Supply	7,352	7,424	7,631	7,842	8,060	8,284	8,515	8,752	63,860
b. Dhamar Rural Sanitation	431	216	216	216	216	216	216	216	1,940
c. Dhamar Branch Institutional Building	113	51	31	-	-	-	-	-	196
Subtotal Dhamar Rural Water and Sanitation	7,897	7,691	7,877	8,058	8,275	8,499	8,730	8,968	65,996
7. Al Mahweet Rural Water and Sanitation									
a. Al Mahweet Rural Water Supply									
RW Mechanized Systems GARWSP Al Mahweet	1,952	2,076	2,153	2,236	2,322	2,410	2,501	2,594	18,244
RW Mechanized Systems PWP Al Mahweet	390	390	390	390	390	390	390	390	3,120
Water Harvesting Al Mahweet	363	300	306	306	306	306	306	306	2,503
Subtotal Al Mahweet Rural Water Supply	2,705	2,767	2,849	2,932	3,018	3,106	3,197	3,291	23,866
c. Al Mahweet Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Al Mahweet Rural Water and Sanitation	2,912	2,849	2,880	2,932	3,018	3,106	3,197	3,291	24,186
8. Al Sahel Rural Water and Sanitation									
a. Al Sahel Rural Water Supply									
RW Mechanized Systems GARWSP Al Sahel	2,020	2,081	2,143	2,208	2,274	2,342	2,412	2,412	17,893
9. Wadi Hadramout Rural Water and Sanitation									
a. Wadi Hadramout Rural Water Supply									
RW Mechanized Systems GARWSP Wadi Hadramout	908	1,049	1,106	1,165	1,227	1,290	1,356	1,423	9,523
RW Mechanized Systems PWP W. Hadramout	470	470	470	470	470	470	470	470	3,760
Water Harvesting Wadi Hadramout	674	557	559	559	559	559	559	559	4,584
Subtotal Wadi Hadramout Rural Water Supply	2,051	2,076	2,135	2,194	2,256	2,319	2,384	2,452	17,868
b. Wadi Hadramout Rural Sanitation	822	406	406	406	406	406	406	406	3,665
c. Wadi Hadramout Branch Institutional Building	82	57	139	-	-	-	-	-	278
Subtotal Wadi Hadramout Rural Water and Sanitation	2,955	2,539	2,680	2,600	2,662	2,725	2,791	2,858	21,811
10. Lahj Rural Water and Sanitation									
a. Lahj Rural Water Supply									
RW Mechanized Systems GARWSP Lahj	2,780	1,770	1,868	1,992	3,336	3,467	3,602	3,741	22,557
RW Mechanized Systems PWP Lahj	561	561	561	561	561	561	561	561	4,491
Water Harvesting Lahj	1,453	1,202	1,262	1,262	1,262	1,262	1,262	1,262	10,226
Subtotal Lahj Rural Water Supply	4,794	3,534	3,692	3,815	5,160	5,291	5,425	5,565	37,274
c. Lahj Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Lahj Rural Water and Sanitation	5,000	3,616	3,722	3,815	5,160	5,291	5,425	5,565	37,594

	2008	2009	2010	2011	2012	2013	2014	2015	Total
11. Al Mahara Rural Water and Sanitation									
a. Al Mahara Rural Water Supply									
RW Mechanized Systems GARWSP Al Mahara	288	305	314	325	336	347	358	370	2,643
RW Mechanized Systems PWP Al Mahara	44	44	44	44	44	44	44	44	349
Water Harvesting Al Mahara	63	52	54	54	54	54	54	54	439
Subtotal Al Mahara Rural Water Supply	394	401	412	422	433	445	456	468	3,431
c. Al Mahara Branch Institutional Building	82	134	139	83	83	-	-	-	521
Subtotal Al Mahara Rural Water and Sanitation	476	535	551	505	516	445	456	468	3,952
12. Mareb Rural Water and Sanitation									
a. Mareb Rural Water Supply									
RW Mechanized Systems GARWSP Mareb	1,081	1,119	1,158	1,198	1,240	1,282	1,326	1,371	9,775
RW Mechanized Systems PWP Mareb	176	176	176	176	176	176	176	176	1,406
Subtotal Mareb Rural Water Supply	1,257	1,295	1,334	1,374	1,415	1,458	1,502	1,547	11,181
c. Mareb Branch Institutional Building	181	82	57	-	-	-	-	-	320
Subtotal Mareb Rural Water and Sanitation	1,438	1,377	1,390	1,374	1,415	1,458	1,502	1,547	11,501
13. Al Jawf Rural Water and Sanitation									
a. Al Jawf Rural Water Supply									
RW Mechanized Systems GARWSP Al Jawf	545	879	951	1,028	1,106	1,193	1,270	1,356	8,329
RW Mechanized Systems PWP AL Jawf	328	328	328	328	328	328	328	328	2,624
Water Harvesting Al Jawf	2,079	1,720	1,722	1,722	1,722	1,722	1,722	1,722	14,129
Subtotal Al Jawf Rural Water Supply	2,952	2,927	3,001	3,077	3,156	3,243	3,320	3,406	25,082
c. Al Jawf Branch Institutional Building	103	155	113	-	-	-	-	-	371
Subtotal Al Jawf Rural Water and Sanitation	3,055	3,081	3,115	3,077	3,156	3,243	3,320	3,406	25,454
14. Al Dalah Rural Water and Sanitation									
a. Al Dalah Rural Water Supply									
RW Mechanized Systems GARWSP Al Dalah	1,515	700	770	842	1,936	1,942	2,020	2,101	11,826
RW Mechanized Systems PWP AL Dalah	347	347	347	347	347	347	347	347	2,778
RW Mechanized Systems RWSSP Al Dalah	-	1,084	1,084	1,084	1,084	-	-	-	4,336
Water Harvesting Al Dalah	534	441	442	442	442	442	442	442	3,625
Subtotal Al Dalah Rural Water Supply	2,396	2,573	2,643	2,715	3,809	2,730	2,809	2,890	22,565
b. Al Dahal Rural Sanitation	3	4	4	4	4	4	4	4	32
c. Al Dahla Branch Institutional Building	186	82	31	-	-	-	-	-	299
Subtotal Al Dalah Rural Water and Sanitation	2,585	2,660	2,678	2,719	3,813	2,735	2,813	2,894	22,896
15. Hoddeidah Rural Water and Sanitation									
a. Hoddeidah Rural Water Supply									
RW Mechanized Systems GARWSP Hoddeidah	6,713	6,951	7,196	8,632	7,708	7,975	8,250	8,534	61,959
RW Mechanized Systems PWP Hoddeidah	1,188	1,188	1,188	1,188	1,188	1,188	1,188	1,188	9,500
Subtotal Hoddeidah Rural Water Supply	7,901	8,139	8,383	9,820	8,895	9,162	9,438	9,722	71,459
b. Hoddeida Rural Sanitation	8	4	4	4	4	4	4	4	37
c. Hoddeidah Branch Institutional Building	165	82	57	-	-	-	-	-	304
Subtotal Hoddeidah Rural Water and Sanitation	8,074	8,225	8,444	9,824	8,899	9,167	9,442	9,726	71,801

	2008	2009	2010	2011	2012	2013	2014	2015	Total
16. Taiz Rural Water and Sanitation									
a. Taiz Rural Water Supply									
RW Mechanized Systems GARWSP Taiz	8,801	9,275	9,621	9,977	10,344	10,723	11,112	11,513	81,366
RW Mechanized Systems PWP Taiz	1,579	1,579	1,579	1,579	1,579	1,579	1,579	1,579	12,635
Water Harvesting Taiz	1,090	901	901	901	901	901	901	901	7,399
Subtotal Taiz Rural Water Supply	11,470	11,755	12,101	12,458	12,825	13,203	13,593	13,994	101,401
c. Taiz Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Taiz Rural Water and Sanitation	11,677	11,838	12,132	12,458	12,825	13,203	13,593	13,994	101,721
17. Shabwa Rural Water and Sanitation									
a. Shabwa Rural Water Supply									
RW Mechanized Systems GARWSP Shabwa	1,301	1,533	1,608	1,689	1,773	1,859	1,947	2,038	13,749
RW Mechanized Systems PWP Shabwa	337	337	337	337	337	337	337	337	2,696
Water Harvesting Shabwa	1,236	1,022	1,028	1,028	1,028	1,028	1,028	1,028	8,424
Subtotal Shabwa Rural Water Supply	2,874	2,893	2,973	3,054	3,137	3,223	3,312	3,403	24,869
c. Shabwa Branch Institutional Building	165	82	57	-	-	-	-	-	304
Subtotal Shabwa Rural Water and Sanitation	3,039	2,975	3,029	3,054	3,137	3,223	3,312	3,403	25,173
18. Saada Rural Water and Sanitation									
a. Saada Rural Water Supply									
RW Mechanized Systems GARWSP Saada	1,987	2,223	2,325	2,430	2,537	2,649	2,763	2,881	19,795
RW Mechanized Systems PWP Saada	500	500	500	500	500	500	500	500	4,000
Water Harvesting Saada	902	746	746	746	746	746	746	746	6,124
Subtotal Saada Rural Water Supply	3,389	3,469	3,571	3,676	3,783	3,895	4,009	4,127	29,919
c. Saada Branch Institutional Building	206	82	31	-	-	-	-	-	320
Subtotal Saada Rural Water and Sanitation	3,595	3,552	3,602	3,676	3,783	3,895	4,009	4,127	30,238
19. Abyan Rural Water and Sanitation									
a. Abyan Rural Water Supply									
RW Mechanized Systems GARWSP Abyan	1,607	955	1,019	1,085	1,904	1,974	2,047	2,122	12,713
RW Mechanized Systems PWP Abyan	274	274	274	274	274	274	274	274	2,192
RW Mechanized Systems RWSSP Abyan	856	856	856	856	-	-	-	-	3,424
Water Harvesting Abyan	282	233	234	234	234	234	234	234	1,921
Subtotal Abyan Rural Water Supply	3,019	2,318	2,383	2,450	2,412	2,483	2,555	2,630	20,250
c. Abyan Branch Institutional Building	134	31	31	-	-	-	-	-	196
Subtotal Abyan Rural Water and Sanitation	3,153	2,349	2,414	2,450	2,412	2,483	2,555	2,630	20,446
20. Mukalla Rural Water and Sanitation									
c. Mukalla Branch Institutional Building	139	31	31	-	-	-	-	-	201

	2008	2009	2010	2011	2012	2013	2014	2015	Total
21. Raima Rural Water and Sanitation									
a. Raimah Rural Water Supply									
RW Mechanized Systems GARWSP Raimah	1,032	1,252	1,320	1,392	1,466	1,542	1,620	1,700	11,324
RW Mechanized Systems PWP Raimah	332	332	332	332	332	332	332	332	2,658
Water Harvesting Raimah	1,207	999	1,001	1,001	1,001	1,001	1,001	1,001	8,209
Subtotal Raimah Rural Water Supply	2,572	2,583	2,653	2,725	2,798	2,874	2,953	3,033	22,191
c. Raima Branch Institutional Building	129	160	165	83	83	-	-	-	619
Subtotal Raima Rural Water and Sanitation	2,701	2,743	2,818	2,807	2,881	2,874	2,953	3,033	22,810
22. Al Baida Rural Water and Sanitation									
a. Al Beida Rural Water Supply									
RW Mechanized Systems GARWSP Al Beida	2,000	2,181	2,269	2,363	2,460	2,559	2,661	2,767	19,261
RW Mechanized Systems PWP Al Baida	399	399	399	399	399	399	399	399	3,192
Water Harvesting Al Beida	736	609	613	613	613	613	613	613	5,023
Subtotal Al Beida Rural Water Supply	3,136	3,189	3,281	3,375	3,472	3,571	3,673	3,779	27,476
b. Al Beida Rural Sanitation	497	249	249	249	249	249	249	249	2,238
c. Al Beida Branch Institutional Building	212	83	31	-	-	-	-	-	325
Subtotal Al Baida Rural Water and Sanitation	3,845	3,521	3,561	3,624	3,720	3,820	3,922	4,027	30,039
23. National Programs									
c. Other Programs									
Triangle RWS	492	-	-	-	-	-	-	-	492
Subtotal Rural Water Supply and Sanitation	105,047	98,350	97,994	101,826	103,090	104,595	107,493	110,399	828,794
Physical Contingencies	105,047	98,350	97,994	101,826	103,090	104,595	107,493	110,399	828,794
Price Contingencies	8,446	8,075	7,828	8,228	8,130	8,214	8,421	8,627	65,968
	4,146	8,417	17,660	29,043	41,144	54,799	70,996	89,416	315,622
TOTAL	117,639	114,842	123,482	139,097	152,364	167,609	186,909	208,442	1,210,384

File: COMYRB

Yemen
NWSSIP
Expenditure Accounts by Financiers
Rural Water Supply and Sanitation (US\$
'000)

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Physical Infrastructure												
a. Mechanized Systems												
GARWSP Schemes	-	-	203,521	25.0	-	-	122,113	15.0	488,451	60.0	814,085	67.3
PWP Schemes	120,367	85.0	-	-	7,080	5.0	14,161	10.0	0	-	141,608	11.7
RWSSP Schemes	31,615	83.1	-	-	348	0.9	6,074	16.0	0	-	38,036	3.1
Other Schemes	568	100.0	-	-	-	-	-	-	-	-	568	-
Subtotal Mechanized Systems	152,550	15.3	203,521	20.5	7,428	0.7	142,347	14.3	488,451	49.1	994,297	82.1
b. Water Harvesting Schemes												
SFD Schemes	52,792	30.0	-	-	8,799	5.0	114,382	65.0	0	-	175,973	14.5
c. Rural Sanitation												
SFD Rural Sanitation	14,575	85.0	-	-	-	-	2,572	15.0	0	-	17,148	1.4
Subtotal physical Infrastructure	219,917	18.5	203,521	17.1	16,227	1.4	259,302	21.8	488,451	41.1	1,187,417	98.1
2. RWSS Institutional Support												
Sector Strategy 1.1.1	-	-	446	100.0	-	-	-	-	-	-	446	-
Develop of Appropriate Technology 2.1	22	0.6	3,918	99.4	-	-	-	-	0	-	3,940	0.3
Protect Water Resources and Ensured Quality 2.2	-	-	4,857	100.0	-	-	-	-	0	-	4,857	0.4
Improve Targeting and Sustainability 2.3	1,013	43.2	1,290	55.0	-	-	-	-	43	1.8	2,345	0.2
Increased Projects Implementation 3.1	-	-	3,815	100.0	-	-	-	-	0	-	3,815	0.3
Strengthened Coordination 3.2	-	-	293	100.0	-	-	-	-	0	-	293	-
GARWSP Decentralization 3.3	-	-	6,543	90.0	-	-	-	-	727	10.0	7,270	0.6
Subtotal WSS Institutional Support	1,035	4.5	21,162	92.1	-	-	-	-	770	3.4	22,967	1.9
Total Investment Costs	220,952	18.3	224,683	18.6	16,227	1.3	259,302	21.4	489,221	40.4	1,210,384	100.0

File: EXPFIN

Yemen
NWSSIP
Components by Financiers
Rural Water Supply and Sanitation (US\$
'000)

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Institutional Support												
a. Sector Strategy 1.1												
Sector Strategy and Coordination 1.1.1	-	-	446	100.0	-	-	-	-	-	-	446	-
b. Research & Development of Appropriate Technologies 2.1												
Appropriate Technologies for Water Supply 2.1.1	22	1.2	1,826	98.8	-	-	-	-	0	-	1,848	0.2
Appropriate Technologies for Rural Sanitation 2.1.2	-	-	622	100.0	-	-	-	-	0	-	622	0.1
Hygiene Education 2.1.3	-	-	1,325	100.0	-	-	-	-	-	-	1,325	0.1
Private Sector Involvement 2.1.4	-	-	144	100.0	-	-	-	-	0	-	144	-
Subtotal Research & Development of Appropriate Technologies 2.1	22	0.6	3,918	99.4	-	-	-	-	0	-	3,940	0.3
c. Water Supply Security and Good Quality 2.2												
Water Ensured and of Good Quality 2.2.1	-	-	4,231	100.0	-	-	-	-	0	-	4,231	0.3
Community Partnership 2.2.2	-	-	626	100.0	-	-	-	-	0	-	626	0.1
Subtotal Water Supply Security and Good Quality 2.2	-	-	4,857	100.0	-	-	-	-	0	-	4,857	0.4
d. Improve Targeting and Sustainability 2.3												
Promotion of DRA 2.3.1	1,013	67.8	480	32.2	-	-	-	-	0	-	1,493	0.1
Partnership with Community Institutions 2.3.2	-	-	810	95.0	-	-	-	-	43	5.0	852	0.1
Subtotal Improve Targeting and Sustainability 2.3	1,013	43.2	1,290	55.0	-	-	-	-	43	1.8	2,345	0.2
e. Increased Projects Implementation 3.1												
Capacities of Partners Built 3.1.1	-	-	1,739	100.0	-	-	-	-	0	-	1,739	0.1
Development of Common Approach 3.1.2	-	-	56	100.0	-	-	-	-	0	-	56	-
Community Contracting 3.1.3	-	-	2,020	100.0	-	-	-	-	0	-	2,020	0.2
Subtotal Increased Projects Implementation 3.1	-	-	3,815	100.0	-	-	-	-	0	-	3,815	0.3
f. Strengthened Coordination 3.2												
Range of Partners Broadened 3.2.2	-	-	119	100.0	-	-	-	-	0	-	119	-
Specification of Tasks and Responsibilities 3.2.3	-	-	22	100.0	-	-	-	-	-	-	22	-
Single Organization for Supervision and Evaluation 3.2.4	-	-	151	100.0	-	-	-	-	0	-	151	-
Subtotal Strengthened Coordination 3.2	-	-	293	100.0	-	-	-	-	0	-	293	-
Subtotal institutional Support	1,035	6.6	14,619	93.1	-	-	-	-	43	0.3	15,696	1.3

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
2. Sana'a Rural Water Supply and Sanitation												
a. Sana'a RWS												
Mechanized Systems GARWSP	-	-	15,546	25.0	-	-	9,328	15.0	37,312	60.0	62,186	5.1
Mechanized Systems PWP	8,003	85.0	-	-	471	5.0	941	10.0	0	-	9,415	0.8
Water Harvesting Sana'a	4,612	30.0	-	-	769	5.0	9,993	65.0	0	-	15,374	1.3
Subtotal Sana'a RWS	12,615	14.5	15,546	17.9	1,239	1.4	20,263	23.3	37,312	42.9	86,975	7.2
b. Sana'a Rural Sanitation	46	85.0	-	-	-	-	8	15.0	0	-	54	-
c. Sana'a Branch Institution Building	-	-	312	90.0	-	-	-	-	35	10.0	347	-
Subtotal Sana'a Rural Water Supply and Sanitation	12,661	14.5	15,859	18.1	1,239	1.4	20,271	23.2	37,346	42.7	87,376	7.2
3. Hajjah Rural Water and Sanitation												
a. Hajjah Rural Water Supply												
RW Mechanized Systems GARWSP Hajjah	-	-	16,923	25.0	-	-	10,154	15.0	40,616	60.0	67,693	5.6
RW Mechanized Systems PWP Hajjah	11,482	85.0	-	-	675	5.0	1,351	10.0	0	-	13,508	1.1
RW Mechanized Systems RWSSP Hajjah	7,795	95.0	-	-	-	-	410	5.0	-0	-0.0	8,205	0.7
Water Harvesting Hajjah	5,291	30.0	-	-	882	5.0	11,464	65.0	0	-	17,637	1.5
Subtotal Hajjah Rural Water Supply	24,568	23.0	16,923	15.8	1,557	1.5	23,379	21.8	40,616	37.9	107,043	8.8
b. Hajjah Rural Sanitation	4,779	85.0	-	-	-	-	843	15.0	0	-	5,622	0.5
c. Hajjah Branch Institutional Building	-	-	304	90.0	-	-	-	-	34	10.0	338	-
Subtotal Hajjah Rural Water and Sanitation	29,346	26.0	17,228	15.2	1,557	1.4	24,222	21.4	40,650	36.0	113,004	9.3
4. Ibb Rural Water and Sanitation												
a. Ibb Rural Water Supply												
RW Mechanized Systems GARWSP Ibb	-	-	28,845	25.0	-	-	17,307	15.0	69,228	60.0	115,380	9.5
RW Mechanized Systems PWP Ibb	15,055	85.0	-	-	886	5.0	1,771	10.0	0	-	17,712	1.5
RW Mechanized Systems RWSSP Ibb	6,980	95.0	-	-	-	-	367	5.0	0	-	7,347	0.6
Subtotal Ibb Rural Water Supply	22,035	15.7	28,845	20.5	886	0.6	19,446	13.8	69,228	49.3	140,439	11.6
b. Ibb Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal Ibb Rural Water and Sanitation	22,035	15.7	29,162	20.7	886	0.6	19,446	13.8	69,263	49.2	140,791	11.6
5. Amran Rural Water and Sanitation												
a. Amran Rural Water Supply												
RW Mechanized Systems GARWSP Amran	-	-	9,498	25.0	-	-	5,699	15.0	22,796	60.0	37,993	3.1
RW Mechanized Systems PWP Amran	6,241	85.0	-	-	367	5.0	734	10.0	0	-	7,342	0.6
RW Mechanized Systems RWSSP Amran	7,239	58.5	-	-	348	2.8	4,791	38.7	0	-	12,378	1.0
Water Harvesting Amran	2,612	30.0	-	-	435	5.0	5,659	65.0	0	-	8,706	0.7
Subtotal Amran Rural Water Supply	16,092	24.2	9,498	14.3	1,150	1.7	16,883	25.4	22,796	34.3	66,418	5.5
b. Amran Rural Sanitation	42	85.0	-	-	-	-	7	15.0	0	-	49	-
c. Amran Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal Amran Rural Water and Sanitation	16,133	24.1	9,815	14.7	1,150	1.7	16,890	25.3	22,831	34.2	66,819	5.5

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
6. Dhamar Rural Water and Sanitation												
a. Dhamar Rural Water Supply												
RW Mechanized Systems GARWSP Dhamar	-	-	14,219	25.0	-	-	8,531	15.0	34,125	60.0	56,875	4.7
RW Mechanized Systems PWP Dhamar	9,804	85.0	-	-	577	5.0	1,153	10.0	0	-	11,534	1.0
Water Harvesting Dhamar	8,171	30.0	-	-	1,362	5.0	17,703	65.0	0	-	27,235	2.3
Subtotal Dhamar Rural Water Supply	17,974	18.8	14,219	14.9	1,938	2.0	27,388	28.6	34,125	35.7	95,644	7.9
b. Dhamar Rural Sanitation	2,380	85.0	-	-	-	-	420	15.0	0	-	2,801	0.2
c. Dhamar Branch Institutional Building	-	-	195	90.0	-	-	-	-	22	10.0	217	-
Subtotal Dhamar Rural Water and Sanitation	20,355	20.6	14,414	14.6	1,938	2.0	27,808	28.2	34,146	34.6	98,661	8.2
7. Al Mahweet Rural Water and Sanitation												
a. Al Mahweet Rural Water Supply												
RW Mechanized Systems GARWSP Al Mahweet	-	-	6,242	25.0	-	-	3,745	15.0	14,980	60.0	24,966	2.1
RW Mechanized Systems PWP Al Mahweet	3,930	85.0	-	-	231	5.0	462	10.0	0	-	4,623	0.4
Water Harvesting Al Mahweet	1,107	30.0	-	-	185	5.0	2,399	65.0	0	-	3,691	0.3
Subtotal Al Mahweet Rural Water Supply	5,037	15.1	6,242	18.8	416	1.2	6,606	19.9	14,980	45.0	33,280	2.7
c. Al Mahweet Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal I Mahweet Rural Water and Sanitation	5,037	15.0	6,558	19.5	416	1.2	6,606	19.6	15,015	44.6	33,632	2.8
8. Al Sahel Rural Water and Sanitation												
a. Al Sahel Rural Water Supply												
RW Mechanized Systems GARWSP Al Sahel	-	-	6,701	25.0	-	-	4,020	15.0	16,082	60.0	26,803	2.2
9. Wadi Hadramout Rural Water and Sanitation												
a. Wadi Hadramout Rural Water Supply												
RW Mechanized Systems GARWSP Wadi Hadramout	-	-	3,610	25.0	-	-	2,166	15.0	8,663	60.0	14,439	1.2
RW Mechanized Systems PWP W. Hadramout	4,736	85.0	-	-	279	5.0	557	10.0	0	-	5,572	0.5
Water Harvesting Wadi Hadramout	2,026	30.0	-	-	338	5.0	4,391	65.0	0	-	6,755	0.6
Subtotal Wadi Hadramout Rural Water Supply	6,762	25.3	3,610	13.5	616	2.3	7,114	26.6	8,663	32.4	26,765	2.2
b. Wadi Hadramout Rural Sanitation	4,495	85.0	-	-	-	-	793	15.0	0	-	5,289	0.4
c. Wadi Hadramout Branch Institutional Building	-	-	287	90.0	-	-	-	-	32	10.0	319	-
Subtotal Wadi Hadramout Rural Water and Sanitation	11,258	34.8	3,897	12.0	616	1.9	7,907	24.4	8,695	26.9	32,373	2.7
10. Lahj Rural Water and Sanitation												
a. Lahj Rural Water Supply												
RW Mechanized Systems GARWSP Lahj	-	-	8,674	25.0	-	-	5,204	15.0	20,817	60.0	34,696	2.9
RW Mechanized Systems PWP Lahj	5,656	85.0	-	-	333	5.0	665	10.0	0	-	6,654	0.5
Water Harvesting Lahj	4,532	30.0	-	-	755	5.0	9,819	65.0	-0	-0.0	15,107	1.2
Subtotal Lahj Rural Water Supply	10,188	18.0	8,674	15.4	1,088	1.9	15,689	27.8	20,817	36.9	56,456	4.7
c. Lahj Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal Lahj Rural Water and Sanitation	10,188	17.9	8,991	15.8	1,088	1.9	15,689	27.6	20,853	36.7	56,808	4.7

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
11. Al Mahara Rural Water and Sanitation												
a. Al Mahara Rural Water Supply												
RW Mechanized Systems GARWSP Al Mahara	-	-	902	25.0	-	-	541	15.0	2,166	60.0	3,610	0.3
RW Mechanized Systems PWP Al Mahara	440	85.0	-	-	26	5.0	52	10.0	0	-	517	-
Water Harvesting Al Mahara	194	30.0	-	-	32	5.0	421	65.0	-0	-0.0	648	0.1
Subtotal Al Mahara Rural Water Supply	634	13.3	902	18.9	58	1.2	1,015	21.2	2,166	45.4	4,775	0.4
c. Al Mahara Branch Institutional Building	-	-	563	90.0	-	-	-	-	63	10.0	626	0.1
Subtotal Al Mahara Rural Water and Sanitation	634	11.7	1,466	27.1	58	1.1	1,015	18.8	2,228	41.3	5,401	0.4
12. Mareb Rural Water and Sanitation												
a. Mareb Rural Water Supply												
RW Mechanized Systems GARWSP Mareb	-	-	3,338	25.0	-	-	2,003	15.0	8,010	60.0	13,351	1.1
RW Mechanized Systems PWP Mareb	1,771	85.0	-	-	104	5.0	208	10.0	0	-	2,083	0.2
Subtotal Mareb Rural Water Supply	1,771	11.5	3,338	21.6	104	0.7	2,211	14.3	8,010	51.9	15,434	1.3
c. Mareb Branch Institutional Building	-	-	319	90.0	-	-	-	-	35	10.0	355	-
Subtotal Mareb Rural Water and Sanitation	1,771	11.2	3,657	23.2	104	0.7	2,211	14.0	8,046	51.0	15,789	1.3
13. Al Jawf Rural Water and Sanitation												
a. Al Jawf Rural Water Supply												
RW Mechanized Systems GARWSP Al Jawf	-	-	2,912	25.0	-	-	1,747	15.0	6,989	60.0	11,648	1.0
RW Mechanized Systems PWP AL Jawf	3,306	85.0	-	-	194	5.0	389	10.0	0	-	3,889	0.3
Water Harvesting Al Jawf	6,245	30.0	-	-	1,041	5.0	13,530	65.0	0	-	20,815	1.7
Subtotal Al Jawf Rural Water Supply	9,550	26.3	2,912	8.0	1,235	3.4	15,666	43.1	6,989	19.2	36,352	3.0
c. Al Jawf Branch Institutional Building	-	-	378	90.0	-	-	-	-	42	10.0	420	-
Subtotal Al Jawf Rural Water and Sanitation	9,550	26.0	3,290	8.9	1,235	3.4	15,666	42.6	7,031	19.1	36,773	3.0
14. Al Dalah Rural Water and Sanitation												
a. Al Dalah Rural Water Supply												
RW Mechanized Systems GARWSP Al Dalah	-	-	4,196	25.0	-	-	2,517	15.0	10,069	60.0	16,782	1.4
RW Mechanized Systems PWP AL Dalah	3,499	85.0	-	-	206	5.0	412	10.0	0	-	4,116	0.3
RW Mechanized Systems RWSSP Al Dalah	5,532	95.0	-	-	-	-	291	5.0	0	-	5,823	0.5
Water Harvesting Al Dalah	1,602	30.0	-	-	267	5.0	3,471	65.0	0	-	5,341	0.4
Subtotal Al Dalah Rural Water Supply	10,633	33.2	4,196	13.1	473	1.5	6,691	20.9	10,069	31.4	32,063	2.6
b. Al Dahal Rural Sanitation	41	85.0	-	-	-	-	7	15.0	0	-	48	-
c. Al Dahla Branch Institutional Building	-	-	297	90.0	-	-	-	-	33	10.0	330	-
Subtotal Al Dalah Rural Water and Sanitation	10,674	32.9	4,492	13.8	473	1.5	6,699	20.6	10,102	31.1	32,440	2.7

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
15. Hoddeidah Rural Water and Sanitation												
a. Hoddeidah Rural Water Supply												
RW Mechanized Systems GARWSP Hoddeidah	-	-	23,241	25.0	-	-	13,945	15.0	55,780	60.0	92,966	7.7
RW Mechanized Systems PWP Hoddeidah	11,966	85.0	-	-	704	5.0	1,408	10.0	0	-	14,078	1.2
Subtotal Hoddeidah Rural Water Supply	11,966	11.2	23,241	21.7	704	0.7	15,353	14.3	55,780	52.1	107,044	8.8
b. Hoddeida Rural Sanitation	46	85.0	-	-	-	-	8	15.0	0	-	54	-
c. Hoddeidah Branch Institutional Building	-	-	304	90.0	-	-	-	-	34	10.0	338	-
Subtotal Hoddeidah Rural Water and Sanitation	12,012	11.2	23,546	21.9	704	0.7	15,361	14.3	55,813	52.0	107,436	8.9
16. Taiz Rural Water and Sanitation												
a. Taiz Rural Water Supply												
RW Mechanized Systems GARWSP Taiz	-	-	30,600	25.0	-	-	18,360	15.0	73,440	60.0	122,399	10.1
RW Mechanized Systems PWP Taiz	15,915	85.0	-	-	936	5.0	1,872	10.0	0	-	18,724	1.5
Water Harvesting Taiz	3,270	30.0	-	-	545	5.0	7,085	65.0	0	-	10,901	0.9
Subtotal Taiz Rural Water Supply	19,185	12.6	30,600	20.1	1,481	1.0	27,318	18.0	73,440	48.3	152,024	12.6
c. Taiz Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal Taiz Rural Water and Sanitation	19,185	12.6	30,917	20.3	1,481	1.0	27,318	17.9	73,475	48.2	152,376	12.6
17. Shabwa Rural Water and Sanitation												
a. Shabwa Rural Water Supply												
RW Mechanized Systems GARWSP Shabwa	-	-	5,207	25.0	-	-	3,124	15.0	12,498	60.0	20,829	1.7
RW Mechanized Systems PWP Shabwa	3,396	85.0	-	-	200	5.0	400	10.0	0	-	3,995	0.3
Water Harvesting Shabwa	3,724	30.0	-	-	621	5.0	8,069	65.0	-0	-0.0	12,414	1.0
Subtotal Shabwa Rural Water Supply	7,120	19.1	5,207	14.0	820	2.2	11,593	31.1	12,498	33.6	37,238	3.1
c. Shabwa Branch Institutional Building	-	-	304	90.0	-	-	-	-	34	10.0	338	-
Subtotal Shabwa Rural Water and Sanitation	7,120	18.9	5,512	14.7	820	2.2	11,593	30.9	12,531	33.3	37,576	3.1
18. Saada Rural Water and Sanitation												
a. Saada Rural Water Supply												
RW Mechanized Systems GARWSP Saada	-	-	6,796	25.0	-	-	4,078	15.0	16,310	60.0	27,184	2.2
RW Mechanized Systems PWP Saada	5,039	85.0	-	-	296	5.0	593	10.0	0	-	5,928	0.5
Water Harvesting Saada	2,706	30.0	-	-	451	5.0	5,864	65.0	0	-	9,021	0.7
Subtotal Saada Rural Water Supply	7,745	18.4	6,796	16.1	747	1.8	10,534	25.0	16,310	38.7	42,133	3.5
c. Saada Branch Institutional Building	-	-	317	90.0	-	-	-	-	35	10.0	352	-
Subtotal Saada Rural Water and Sanitation	7,745	18.2	7,113	16.7	747	1.8	10,534	24.8	16,346	38.5	42,485	3.5

	Foreign		Foreign Gap		Budget GOY		Other Local		The Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
19. Abyan Rural Water and Sanitation												
a. Abyan Rural Water Supply												
RW Mechanized Systems GARWSP Abyan	-	-	4,905	25.0	-	-	2,943	15.0	11,771	60.0	19,619	1.6
RW Mechanized Systems PWP Abyan	2,762	85.0	-	-	162	5.0	325	10.0	0	-	3,249	0.3
RW Mechanized Systems RWSSP Abyan	4,069	95.0	-	-	-	-	214	5.0	0	-	4,283	0.4
Water Harvesting Abyan	849	30.0	-	-	142	5.0	1,840	65.0	0	-	2,831	0.2
Subtotal Abyan Rural Water Supply	7,680	25.6	4,905	16.4	304	1.0	5,322	17.8	11,771	39.3	29,982	2.5
c. Abyan Branch Institutional Building	-	-	194	90.0	-	-	-	-	22	10.0	216	-
Subtotal Abyan Rural Water and Sanitation	7,680	25.4	5,099	16.9	304	1.0	5,322	17.6	11,793	39.1	30,198	2.5
20. Mukalla Rural Water and Sanitation												
c. Mukalla Branch Institutional Building	-	-	199	90.0	-	-	-	-	22	10.0	222	-
21. Raima Rural Water and Sanitation												
a. Raimah Rural Water Supply												
RW Mechanized Systems GARWSP Raimah	-	-	3,907	25.0	-	-	2,344	15.0	9,376	60.0	15,626	1.3
RW Mechanized Systems PWP Raimah	3,347	85.0	-	-	197	5.0	394	10.0	-0	-0.0	3,938	0.3
Water Harvesting Raimah	3,629	30.0	-	-	605	5.0	7,862	65.0	-0	-0.0	12,095	1.0
Subtotal Raimah Rural Water Supply	6,976	22.0	3,907	12.3	802	2.5	10,600	33.5	9,376	29.6	31,660	2.6
c. Raima Branch Institutional Building	-	-	662	90.0	-	-	-	-	74	10.0	736	0.1
Subtotal Raima Rural Water and Sanitation	6,976	21.5	4,569	14.1	802	2.5	10,600	32.7	9,449	29.2	32,395	2.7
22. Al Beida Rural Water and Sanitation												
a. Al Beida Rural Water Supply												
RW Mechanized Systems GARWSP Al Beida	-	-	7,260	25.0	-	-	4,356	15.0	17,424	60.0	29,040	2.4
RW Mechanized Systems PWP Al Beida	4,021	85.0	-	-	237	5.0	473	10.0	0	-	4,730	0.4
Water Harvesting Al Beida	2,221	30.0	-	-	370	5.0	4,812	65.0	0	-	7,402	0.6
Subtotal Al Beida Rural Water Supply	6,242	15.2	7,260	17.6	607	1.5	9,641	23.4	17,424	42.3	41,172	3.4
b. Al Beida Rural Sanitation	2,747	85.0	-	-	-	-	485	15.0	0	-	3,231	0.3
c. Al Beida Branch Institutional Building	-	-	322	90.0	-	-	-	-	36	10.0	358	-
Subtotal Al Beida Rural Water and Sanitation	8,988	20.1	7,582	16.9	607	1.4	10,125	22.6	17,460	39.0	44,762	3.7
23. National Programs												
c. Other Programs												
Triangle RWS	568	100.0	-	-	-	-	-	-	-	-	568	-
TOTAL	220,952	18.3	224,683	18.6	16,227	1.3	259,302	21.4	489,221	40.4	1,210,384	100.0

File: COMFIN

Yemen
NWSSIP
Physical Aggregations
Rural Water Supply and Sanitation

	Unit	2008	2009	2010	2011	2012	2013	2014	2015	Total
Beneficiaries RWS										
Beneficiaries GARWSP										
Rural Water Supply Systems Sana'a										
Mechanized Systems GARWSP	Beneficiaries GR	38,995	40,165	41,370	42,611	43,889	45,206	46,562	47,859	346,657
Rural Water Supply Systems Hajjah										
Mechanized Systems GARWSP	Beneficiaries GR	39,422	31,928	22,670	35,514	48,329	50,286	52,301	54,377	334,827
Rural Water Supply Systems Ibb										
Mechanized Systems GARWSP	Beneficiaries GR	66,412	59,794	62,160	64,769	77,230	79,998	82,849	85,786	578,998
Mechanized Systems GARWSP	Beneficiaries GR	24,199	18,825	19,836	20,912	29,235	30,375	31,550	32,760	207,692
Rural Water Supply Systems Dhamar										
Mechanized Systems GARWSP	Beneficiaries GR	27,837	31,952	33,474	35,079	36,731	38,434	40,187	41,993	285,687
Rural Water Supply Systems Al Mahweet										
Mechanized Systems GARWSP	Beneficiaries GR	14,837	15,780	16,360	16,992	17,643	18,314	19,005	19,716	138,647
Rural Water Supply Systems Al Sahel										
Mechanized Systems GARWSP	Beneficiaries GR	15,353	15,814	16,288	16,777	17,280	17,799	18,333	18,333	135,977
Rural Water Supply Systems Al Wadi										
Mechanized Systems GARWSP	Beneficiaries GR	6,897	7,971	8,403	8,857	9,325	9,806	10,302	10,813	72,374
Rural Water Supply Systems Lahj										
Mechanized Systems GARWSP	Beneficiaries GR	20,661	12,978	13,708	14,632	24,833	25,813	26,822	27,862	167,309
Rural Water Supply Systems Aden/Lahj										
Mechanized Systems GARWSP	Beneficiaries GR	463	477	491	506	521	537	553	570	4,118
Rural Water Supply Systems Al Mahara										
Mechanized Systems GARWSP	Beneficiaries GR	2,185	2,321	2,387	2,467	2,550	2,636	2,724	2,814	20,084
Rural Water Supply Systems Mareb										
Mechanized Systems GARWSP	Beneficiaries GR	8,218	8,506	8,801	9,106	9,420	9,743	10,076	10,419	74,289
Rural Water Supply Systems Al Jawf										
Mechanized Systems GARWSP	Beneficiaries GR	4,141	6,679	7,231	7,810	8,407	9,067	9,655	10,307	63,297
Rural Water Supply Systems Al Dalah										
Mechanized Systems GARWSP	Beneficiaries GR	11,513	5,323	5,851	6,397	14,715	14,755	15,351	15,966	89,871
Rural Water Supply Systems Hoddeidah										
Mechanized Systems GARWSP	Beneficiaries GR	51,019	52,825	54,685	65,600	58,574	60,606	62,699	64,855	470,863
Rural Water Supply Systems Taiz										
Mechanized Systems GARWSP	Beneficiaries GR	66,886	70,484	73,113	75,822	78,613	81,487	84,447	87,497	618,349
Rural Water Supply Systems Shabwa										
Mechanized Systems GARWSP	Beneficiaries GR	9,888	11,653	12,222	12,838	13,472	14,125	14,798	15,491	104,487

	Unit	2008	2009	2010	2011	2012	2013	2014	2015	Total
Rural Water Supply Systems Saada										
Mechanized Systems GARWSP	Beneficiaries GR	15,102	16,896	17,668	18,464	19,283	20,128	20,997	21,893	150,431
Rural Water Supply Systems Abyan										
Mechanized Systems GARWSP	Beneficiaries GR	12,210	7,259	7,742	8,248	14,467	15,004	15,556	16,125	96,611
Rural Water Supply Systems Raimah										
Mechanized Systems GARWSP	Beneficiaries GR	7,845	9,515	10,033	10,577	11,138	11,715	12,310	12,923	86,056
Rural Water Supply Systems Al Beida										
Mechanized Systems GARWSP	Beneficiaries GR	15,202	16,578	17,247	17,959	18,692	19,447	20,225	21,026	146,376
Subtotal Beneficiaries GARWSP		459,285	443,723	451,740	491,937	554,347	575,281	597,302	619,385	4,193,000
Beneficiaries PWP										
Rural Water Supply Systems Sana'a										
Mechanized Systems PWP	Beneficiaries PWP	6,132	6,132	6,132	6,132	6,132	6,132	6,132	6,132	49,056
Rural Water Supply Systems Hajjah										
Mechanized Systems PWP	Beneficiaries PWP	8,798	8,798	8,798	8,798	8,798	8,798	8,798	8,798	70,384
Rural Water Supply Systems Ibb										
Mechanized Systems PWP	Beneficiaries PWP	11,536	11,536	11,536	11,536	11,536	11,536	11,536	11,536	92,288
Rural Water Supply Systems Amran										
Mechanized Systems PWP	Beneficiaries PWP	4,782	4,782	4,782	4,782	4,782	4,782	4,782	4,782	38,256
Rural Water Supply Systems Dhamar										
Mechanized Systems PWP	Beneficiaries PWP	7,512	7,512	7,512	7,512	7,512	7,512	7,512	7,512	60,096
Rural Water Supply Systems Al Mahweet										
Mechanized Systems PWP	Beneficiaries PWP	3,011	3,011	3,011	3,011	3,011	3,011	3,011	3,011	24,088
Rural Water Supply Systems Al Wadi										
Mechanized Systems PWP	Beneficiaries PWP	3,629	3,629	3,629	3,629	3,629	3,629	3,629	3,629	29,032
Rural Water Supply Systems Lahj										
Mechanized Systems PWP	Beneficiaries PWP	4,334	4,334	4,334	4,334	4,334	4,334	4,334	4,334	34,672
Rural Water Supply Systems Mareb										
Mechanized Systems PWP	Beneficiaries PWP	1,357	1,357	1,357	1,357	1,357	1,357	1,357	1,357	10,856
Rural Water Supply Systems Al Jawf										
Mechanized Systems PWP	Beneficiaries PWP	2,533	2,533	2,533	2,533	2,533	2,533	2,533	2,533	20,264
Rural Water Supply Systems Al Dalah										
Mechanized Systems PWP	Beneficiaries PWP	2,681	2,681	2,681	2,681	2,681	2,681	2,681	2,681	21,448
Rural Water Supply Systems Hoddeidah										
Mechanized Systems PWP	Beneficiaries PWP	9,169	9,169	9,169	9,169	9,169	9,169	9,169	9,169	73,352

	Unit	2008	2009	2010	2011	2012	2013	2014	2015	Total
Rural Water Supply Systems Taiz										
Mechanized Systems PWP	Beneficiaries PWP	12,195	12,195	12,195	12,195	12,195	12,195	12,195	12,195	97,560
Rural Water Supply Systems Shabwa										
Mechanized Systems PWP	Beneficiaries PWP	2,602	2,602	2,602	2,602	2,602	2,602	2,602	2,602	20,816
Rural Water Supply Systems Saada										
Mechanized Systems PWP	Beneficiaries PWP	3,861	3,861	3,861	3,861	3,861	3,861	3,861	3,861	30,888
Rural Water Supply Systems Abyan										
Mechanized Systems PWP	Beneficiaries PWP	2,116	2,116	2,116	2,116	2,116	2,116	2,116	2,116	16,928
Rural Water Supply Systems Raimah										
Mechanized Systems PWP	Beneficiaries PWP	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	20,520
Rural Water Supply Systems Al Beida										
Mechanized Systems PWP	Beneficiaries PWP	3,081	3,081	3,081	3,081	3,081	3,081	3,081	3,081	24,648
Subtotal Beneficiaries PWP		91,894	91,894	91,894	91,894	91,894	91,894	91,894	91,894	735,152
Beneficiaries SFD										
Rural Water Supply Systems Sana'a										
RWS Water Harvesting	Beneficiaries SFD	17,130	14,056	14,100	14,100	14,100	14,100	14,100	14,100	115,786
Rural Water Supply Systems Hajjah										
RWS Water Harvesting	Beneficiaries SFD	19,467	16,103	16,200	16,200	16,200	16,200	16,200	16,200	132,770
Rural Water Supply Systems Ibb										
RWS Water Harvesting	Beneficiaries SFD	8,058	6,666	7,000	7,000	7,000	7,000	7,000	7,000	56,724
Rural Water Supply Systems Amran										
RWS Water Harvesting	Beneficiaries SFD	9,593	7,936	8,000	8,000	8,000	8,000	8,000	8,000	65,529
Rural Water Supply Systems Dhamar										
RWS Water Harvesting	Beneficiaries SFD	30,135	24,928	25,000	25,000	25,000	25,000	25,000	25,000	205,063
Rural Water Supply Systems Al Mahweet										
RWS Water Harvesting	Beneficiaries SFD	4,029	3,333	3,400	3,400	3,400	3,400	3,400	3,400	27,762
Rural Water Supply Systems Al Wadi										
RWS Water Harvesting	Beneficiaries SFD	7,475	6,183	6,200	6,200	6,200	6,200	6,200	6,200	50,858
Rural Water Supply Systems Lahj										
RWS Water Harvesting	Beneficiaries SFD	8,058	6,666	7,000	7,000	7,000	7,000	7,000	7,000	56,724
Rural Water Supply Systems Al Mahara										
RWS Water Harvesting	Beneficiaries SFD	695	575	600	600	600	600	600	600	4,870

	Unit	2008	2009	2010	2011	2012	2013	2014	2015	Total
Rural Water Supply Systems Al Jawf										
RWS Water Harvesting	Beneficiaries SFD	23,063	19,078	19,100	19,100	19,100	19,100	19,100	19,100	156,741
Rural Water Supply Systems Al Dalah										
RWS Water Harvesting	Beneficiaries SFD	5,919	4,896	4,900	4,900	4,900	4,900	4,900	4,900	40,215
Rural Water Supply Systems Taiz										
RWS Water Harvesting	Beneficiaries SFD	12,087	9,999	10,000	10,000	10,000	10,000	10,000	10,000	82,086
Rural Water Supply Systems Shabwa										
RWS Water Harvesting	Beneficiaries SFD	13,713	11,343	11,400	11,400	11,400	11,400	11,400	11,400	93,456
Rural Water Supply Systems Saada										
RWS Water Harvesting	Beneficiaries SFD	12,087	9,999	10,000	10,000	10,000	10,000	10,000	10,000	82,086
Rural Water Supply Systems Abyan										
RWS Water Harvesting	Beneficiaries SFD	3,126	2,586	2,600	2,600	2,600	2,600	2,600	2,600	21,312
Rural Water Supply Systems Raimah										
RWS Water Harvesting	Beneficiaries SFD	13,393	11,079	11,100	11,100	11,100	11,100	11,100	11,100	91,072
Rural Water Supply Systems Al Beida										
RWS Water Harvesting	Beneficiaries SFD	8,167	6,756	6,800	6,800	6,800	6,800	6,800	6,800	55,723
Subtotal Beneficiaries SFD		196,195	162,182	163,400	163,400	163,400	163,400	163,400	163,400	1,338,777
Beneficiaries RWSSP										
Rural Water Supply Systems Hajjah										
New mechanized schemes	Beneficiaries RWSSP	10,915	10,915	10,915	10,915	-	-	-	-	43,660
Rural Water Supply Systems Ibb										
New mechanized schemes	Beneficiaries RWSSP	9,774	9,774	9,774	9,774	-	-	-	-	39,096
Rural Water Supply Systems Amran										
Mechanized Systems RWSSP	Beneficiaries RWSSP	7,216	7,216	7,216	7,216	-	-	-	-	28,864
Rural Water Supply Systems Lahj										
Mechanized Systems RWSSP	Beneficiaries RWSSP	9,250	9,250	9,250	9,250	-	-	-	-	37,000
Rural Water Supply Systems Al Dalah										
Mechanized Systems RWSSP	Beneficiaries RWSSP	-	7,216	7,216	7,216	7,216	-	-	-	28,864
Rural Water Supply Systems Abyan										
Mechanized Systems RWSSP	Beneficiaries RWSSP	5,698	5,698	5,698	5,698	-	-	-	-	22,792
Subtotal Beneficiaries RWSSP		42,853	50,069	50,069	50,069	7,216	-	-	-	200,276

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