

JOINT ANNUAL REVIEW OF NWSSIP YEAR 2005

Urban Water and Sanitation

I Key Issues

- Access to water and sanitation in NWSSIP is explicitly defined as houses connected to networks; it does not take into consideration that there are other types (such as water trucks, cesspits) of service which still cover large parts of the population in a more or less acceptable manner; coverage assessment in this paper only refers to NWSSIP terms
- Number of people with access to safe water supply and sanitation is increasing; however, urban universe and service coverage baselines have partly contradicting reference data (“urban” population in 2004 census not always in line with utilities’ understanding of their service area); NWSSIP targets for water supply (2009=71%) coverage are achievable (2005=58%), but for sewerage (2009=52%) they need some adjustment (2005=32%); sanitation targets need to be reduced to 42% (2009), separate targets will be defined for alternative service options
- Water availability l/c/d underachieving the NWSSIP target; while coastal towns usually are well served, there are critical towns (such as Taiz, Sana’a, Sa’ada, Amran) where rural-urban water transfer must be organized on short notice
- Decentralization process well on track; 84% of total urban population related to utility towns are attended by independent LCs and their branches
- Annual investment target of USD 150 mn missed by far (of this target, 90% planned, 43% approved and 30% disbursed in 2005). Budget approval rationale unclear and disbursement constraints are many
- Value for money has improved (investment 2004-2005 per new HC dropped from Ø USD 1000 to USD 780; NWSSIP target was USD 2,170); however, this cross-project assessment is not a reliable trend and cost development overall is rather upwards
- Operational efficiency improving (UFW down to 29.9%, collection efficiency up to 90%, physical completion rate up to 71% in spite of reduced investment budget disbursement); most utilities cover their O&M cost, overall O&M cost coverage according to PIIS stands at some 107% (collected) and 120% (billed), but contradicting data submitted by the utilities require revisiting this aspect after the JAR
- Poor people benefit substantially from water supply and sanitation services. Water supply tariff system markedly pro-poor, but tariff adjustments too irregular and often not in line with full cost coverage needs

II Summary Analysis

a. Capacity Development and Organisational Strengthening

- NWSA maintains 19 branches of which 2 are already earmarked as new LCs; the launching process is however delayed
- 9 LCs with 27 utilities (only 23 captured in JAR process) exist, but the relation between LCs and branches within their geographic boundaries still lacks clarity
- Staff in the sector in 2005 is around 7,400, but the ratio of professionals (10.8%) and staff with technical background (18.0%) seems low; however, no benchmarks have been set as yet

- Reported training days are Ø 3.9 day/staff/yr for in-country courses (for professional and technical level staff), plus a total of 5,200 training days abroad (mid- and long-term courses); there is no systematic personnel development concept and focus of training / HRD is under revision
- UWSS has launched its PIIS monitoring system, so far used by 23 utilities, NWSA and MWE planning department; benchmarking process will start soon
- Performance of water utilities differs. Some perform well, some need considerable strengthening
- Quite some problems could be observed in delivering plausible data for the JAR; substantial training is needed in English language, statistical terminology and data cross-checking / interpretation, financial accounting and reporting, use of monitoring instruments, computer skills etc.

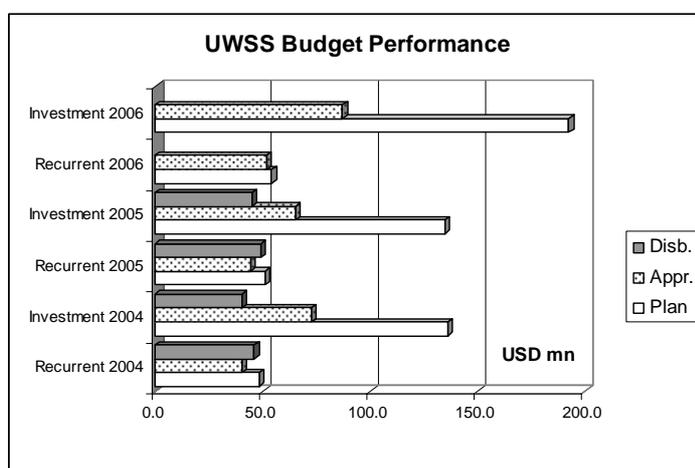
b. Outcome indicators (domestic indicators)

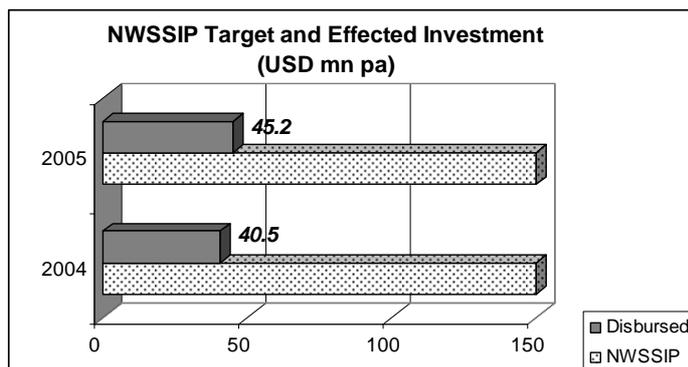
- NWSSIP water coverage target achievable with additional human and effective financial resources; water supply coverage (2005=58%) up 11% from 2002 baseline; increase however not yet surpassing urban population growth, thus in some cases coverage is actually decreasing
- Sewerage network coverage (2005=32%) up 7% from 2002 baseline, but increase behind urban population growth; NWSSIP sanitation targets need redefinition

c. Results Indicators 2005 (domestic indicators)

- Total number of effective LCs is 9, 2 were approved by cabinet in 2005 and still need to be officially established by decrees
- In 2005, approx. 26.300 new water house connections have been constructed, benefiting some 197.000 persons; total domestic HCs now approx. 461.000
- In 2005, approx. 32.750 new sewerage house connections have been constructed, benefiting some 246.000 persons; total domestic HCs now approx. 255.000
- Water production overall growing slightly, reaching 90% of NWSSIP target, however substantial regional differences; water consumption (produced = 86 l/c/d, billed = 61 l/c/d; NWSSIP target (billed) = 40-100 l/c/d): NWSSIP target is slightly underachieved

d. Financial Indicators





*) 2004 target data for reference only, since NWSSIP was not yet approved

III Conclusions on 2005 performance



Institutional capacities to efficiently manage the interrelated aspects of functional technical systems, cost-effective technologies, recurrent cost and operational demand, resource effectiveness and financial reporting seem to be weak or lacking in many cases. Not all key positions are occupied based on transparent recruitment processes, and evidenced lack of competences have not triggered corrective actions. Thus, capacity building efforts are often facing low responsiveness since a major focus is on training only. **Corrective actions are needed through additional training or, as the case may be, new recruitment. Capacities need also be supported more consistently by consultancies and advisory services to key staff in organizational development, management, administration, as well as financial and technical operations.**



So far **increase of service coverage** does not match urban population growth and **does not close the gap**; while water supply targets with some additional resources and efforts can still be reached, the sewerage target coverage is unrealistic (the 2005 confirmed coverage is only 7% above the assumed 2002 baseline). More speed in increase of coverage has been hindered by: (i) increased duration and complexity of project planning processes; (ii) limitations in water resource availability in a number of utilities; (iii) insufficient funds for investments; and (iv) low absorptive / implementation capacity of the utilities. Thus **additional resources and capacities are needed.**



Benefits to the population come as increased coverage, maintaining water supply reliable and of reasonable quality, and disposing of the sewerage in an environmentally sound manner. Coverage increase has been poor, but water production was kept stable and with reasonable continuity, and quality is being watched. At the same time, basically all sewerage networks are connected to STPs, although the quality of effluent is not satisfactory. **More attention is needed for water quality aspects and STP performance.**



Although the ratio between overall investments and achieved additional service coverage seems to have improved, this only shows a part of the picture. Small network extensions or just house connections require comparatively small amounts of money, while the provision of complete and complex systems demands possibly up to 5 times the indicated amounts, especially in sanitation; **more cost-effective solutions will become imperative.**



As from the utilities' perspective, much of the investment planning seems to be a futile exercise, since effective money flow is reduced by donors as well as government for a number of reasons. **Investment planning has to be improved with regard to sub-sector targets, good plans should be prioritized and commitments must become more reliable.**



The utilities have effectively deposited in the “**depreciation accounts**” accumulated funds of some USD 13 mn, of which, except for some minor quantities and small utilities, none is interest bearing and thus **not protected against inflation**. In 2005 alone, with an official inflation rate of 20.5%, the utilities have thus lost the equivalent of USD 2.5 mn in real value. Furthermore, substantial amounts are booked to virtual “depreciation accounts” in the utilities' balance sheets, but the capacity to mobilize these funds for equipment replacement seems limited. **The overall asset register needs to be verified and updated (currency factor, discounted value) by a financial expert.**



The most relevant performance item is the cost coverage of O&M. O&M cost coverage according to provided JAR data (2005=87.7%) is not correct, and the PIIS indicates that coverage is above 107%. **All financial data need to be verified by a qualified independent consultant and serious training efforts in the utilities have to be started immediately.**



Information on tariffs has been fragmented, but there is indication that (i) **tariffs are not revised regularly** in line with inflation and/or full cost coverage targets; (ii) unforeseen events such as GoY's wage strategy and reduction in energy cost subsidy in 2005 have not prompted the necessary tariff adjustments; and (iii) the already **accumulated adjustment needs will make it difficult to politically sustain a full update**. On the other hand, there is a good margin to adjust tariffs without hurting the poor. **The regulation agency under study has to tackle this issue immediately, and at least one compulsory annual tariff adjustment is highly recommended.**

IV Key recommendations

- Verification of urban population baseline and relevant coverage data
- Immediate assessment and improvement of managerial, financial and technical capacities at all utilities, curb increase of non-technical auxiliary staff and reduce excessive dependency from external consultancies by building up own capacities
- Clarify and define the relationship between LC and autonomous water utilities within the same governorate. Independent operations should be kept, strategic support be defined and be provided to the autonomous water utilities on commercial basis
- Put newly established LCs on the move with proper human resources capabilities and equipment; some utilities will have to implement a staff restructuring program in order to improve operation and to increase absorption capacities
- First and foremost, update all financial data; then, address the cost coverage equation by making cost structures more transparent, curb overspending of recurrent budgets, improve revenues and explore ways for more cost-effective procurement
- Implement the recommendations of the study on an independent regulation agency for UWSS

- Increase quality and speed of project planning and preparation in the framework of a flexible program approach, and move away from complex mega-projects (donor- and locally funded projects)
- Increase investment funding to the required NWSSIP target sub-sector budget, aligned with a mid-term results framework

VI Indicative targets for 2006 and 2007

a. Capacity Development and Organisational Strengthening

2006:

- Issue decree for the approved 2 LCs in 2005, and provide with proper staff, training and budget; elaborate opening balance sheets and strategic plans
- Approve (done) and issue decrees for at least 2 more LCs
- Finalize the HRD inventory and start work on a HRD sector concept / strategy
- Increase ratio of professional and technical staff in all utilities, after defining respective benchmarks
- Define roadmap for sub-sector program-based approach
- Start formulation of a mid-term results framework (MRTF) and harmonize with mid-term expenditure framework (MTEF)
- Update NWSSIP unit costs (house connections) and technological choices
- Contract Technical Assistance for verification of financial performance data
- Design and launch massive coaching and training program for management and monitoring capacities in all utilities
- Enhance capacities of NWSSIP M&E unit
- MWE shall fully assume responsibility for PIIS operation

2007:

- Enhance capacities of newly established LCs
- Approve and legalize 2 more LCs
- Finalize HRD sector strategy
- Implement the training program related to utility performance in the fields of managerial, financial and technical aspects
- Finalize PIIS benchmarking and increase PIIS affiliation of utilities

b. Outcome indicators

2006:

- Increase water supply coverage to 61% (based on 58% 2005 baseline)
- Increase sewerage coverage to 34% (based on 32% 2005 baseline)

2007:

- Increase water supply coverage to 65% (based on 58% 2005 baseline)
- Increase sewerage coverage to 37% (based on 32% 2005 baseline)

c. Results Indicators

2006:

- 13 LCs in operation (end of year)
- All LC have strategic plans prepared
- 47,000 new HC water finalized
- 31,000 new HC sewerage finalized

2007:

- 15 LCs in operation (end of year)
- All LC have strategic plans developed or updated
- 59,000 new HC water finalized
- 40,000 new HC sewerage finalized

d. Financial Indicators

2006:

- Disbursement of investment budget increased by to USD 99 mn
- O&M cost coverage increased by 10% as compared to 2005 (baseline for review)

2007:

- Disbursement of investment budget increased by to USD 136 mn
- O&M cost coverage increased by 5% as compared to 2006 (baseline for review)

Average HH size 7.5 persons	2005		2006		2007		2008		2009		NWSSIP target	
Urban growth rate 5% pa	WS	SAN	WS	SAN	WS	SAN	WS	SAN	WS	SAN	WS	SAN
Urban population (mn)	5.9		6.2		6.5		6.8		7.2		6.9	
Service coverage (%)	58%	32%	61%	34%	65%	37%	68%	39%	71%	42%	71%	52%
Urban population covered (mn)	3.4	1.9	3.8	2.1	4.2	2.4	4.6	2.7	5.1	3.0	4.9	3.6
No. HC (thousands)	457	250	504	281	563	321	617	354	682	403	653	478
Annual new HC (thousands)	25	32	47	31	59	40	53	33	65	50		
Average cost per HC (USD)			1,100	1,500	1,200	1,650	1,330	1,820	1,460	2,000		
Investment per category (USD mn)			52.0	46.6	70.9	65.3	70.8	59.9	95.0	99.2		
Total investment pa (USD mn)	45.2		98.6		136.2		130.7		194.2		Ø 150.0 pa	