

IEG ICR Review

Independent Evaluation Group

1. Project Data:		Date Posted : 07/25/2011	
PROJ ID :	P061558	Appraisal	Actual
Project Name :	Water Sector Project	Project Costs (US\$M):	79.27
Country:	Niger	Loan/Credit (US\$M):	48.00
Sector Board :	WAT	Cofinancing (US\$M):	
Sector(s):	Water supply (87%) Sanitation (10%) General public administration sector (3%)		
Theme(s):	Water resource management (25% - P) Regulation and competition policy (25% - P) Rural services and infrastructure (24% - P) Participation and civic engagement (13% - S) Access to urban services and housing (13% - S)		
L/C Number:	C3505; CH259		
		Board Approval Date :	05/03/2001
Partners involved :		Closing Date :	12/31/2006
			07/31/2010
Evaluator :	Panel Reviewer :	Group Manager :	Group :
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2. Project Objectives and Components:

a. Objectives:

According to the DCA (Schedule 2): "The objective of the Project is to assist the Borrower in increasing sustainable and efficient access to improved potable water and sanitation services in urban and rural areas of its territory through: (a) improving water production and distribution efficiency and providing affordable sanitation services; (b) strengthening the institutional capacity of MRE [Ministère des Ressources en Eau] in the areas of regulatory oversight and policy formulation and strengthening the management capabilities of ARM [Autorité de Régulation Multisectorielle] and SPEN [Société de Patrimoine des Eaux du Niger] to monitor and regulate water sector activities; and (c) rehabilitating rural water facilities, developing on-site sanitation services and implementing community-based management of rural water facilities involving private sector participation ."

According to the PAD (page 3): "The objective of the project is to increase sustainable and efficient access to improved potable water supply and sanitation services in urban and rural areas through (a) improving water production and distribution efficiency and providing affordable sanitation services; (b) strengthening the institutional capacity in the areas of oversight, policy formulation, monitoring and regulation; and (c) rehabilitating rural water facilities, developing on-site sanitation services and implementing community-based management of rural water

facilities involving private sector participation ."

This ICR Review uses the statement of objectives given in the DCA because it is more specific and monitorable .

It was expected that the project's improved water supplies would benefit 355,000 people (of which 230,000 urban) and sanitation would benefit 35,000 urban people and 40,000 rural people. A hygiene and education program was expected to benefit 50,000 people.

Target values of the key indicators related to the access to services were revised in 2006 to reflect the scaling -up of activities that resulted from the Additional Financing .

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

If yes, did the Board approve the revised objectives /key associated outcome targets?

Yes

Date of Board Approval: 07/18/2006

c. Components (or Key Conditions in the case of DPLs, as appropriate):

- **Institutional Strengthening and Capacity Building (Appraisal US\$ 3.42 million, actual US\$ 5.32 million).** This component was implemented by the Ministry of Water Resources (MRE) and the Project Coordination Unit (PCU). It was designed to support and strengthen the urban water sub -sector reform and ensure successful implementation of project components . It included three sub-components: (a) institutional strengthening; (b) capacity building and technical support; and (c) water resource management capacity building .
- **Urban Water Supply (Appraisal US\$ 54.83 million, actual US\$ 106.64 million).** This component was implemented by SPEN to help increase coverage and reliability of water supply in Niger's urban centers . The urban water component comprised two sub-components: (a) physical works (rehabilitation and extension of water supply networks); and (b) studies and supervision .
- **Rural Water and Sanitation (Appraisal US\$ 4.90 million, actual US\$ 7.70 million).** This component was implemented by the Directorate of Inventory and Management of Water Works (DIGOH) of the MRE. It helped to increase access to water supply and sanitation services in rural areas . It included four sub-components: (a) rehabilitation/extension of 50 existing mini-AEPs; (b) promotion of the private sector; (c) build and implement an improved monitoring system; and (d) sanitation, hygiene and health education .
- **Urban Sanitation Pilot Program (Appraisal US\$ 1.84 million, actual US\$ 2.69 million).** This component was implemented by the Directorate of Construction of New Water Works (DTNAEP) of the MRE and helped to develop, test and implement appropriate tools to increase sanitation coverage and improve sanitary conditions in periurban areas. It comprised three sub-components: (a) rehabilitation and construction of individual and public latrines; (b) school sanitation; and (c) strengthening the capacity of main stakeholders .
- **Environmental Management Plan (Appraisal US\$ 0.28 million, actual US\$ 0.36 million).** This component was implemented by Bureau des Evaluations Environnementales et des Etudes d'Impact (BEEEI). It supported: (a) local environmental development program in Zinder; (b) provision for design of appropriate wastewater disposal facilities for self-contained sanitation systems in Niamey; (c) compensation for temporary lost income from market gardening activities due to the construction of pipes in Niamey; and (d) support to BEEEI for equipment, dissemination of EA texts and monitoring the implementation of the EMP .

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

Project Costs :

- Final project costs were 56% greater than estimated at appraisal. The primary reasons were (a) there was far greater demand from the urban population for the social water connections and on -site sanitation facilities and (b) that project activities in secondary urban centers had considerable cost overruns . As a consequence the costs of urban water supply (UWS) almost doubled. Costs of Rural Water Supply and Sanitation (RWSS) increased by 57%.
- According to the ICR (pages 11 and 49) the cost overruns were: (a) inaccuracies in the cost estimates of detailed design studies; (b) the results of the few contractors (returning to operate in Niger after 10 years of political instability) taking advantage of their monopoly; (c) lack of reliable pricing benchmarks during appraisal; and (d) an 18% devaluation in the US\$ against the CFAF .
- The Region in its response to this ICR Review (06/19/2011) stated that the above variations in project costs were "mainly attributable, not to cost overruns as stated in the review, but to the scaling up of activities (the number of connections was 60% higher than the PAD estimate and the production capacity increase 43%

higher. The additional cost resulting of the scaling up was about US\$ 32 million (financed not only by IDA but also by BOAD and China), i.e. 80% of the cost increase of the urban water supply component . For the rural water component the cost increasedby 24% because of increased support costs . And for urban sanitation.. [costs increased] by 29%, whereas the number of facilities finally constructed was twice the number planned in the PAD."

Financing :

- On January 30, 2006, the Borrower requested additional financing . The Bank reviewed the Government request and found that (i) the cost overruns were beyond the Government 's control; (ii) urban households had already mobilized contributions to support the additional demand for connections and sanitation facilities; and (iii) additional funds were not readily available from the national budget or the parallel -financiers, and the original IDA funds were already fully committed. The Bank agreed to provide additional financing in the form of a Grant of SDR 7 million (US\$10 million equivalent) to *inter alia* complete the works in 12 secondary centers, to construct 5,600 additional social connections, 70 standpipes and 4,000 additional sanitation facilities and to rehabilitate eight water systems in secondary urban centers . These activities were in line with the original development objectives and project components and were appraised on April 14, 2006. The Additional Financing was approved on July 18, 2006 and became effective on March 14, 2007. Total Bank financing at closing was US\$66.69 million excluding US\$0.34 million that was canceled.
- Parallel financing of US\$45.39 million equivalent (planned US\$21.45 million) was made by three donors (France AFD: US\$9.50 million; China US\$9.01 million; and West African Development Bank US\$23.36 million). In addition foreign private commercial sources invested US\$ 3.52 million.

Borrower Contribution :

- The actual contribution was US\$13.27 million, 25% more than the planned US\$9.95 million. Beneficiaries unexpectedly contributed US\$0.17 million.

Dates:

- The original closing date was 12/31/2006. The DCA was amended to include the Additional Financing and a new closing date of December 31, 2009 was agreed. Subsequently, IDA suspended disbursements for country-related reasons in January 2010, which prevented the processing of payments during the grace period; the suspension was lifted on April 30, 2010. The Bank agreed to the Government's request for a retroactive extension of the closing date on May 18, 2010 in order to process the outstanding withdrawal applications . On June 18, 2010, IDA granted an extension of the closing date to July 31, 2010.

3. Relevance of Objectives & Design:

Objectives : High

- According to the 2002 Poverty Reduction Strategy, Niger's water and sewage sector was regarded as severely underdeveloped. Urban water investments practically came to a standstill in 1996, as the Government and donors recognized that the government utility was no longer a credible recipient of external funding and that sector reform was urgently needed . A substantial backlog of investments resulted, since the government was not in a position to finance significant renewal and system expansion . As a result, national access to safe drinking water had declined steadily from 54% in the early 1990s to 46% percent in 2003, the worst in West and Central Africa. By 2000 only about 45% of the urban population of 1.7 million were served through 45,600 service connections and 1,850 standposts. Generally about half the urban population with access had to purchase their water from private vendors because they could not afford to pay the high connection fees, and this particularly affects the poorest . Typically those with private water connection paid 5% of their household expenditure on water; in contrast those accessing public fountains paid 11% whilst those using street vendors paid almost 19%. Although 75% of the population lived outside the urban areas, coverage of rural water supply was only 52% and even then 35% of small rural water supply schemes were not functioning . Sanitation coverage was 7% - like access to water, the worst in the region .
- Objectives were highly relevant to three of the four pillars of the 2003-2005 Country Assistance Strategy (CAS). Pillar 1 included promoting sustainability through privatization of state -owned enterprises; Pillar 3 focused on improvement in the access of the poor to quality social services, including basic education, health, water and sanitation, and adequate urban habitat and Pillar 4 aimed at assistance to strengthening institutional and individual capacity within and outside Government, at the central and local level . Objectives remain relevant to the two pillars of 2008-2011 CAS, particularly Pillar 2 that aims to develop human capital through equal access to quality social services that include adequate and sustainable water and sanitation .
- Project objectives were in accord with the Niger's Master Plan for the Development and Management of Water Resources and its Urban Environmental Strategy developed over the period 2000-2003.
- Objectives remain relevant as the Government, with the support of the international donor community, prepared a National Water Supply and Sanitation Program for achieving the Millennium Development Goals . After project closure the Government renewed its commitment in a new Letter of Sector Policy (April 16, 2010) to maintain the public-private partnership (PPP) option for the management of the urban water sub-sector with an extension of the ongoing lease contract with the private operators .

Design: Substantial

- Lessons learned from water sector operations with PPP in West African countries (notably Guinea, Côte d'Ivoire, and Senegal) were reflected in the design of the urban water supply PPP. Specifically the focus on PPP to provide safe drinking water and sanitation increased access; and subsidizing social connections in the poorer urban fringe areas was successful in reducing reliance on expensive water from street vendors and reducing the financial burden of water expenses on family budgets.
- Project design focused on removing three major constraints to improved sector performance: reforming the institutional set-up; assisting in programming and executing priority investments that would allow a more equitable access to services; and introducing commercial principles to the operation of urban water utilities that would benefit from improved revenues as service levels and efficiency improved. Independent review of quality-at entry review by the Bank's QAG was critical about size and scope of the project and raised doubts about ownership of the institutional reform program; however, these concerns proved to be unfounded in practice.
- The involvement of women in the selection of sites and sanitation options and as caretakers of standpipes was a highly successful design feature.
- A preexisting overlap in the responsibilities of the implementing directorates of the Ministry of Water and the Ministry of Health was not addressed during appraisal. According to the ICR (page 46): "This conflict created coordination issues until DHPEPS [Directorate of Public Hygiene and Sanitary Education] removed itself from the project." In addition, the ICR (page 46) also notes that: "the use of a contract management agency (MOD) to implement the component did not allow DTNAEP [Directorate of Construction of New Water Works] to fully appropriate the component and the municipality of Niamey, which was an important stakeholder, gave up participation after a few months as it felt it was not compensated enough for its activities."

4. Achievement of Objectives (Efficacy):

The outcomes and outputs reported for the project cannot be solely attributed to the Bank's financing because of complementary investments by the three parallel financiers.

(1) The objective to assist the Borrower in increasing sustainable and efficient access to improved potable water services in urban and rural areas was substantially achieved. Efficacy is rated Substantial.

Increased access to potable water supplies in urban and rural areas generally exceeded targets. This was achieved through increasing water supplies, extending the supply network to unserved areas and reducing unaccounted-for-water. Social connections serving the poorest consumers are affordable. The water supply system was successfully managed by a well-regulated private operator that increased supply efficiency and, as a result of increased water tariffs, the sector achieved financial equilibrium by 2005. Up to this point all indications were that the water supply system was sustainable provided that the public agencies reduce their excessive use of water and that water tariffs further increased to cover the operation and maintenance costs of the extending supply network. However, the project was unable either to curtail excessive water use by public agencies or ensure that they paid for it by project closing. Tariff increases were frozen after 2006. The Region subsequently informed IEG (06/19/2011) that the Government of Niger had settled arrears in the payment of its water bills in early 2011 and is currently taking necessary actions to strengthen the financial equilibrium of the sector, including tariff adjustments.

Access was increased and water became more affordable:

- **Urban.** Before the project, water supplies were rationed in many urban areas. By the end of the project, water supply was available for 24 hours a day (except when there are power outages).
- The number of people with access to water services in urban areas increased by 135% from a baseline of 230,000 to 541,000 by the end of the project. This was enabled by the construction of 43,700 service connections of which 18,133 were new social water connections subsidized by the project (target 16,800) and 416 were new public standpipes (target 330) in low-income peri-urban areas.
- The social connections program and the standpipe programs in the peri-urban areas of the major cities had a positive impact on the households' water expenditures. Surveys carried out in 2009 found that the share of the population with social connections that spent more than 10% of their daily budgets on water supplies fell from 62% to 16%. And for those using standpipes the share fell from 49% to 19%. The ICR notes (page 17) that even though the surveys do not allow precise measurement of households' income and of the income distribution of beneficiaries, the geographical targeting of the programs on poor peri-urban neighborhoods can be considered as an acceptable proxy for poverty targeting. A result of the reduced water costs is that the retention rate of social connections customers (i.e. the percentage of customers who are not cut-off for nonpayment) is about 95 percent, well above that observed elsewhere in West Africa (ICR page 18).
- **Rural.** 55 rural piped water systems were rehabilitated (target 55) and this increased the share of the rural project population with access from 55% to 78% (target 75%).

Water production and distribution efficiency in urban areas improved:

- The volume of water produced for urban use in the project area increased by 46,100 m³ per day (m³/d) (ICR

page 44) as a result of rehabilitated infrastructure, increasing the production capacity of two water treatment plants in Niamey and increasing pumping capacity and reduction of water losses . This exceeded the target of 35,000 m³/d. This alleviated water shortages that existed in several parts of the city and enabled extension of the network to meet the growing demand for new service connections .

- In secondary urban areas the water supply improved (no targets given) through the construction of 45 new wells and rehabilitation of 8 wells, construction of two new water treatment plants with a capacity of 8,000 m³/d, 67 km of new water transmission mains, storage tanks and 275 km of new water distribution pipework.
- Water distribution efficiency improved in Niamey . Unaccounted-for-water fell from 20% to 15.3% (target 15%) by the end of the project.
- The objective of reducing the annual consumption of the public agencies (that accounted for 21% of total water consumption and 30% of sector revenues in 1998) by 1 million m³ a year was not achieved . According to the ICR (page 16) this is attributable to: (i) the insufficient rehabilitation of public agencies' internal installations; and (ii) the inefficiency of the communication campaign for a better water management in public offices, military camps and hospitals . However, reduction of the percentage of the consumption by bonded public customers reached 94 percent of the project's target .

Institutional capacity to manage the sector improved :

- The institutional and contractual arrangements established in 1999 involved four participants: (a) the Government, responsible for defining sectoral policy, managing water resources, and developing tariff policy; (b) the Multi-sectoral Regulatory Agency, responsible for developing a regulatory framework, monitoring water service and contractual arrangements among stakeholders; (c) a public asset holding company, *Societe de Patrimoine des Eaux du Niger* (SPEN) created in 2000; and (d) a private operator, *Societe d'Exploitation des Eaux du Niger* (SEEN) that was appointed in 2001, two months before project approval, with exclusive rights to produce and distribute potable water in all urban centers of the leased area for a 10-year period.
- SPEN effectively oversaw project implementation and supervision of the investment program . SPEN has also been effective in managing its financial responsibility of the urban water sector . SEEN was effective at increasing the volumes of water sold and the customer base, improving the collection rate on bills from of 79% to 97% for private customers (who account for 80% of all customers), and reducing costs (staff per 1,000 connections fell from 8 to 5, and unaccounted-for-water was reduced to 15.3%).
- SPEN achieved the target of 'financial equilibrium' for the urban water sector by 2006. The working ratio improved from 0.81 in 2002 to 0.32 in 2006 (target <1.0) and reached 0.52 in 2009, and the debt service coverage ratio rose from 1.00 in 2002 to 2.07 in 2005 (target >1.2). This was enabled by SEEN's efficiency improvements and water tariff increases approved by the regulator . As a result, tariffs increased from 210 CFAF/m³ in 2003 to 252 CFAF/m³ in 2006 meeting project targets. However the financial equilibrium thereafter deteriorated. In 2009 the debt service coverage ratio was 0.34 because consumer tariffs were frozen by the Government since 2006 as part of its poverty alleviation policy . A similar situation occurred for the payment of public water bills. Public customers were current on their payments until 2006, and then arrears grew but these were settled as an effectiveness condition of the Additional Financing . Since then, public customer arrears increased to about CFAF 1 billion by the closing date of the project . The Region informed IEG (06/19/2011) that the Government of Niger has settled arrears in the payment of its water bills in early 2011; is currently taking necessary actions to strengthen the financial equilibrium of the sector, including tariff adjustment; and that a plan for improving SPEN's financial situation was adopted by government in 2011. Subsequently the Region informed IEG that the Government passed a Decree on 06/21/2011 that increased water tariffs and that these would be come effective 07/01/2010.
- The sub-objective to rehabilitate rural water facilities, implement community -based management of rural water facilities involving private sector participation was achieved . Rural water management institutions were changed . In the 55 rehabilitated and new rural piped systems 55 water use associations (WUAs) were formed under the project (target 55). While it was planned that 25 project facilities would be managed under contract by private operators, 41 are currently being managed by the private sector thus significantly exceeding targets . No statistical data are presented in the ICR about how effectively these smaller utilities /WUAs performed. However, the ICR notes (page 14): "A diagnostic study of rural piped water systems, which was carried out in 2009, showed that the systems managed by private operators were significantly more reliable and accountable and generated more funds for adequate maintenance and renewal of equipment than the systems under community management."
- There are few indicators presented in the ICR of how effectively the main government sector agencies MRE and ARN performed. The ICR notes (page 32) that establishment of a decentralized monitoring system for rural water systems was not done . A communications plan to sensitize the population about sector reforms and the need to increase tariffs was not implemented (ICR page 43).
- The Environmental Appraisal Office (BEEEI) developed its ability to undertake environmental and social impact assessment of water development .

(2) The objective to assist the Borrower in increasing sustainable and efficient access to sanitation services in urban and rural areas was achieved . Efficacy is rated Modest .

- **Urban.** The urban sanitation component benefited 120,000 people (target 50,000). 7,758 on-site sanitation

facilities were constructed (target 8,000); 37 blocks of latrines for schools (target 37) and 17 public toilets (target 18).

- **Rural.** 6,600 rural latrines were constructed (no target).
- There are no indicators presented in the ICR to determine if the sanitation services provided through the project are efficient and sustainable. While hygiene and sanitation education programs reached 6,400 people (target 4,000), there are no surveys or outcome indicators to estimate how effective this outreach was in improving public health.

5. Efficiency (not applicable to DPLs):

An exemplary analysis of the project's efficiency was presented in the PAD Annex 4. An Economic Rate of Return (ERR) of 15% was calculated on the basis of incremental water supplied and costs savings as a consequence of improving the operation of the operation of the water distribution system. This accounted for 87% of project costs. The Project Paper of the Additional Financing also included a cost-benefit analysis of the additional investments scheduled for the urban water supply component, which took into account only the incremental water sales and the consumer surplus attributable to the additional investments, as there were no additional cost savings. The ERR of the additional investments was estimated at 17.3%. A similar (but abbreviated) analysis was undertaken at project closure and the ERR was estimated to be 13%. The reduction in ERR was primarily the result of costs overruns. It is not clear in the ICR, however, how far the project delays affected the benefit stream.

Overall, efficiency is rated substantial.

a. If available, enter the Economic Rate of Return (ERR)/Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation :

	Rate Available?	Point Value	Coverage/Scope*
Appraisal	Yes	15%	87%
ICR estimate	Yes	13.3%	87%

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome:

Project objectives were and remain highly relevant. Relevance of design is rated substantial. The project fully achieved its objectives to increase access to water supply and sanitation, exceeding targets. Water supply is delivered efficiently, and while the financial conditions for sustainability were met during the first 5 years of the project, they have since deteriorated. The efficacy of water supply and its new institutions are rated substantial. There were no measures for the efficiency or sustainability for sanitation and its efficacy is rated modest. Overall the project was substantially efficient. The overall outcome is rated satisfactory.

a. **Outcome Rating:** Satisfactory

7. Rationale for Risk to Development Outcome Rating:

- At project completion, the primary risk was the financial viability of the urban water supply. First, the Government had shown itself unwilling to approve justified increases in the water tariff. Second, Government had been ineffective in ensuring that public sector agencies pay their water bills that would account for a significant portion (30%) of the SPEN's revenue.
- SPEN and ARM have explored various scenarios of tariff increases, combined with a rescheduling of the on-lent debt of SPEN, which would allow restoration of SPEN's financial equilibrium. These scenarios indicate that water tariffs need to increase by about 15% immediately. Failure to increase water tariffs risks deterioration in operational performance and a growing backlog of deferred maintenance. It also poses a high risk of SPEN defaulting on government loans.
- Although the ICR states that the follow-on operation being designed would (as a condition of Board presentation) covenant required tariff increases and payment of public billing arrears (as had happened for this project and its additional funding) this provides little assurance that the Government, as against the donors, is fully behind a financially viable PPP in the water sector.
- After project closure the Government, as a precondition for the follow-on operation, renewed its commitment in a new Letter of Sector Policy (April 16, 2010) to maintain the public-private partnership (PPP) option for the management of the urban water sub-sector with an extension of the ongoing lease contract with the private operators.

- In its response to IEG on the above comments the Region states (06/19/2011): "Actually, it is now apparent that the previous Government's decisions to freeze tariffs and accumulate arrears on public water bills were dictated by political considerations linked to its increased unpopularity and its mismanagement of public finances . The provisional (*de facto*) Government that took power in February 2010 attempted with success to restore a sound management of public finances and resumed payments of water bills to eventually settle arrears in 2011. The same Government, which resumed an active dialogue with the donors' community, expressed its support of the PPP arrangements and adopted a plan to improve the financial situation of SPEN . These commitments are confirmed by the new Government that was constitutionally elected in May 2011. We have, therefore, evidence that the Government is fully behind a viable PPP for the sustainable development of the water sector ." Subsequently the Region informed IEG that the Government passed a Decree on 06/21/2011 that increased water tariffs and that these would be come effective 07/01/2010.

a. Risk to Development Outcome Rating : Significant

8. Assessment of Bank Performance:

Quality-at-entry:

- The project was prepared in consultation with development partners that provided parallel financing . It successfully built on lessons drawn from similar operation in Central and West Africa and sector experience . The World Bank and AFD financing were designed under the common framework of the investment program defined to support the reform of the sub-sector. While QAG's QAE assessment rated it overall satisfactory it had reservations that the size and scope of the project was too large, that an Adaptable Program Loan focusing initially on urban water supply would have been preferable given the risks, and that too much confidence was placed on SPEN and ARM delivering timely results due to the risks of Government interference and their initial weak capacities . In the event, these concerns did not arise . Indeed, QAG (QEA8) later assessed the Additional Financing and rated it as Highly Satisfactory . The panel noted that "the task team was quite successful in managing the risks [identified by QEA4] during implementation" (ICR page 20).

Supervision :

- There was a high level of continuity in the Bank team during the regular supervision missions . Missions focused on the development impact, with a particular attention given to performance indicators and to the execution of the action plan set out in the Sector Policy Letter . Missions were systematically coordinated with other development partners and facilitated inter -agency discussion between Nigerien sector partners . While initially successful in holding the government to agreed tariff adjustments and the payment of its water bills, this was not the case after 2006.

a. Ensuring Quality -at-Entry:Satisfactory

b. Quality of Supervision :Satisfactory

c. Overall Bank Performance :Satisfactory

9. Assessment of Borrower Performance:

Government :

- The project was high in the country's priorities and the Government's commitment to the project's development objective and to the implementation of reforms was high . Counterpart funds for the project were adequate and timely . Approval and implementation of required tariff increases and timely payment of public sector water bills continued until 2006 after which Government commitment to both ceased, thus giving mixed signals about its support for the PPP model .

Implementing Agency :

- The PCU was effective at ensuring the line agencies implemented the project according to plan but was less successful at facilitating and coordinating the agencies responsible for urban sanitation and rural water supply . It failed to establish the decentralized monitoring of rural WSS facilities .
- The physical implementation of the urban water supply component by SPEN was highly satisfactory, as was procurement and contract management . The partnership with SEEN functioned satisfactorily .
- The implementation of the rural water supply and sanitation satisfactorily delivered on project targets but only after initial difficulties facilitating the new institutional arrangements and helping WUAs and operators to address issues. The Directorate of Construction of New Water Works that executed the urban sanitation pilot program was successful in recruiting a contract management agency that facilitated the interventions of the multiple actors (masons, NGOs and community-based organizations, and local consultants).

a. Government Performance :Moderately Unsatisfactory

b. Implementing Agency Performance :Satisfactory

c. Overall Borrower Performance :Moderately Satisfactory

10. M&E Design, Implementation, & Utilization:

Design:

- Monitoring was based on predetermined physical indicators measuring progress of project implementation and performance indicators measuring outputs and outcomes . All indicators were relevant, quantifiable and measurable. The design of monitoring and evaluation arrangements benefited from the experience of previous projects that relied on PPP (particularly the Senegal Water and Sanitation Sector Project), with the necessary adjustments required by the complexity of the Niger operation (urban sanitation pilot program and rural water and sanitation). The PCU was specifically charged with collecting and consolidating the information from the various executing agencies and producing monitoring and evaluation reports and indicators .

Implementation :

- SEEN's Performance Contract included verifiable indicators consistent with the project performance indicators; from 2005 onwards, the indicators were verified and validated by ARM . SPEN's financial model developed under the project was complemented by a regulatory accounting financial model developed for ARM under PPIAF financing, which integrated SEEN's financial information and served as the basic regulatory tool to optimize the investment programs and to propose water tariff revisions . According to the ICR (page 12) various specific studies of impact were carried out before project completion, such as an assessment of the transfer of the management of rural water facilities to private operators; an assessment of the impact of the social connections and the standpipes programs on the living conditions of the urban population; and an environmental/social/sanitary impact assessment of the urban sanitation pilot program in peri -urban areas of Niamey.
- The decentralized monitoring system of rural facilities was not implemented as expected in the project areas .
- Supervision missions included field visits to closely monitor development impacts, particularly for the urban sanitation pilot program and the rural water and sanitation component;

Utilization :

- Annual reviews of the outcome of the financial model of the urban water supply subsector, carried out jointly by MRE, SPEN, ARM and the Bank, in view of assessing the annual tariff increases . M&E activities served IDA supervision missions and triggered, whenever necessary, detailed recommendations to the Government and executing agencies. M&E results were also used extensively in the preparation of the Additional Financing .

a. M&E Quality Rating : Substantial

11. Other Issues (Safeguards, Fiduciary, Unintended Positive and Negative Impacts):

Safeguards :

- The project was categorized as a "B" category under OD4.01 Environmental Assessment . The implementation of the Environmental and Social Management Plan was regularly monitored by Bank safeguard specialists . The final assessment was carried out in June 2009 and the overall safeguard compliance was rated as satisfactory by the Bank (ICR page 13). The assessment found that the initially -planned activities had been fully implemented, including: (i) the timely compensation of temporary income losses from the interruption of market gardening activities by the digging of trenches in Niamey, which was reduced to a minimum by modifying the design and layout of project facilities; and (ii) the restoration of the Gogo-Mashaya Valley, which had been jeopardized by desertification stemming from the abstraction of water resources for water supply . The institutional strengthening of BEEEI, through training and provision of equipment and funding of operational expenditures for monitoring and dissemination, was satisfactorily implemented .

Fiduciary :

- Fiduciary compliance was monitored regularly by the Bank specialists based in Niamey . The Bank's final procurement assessment (including a post review of procurement activities) found that the project's procurement performance was satisfactory, with an appropriate monitoring of the procurement plan and an adequate filing system. The Bank's final financial management assessment found that the overall FM performance was satisfactory. According to the ICR, reporting and audit covenants were fully complied with . The final two audits are not yet due.

12. Ratings :	ICR	IEG Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	

Risk to Development Outcome:	Moderate	Significant	Financial sustainability and political instability are risk factors.
Bank Performance:	Satisfactory	Satisfactory	
Borrower Performance:	Satisfactory	Moderately Satisfactory	Government's wavering commitment to supporting the PPP through essential tariff increase. There appears to have been poor dissemination of the new role of the private sector and poor coordination of some agencies.
Quality of ICR:		Satisfactory	

NOTES:

- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

- The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons:

- **Depending on country conditions, some cost recovery may be possible even in difficult circumstances** . By providing greater access to water services and reducing operational costs through new infrastructure and efficiency improvements using PPP, the cost of water to households can be significantly reduced below that of alternative providers such as commercialized standpipes and water vendors . Under these circumstances poor people may be able to reduce their water coping costs and show willingness to pay .
- **Private sector participation may be a feasible delivery option even in poor countries** . Niger was able to attract international competition for urban water services and at the same time was able to promote local private operators for rural facilities .
- **Improving in a sustainable manner water service provision often requires both supporting sectoral reform and financing key investments** . Tackling water sector institutional reform without the funding of major investments can be risky as the latter usually provide a counterbalance to the political cost of the reform .
- **Rehabilitation investments, which are critical to the improvement of the services in the context of a PPP, can be delegated to the lease contractor** . This would ensure timely execution and avoid conflicts with the asset-holding companies, which tend to favor large-scale investments.

14. Assessment Recommended? Yes No

Why? Lessons for sustainable service provision - what to do and what not to do . Apart from the tariff issue, inter-sectoral coordination appears to be a problem .

15. Comments on Quality of ICR:

The ICR describes project achievements well and the supporting annexes are very useful . However, there are a number of contradictions on the institutional performance of government agencies and in the numbers quoted (e.g. unaccounted-for-water is said to be 15.3% in one place and 14.7% elsewhere; the target for latrine blocks is 195 on page 45, but only 55 on page (vi)). While these errors have been corrected by the Region in correspondence with IEG, they remain in the ICR.

a. Quality of ICR Rating : Satisfactory