

**Document of  
The World Bank**

**Report No.: 36597**

**PROJECT PERFORMANCE ASSESSMENT REPORT**

**GHANA**

**URBAN ENVIRONMENTAL SANITATION PROJECT  
(CREDIT 2836-GH)**

**VILLAGE INFRASTRUCTURE PROJECT  
(IF CREDIT N020 GH)**

**SECOND COMMUNITY WATER AND SANITATION PROJECT  
(CREDIT 3282-GH)**

**July 7, 2006**

*Sector, Thematic and Global Evaluation Division  
Independent Evaluation Group*

## Currency Equivalents (annual averages)

*Currency Unit = Ghanaian Cedi*

1996	US\$1.00	1,637 cedis	2001	US\$1.00	7,171 cedis
1997	US\$1.00	2,050 cedis	2002	US\$1.00	7,933 cedis
1998	US\$1.00	2,314 cedis	2003	US\$1.00	8,677 cedis
1999	US\$1.00	2,669 cedis	2004	US\$1.00	9,005 cedis
2000	US\$1.00	5,455 cedis	2005	US\$1.00	9,073 cedis

## Abbreviations and Acronyms

APL	Adaptable Program Loan
ASIP	Agricultural Services Improvement Project
CAE	Country Assistance Evaluation
CAS	Country Assistance Strategy
CBRDP	Community Based Rural Development Project
CDD	Community driven development
CWSA	Community Water and Sanitation Agency
CWSP-2-	Second Community Water and Sanitation Project
DA	District Assembly
DO	Development Objective
DWST	District Water and Sanitation Team
ICR	Implementation Completion Report
IEG	Independent Evaluation Group
MA	Municipal/Metropolitan Assembly
M&E	Monitoring and Evaluation
MLGRD	Ministry of Local Government and Rural Development
MIS	Management Information System
NDAP	National Development Action Plan
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PU	Project Unit
PPAR	Project Performance Assessment Report
PRSP	Poverty Reduction Strategy Paper
RICU	Rural Infrastructure Coordination Unit
SAR	Staff Appraisal Report
RWSS	Rural Water Supply and Sanitation
RWST	Regional Water and Sanitation Team
SWM	Solid Waste Management
UESP	Urban Environmental Sanitation Project
UWSS	Urban Water Supply and Sanitation
VIP	Village Infrastructure Project
WATSAN	Water and Sanitation Committee
WMD	Waste Management Department
WSS	Water Supply and Sanitation

### Fiscal Year

Government: January 1 – December 31

Director-General Evaluation	:	Mr. Vinod Thomas
Director, Independent Evaluation Group	:	Mr. Ajay Chhibber
Manager, Sector, Thematic and Global Evaluation	:	Mr. Alain Barbu
Task Manager	:	Mr. Keith Pitman

**IEG Mission: Enhancing development effectiveness through excellence and independence in evaluation.**

### About this Report

The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEG annually assesses about 25 percent of the Bank's lending operations. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by IEG. To prepare PPARs, IEG staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader IEG studies.

Each PPAR is subject to a peer review process and IEG management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

### About the IEG Rating System

The time-tested evaluation methods used by IEG are suited to the broad range of the World Bank's work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEG evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (more information is available on the IEG website: <http://worldbank.org/oed/eta-mainpage.html>).

**Relevance of Objectives:** The extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). *Possible ratings:* High, Substantial, Modest, Negligible.

**Efficacy:** The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. *Possible ratings:* High, Substantial, Modest, Negligible.

**Efficiency:** The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. *Possible ratings:* High, Substantial, Modest, Negligible. This rating is not generally applied to adjustment operations.

**Sustainability:** The resilience to risk of net benefits flows over time. *Possible ratings:* Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

**Institutional Development Impact:** The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. *Possible ratings:* High, Substantial, Modest, Negligible.

**Outcome:** The extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

**Bank Performance:** The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

**Borrower Performance:** The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.



## Contents

<b>Principal Ratings.....</b>	<b>v</b>
<b>Key Staff Responsible.....</b>	<b>vi</b>
<b>Preface.....</b>	<b>vii</b>
<b>1. Water and Sanitation in Ghana’s Decentralization Strategy .....</b>	<b>1</b>
<i>Economic and Water Sector Development .....</i>	<i>1</i>
<i>Ghana’s Experience with Decentralization .....</i>	<i>2</i>
<i>The Key Issues.....</i>	<i>3</i>
<i>The Three Projects.....</i>	<i>3</i>
<b>2. The Urban Environmental Sanitation Project (UESP) .....</b>	<b>5</b>
<i>Relevance .....</i>	<i>5</i>
<i>Efficacy .....</i>	<i>6</i>
<i>Efficiency.....</i>	<i>8</i>
<i>Overall Project Outcome .....</i>	<i>8</i>
<i>Institutional Development Impact.....</i>	<i>8</i>
<i>Sustainability.....</i>	<i>10</i>
<i>Bank and Borrower Performance.....</i>	<i>11</i>
<b>3. The Village Infrastructure Project (VIP) .....</b>	<b>13</b>
<i>Relevance .....</i>	<i>13</i>
<i>Efficacy .....</i>	<i>14</i>
<i>Efficiency.....</i>	<i>17</i>
<i>Overall Project Outcome .....</i>	<i>17</i>
<i>Institutional Development Impact.....</i>	<i>17</i>
<i>Sustainability.....</i>	<i>18</i>
<i>Bank And Borrower Performance .....</i>	<i>19</i>
<b>4. The Second Community Water and Sanitation Project (CWSP-2) .....</b>	<b>20</b>
<i>Relevance .....</i>	<i>20</i>
<i>Efficacy .....</i>	<i>21</i>
<i>Efficiency.....</i>	<i>23</i>
<i>Overall Project Outcome .....</i>	<i>23</i>
<i>Institutional Development Impact.....</i>	<i>23</i>

<i>Sustainability</i> .....	23
<i>Bank and Borrower Performance</i> .....	27
<b>5. Monitoring &amp; Evaluation &amp; Fiduciary Issues for the Three Projects</b> .....	<b>28</b>
<i>M&amp;E Design, Implementation And Utilization</i> .....	28
<i>Other Issues (Safeguards, Fiduciary, Unintended Impacts – Positive and Negative</i>	28
<b>6. Decentralizing and Developing Ghana’s Water Sector: Lessons for the Future</b> .	<b>29</b>
1. <i>An Enabling Institutional and Policy Environment</i> .....	29
2. <i>A Major Drive to Build Implementation Capacity</i> .....	31
3. <i>Making Sustainability a Central Focus</i> .....	32
<b>Annex A. Basic Data Sheet</b> .....	<b>35</b>
<b>Annex B. Project Components And Costs</b> .....	<b>41</b>
<b>Annex C. Infrastructure Achievements of VIP and CWSP-2</b> .....	<b>43</b>
<b>Annex D. Monitoring and Evaluation</b> .....	<b>45</b>
<b>Annex E. The Benefits from Integrating Preventive Health with Water and Sanitation Investments</b> .....	<b>49</b>
<b>Annex F. Borrower Comments</b> .....	<b>51</b>

This report was prepared by Keith Oblitas (consultant) who assessed the projects in February 2006. Keith Pitman was the task manager and Chris Gerrard reviewed the report. Soon-Won Pak provided administrative support.

## Principal Ratings

### URBAN ENVIRONMENTAL SANITATION PROJECT (CREDIT 28360)

	<i>ICR*</i>	<i>ICR Review*</i>	<i>PPAR</i>
Outcome	Satisfactory	Moderately Satisfactory	Moderately Satisfactory
Sustainability	Unlikely	Unlikely	Unlikely
Institutional Development Impact	Modest	Modest	Substantial
Bank Performance	Satisfactory	Satisfactory	Unsatisfactory
Borrower Performance	Satisfactory	Satisfactory	Unsatisfactory

### VILLAGE INFRASTRUCTURE PROJECT (CREDIT IF-N020)

	<i>ICR*</i>	<i>ICR Review*</i>	<i>PPAR</i>
Outcome	Satisfactory	Satisfactory	Satisfactory
Sustainability	Likely	Likely	Not Evaluable
Institutional Development Impact	High	Substantial	Substantial
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

### SECOND COMMUNITY WATER AND SANITATION PROJECT (CREDIT 32820)

	<i>ICR*</i>	<i>ICR Review*</i>	<i>PPAR</i>
Outcome	Highly Satisfactory	Satisfactory	Highly Satisfactory
Sustainability	Likely	Likely	Not Evaluable
Institutional Development Impact	Substantial	Substantial	Substantial
Bank Performance	Satisfactory	Satisfactory	Highly Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Highly Satisfactory

\* The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The ICR Review is an intermediate Independent Evaluation Group (IEG) product that seeks to independently verify the findings of the ICR.

## Key Staff Responsible

### URBAN ENVIRONMENTAL SANITATION PROJECT (CREDIT 28360)

<i>Project</i>	<i>Task Manager/Leader</i>	<i>Division Chief/ Sector Director</i>	<i>Country Director</i>
Appraisal	Alan Carroll	James Wright	Olivier Lafourcade
Completion	Gerhard Tschannerl	Inger Andersen	Mats Karlsson

### VILLAGE INFRASTRUCTURE PROJECT (CREDIT N020)

<i>Project</i>	<i>Task Manager/Leader</i>	<i>Division Chief/ Sector Director</i>	<i>Country Director</i>
Appraisal	Rudolph Polson	Jean-Paul Chausse	Serge Michailof
Completion	Charles A. Frempong	Mary Barton-Dock	Mats Karlsson

### SECOND COMMUNITY WATER AND SANITATION PROJECT (CREDIT 32820)

<i>Project</i>	<i>Task Manager/Leader</i>	<i>Division Chief/ Sector Director</i>	<i>Country Director</i>
Appraisal	Jennifer Sara	Letitia Obeng	Peter Harrold
Completion	Arthur M. Swatson	Eustache Ouayoro	Mats Karlsson

## **Preface**

This is the Project Performance Assessment Report (PPAR) of three projects in the Republic of Ghana: the Urban Environmental Sanitation Project, the Village Infrastructure Project and the Second Community Water and Sanitation Project.

The Urban Environmental Sanitation Project (UESP) was approved in March 1996 for an IDA Credit of US\$71.0 million (Credit 28360). At project closure, 90 percent (US\$63.8 million) of the Credit had been disbursed. The project was closed in December 2003, one year behind schedule.

The Village Infrastructure Project (VIP) was approved in May 1997 for an IDA Credit of US\$30.0 million (Credit N020). At project closure 78 percent (US\$23.3 million) of the Credit had been disbursed. The project was closed in June 2004, six months behind schedule.

The Second Community Water and Sanitation Project (CWSP-2) was approved in August 1999 for an IDA Credit of US\$25.0 million (Credit 32820). At project closure 95 percent of the Credit had been disbursed. The project was closed in December 2004, 18 months behind schedule.

The report presents the findings of: (1) a review of the projects' implementation completion reports, appraisal reports, legal documents, sector reports and other relevant material; and (2) an IEG mission to Ghana in February 2006, including visits to project sites and discussions with government officials and agencies, project directors and staff, beneficiaries, key donors and academia. The collaboration of all persons met is gratefully acknowledged.

The three projects were selected because they had all been implemented within Ghana's overall strategy to decentralize central government services to the towns and rural districts. The national decentralization program has gone slowly, but each of these projects has made progress in their programs to decentralize the water and sanitation sector. Two of them – the CWSP-2 and the VIP – have also pioneered large-scale community driven development programs. Each project covers a different facet of the water and sanitation sector; the urban environment in the case of the UESP, and two rural projects, the CWSP-2 exclusively for water and sanitation services, the other (VIP) with water and sanitation as a choice in a menu of rural investment options. Together, the three projects illuminate an array of experiences and issues, and provide pointers to the way forward. They also provide lessons for other sectors providing local public services in Ghana, and for decentralization programs in other countries.

Following standard IEG procedures, copies of the draft PPAR were sent to government officials and agencies for their review and comments. Comments were taken into account in the text and are included as Annex F.



## Summary

This Project Performance Assessment Report (PPAR) reviews three projects in Ghana's water and sanitation sector, covering both rural and urban areas: the Urban Environmental Sanitation Project (UESP); the Village Infrastructure Project (VIP); and the Second Community Water and Sanitation Project (CWSP-2).

The three projects helped pioneer the implementation of Ghana's decentralization strategy. Decentralization has been a priority for both the Government and the Bank for over a decade, and both the 2003 PRSP and 2004 CAS emphasize its continuation. The main objective is to shift responsibility for the delivery of local services such as water and sanitation from the center to the district and municipal governments. UESP devolved responsibility for sanitation services to municipalities. The CWSP-2 and the VIP decentralized rural water supply and village infrastructure to district governments. A further thrust of the two rural projects was their community driven development (CDD) approaches.

Ghana's experience with CDD was still nascent when the projects commenced, and there was even less experience with large-scale decentralization. Both the Government and the Bank were disappointed with the progress of the decentralization program. It was proceeding slowly and lacked a consistent implementation modality between the different government departments and donor agencies. Success stories in decentralization were very limited, and consequently there was little positive experience to learn from and emulate. The three projects, particularly when compared together, thus assume particular importance, as each was broadly successful in its decentralization program. They were unique in their large scale: (i) in implementing decentralization; (ii) in commencing to harmonize approaches between different actors; and (iii) in promoting CDD approaches. Thus, their "good practice" features, as well as the problems they encountered, provide valuable lessons for the future: for Ghana's water supply and sanitation program, for other sectors providing local public services in Ghana, and also for decentralization programs in other countries.

**The Urban Environmental Sanitation Project** was moderately satisfactory in its outcome. It successfully implemented its investment program in storm drainage, sanitation, solid waste management, and construction of community infrastructure in Ghana's five largest cities, but its objective to establish financing mechanisms to enable funds for maintenance was not achieved. Nevertheless, the project was efficient in being economically viable, and its relevance was substantial given that one third of the country's poor are urban, and that sanitation services have a large impact on welfare and in reducing water-associated diseases. The UESP's institutional achievements in capacity building were substantial, although the degree to which responsibilities were actually handed over to the municipalities was lower than for the CWSP-2 and the VIP. Under the UESP new agencies were created in each city for consolidated management of all sanitation services. With major training, these agencies were enabled to function and to commence taking over some of the sanitation sector activities that were managed centrally. Thus, each city set an example that decentralization of urban services could likely be successful. However, the UESP failed to make funding for operations and maintenance (O&M) services available. Sustainability is unlikely, and because neither the Bank nor the Government focused on sustainability, their performances are rated unsatisfactory.

The **Second Community Water and Sanitation Project** was targeted specifically on rural potable water (boreholes), sanitation facilities and hygiene education, with major emphasis on capacity building. The **Village Infrastructure Project** financed a variety of small rural infrastructure that could be chosen by communities from a menu (the main investments turned out to be boreholes, feeder roads and markets). In other respects there are substantial similarities between the two projects, although CWSP-2 placed stronger emphasis on software aspects – training, and the integration of hygiene education. The VIP is rated satisfactory for outcome and for the Bank’s and Borrowers performance, and the CWSP-2 is rated highly satisfactory for these same rating categories. The CWSP-2 was a consistently high performer across all its development objectives (the VIP’s physical objectives were short of targets) and the Bank and the Government were significant innovators in CDD approaches.

The VIP and the CWSP-2 considerably advanced the decentralization agenda, providing major training and capacity building to the district governments, and devolving implementation entirely to them. The central government agencies stepped back to take a facilitating rather than an implementing role. The institutional impact of both projects was substantial, and national in coverage (the VIP was in every district). Nearly all the district governments enhanced their capacity for investment in water supply, sanitation and small rural infrastructure, and their increased capabilities had some utility for other sectors. Additionally, all of the districts gained experience in promoting CDD approaches. There was also some progress in harmonizing the approaches of different government agencies and donors to the same implementation modalities. The sustainability of the two projects is not yet clear and is rated not evaluable. Training was excellent when the communities and their boreholes were established, but routine follow-on extension and training has not been provided. For the moment, nearly all the boreholes are functioning, but their sustainability in the longer term, and whether or not follow-on technical assistance will be needed, is still to be determined.

For all of the projects three broad areas were found to be important for successful decentralization and community driven development. First, **an enabling institutional and policy environment was needed** and was largely present. The Government and the Bank recognized that a long-term commitment was needed and have stayed with the decentralization agenda for over a decade and plan to continue. For the two rural projects – the CWSP-2 and the VIP – a strongly demand-driven approach to CDD was adopted including a requirement for contributions to investments by local governments and beneficiaries which helped create “ownership” of the facilities and better prospects for sustainability. The roles of the center, the local governments and communities were clear, and detailed in widely distributed operational manuals. Harmonizing implementation modalities to be the same across different donor agencies and government departments was also found to be important, though progress was limited.

Second, **major capacity building proved essential** for all the decentralized entities: local governments or municipalities, communities, and for other involved parties such as the private sector. Especially for the CDD-based rural projects, training had to be massive, and, importantly, was done before investments. Each of the projects had a strong central coordinating unit to facilitate the activities of the local governments, and this proved essential. But M&E to inform management on impacts and appropriate adaptations was

inadequate, and contributed to some implementation weaknesses. Training communities in hygiene, a natural concomitant to water and sanitation projects, appears to have had good health benefits, but only the CWSP-2 integrated hygiene education as a core activity.

Third, **Sustainability needed to be a central focus.** This was not so with the UESP where no solution was found for raising revenues to finance O&M. Yet sustainable O&M funding should receive as much, or more, attention as engineering in project preparation and implementation. For all three projects, follow-on training for local governments is needed; for progressive enhancement of capacity and, in particular, to deal with Ghana's problem of overly frequent staff rotations. Attention should also be paid to creating self-sustaining support services. The CWSP-2 is a particularly good example. It created a three pronged network: (i) a private sector network of shops selling spare parts for boreholes; (ii) a similar network of trained private mechanics; and (iii) a water and sanitation technical assistance team within each local government, available on demand. This provided the essential elements for a proactive borehole community to successfully maintain and operate its facility. Such a self-sustaining network may by itself be sufficient to enable the continued good functioning of rural water facilities, or to substantially reduce the intensity of any supplementary extension support that might still be required.

Based on the observations regarding these three areas, the following lessons on decentralization (including community driven development) would apply in most respects to other sectors in Ghana and in large part also to decentralization programs in other countries:

- **Decentralization requires an enabling institutional environment including:** a long term commitment, a demand-driven approach including beneficiary contributions, clear institutional roles and guidance for all stakeholders, and a common implementation modality for all actors.
- **A major drive to build implementation capacity is essential** for decentralization including: major training for local governments, communities and private sector support services, emphasis on up-front capacity building before investment in infrastructure, strong central coordination including M&E, and (for water and sanitation sector projects) integration of hygiene education alongside the investment program; and
- **Sustainability needs to be a central focus** of a decentralization program, including: priority on raising revenues for O&M, institutional adjustments if needed to improve revenue collection, self-sustaining support services preferably from the private sector, and follow-on training for the local governments and, as needed, the community organizations.

Ajay Chhibber  
Acting Director-General  
Evaluation



## 1. Water and Sanitation in Ghana's Decentralization Strategy

1. This Project Performance Assessment Report (PPAR) reviews three projects which helped the Republic of Ghana to decentralize and develop its water and sanitation infrastructure: the Urban Environmental Sanitation Project (UESP, approved in FY96); the Village Infrastructure Project (VIP, FY97); and the Second Community Water and Sanitation Project (CWSP-2, FY00)<sup>1</sup> The projects are of strategic interest, especially when assessed collectively, because they have all taken pioneering steps to implement the Government's decentralization strategy.

### ECONOMIC AND WATER SECTOR DEVELOPMENT

2. The three projects have been implemented within an economic and water and sanitation environment that has, in general, been improving. GDP growth has accelerated from slightly under 4 percent per annum in 2000 to about 5 percent currently, and is expected to remain on this growth path over at least the next several years. The fiscal deficit has been reduced from 9 percent in 2000 to about 5 percent currently. Domestic debt has been reduced from 29 percent of GDP in 2000 to about 12 percent in 2005, and Inflation has fallen to about 16 percent per annum, from its level of 40 percent in 2000.<sup>2</sup>

3. As concerns the water and sanitation sector, in rural areas access to potable water increased from about 40 percent of the rural population in 2000 to 46 percent at end 2003. Urban access to potable water was estimated in 2004 to be about 61 percent. Investment in sanitation has been slower. Sanitation coverage in rural areas was estimated to be about 28 percent in 2002. In urban areas, sanitation access was estimated in 2004 to be about 40 percent. The improving water and sanitation coverage has, however, not been matched by improving health indicators. The Government's 2003 Poverty Reduction Strategy Paper (PRSP) comments that the health situation in the country may even be worsening. The incidence of water associated diseases such as malaria, guinea worm and dysentery has shown little reduction (guinea worm has increased). Malaria and anemia represent some 40 percent of reported deaths of children under 15, and an increase in the mortality of infants and children under five years has been reported.<sup>3</sup>

4. The Bank's 2004 Country Assistance Strategy (CAS) and the Government's 2003 PRSP target continued investment, for both rural and urban populations, in potable water and sanitation. Increased access to both potable water and sanitation are part of Ghana's program to meet its Millennium Development Goals. Also, for rural areas, village infrastructure

---

1. This is the first PPAR on Ghana's water supply and sanitation sector. Since 1994 there have been three water or rural development related PPARs in Ghana: on the Agricultural Services Rehabilitation Project in 1997; on four agriculture projects concerned with research and extension services, and rural infrastructure in 2001; and on the Ghana Second Urban Project (housing) in 2001.

2. Source: From an interview in February 2006 with a Ghana country economist (World Bank).

3. Sources: (i) Strategic Investment Plan 2000-2015 (Community Water and Sanitation Agency, Ministry of Works and Housing, 2004); (ii) Ghana Poverty Reduction Strategy Paper (PRSP, Republic of Ghana, 2003); (iii) PRSP Annual Progress Report (World Bank, 2004); (iv) Ghana Country Assistance Strategy (CAS) (World Bank, 2004); and (v) Second Urban Environmental Sanitation Project Appraisal Report (World Bank, 2004).

generally (including rural roads and facilities for marketing and processing) is considered an important factor for rural growth, and an investment in which poorer groups also benefit.

## **GHANA'S EXPERIENCE WITH DECENTRALIZATION**

5. The establishment of local government structures in the early 1990s set the stage for Ghana's continuous objective since then to strengthen the capacity of the new local governments – the District Assemblies (DAs) and, in the case of cities, the Municipal or Metropolitan Assemblies (MAs) – and to devolve various responsibilities to them.<sup>4</sup> The objective is to shift responsibility for planning and delivering local public services from the center to these local government levels. In specific terms as concerns the three projects assessed in this review, this means in the case of the UESP, shifting responsibilities to the MAs, and, for the VIP and the CWSP-2, to the DAs. Additionally, for the rural projects (CWSP-2 and VIP) implementation was further devolved to rural communities through community driven development (CDD).

6. Ghana's experience with CDD was still nascent when the three projects commenced, and there was even less experience with large-scale decentralization. The country's progress with decentralization was considered disappointing. It was proceeding slowly and lacked a consistent ("harmonized") implementation modality, both between different government departments and between development partners (multi-lateral and bilateral donors and NGOs). Thus, the Ghanaian Government, in its 2003 PRSP, commented: "While the institutional and legal frameworks for decentralization have made great progress since 1992 when the District Assemblies were established ..... no clear trend has been observed to deepen and institutionalize decentralization efforts of government. Projects have been largely uncoordinated and approaches to implementation have been divergent." In the 2004 CAS, the Bank commented: "The capacity of decentralized public service provision structures to plan and execute programs, manage financial resources and processes, and monitor and evaluate interventions must be strengthened." The Independent Evaluation Group (IEG) and the Bank's Board of Directors have also expressed concern.<sup>5</sup>

7. Nevertheless, despite such concerns, the commitment to decentralization, both in the Government and the Bank, remains strong and is prioritized in the 2003 PRSP and the 2004 CAS.

---

4. Following legislation in 1988 and an amendment to the constitution in 1993, the legal and administrative base for decentralization was further strengthened in 2000 with the passing of the Local Government Services Act. Then in 2004 a National Development Action Plan (NDAP) was formulated to accelerate implementation of decentralized activities and to build the capacity of the Assemblies. These actions have established the legal and administrative basis for decentralization, but, as indicated, implementation of decentralization remains an issue.

5. From the Independent Evaluation Group: "Improved governance is essential. First, decentralization is a priority, but progress has been stalled" (IEG, Country Assistance Evaluation, 2000), and (ii) from the Bank's Board of Directors, Committee of Development Effectiveness (CODE): "The Committee agreed that improved governance is essential and in that context, decentralization is a priority. Although it expressed concern about the OED (now IEG) finding that progress in this area has stalled, the Committee acknowledged that further progress would require a major effort in capacity building at the district levels ....." (Report from the CODE on the Ghana, Country Assistance Evaluation, March 2000).

8. Given Ghana's still limited experience with successful large-scale decentralization, the three projects reviewed are of particular interest. Although all three had some shortfalls, each project was broadly successful in implementing its decentralization program, especially institutionally and in capacity enhancement. Thus, each project provides "good-practice" features, and the difficulties encountered also provide learning material for the decentralization program. The lessons are specifically based on the water sector. However, to varying degree, the experience of the projects and the lessons learned is relevant to decentralization of other sectors providing local public services in Ghana, and to other countries as well.

### THE KEY ISSUES

9. This PPAR focuses on three broad issues that were found by the IEG mission to be particularly relevant as Ghana takes its decentralization program forwards.

10. First, there is the overall **institutional and policy environment** and what aspects appear to be particularly important to success. Were institutional roles clear, and if so, how were they made clear? How important is the harmonization of implementation modalities between agencies and donors? What made the community driven development (CDD) approach of the CWSP-2 and the VIP largely successful, and what can be learned from aspects of CDD that were less successful?

11. Second, **the need for capacity building** was an implementation issue for all three projects. Each of the projects put major effort into strengthening institutions: the capacity of the MAs and some private sector participants in the case of the UESP; and the capacity of the DAs, rural communities and private sector under the CWSP-2 and the VIP. What lessons do the projects provide in how to build the capacity of these institutions?

12. Third, the **sustainability of works and institutions** was an issue, especially for the UESP. Can the Government improve the generation of urban revenues for O&M? For the CDD projects, what are the institutional and financial features that would help continued operation of boreholes? Is follow-on training and extension support required for the borehole communities?

13. These and other related issues emerged during the individual reviews of each project in Sections 2, 3 and 4 of this review, and in the summary of lessons learned in Section 6. It should be emphasized, first, that the lessons are those specifically stemming from reviewing the three projects. While wide-ranging, the lessons are not intended to be comprehensive. Second, this assessment outlines issues and lessons, and does not attempt to precisely detail them. Finally, there were some issues encountered for which the veracity of observations and data could not be determined, or for which the appropriate actions are not readily apparent.

### THE THREE PROJECTS

14. **The Urban Environmental Sanitation Project (UESP, FY96)** was the first of the three projects to be approved. It financed investment in storm drainage, sanitation, solid waste management and community infrastructure in Ghana's five largest cities (Accra, Kumasi, Tamale, Tema and Sekondi-Takoradi), and provided associated training, with

assistance from the Nordic Development Fund, to enhance the capacity of the MAs. Direct implementation was devolved to the five MAs, assisted by a central coordination unit. The project followed the largely successful Urban II Project (FY90), which had financed urban infrastructure and housing in the same five cities. The UESP was the first project in the water supply and sanitation (WSS) sector to have a decentralized approach.

15. **The Village Infrastructure Project (VIP, FY97)** financed community-level small rural infrastructure - primarily boreholes, feeder roads, tracks, markets, small-scale irrigation and post-harvest processing facilities. The potable water component (boreholes and some dug-wells) was by far the most popular investment for the communities. The VIP was, with the CWSP-2, Ghana's first large-scale decentralized rural project and the country's second CDD project.<sup>6</sup> The project was co-financed with Germany's KfW and the International Fund for Agricultural Development. VIP had national coverage, involving all 110 of Ghana's DAs, and it was the first rural project with a multi-menu approach. VIP made some progress towards harmonizing service delivery to DAs. Decentralization was supported by major training and technical assistance to the DAs and communities. Like the UESP, central coordination was through a project implementation unit.

16. **The Second Community Water and Sanitation Project (CWSP-2, FY00)** was effectively implemented over the same period as the VIP, as VIP start-up had been substantially delayed. The CWSP-2 financed development of village water and sanitation facilities, along with training and technical support to the DAs and communities. The CWSP-2 added decentralized implementation by the DAs to the CDD approach introduced under the first CWSP. Central coordination was through an existing government agency, the Community Water and Sanitation Agency (CWSA). DANIDA and KfW were major partners in the CWSA program.<sup>7</sup>

17. The projects and their ratings are discussed in three sections below, one for each project, starting with the first approved project (UESP), followed by the VIP and then the CWSP-2. Each section starts with a summary table of the project's Development Objectives (DOs), an assessment of the relevance, efficacy and efficiency in achieving each development objective, and the overall outcome rating for each project based on these sub-ratings. Then, each section continues by assessing the project's Institutional Development Impact and Sustainability, and concludes by assessing the Bank's and the Borrower's Performance in preparing and implementing the project. Monitoring and evaluation and fiduciary issues are reviewed in section 5 and its related annex. The final section (Section 6) discusses lessons for the future decentralized development of the water and sanitation sector.

---

6. The first Community Water and Sanitation Project (CWSP, FY94) was the first CDD project, but implementation was still managed centrally.

7. A comment on paragraph 16 of the draft report by the CWSA (see Annex F) has been referred to in a footnote to paragraph 87. The sentence referenced in CWSA's comment has been removed from paragraph 16.

## 2. The Urban Environmental Sanitation Project (UESP)

**Table 1. Assessment of Development Objectives and Overall Outcome for UESP**

Development Objectives	Relevance	Efficacy	Efficiency
(1) Promote productivity and raise living standards in Ghana's major cities, especially for lower income people, by improving drainage, sanitation, and solid waste services	High	Substantial	Substantial
(2) Help establish better institutional and financing mechanisms and more effective policy frameworks so that improvements are sustained over time	Modest	Modest	Substantial
(3) Build-up the capacity of the metropolitan and municipal assemblies to manage environmental management services.	High	Modest	Substantial
Overall Project	Substantial	Modest	Substantial
Overall Project Outcome	Moderately Satisfactory		

### RELEVANCE

18. The UESP fitted well with the Bank's and the Government's development strategies as laid out in the 2000 and 2004 CASs and the 2003 PRSP. The key emphases of both the Bank and the Government were to promote economic growth and poverty reduction with a special focus on Ghana's decentralization program. Environmental management and an increased role for the private sector were also targeted. Investment in social infrastructure in the urban sector, and, specifically, on urban environmental management, was a complement to the attention already placed on rural water supply and sanitation. The urban sector has been the growth leader in Ghana's economic development, and urban growth can also provide markets and employment for the rural sector. One-third of the country's poor are urban. The urban poor have worse social indicators (health, education) than the rural poor, and the majority of epidemic diseases are in urban areas.

19. The UESP's three Development Objectives (DOs) complemented each other to provide comprehensive support both to alleviation of urban poverty and diseases, and to Ghana's decentralization strategy. The first DO - developing urban infrastructure supporting improved environmental sanitation - tackled the **highly** relevant need to improve environmental sanitation. The five cities - Accra, Kumasi, Secondi-Takoradi, Tamale and Tema - contained 23 percent of the country's population. The last objective - building the capacity of the MAs - was an essential concomitant to decentralization as, without major training in almost all skill areas, the newly independent MAs risked floundering. Its relevance was also **high**.

20. Development Objective two was critically important as the maintenance of urban environmental sanitation infrastructure was chronically under-funded. Thus, in concept, the DO was highly relevant, but as it was ineffectively reflected in the design of the project, the relevance of DO2 is rated **modest**. Few specific actions to enable the adequate provision of funds for O&M were proposed, and project implementation did not redress this serious

sustainability issue. This gap would turn out to be, by far, the UESP's overarching weakness. The high relevance of the other two DOs is, thus, pulled down, to an overall relevance of **substantial**, and the O&M financing issue has larger influence on other project ratings.

## EFFICACY

21. The UESP's first objective was supported by the project's first four components: (a) drainage, (b) sanitation, (c) solid waste management, and (d) upgrading of community infrastructure, together comprising 86 percent of actual project costs. Annex 2 summarizes the components and their costs. There was some variability in achievement between the components, but, overall, the achievement of DO 1 was **substantial**.

22. The storm drainage constructed is estimated, for most drains, to have significantly reduced seasonal flooding and the risk from exceptional future floods.<sup>8</sup> The IEG mission also noted the prevalence of low income households in the main flood zones, indicating the particular benefits to poorer people.

23. The sanitation component - funding household, public and school latrines - exceeded project targets. An inspection in Accra by the mission found functioning facilities. A public toilet was operating well, though it was not as clean as desirable. Several private latrines inspected were in good condition. The Waste Management Departments (WMDs) had successfully outsourced management of public toilets to private operators.

24. Of particular interest is the school latrine program and the potential impact from promoting health education and awareness. The mission visited one school and found the toilet to be immaculately clean. It was highly appreciated by the headmistress who felt that, in addition to the significant reduction in open-space defecation. The toilet was contributing to better awareness of sanitation. Hygiene education was not an explicit part of the project though UESP funds did contribute to a national public awareness program of sanitation practices. The school visited indicated the interest in improving sanitation practices. Without any extra funds, the headmistress had provided washbasins and soap outside every classroom, and intended if affordable to install running water. In her view, the value of this was as much in terms of education in hygiene as in the better health conditions specifically provided by the washbasins. The school also had a health and sanitation teacher.

25. Solid waste management (SWM) improved in all five UESP cities during the project period. The percentage of solid waste collected is estimated to have increased from 60 to 63 percent in Accra, from 45 to 77 percent in Kumasi, from 40 to 72 percent in Sekondi-Takoradi, from 10 to 57 percent in Tamale and from 50 to 60 percent in Tema.<sup>9</sup> An

---

8. From interviews with residents and government officials reported in the *Baseline and Impact Assessments* prepared by CIHSD in 2003

9. Data as estimated in the Project Appraisal Report for the Ghana: Second Urban Environmental Sanitation Project.

increasing amount of solid waste is being collected under private sector franchise arrangements.<sup>10</sup>

26. The Community Infrastructure Upgrading component appears a particular success. Small infrastructure facilities – drainage, paved small roads, electricity and public toilets – were installed in low income communities in three of the project cities. In an unscheduled visit by the IEG mission to Nima community, a former slum in Accra, a remarkable change was noticed. Citizens said that sanitation related diseases had declined, and improved employment and incomes were also enthusiastically recounted. Improved living standards were also indirectly evident in a mission walk-through. Small businesses and shops were thriving and most buildings were newly painted. An inspection of project infrastructure found facilities generally in good shape. Maintenance of the larger infrastructure was good. A secondary drain had minimal silt deposits and was being cleaned at that time. Repair of road potholes was also being done.

27. According to a former Assembly man in the neighborhood, the community had been significantly involved in decisions on the location and type of upgrading. However, this appears to have been limited to participation in meetings. There had been no contribution to investment costs. Also, while smaller infrastructure was being maintained by the community, larger infrastructure, including the drain and road maintenance above, was maintained by the government. To increase community ownership and longer term sustainability, it would be desirable to increase community input, both as part of investment and in shouldering more of the maintenance.

28. The project's second objective – to establish better institutional, financing and policy frameworks so that improvements are sustained over time – had **modest** achievements. As planned at appraisal, a separate line item for waste management was established in each MA's budget. All five cities enacted legislation for establishing Waste Management Departments (WMDs), which were subsequently formed. However, translation of these actions into sustainable funding for operations and maintenance was not achieved (refer to Sustainability section).

29. The final objective – to build capacity of the MAs to manage environmental and sanitation services – involved major effort in training of MA staff, but capacity building was impeded by the government practice of frequent reassignment of staff, a country-wide problem in Ghana. Staff departures to the private sector, which offered higher remuneration than the very low wages in government, were also a problem. The Director of UESP estimated that a government staff position had, on average, three different staff during the project period. This problem varied by city. For instance, the Director of the Kumasi WMD commented to the mission that most of the senior staff had remained during and after the project period, but the training efforts of most WMDs were reduced in impact. The UESP made some progress in devolving implementation responsibilities for sanitation to the MAs, but its central coordination unit still provided major hands-on implementation assistance. By

---

10. There were some problems with the sanitary landfills. The February 2006 Bank supervision mission for the UESP-II found that in Kumasi, usage of the landfill is diminished by a limited number of trucks and, due to low financial incentives, a limited number of private sector waste collectors. Also, effective operation of the land-fill was impaired since there was no compactor.

comparison, the VIP and the CWSP-2 were able to make the DAs more self-sufficient. The efficacy of the UESP's third DO is rated **modest**. Considering all three objectives combined, the project's overall efficacy was **modest**.

## **EFFICIENCY**

30. The actual cost of UESP's investments was 93 percent of the costs estimated at appraisal, and the project's investment components largely achieved their targets. The one year extension of the closing date was not excessive. The economic analysis, at both appraisal and ICR stage, covered only the project's drainage component, but had positive returns. All of the other physical components – sanitation, solid waste management and community infrastructure – had positive impact but no ERRs were calculated. This was an analytical gap as ERRs for these components could have been estimated.<sup>11</sup> Nevertheless, taking account of the cost-effectiveness of the project, and of general Bank experience about the benefits from such investments, it is probable that the project's overall ERR would have been above the opportunity cost of capital. Efficiency is estimated **substantial**, though a better analysis would have enabled a greater degree of confidence in this rating.

## **OVERALL PROJECT OUTCOME**

31. The UESP's relevance and efficiency were both substantial. The project achieved its physical investment objective (DO 1), but efficacy was modest for the project's 2<sup>nd</sup> and 3<sup>rd</sup> DOs, and overall efficacy was modest. The outcome of the UESP is assessed **moderately satisfactory**. This is the same as in the ICR Review. The ICR rated outcome satisfactory.<sup>12</sup>

## **INSTITUTIONAL DEVELOPMENT IMPACT**

32. The UESP's two main institutional achievements were: (a) the establishment in each MA of a Waste Management Department; and (b) the project's support to Ghana's decentralization program through the major training provided to the decentralized MAs. The new WMDs provided, for the first time, a consolidation and locally based home for the related activities of drainage, sanitation and solid waste management. MA legislation also provided the WMDs with authority to recruit their own staff, to set their own tariffs, and to retain the revenues that they collected, rather than pass these on to the MA general funds.<sup>13</sup> The enabling features for independent and self-financing local entities to fund operations and maintenance were therefore established. Additionally, the head of the WMD became a part of

---

11. Economic returns for the other components, while these might have been based on only approximate assumptions of benefits, could have been calculated, with sensitivity analysis used to test the robustness of the estimated ERRs against different assumptions of benefits.

12. ICRs have a four point scale for rating project outcome (Highly Satisfactory, Satisfactory, Unsatisfactory and Highly Unsatisfactory). For rating outcome, IEG uses a six-point scale that also includes a Moderately Satisfactory and a Moderately Unsatisfactory category. All other rating scales are the same for the ICR, the ICR Review and the PPAR.

13. As concerns the independence of the WMDs, the mission was told that the powers provided to them through the new legislation were only modestly applied in practice; the WMDs, like typical government departments, seem to be still very much a part of MA authority.

each MA's management team. Finally, while reduced in impact because of staff rotations, the UESP's large training program, assisted by the Nordic Development Fund, strengthened the capacity of the WMDs, and made decentralized implementation possible. It should, however, be remarked that the UESP still involved substantial implementation assistance by the Project Unit (PU). In this regard, UESP made more modest progress towards decentralized implementation than the two rural projects. Nevertheless, the establishment of the institutional base for decentralized provision of sanitation services, the creation and capacity strengthening of the WMDs and some progress in the actual assumption of responsibilities from the center to the MAs, were very positive achievements. Institutional Development is rated **substantial**. The ICR and ICR Review ratings were modest.

33. The Appropriateness of a Project Coordination Unit: Project activities for the UESP (and also the VIP) were implemented organically within the existing government structures; the MAs in the case of the UESP, and the DAs and a number of central technical agencies for the VIP. However, to coordinate and support the activities of these multiple local governments and central agencies, project coordination units (PCUs) were established for both projects; the "Project Unit" (PU) for the UESP, and the "Rural Infrastructure Coordination Unit" (RICU) for the VIP. (The CWSP-2 was coordinated by the existing and substantially autonomous Community Water and Sanitation Agency (CWSA), thus, a government agency, but with management features somewhat similar to a PCU.) The UESP and VIP PCUs were each staffed exclusively by consultants, and had substantial autonomy from their umbrella ministry, the Ministry of Local Government and Rural Development. Could project coordination of the UESP and the VIP have been within an existing government ministry? After discussion with both agencies and Bank staff the IEG mission concluded that the use of PCUs in the particular circumstances of the two projects and the then stage of institutional development was appropriate. The low salaries of government staff provide little incentive to take on the kind of workload needed and found in the PU and RICU. Government employees in ministries were also constantly being transferred, whereas continuity and experience were required. The highly demanding outreach, multi-agency and capacity building nature of the UESP and the VIP needed strong and substantially independent coordination entities if the projects were to succeed. Nevertheless, over time, it would be appropriate for the PCUs to be absorbed as organic parts of the existing government structure, including appropriate remuneration.

34. For now, there is the interesting contrast of the project implementers – five municipalities for the UESP and over a hundred DAs and multiple ministries and agencies for the VIP - being entirely part of the existing government structure, and the PCUs being the reverse. However, it was more important to successfully promote, using PCUs, the entirely organically based major decentralization and harmonization program that the UESP and the VIP started, than to have less effective programs promoted by institutionally embedded but lower capacity project managements.<sup>14</sup>

---

14. There is now the question, which cannot be answered at this stage, of whether the coordination of the UESP's and the VIP's successor projects – the UESP 2 and the CBRDP (the Community Based Rural Development Project) – have the right balance in terms of evolution towards more organic project coordination yet continued strong capacity. The UESP-2 has reduced the PU's role and is experiencing initial project coordination and implementation problems, but this may be a temporary adjustment problem.

## SUSTAINABILITY

35. Inadequate funding for operations and maintenance (O&M) was considered by most persons met to be the UESP's critical issue. The mission shares this view. As examples, the MAs were typically months behind in payments to garbage collection contractors, the compactor at Kumasi landfill had broken down, and drainage maintenance was reported to be frequently poor. One example was the Odaw main drain in Accra. The project had helped reconstruct this to achieve a higher flood protection than previously. The mission was informed that, as designed, the drain had a depth of five meters. However, from the mission's visual inspection, build-up of silt had resulted in a drop of not much more than three meters before meeting the silt bed. This would mean nearly two meters of silt, and a capacity reduction of nearly 40 percent, still adequate for smaller floods, but an evident reduction in capacity for large floods.

36. If such situations continue, it might be questioned whether there should be any additional investment in Ghana's urban sanitation sector. With inadequate O&M, constructed infrastructure would rapidly fall into disuse or reduced capacity, as is already happening with some landfills and drains. Nevertheless, while beyond the UESP project period, positive initiatives are now being taken. For Odaw drain a group of private contractors is putting up a proposal to the Government to manage the entire basin of eight kilometers, including Odaw's key tributaries, as a more sustainable measure, and the Bank is supporting this with a PPIAF grant to carry out the financial model.

37. The source of the O&M financing issue is, to a substantial extent, broader than the project itself. A number of waste management activities, particularly drainage and part of solid waste management, have a public goods element and are difficult to charge for directly. But if funds are required from the MAs' general revenues, these must compete with the other chronically under-funded municipal activities. Waste management O&M expenditures, even at the present inadequate levels, are already a huge part of annual city budgets; typically some 30 – 50 percent of annual MA expenditure. Significant increases in allocations to waste management would severely impact other urban needs. Hence, part of the urban O&M financing solution requires augmenting MA revenues. The other part is to find ways to augment revenues for waste management services. But there were no significant project actions, or other actions by the MAs, that effectively improved either source of revenues. Given that a solution was not found for O&M financing, sustainability is rated **unlikely**, as in the ICR and ICR Review.

38. Looking ahead, resolving the revenues issue appears feasible. A common view expressed to the mission was that the MAs had some obvious options for sizeable revenue enhancements. It was a matter of actually applying these options. For instance, the Chief Executive of Kumasi city advised that property taxes and business licenses could be a large source of increased revenues. Only about one-third of property taxes were being collected, substantially due to out of date property records. Registering of businesses for licenses was also very incomplete. The Director of the UESP and Bank staff advised the mission that similar observations can be made about the other MAs. As property taxes and business licenses, even at present collection rates, are typically well over one-third of MA self-generated funds, increasing these two funding sources alone has potential to more than cover O&M costs for urban sanitation, and to contribute to other urban expenditure needs. There is

also likely to be scope for enhancing direct charges for waste management services, and practical sources of such fees could be looked for.

39. An example of successful generation of revenues for O&M is the Bank financed Urban II project (Credit 2157) which was approved in June 1990, six years before approval of the UESP. The Urban II project covered the same five cities as the UESP. Two-thirds of the Urban-II's costs were, like the UESP, for urban public goods (mainly rehabilitation of roads and sewerage, and solid waste management). The Urban-II project put major emphasis on sustainability and raising revenues for O&M. Positive financial flows were achieved, in excess of O&M expenditure needs.<sup>15</sup> IEG undertook a PPAR on the Urban II project and had a favorable assessment. One of the PPAR's two major lessons was the need to have strong revenue flows. In the PPAR's conclusion IEG commented that "Sustainability is rated likely, in view of the strong local commitment to the project, together with positive financial flows generated in key areas."<sup>16</sup>

### **BANK AND BORROWER PERFORMANCE**

40. Both the Bank and the Borrower performed well in implementing the project's investments. Components 1 through 4, supporting Development Objective 1 and comprising 86 percent of project costs, were completed broadly as targeted, and with strong "ownership" by the MAs. Project coordination by the PU was good and its professional staff provided major assistance to the MAs. The establishment by each MA of a Waste Management Department was an important institutional achievement. The handover of supervision responsibility to the Bank's Accra office enabled a more immediately responsive task team. In engineering, physical investment and training, the performance of both the Bank and the Government was strong. However, minimal attention was placed on O&M financing by both the Bank and the Government. Yet this was the project's key issue.<sup>17</sup>

---

15. There were some design features to achieve financial viability in the Urban II project, including a property revaluation exercise, improved billing and collection systems and some institutional strengthening. However, The success in generating revenues appears to be more the result of strong focus, monitoring and dialogue between the Bank and the Government, both during project preparation and during implementation. The success thus included a strong "cultural" element – i.e., simply taking decisions on service fees and collection and on municipal revenues that would achieve the sustainability goal. The Urban II's log-frame exemplifies this attention. Mobilization of municipal revenues is one of the performance indicators, and the targeted increase in revenues is specified by city.

16. At the conclusion of the Urban II project, the Bank's Africa Region was looking ahead to maintain the urban environmental sanitation sector's financial viability. The ICR for the Urban II project commented, "Considering the positive trend in revenue build-up in all the Assemblies, the foundation for putting them on a sound financial footing has been laid. More needs to be done to continue to develop prudent and accountable financial practices, and support is being provided under follow-on projects approved in 1994 and 1996, the Local Government Development Project (Cr. 2568) and the UESP (Cr. 2836)."

17. Refer to the Government's comment on the sustainability issue in Annex F. Regarding this comment, IEG notes that both project design and implementation are important. Specifically, IEG evaluates Bank Performance in terms of, inter alia, the extent to which the services provided by the Bank ensured quality at entry and supported implementation, and Borrower Performance in terms of the extent to which the Borrower ensured quality of preparation and implementation.

41. A number of observations can be made about the inattention to O&M financing. For the Bank, the focus at appraisal was on the physical components of the project. There was no plan for O&M and its financing. The Government had minimal achievement in improving O&M financing. It is telling that government's ICR report for the UESP has no mention at all of financial issues. For both the Bank and the Borrower, attention to O&M financing was very much in the back seat, both at project preparation and during implementation.<sup>18</sup>

42. The lack of attention to revenue generation and O&M is disconcerting because the UESP was designed when the Bank already had significant experience in Ghana's urban sector, including in successful generation of municipal revenues in the Urban II project. But the Bank appears not to have learnt from this prior experience. The Urban II lessons regarding successful revenue generation were not taken forward under UESP. The same lack of learning by both the Government and the Bank continued in a number of respects in the design of the UESP-2 (FY04, Credit 3889).<sup>19</sup> In the Bank Quality Assurance Group's "Quality at Entry Assessment" of UESP II in October 2005, the QAG panel commented that its main concern was "the failure to address adequately issues of project sustainability."<sup>20</sup>

43. The Bank's and Government's performance for the UESP are both rated **unsatisfactory**. This is a downgrade of the satisfactory performance ratings assessed in the ICR and ICR Review, because of the greater weight attached to the UESP's most critical issue.<sup>21</sup>

---

18. Another contributor to not tackling the O&M/financing issue may be the limited strategic sector analysis. Several government observers felt that Ghana did not have a comprehensive strategy for waste management, and the Bank also appears to lack a comprehensive sector analysis. There was an Urban Development Strategy Review conducted jointly by the Government and the Bank in 1993/94, but this was more technically than financially and institutionally oriented, and is also outdated.

19. The UESP-2 appraisal report has minimal mention or features addressing O&M financing. There is no Development Objective or component addressing O&M financing, the Lessons Learned section does not include a lesson related to financing, and the Results Framework also omits O&M financing. On the positive side, however, a large study on institutional and financial matters was included under the project (para 44).

20. The QAG also commented that "the project (UESP II) remains less than satisfactory in the likelihood of sustainable alternative revenue generating arrangements. Indeed, one would have expected an analysis of the current municipal revenues generating arrangements....."

21. The World Bank's Africa Region commented as follows on the ratings provided for the Bank's and the Government's performance: "Despite the launch of the decentralization process in the late 80s in Ghana, fiscal decentralization remains very weak in this country. The bulk of Local Governments' resources continues to come from the CDF and the total amount allocated through this instrument is around US\$80- US\$100 million per year (for 138 Local Governments comprising 86 urban centers) and represents a small percentage of government revenues (should not be less than 5% according to the Constitution). Local resources generated by Local Governments represent only 30% of their resources. The situation is not specific to Ghana and is quite similar to most of the countries in SSA. While average level of Local Government revenues is 11% of GDP in OECD countries spanning from Denmark (31%) to Greece (2.8%), that share is between 4-15% in countries in transition. By contrast, that share in SSA, varies from 5% in Uganda to 3.5% in South Africa. The share reaches 1% in most of the countries like Cote d'Ivoire, Benin, Cameroun, Burkina Faso, Ghana, Madagascar and Senegal. Property taxes have been advocated as one of the best local resources but resources from this tax are very difficult to generate except in South Africa, where they are mandated by the Constitution, represent the main source of revenues of Local Governments."

44. A more positive situation is, however, emerging, with various measures to begin to more rigorously tackle the O&M financing issue being taken by the Bank and the Government under the UESP-2. The most significant of these is the provision in UESP-2's project design of about US\$6.8 million of project funds to a study and technical assistance specifically focused on financial and institutional changes to enhance revenues.<sup>22</sup> This is a most encouraging development, to the great credit of both the Bank and the Government, and it is to be hoped that these and other initiatives will continue and be successful.

### 3. The Village Infrastructure Project (VIP)

**Table 2. Assessment of Development Objectives and Overall Outcome for VIP**

Development Objectives	Relevance	Efficacy	Efficiency
To enhance the quality of life of Ghana's rural poor through increased transfer of financial and technical resources to develop and sustain basic village-level infrastructure through:			
(1) empowering local communities and beneficiary groups to identify, plan, implement and maintain small, village-level infrastructure investments	High	High	Substantial
(2) increasing rural communities' access to development resources to leverage the implementation of rural development priorities set by beneficiaries	High	Modest	Substantial
(3) supporting the government's strategy of decentralization of development responsibilities to District Assemblies and other local government entities and strengthening their institutional capacity in order to improve the efficiency of rural resources transfer and to ensure its sustainability.	High	High	Substantial
Overall Project	High	Substantial	Substantial
Overall Project Outcome	Satisfactory		

#### RELEVANCE

45. The VIP was **highly** relevant both in its overall objective to enhance the quality of life of the rural poor and in its specific objectives and supporting components to achieve this. The 2000 and 2004 CASs support pro-poor participatory economic growth based on infrastructure investment and development of human resources. The Government's Medium Term Agricultural Development Strategy identified lack of basic rural infrastructure as a constraint to improving rural livelihoods. Underlying all of the Government's development efforts was its decentralization strategy, including empowering local communities and strengthening of district level capacity.

22. Financing is from the Nordic Fund's part of the project. The study and TA focuses on improvement of accounting systems and procedures, enhancing municipal revenue generation (largely through better implementation of property taxation assessments and collection), and rationalization of the budgetary process. The funding of O&M for basic urban services and infrastructure facilities is a particular focus. This will largely be implemented at the municipalities rather than at the central government level.

46. The VIP's specific objectives complemented each other to support the overall objective.<sup>23</sup> The first development objective, to empower and build capacity of local rural communities was a key grass roots need for the decentralization program and for community driven development (CDD). The second objective - to provide the rural infrastructure, as prioritized by each community – was the fulcrum of the project. Strengthening the capacity of the DAs under the final objective was essential; the decentralization program required significant enhancement of the capacity of the local governments, and the DAs were also to be the primary managers of their respective village investment programs.

## EFFICACY

47. **Implementation Constraints:** A strongly positive feature of the infrastructure program and its supporting institutional activities was the training provided to DA staff and the communities *before* the investments were made. Though this necessarily contributed to the project's very slow start - The project's first borehole was not constructed until 2000, three years after the project was approved - the training provided a much firmer base for the sustainability of the investments.

48. The first factor in the VIP's very slow start was not a good augur for the project. The project coordination unit, the "Rural Infrastructure Coordination Unit" (RICU), was not established until 1 ½ years after Board approval. A substantial part of the RICU team (all consultants) had been identified before project effectiveness, but letters of appointment were not signed until January 1999, 20 months after Board approval. Already, 25 percent of the project period had been used up.

49. Other implementation constraints have been as follows. First, the project preparation team's Project Operational Manual, a particularly critical document for a CDD project so that all staff down to field and DA level have a clear understanding of processes, was inadequate and had to be substantially re-written by RICU. Second, the VIP's varied menu needed implementation or technical assistance to DAs and communities from a number of different agencies,<sup>24</sup> and for each agency a memorandum of understanding had to be agreed and signed. Third, a demand-based program necessarily has to follow demand rather than particular targets. Finally, a new program will inevitably require a learning-by-doing phase which will initially be slow.

50. **Achievements:** The efficacy of the VIP's Development Objectives will be reviewed commencing with its infrastructure achievements (DO 2), with the two institutional objectives reviewed subsequently. The VIP's infrastructure investments were through three

---

23. There was duplication between the development objectives as articulated in the PAD, necessitating some adjustment to retain the logic intended in the PAD's text. The PAD had four original objectives. The third and fourth objectives substantially overlapped, covering the same theme of supporting decentralization and capacity building for DAs. Also, the third objective duplicated capacity building for communities, which was already covered in DO 1. Accordingly, in Table 2 and all text discussion, the PAD's DOs 3 and 4 have been combined and capacity building for communities is kept only in DO 1. The net effect is that DOs 1 and 2 remain unchanged, and the full contents of the substantially duplicating DOs 3 and 4 have been combined in an adjusted DO 3.

24. Among them, the Community Water and Sanitation Agency, Department of Feeder Roads, the Ghana Irrigation Development Board, and the National Board for Small-scale Industry (for private investments).

rural investment categories (project components 1, 2 and 3, refer to Annex B): (a) rural water infrastructure; such as boreholes for potable water and small scale irrigation infrastructure; (b) rural transport infrastructure; such as roads and trails; and (c) rural post-harvest infrastructure, such as markets and drying and storage facilities. Because of the implementation constraints noted above, achievement was modest except for water infrastructure. Annex C provides a table of the infrastructure program's achievements. Some highlights are provided below.

51. **Water Infrastructure:** Some 1000 boreholes were established, and, together with other sources of potable water, reached about 2000 villages (about 20 percent above the appraisal target). The project's investment in irrigation was on a much smaller scale than boreholes, but its impact on productivity was high, demonstrating its future potential. Small-scale irrigation is reported to have increased vegetable crop intensification to 4 crops per annum, against the appraisal target of two harvests per annum, and yields have increased substantially.

52. According to both the RICU management and as noted in the "Beneficiary Survey of the VIP",<sup>25</sup> virtually all boreholes established under the VIP are still functioning. Breakdowns are not uncommon, but these are usually repaired quickly, either by the village borehole mechanic or, at a charge and for more complex repairs, by a private "area" mechanic, both trained under the project.<sup>26</sup> The IEG mission visited two villages with boreholes established under the project. Both were clean and functioning well. One borehole had broken down a month before the mission, but had been repaired in two days. The Water and Sanitation Committees (WATSANs) met about quarterly in one village and every six months in the other. One WATSAN had a 7 person executive committee of which 3 members were women including the treasurer and secretary. The other had a 5 person committee including two women, one of whom was the Treasurer. Revenues were collected monthly; 1000 Cedis per adult in one community and the same amount but per household in the other. A village mechanic and the WATSAN executive members (president, treasurer and secretary) had received training. The main area of concern was the size of the Bank accounts; one had Cedis 1 million or about US\$111, and the other had only Cedis 200,000 (US\$22). Such amounts would be inadequate if major repairs were needed. In other respects the WATSANS and the general body were well functioning village level institutions. Observations such as the above were also typical in the mission's visits to CWSP-2 boreholes. The water component's efficacy is rated **substantial**.

53. **Transport Infrastructure:** Rehabilitation of roads and construction of tracks achieved about 50 and 60 percent respectively of appraisal targets.<sup>27</sup> The roads and tracks were highly appreciated by the communities. They improved (or even enabled) access to markets. The Chief Executive of Asante Akima North DA commented to the mission that a former "wilderness area" had been opened up to markets, and incomes had significantly

---

25. Undertaken by consultants for RICU. The report was issued in July 2003.

26. Each district is subdivided into "Areas", and over time these will shoulder some of the activities of the DA. In most cases Area administrations are not yet very developed.

27. The component also included a small Intermediate Means of Transportation activity, which provided transport such as power tillers, motor tricycles, and animal traction carts, but this had low achievement, and it might be questioned why such private goods were financed under the project.

improved.<sup>28</sup> A program that was appreciated was given a significant start, but achievements were short of appraisal targets. Efficacy is rated **modest**.

54. **Post-Harvest Infrastructure:** Investment in most post harvest infrastructure was very small relative to targets, though 174 markets were constructed. These were appreciated by the DAs because market fees are one of their largest sources of revenue. The mission visited one market, where bustling activity between buyers and sellers clearly indicated vibrant usage.<sup>29</sup> Nevertheless, the substantial underachievement of investments in most post-harvest infrastructure points to a **modest** efficacy. Taking account of all three components under DO 2, its overall efficacy was **modest**.

55. The project performed strongly in its two institutional objectives. Like the CWSP-2, the VIP tackled community empowerment and capacity building (VIP's Objective I) on a massive scale. Nearly all numerical targets were exceeded, a number of them considerably exceeded. Some 3300 communities, spread over all of Ghana's 110 rural districts, received training in group development, participatory processes, business management and O&M. The training programs included training of the office bearers of the community organization, and training in other skills as needed; such as village mechanics for communities investing in boreholes. A private sector support network was also developed; mechanics were trained to more advanced skill levels than the village mechanics, and a network of private retailers stocking and selling spare parts was also facilitated.

56. The impact appears to have been considerable, going well beyond provision of the skills needed for O&M of the community's investment. According to the Beneficiary Assessment, there was an increase in the confidence of communities. VIP staff commented that the five percent down-payment required from a community to qualify for a VIP investment was also contributing to empowerment and "ownership"<sup>30</sup>. The ICR commented that a former "cycle of dependency" was being progressively replaced by the participatory skills, attitude and confidence to - as targeted in Objective 1 - identify, plan, implement and maintain small village-level infrastructure.<sup>31</sup> The efficacy of Objective 1 was **high**.

---

28. There was, however, a potential negative effect of development of feeder roads. Where such roads opened up access to forested areas, they could also enable illegal logging and impact on wildlife through poaching. An environmental screening process for all investments was introduced to help deal with such risks.

29. This was not so with all of the markets as some (advised by RICU to be about 10 percent) had been poorly located. These were mostly the partially constructed markets from an earlier project, ASIP, which were finished off by VIP.

30. Requiring down-payments has been controversial in Ghana among donors, some considering the investments should be free. The five percent contribution from the community (and another five percent from the DA) is now usually the norm, though some NGOs still provide infrastructure free. The five percent community contribution appears to be about right. Given the prevailing low incomes, the five percent is a significant contribution, requiring effort and commitment by the community. Thus, a borehole (well, pump and apron) might typically cost about US\$8,000. Five percent of this is US\$400. This represents the monthly salary of about eight base level clerical staff, and is even more significant compared with rural incomes.

31. Government and donor assisted projects in Ghana had tended to provide villagers with free rural infrastructure. This practice reduced ownership by the community and its interest in maintaining facilities. Another comment in the ICR is that communities would tend to refer to a borehole or other infrastructure by the name of the donor. The borehole was considered by the community not to be their borehole but that of the contributing donor.

57. The Government's decentralization program was substantially aided by the VIP (Objective 3). The project was purportedly the only CDD projects in Ghana that covered all of the country's 110 districts, so capacity building had national significance. Training courses included training of all of the District Planning Officers and Finance Officers, two key positions in the DAs. Also, over 2000 DA staff (the target at appraisal was 200) were trained in project implementation and procurement. One DA Chief Executive commented to the IEG mission that "we got more training from VIP than from any other project" (N.B. No comparison with the CWSP-2 is intended; since it did not cover this district.). The mission's discussions with DA and VIP staff corroborated the views expressed in the ICR and Beneficiary Survey that practically all DAs had at least some capacity improvement, and some to a considerable extent. As with the CWSP-2, this was from both "learning-by-doing" under the project and from the VIP's training programs. The main areas of improved capacity were planning, financial management and procurement, and various technical areas.<sup>32</sup> One problem area, however, and common to all three projects in this review, was the turnover of staff in the DAs, implying that training will need to be a continuous process if DA or MA capacity is to be maintained or to further strengthen. The efficacy of objective 3 was **high**. Based on the ratings for all three objectives, the VIP's overall efficacy was **substantial**.

#### **EFFICIENCY**

58. The re-estimated ERR for the project at completion was 41 percent compared with an estimated ERR at appraisal of 26 percent. Neither calculation included the costs of RICU, but institutional benefits were also excluded. The viability of the project's three physical components based on models was estimated at project completion as: rural water 42 percent; rural transport 54 percent and post harvest infrastructure at 29 percent. Efficiency is rated **substantial**, on the assumption that, as the program expands, RICU costs will become a smaller overhead in the investment program.

#### **OVERALL PROJECT OUTCOME**

59. The overall project outcome is rated **satisfactory**, the same as in the ICR and ICR Review. The VIP was highly relevant to the Government's decentralization strategy, was economically viable, and institution building (DOs 1 and 3) was strong, both at grass-roots and DA levels, even though physical achievements (DO2) were modest.

#### **INSTITUTIONAL DEVELOPMENT IMPACT**

60. Institutional development impact is rated **substantial**, the same rating as in the ICR Review, though below the high rating in the ICR. VIP's very considerable achievement was to support in a major way the Government's decentralization program and to help the beginning of "harmonized"<sup>33</sup> activities between the supporting government and donor

---

32. The VIP also piloted capacity building of about 60 Area Councils, the administrations below the DAs. Across Ghana, the Area Councils were seldom effectively operational. The VIP's piloting was reportedly successful, and could be an example for strengthening Area Councils elsewhere.

33. "Harmonization" has been taken to encapsulate activities such as: (i) making government activities, no matter from which agency, follow an agreed and uniform approval, financing and implementation modality; (ii) making donor agencies agree among each other and with the government to also apply a common approach

agencies. It was one of the first projects to promote the decentralization and harmonization agenda, and was pioneering in its nationwide coverage. The VIP demonstrated that the empowered but still nascent DAs could upgrade their capacity, even if the degree of upgrading was only a beginning to achieving the institutional strength that the DAs ultimately need. The project also promoted a large program to establish, empower and strengthen community organizations.

61. Due to its multi-sector nature, the VIP necessarily had to coordinate the activities of a number of different agencies. This was in place of the disparate and disconnected agendas often sponsored by different government agencies. There were also different implementation modalities between donor agencies for the same sector. The VIP began a single window approach to assisting the DAs with improved coordination between agencies. To the extent that financing and implementation processes can be simplified and generalized (the same form for instance, for all disbursement requests, no matter which sector and financier) and implementation modalities made identical in any one sector (e.g. uniformity in applying the five percent community contribution for boreholes, and five percent contribution by the DAs), this will assist the DAs in their development activities. The VIP's harmonization achievements were partial, and by no means the same across all activities and government agencies or donors, but a start was made and an example provided for other programs.

## **SUSTAINABILITY**

62. The type of infrastructure is one factor in sustainability risks. Project infrastructure such as the water investments (boreholes, irrigation) may have greater likelihood of being maintained than other infrastructure, as benefits are tangible and felt by each involved household, and funds for O&M are more easily collected. Feeder roads will need regular maintaining by the DAs. The roads program is highly appreciated, and this may help to ensure funds are made available by the DAs. Tracks are maintained by communities, and experience is variable, some communities steadfastly maintaining the tracks, others letting them go into disrepair. Markets, if well situated, can be greatly appreciated by users, and the DAs may maintain them as they provide revenues from market fees. However, probably more significant than the type of infrastructure is the soundness of the institutions involved. The mission was informed, and also saw, that where a community was strong, institutionally and financially, the infrastructure tended to be well operated and maintained.

63. The importance of the institutional capacity of the VIP's community organizations raises a concern. The IEG mission's review of the CWSP-2 boreholes found signs of weakened management (e.g., insufficient funds in the bank account, irregular meetings, etc.) in the community institutions (paras. 76 to 88). From the mission's field visits and discussions, the situation for VIP is similar to CWSP-2's boreholes. While, for both projects, strong training was provided before and during installation of a borehole, thereafter there

---

(e.g. the 10 percent contribution to investment in boreholes, 5 percent each from the communities and the DAs); (iii) close coordination between donors, among government agencies, and between government agencies and donors; (iv) single-window provision of services such as in the VIP; and (v) progression to program rather than project by project approaches, enabling national sector programs supported by pooled funds.

were minimal routine follow-on visits and training by extension staff.<sup>34</sup> The mission discussed with RICU management whether follow-on support would be helpful. The view was affirmative. However, no funds had been provided under the VIP's successor project – the Community Based Rural Development Project (CBRDP) for such follow-on support. Due to the uncertainties resulting from the IEG mission's discussions and analysis (which was not available at the time of project completion), sustainability is rated **not evaluable**. The ICR and ICR Review both rated sustainability as likely. An important part of the ICR's conclusion of likely sustainability for the VIP was based on the assumption that the CBRDP would provide follow-on support to VIP communities.<sup>35</sup>

## **BANK AND BORROWER PERFORMANCE**

64. The major weakness of the Bank and the Government was the extraordinary gap between Board approval and establishment of RICU, some 20 months after Board approval and representing 25 percent of the planned project period (para. 48). Until RICU was established, no project activity could proceed. There was also some over-optimism in the assumed rate of implementation, contributing to the physical achievements being only about a half to two-thirds those assumed at appraisal. CDD-type projects, especially when key institutions have to be established first, tend to start slowly. In other respects, the performance of both the Bank and the Government was strong.

65. The VIP was highly relevant to the Government's objectives in the rural sector, which were also supported by the Bank. It was path-making in providing nationwide support to rural decentralization and harmonization, and to advancing CDD approaches. Both the Bank and the Government recognized that institutional development and training were as important as the physical investments, if not more so. Investment was not rushed ahead of capacity building, even though the latter would slow down project implementation. RICU's strong performance was a major determinant of the project's success. The Bank's supervision teams were complete in the breadth of specializations, and included institutional and social specialists as well as capacity in procurement, finance, engineering, economics and other specializations. There was good teamwork between the Government and the Bank. Both the Bank and the Borrower performance are rated **satisfactory**, the same as at ICR and ICR Review stages.

---

34. Under the demand-driven model for RWSS developed under the CWSP and the CWSP-2, the District Water and Sanitation Team is available to visit borehole communities if requested by the community. But the DWST does not systematically make routine visits to all communities. (This is discussed in further detail in the CWSP-2 section.)

35. The following remarks are made in pages 8 and 9 of the ICR: (i) "Sustainability is rated Likely, as the successor project, CBRD, has been approved by the Bank's Board and will continue to provide funds and support training and capacity building. It will reinforce the ability of beneficiaries in planning and managing their own development projects reached at the closing of the VIP." (ii) "However, the approach (CDD) is still very new for Ghana, and communities and assemblies require more time and experience to become fully sustainable and autonomous." (iii) "In conclusion, although full sustainability of micro-projects is not assured, the follow-on project (CBRD) will guide and support existing micro-projects, and will facilitate the creation of new micro-projects. For this reason Sustainability is rated Likely."

## 4. The Second Community Water and Sanitation Project (CWSP-2)

**Table 3. Assessment of Development Objectives and Overall Outcome for CWSP-2**

Development Objectives	Relevance	Efficacy	Efficiency
To increase access and achieve effective and sustained use of improved community water and sanitation (CWS) services in villages and small towns in four regions Ashanti, Brong Ahafo, Upper East and Upper West regions), through:			
(1) implementing demand-responsive and sustainable CWS services, providing basic drinking water and sanitation facilities to about 550,000 people in rural communities through construction and rehabilitation of water points, piped water supply systems, and sanitation facilities.	High	High	Substantial
(2) strengthening community capacity to manage services by assisting communities in planning, implementing and administrating services, forming and training Water and Sanitation Development Boards ((WSDBs) and Water and Sanitation Committees (WATSANs) and training community members in better hygiene practices.	High	High	Substantial
(3) strengthening district- level capacity to deliver CWS services, encouraging an active role by the private sector and NGOs in delivering goods and services and assisting District Assemblies (DAs) in planning and providing community support in service planning, implementation and management.	High	High	Substantial
(4) strengthening CWSA's capacity to assume the facilitator role and supporting the national CWS program.	High	Substantial	Substantial
Overall Project	High	High	Substantial
Overall Project Outcome	Highly Satisfactory		

### RELEVANCE

66. The CWSP-2 was **highly** relevant. It shared with the VIP the centrally relevant objective of improving rural welfare, a core priority in the 2000 and 2004 CASs and in the Government's 2004 PRSP. Access to safe water and improved hygiene are core parts of the country's program to achieve its Millennium Development Goals.<sup>36</sup> There is a strong welfare impact for the rural poor from provision of potable water and sanitation, in particular as concerns the social welfare and health of women and children. All four of the CWSP-2's

36. A National Community Water and Sanitation Program to expand the coverage of villages with access to safe water and sanitation was launched in the early 1990s, and in 1994 rural water and sanitation was placed under its own specialized and substantially autonomous agency, the Community Water and Sanitation Agency (CWSA). The Bank's first rural water supply and sanitation (RWSS) project – CWSP – successfully supported the NCWSP, strengthening community and participatory aspects of RWSS. A second project (CWSP-2) could add value by helping to further improve the national program and to increasingly align it to Ghana's decentralization objectives.

development objectives were highly relevant in being necessary and mutually complementary aspects of Ghana's RWSS program. The investment program under the project's first DO was supported by three institution strengthening objectives, at community, district and national levels respectively. As with the VIP, an exemplary feature in project design was the major emphasis on institutional development. There are, indeed, a number of similar operational features between the two projects, and the issues that each encountered also have similarities.

## EFFICACY

67. The efficacy of the CWSP-2's first objective (demand responsive and sustainable investments in RWSS) was **high**. Physical objectives were more than achieved in all major investment categories as shown in Annex C, Table 2. Some 2800 boreholes were constructed, three times the appraisal target.<sup>37</sup>

68. The efficacy of the project's second objective – primarily to strengthen communities to enable them to manage their RWSS facilities – is rated **high**. A massive training program was organized by CWSA to train all communities, especially office bearers (presidents, treasurers, secretaries and village mechanics). Investment did not proceed until such training had been completed. The great majority of community water and sanitation committees (WATSANs) started well, with good capacity and functionality.

69. The efficacy of the third objective – to strengthen DA implementation capacity – is also rated **high**. This objective was at the heart of the decentralization program, Major training was provided to staff in the DAs<sup>38</sup> and most DAs established a District Water and Sanitation Team (DWST). These teams comprised an engineer, a CDD/extension officer, and a hygiene specialist. In the mission's discussions with a DA and the CWSA's Sunyani Region Water and Sanitation Team (RWST), both CWSA and the DA confirmed the positive impact on the capacity of the district administrations to manage their RWSS program. Areas mentioned by the DA as improved included RWSS engineering, planning, procurement, contract management, financial management, CDD approaches and hygiene. There were, however, comments that refresher training was needed. Further, some comprehensive training to DWSTs was considered needed on a continuous basis. As with the UESP and the VIP, this was required to deal with the ubiquitous practice in most DAs/MAs of rotating staff.

70. The project's fourth and final objective – to strengthen CWSA's capacity to transition from a direct provider of RWSS services and investment, to a facilitator - was **substantially**

---

37. This includes boreholes and dug-wells combined. 2732 boreholes were established and 57 dug-wells, boreholes being much more popular with the communities. The corresponding VIP figures for total investments in potable water are 1114 boreholes and 454 dug-wells.

38. Major training and capacity building was also provided to the private sector. Some 650 private drillers, contractors, shopkeepers/suppliers (for spare parts), area mechanics, and consultants (for subsequent extension activities) were trained. NGO training was probably less successful. Field accounts and discussion with other donor agencies indicated that a number of NGOs preferred their independence, and some practiced alternative implementation procedures for RWSS (a number provide RWSS infrastructure without requiring contributions from the community and DA). This had a negative impact on government's harmonization objectives.

achieved. The move from a direct implementer to a facilitator was a major step, calling for changing the staff culture and gathering experience and skills in CWSA's new role. Like the VIP, the CWSP-2 was a path-maker in achieving and exemplifying effective decentralization. From the mission's observations and discussion with other parties, The CWSA significantly strengthened under the project and it has also been a leader in the Government's harmonization program. Various workshops, including participation by the Bank and other donors, have progressively built consensus and action towards a single RWSS model, broadly, the model used in the CWSP-2.<sup>39</sup> The final demonstration of CWSA's success is that it progressively built its ability to deliver a large RWSS program. CWSA's investment activity went from 200 boreholes in 2000, to about 2100 boreholes in 2004. The corresponding figures for the VIP program were zero in 1999 (before the project's field implementation had begun) to an average of 382 boreholes in 2003/2004.

71. Taking account of the achievements of all four objectives, CWSP-2's overall efficacy was **high**.

72. The Impact of Hygiene Education: The CWSP-2 (in particular) and the UESP included a focus on sanitation and hygiene practices. The UESP included sanitation education in schools, and the mission's visit to a school in Accra illustrated the benefits that were possible (para 24). A National Hand Washing Campaign was funded under the CWSP-2. The CWSP-2 hygiene program is particularly impressive. CWSA considers hygiene as a key and fully integrated element in its program, which links potable water, sanitation and hygiene in combination in its sector strategy. Thus, in project design and implementation, hygiene promotion was integrated as a core part of CWSA's training of WATSANs, and in CWSA's overall support system. The human resources applied to this were considerable. Sanitation specialists were included in CWSA's RWSTs, and, at DA levels, the DWST's three-person extension teams included a health specialist as well as the engineer and CDD specialist. One of the outputs of CWSP-2's hygiene technical assistance was production of a hygiene improvement and environmental action plan. Basic sanitation practices such as the importance of hand-washing, clean water and utensils, keeping boreholes and surroundings clean and weed-free, and better village sanitation practices were promoted. One WATSAN visited by the mission had a woman health representative who visited a group of different households every morning to promote better hygiene. As discussed in Annex E, it is likely that the CWSP-2's hygiene promotion activities provided substantial additional benefits, as is usually found internationally in RWSS projects which include health education. Extending CWSP-2's attention to hygiene for all of Ghana's rural and urban water supply and sanitation program would help improve the stagnant (no improvement) health situation in Ghana that is rightly preoccupying the Government (para 3). The VIP did not include sanitation promotion, the emphasis of its borehole program being on the physical investments. Missed broader opportunities can be a disadvantage in a multi-activity menu approach such as the VIP and the CBRDP. A single sector approach has a better opportunity to focus on the sector and its associated additional opportunities.

---

39. However, harmonization in the RWSS sector is still only partial. NGOs in particular are resistant to adjusting their approaches, and often provide the borehole without any contribution from the DAs and communities.

## EFFICIENCY

73. The CWSP-2's economic rate of return as recalculated at ICR stage was 21 percent, though the cost streams only included the investment costs in wells, excluding the project's "software" support which made up 23 percent of project costs. Actual project costs at US\$32.2 million were about 15 percent above appraisal estimates but this increase is mainly due to exchange rate changes. The project far exceeded its physical targets in a five year project period (this period included a project extension of 18 months). This is impressive given that CWSA and the DAs had to learn and become acquainted with their new roles, and the communities required major training. While the ERR would have been marginal if all software costs had been included, given the project's high achievements, at reasonable costs, an efficiency rating of **substantial** is appropriate.

## OVERALL PROJECT OUTCOME

74. Taking account of the project's high relevance and efficacy and substantial efficiency, the overall outcome of the project is rated **highly satisfactory**, the same rating as in the ICR. The ICR Review rated the project outcome as satisfactory. Based on extensive meetings and its field visits the IEG mission had the opportunity to further assess the project's strong institution building performance, which was also matched by high physical achievements.

## INSTITUTIONAL DEVELOPMENT IMPACT

75. Like the VIP, the CWSP-2's major emphasis on "software" strengthened capacity at all institutional levels – communities, DAs and CWSA. The capacity achievements were, in turn, reflected in CWSA's institutional ability to greatly exceed the project's investment objectives (by threefold as concerns the number of boreholes established). The project also advanced CDD experience in Ghana, contributing to the national CDD experience for emulation in other sectors. Also, the CWSP-2, together with the VIP, provided an example of successful decentralization, and the implementation steps typically required to implement the Government's decentralization objectives. The CWSP-2's institutional development achievements were **substantial**. The ICR and ICR Review had the same rating.

## SUSTAINABILITY

76. CWSA's rural water supply and sanitation program, supported by the Bank through two projects enabling a continuum of support from 1994 onwards, has justifiably attracted international interest both because of its overall success and because it has employed a particularly accentuated "demand-driven" approach to the RWSS sector. Most RWSS programs entail at least some "supply-driven" support to borehole communities, wherein the communities receive regular visits by extension staff and refresher training.<sup>40</sup>

77. The CWSP-2 created an enabling environment for sustainability with three elements: (i) facilitating growth of a network of private mechanics; (ii) encouraging a similar network

---

40. The CWSA provided a correction to a sentence that had been at the end of this paragraph in the draft PPAR (Refer to CWSA's second comment at Annex F). Accordingly, the sentence has been removed.

of shopkeepers who, as part of their business, stock and sell spare parts for boreholes; and (iii) the existence in each DA of a District Water and Sanitation Team (DWST). This environment enables an enterprising WATSAN to have facilities repaired and, for some expenditure (transport and other costs), to get advice from the DWST. Once the initial intensive training is completed at the time of installing the borehole, supply-driven extension is not systematically provided, and the communities need to be proactive to access all their needs. The relative merits of demand or supply-driven approaches has attracted some international debate. The question this PPAR has sought to answer is – will the demand-driven model, and hence the project, result in functioning boreholes sustained over time? And, if needed, what adjustments could be made to the model to improve sustainability?

78. Under the CWSP-2, the WATSANs started off very well. The intensive training provided sufficient capacity to operate the borehole and the WATSAN's activities. Almost all of the CWSP-2 water facilities are still operating. However, the bulk of the CWSP-2 boreholes were constructed in the last two years of the project (FY03 and 04). Thus, most of these wells are less than four years old. In the mission's discussions with CWSA staff, and also observed by the mission in the site visits, pump sets are usually repaired as quickly as possible by the WATSANs. If a repair is beyond the scope of the village mechanic, or a spare part is required, the spare is bought, or the area mechanic sought for, usually within two to three days. Further, if the WATSAN has insufficient money in its bank account, the mission was told that the required money is usually collected quickly from the families using the well.

79. From the IEG mission's discussions with concerned bilateral agencies (DANIDA and KfW) and with some RICU and CWSA extension staff, from field visits, and from review of available data, the degree to which the satisfactory situation described above will continue may be a risk.<sup>41</sup> No arrangements or funds have been provided, either by the Government or under the Bank's follow-on project, the CBRDP, for follow-on extension and training for the CWSP-2/VIP communities. Will the three pronged enabling environment be enough support by itself? Is there need for a degree of "supply-driven" provision of training and extension, where DWST staff or their consultants regularly visit the communities? And if so, at what intensity?

80. The available information provides mixed signals regarding these questions. One very positive fact is that, as of now, a high percentage of the boreholes are still operating. A large-sample survey<sup>42</sup> sponsored by the World Bank (Komives and Wakeman et al, draft, 2006) of boreholes over five years old, found that 89 percent of sample boreholes in Brong Ahafo region were still functioning, and some of these may have been only temporarily out of order due to a breakdown. The same study found that there was little difference in the percentage of still functioning boreholes between Brong Ahafo – a CWSP/CWSP-2 region - and Volta –

---

41. Two additional risks have not been examined here. First, it will be important for the DAs to maintain their capacity over time, which, as for the UESP and the VIP, given the staff turn-over problem, may be difficult. However, the presence of a follow-on project, CBRDP, which will need to maintain the implementation capacity of the DAs for new investments, will reduce this risk. Second, fluoride and other natural contaminants are appearing in the groundwater of some areas, and groundwater pollution from human activity is growing.

42. Post-Construction Support Activities and the Sustainability of Rural Water Projects in Ghana (Kristin Komives and Wendy Wakeman et al., final draft, 2006).

a region with a DANIDA project which, as mentioned above, had a more “supply-driven” approach including several extension visits to each community a year. Some 94 percent of boreholes were functioning in Volta region, only slightly above Brong Ahafo. Thus, at least in the shorter term, the survey results are encouraging, suggesting good sustainability under the demand-driven approach.

81. However, the fact that almost all of the boreholes in the above survey are still running is not necessarily a sufficient indicator to the situation in the longer term. Development experience and the extensive international research<sup>43</sup> on CDD activities, points to a causative linkage between the strength of a community organization and the success of its activities; in this case, borehole operation and maintenance. Thus, a decline in a WATSAN’s social cohesion and financial reserves might increase the risk of un-repaired breakdown. Minimal data is available to test this possibility, but some information found by the IEG mission suggests that borehole WATSANs might be vulnerable to reduced functionality, both financially and socially.

82. One source of indirect information was from a small random sample of survey forms that the mission took of 40 WATSANs. This was from a much larger number of forms with raw data that had recently been collected from the field by CWSA’s Greater Accra Region. Greater Accra region was not one of the CWSP-2 financed regions, but CWSA’s procedures for training communities and establishing boreholes are the same, whether financed under CWSP-2 or from other sources.

83. Table 4 Shows a number of parameters from the sample. Only about half or less of the WATSANs: (a) held regular meetings; (b) had accounts available or up to date; and (c) collected money from the villagers regularly. Taking the 50% of WATSANs with the lowest savings, their average savings are only Cedis 124,000 (US\$14). This is not enough for major repairs.

84. Some information from CWSA’s monitoring visits to the WATSANs established in Brong Ahafo region under the first CWSP is also interesting though it must be emphasized that this is not a random sample. Across four districts with 101 WATSANs, 53 of them were visited by the RWST. The results (Table 4) also indicate possible signs of weak financial and social capacity.<sup>44</sup> But as found with the Komives/Wakeman survey, despite the apparent

---

43. IEG’s “Review of the Literature on Participatory Approaches” (Barbara Pozzoni and Nalini Kumar, 2005) comments that “evidence from the literature reviewed on participatory governance also points to social capital as a determinant for successful citizens’ participation initiatives. Goetz and Gaventa (2001) review numerous civil-society-led initiatives aimed at amplifying citizens’ voice to influence policy and spending decisions. They find that ‘success stories’ are rooted in social movements and organizations which have built trust and mutual support amongst their members.”

Relative to Ghana, IEG’s report on *The Effectiveness of World Bank Support for Community-Based and -Driven Development*, 2005, illustrates a case where strong social capital enabled a community organization – the Nangbanyini Nyagsa Women’s Group, Savelugu Nanton District, Northern Region, Ghana – to succeed within a Bank financed project that had not gone particularly well (The Agriculture Sector Investment Project, ASIP). The IEG report commented on this as follows: “The success of this subproject has less to do with the project (ASIP) than with the existing group capacity and the dynamic personality of the group leader.”

44. The results from both data sources – Greater Accra Region and Brong Ahafo Region should be regarded as tentative only. The Greater Accra Region Data is a small sample from the much larger sample that will be available from CWSA’s forthcoming analysis. The Brong Ahafo data are from field monitoring reports intended

weaknesses of a number of the WATSANs, nearly all boreholes were functioning. Out of the 53 WATSANs, only two were abandoned.

85. Nevertheless, as discussed above, while the wells are nearly all working now, if the social capital of the communities is declining, this could be an augur for a less satisfactory situation in the longer term.

86. The need for longer term extension support in CDD projects is perhaps the most commonly held view amongst development practitioners. A 2005 IEG study of international experience with CDD projects<sup>45</sup> also supports this view. The following comments are made in the report's conclusions section: "Bank-supported CBD/CDD projects have had much more success ..... where it has provided consistent long-term capacity-building support to communities over time." Also, "For individual communities, the Bank's sub-project cycle is generally too short to bring about the kind of enhancement of community capacity that is visualized in Bank supported CBD/CDD, particularly CDD, projects. Further, Bank processes and systems have not been geared toward supporting long-term processes such as empowerment and social capital enhancement."

87. From the findings and discussion above, the information to make a reliable judgment of sustainability is not sufficiently clear at this stage. The recent Komives/Wakeman survey indicates that in the shorter term a demand-driven approach without significant supply side follow-on extension provides adequate support for communities. This is important as it appears to reflect the soundness of the three pronged enabling environment approach in the CWSP-2 model. However, other information, the literature and views expressed to the mission suggest caution. The primary measure of sustainability in the study – that the well is still operating – may not capture the weaknesses in institutional and financial functionality noted from other sources. These weaknesses could be the precursor for a less satisfactory situation in the longer term. Longer term impacts have not yet been studied. Further review would be desirable. Finding out whether the existing demand-driven support system of the CWSA model is adequate, or whether, as a supplement, a degree of follow-on support is also needed, is important to the success of Ghana's RWSS program over the longer term.<sup>46</sup>

88. As concerns a rating for sustainability, given the uncertainty regarding the future of the CWSP-2's WATSANs and their infrastructure, sustainability is rated **not evaluable**. This assessment is also the basis for the same sustainability rating for the VIP. This compares with

---

primarily as management tools in CWSA's operations, and are not random samples. There are also slight differences in interpretation for particular indicators; for instance, in the GAR data, "regular" meetings means a frequency of a meeting every three months or more, whereas for Brong Ahafo this is less specifically defined.

45. The Effectiveness of World Bank Support for Community-Based and -Driven Development (World Bank, Independent Evaluation Group, 2005).

46. CWSA has commented (refer Annex F) that "the sustainability of the CWSP 2's infrastructure and community organizations is a question is not a reality on the ground. Among other things, the intensive Community development activities and well organized institutional structures at both community and district levels coupled with availability of spare parts at affordable prices and ever growing private sector are practical pre-requisites to promote sustainability."

likely ratings for the CWSP-2 at both ICR and ICR Review. Most of the information above was not available then, and longer-term perspectives received less attention.<sup>47</sup>

**Table 4. Available Sustainability Indicators for CWSP-2**

Sustainability Indicator	Greater Accra Region	Brong Ahafo Region
WATSAN committee meets regularly (every 3 months or more often)	55%	28%
Accounts records are available/up to date	45%	41%
Money is collected “regularly”	42%	40%
Money is available in Bank account or petty cash	82%	n.a.
Average total amount of money in bank and/or as petty cash (“savings”) (in thousand Cedis and, in parentheses, in US\$)	2522 (US\$280)	n.a.
Average savings (in thousand Cedis and in parentheses in US\$) excluding the 3 WATSANS which had the largest savings.	817 (US\$90)	n.a.
Average savings (in thousand Cedis and in parentheses in US\$) of the 50% of WATSANS with the lowest savings.	124 (US\$14)	

## BANK AND BORROWER PERFORMANCE

89. Both the Bank and Ghana applied a commendable forward vision in conceiving the project, recognizing that decentralization and CDD approaches provided the best chance for further development of the RWSS sector, and pioneering (with the VIP) a major program supporting the decentralization policy. This entailed risk, which was taken by both parties. Then, the features needed for the new approach, were designed into the project, and, in the event, the design has proven appropriate. There was sustained commitment by both parties. The Bank, the Government’s Ministry of Works and Housing and Ministry of Finance and Economic Planning, and CWSA, held firm when under considerable pressure by other government interests and donor agencies to relax the requirement for a capital contribution to investments by DAs and communities. Even though disbursements were very slow in the initial project years, the Bank and CWSA persevered with the training and extension program before investments, rather than succumb to pressures to invest and increase disbursements without the necessary DA and community preparation.

90. The Bank and CWSA also catalyzed a process of change within the donor community. Discussions and workshops led to greater acceptance of the new decentralization and CDD approach. Harmonization of approaches and implementation modalities in the RWSS sector across different government and donor assisted projects, largely using the

47. The World Bank’s Africa Region commented as follows on the rating provided for the project’s Sustainability: “We are not convinced by the reasons behind the lack of assessment of the sustainability of the project. All the ingredients for the sustainable operations of the built facilities are in place and the findings of Komives and Wakeman report indicating that 89% of more than five years old boreholes sampled in the Brong Ahafo region are functioning should provide a clear sense that sustainability is likely. There are comments on social capital that we really appreciate but we found the discussion quite speculative and not based on the facts at hand. Not having a lot of money in the accounts of Watsan committee in many parts of SSA is not always a sign of weakness in the functioning of these committees. There are many examples where surplus of money in accounts has been at the heart of problems that have messed up the functioning of committees.”

CWSP-2 model, is significantly underway. The determined implementation efforts of CWSA and, in most cases, of the DAs, were facilitated by a number of Bank actions. The project team had a good mix of local and headquarters staff, the core team remained largely unchanged throughout implementation, and supervision missions had strength both in social and technical areas. The performances of both the Bank and the Borrower were **highly satisfactory**. The ICR and ICR Review both rated Bank and Borrower performances as satisfactory. The upgrade in part recognizes the strong performance of CWSP-2 in all implementation aspects. But, particularly notable is the Bank and Borrower achievement in developing and successfully implementing an innovative demand-driven/enabling environment approach. While this approach may need adjustments as experience is gained, the CWSP-2 model has attracted international interest, and its strategic relevance as a successful model for CDD, in Ghana and elsewhere, is self-evident.

## **5. Monitoring & Evaluation & Fiduciary Issues for the Three Projects**

### **M&E DESIGN, IMPLEMENTATION AND UTILIZATION**

91. At the beginning of each project, “M&E” was more in the nature of MIS material. Project progress was well documented and presented in regular quarterly reports. These reports formed a useful management tool for project implementation. However, data was almost all quantitative (for example, kilometers of roads or drains achieved, number of markets built or training courses provided). The principal shortcoming was the lack of measurement of qualitative achievements; for instance, the impact of a market or feeder road on community incomes, the impact of a borehole on village health and the well-being of women, the silt build-up and other maintenance needs of urban drains, and expenditure levels on maintenance. (A more detailed review of M&E is provided in Annex D.)

92. The VIP and the CWSP-2 M&E units further developed their capacity towards the end of the projects and subsequent to closure. Both RICU and CWSA have now started to undertake surveys collecting qualitative data, and this should shed light on sustainability and other issues important to project impact. The UESP’s municipalities and the PU now have data on municipal revenues and for expenditures on maintenance of sanitation infrastructure. If analyzed in uniform format and reported on regularly, this could form a good base for decisions on the collection and allocation of revenues for O&M.

### **OTHER ISSUES (SAFEGUARDS, FIDUCIARY, UNINTENDED IMPACTS – POSITIVE AND NEGATIVE**

93. No major environmental, social or fiduciary issue caused by the three projects was reported to the IEG mission.<sup>48</sup> The CWSP-2 ICR comments that an issue that needs monitoring and action as needed is the presence of arsenic in the groundwater in some parts of the interior regions. Most social and environmental impacts of the projects were strongly positive: as examples, improved urban environments and reduced flood risks; reduced labor

---

48. All three projects were Environmental Category B.

for women in fetching water, and greater social cohesion and empowerment of village communities. Some localized environmental problems have been reported. The UESP ICR reports possible risk of siltation from the incomplete landfill at Takoradi. The VIP ICR reports situations where a feeder road has enabled access by loggers and poachers to forested areas, with predictable results (an environmental screening process has now been introduced). On a smaller scale, poor community practices could have deleterious local effects; for instance, inadequate weeding around a borehole can obstruct drainage and increase the risk of water related diseases.

## 6. Decentralizing and Developing Ghana's Water Sector: Lessons for the Future

94. All of the principal lessons from this performance assessment relate directly or indirectly to Ghana's decentralization program; from the apex organizations and local governments to the local communities. While all three projects are in the water sector, the lessons are in most cases not only relevant to water. They provide lessons for other sectors providing local public services in Ghana, and for decentralization programs in other countries as well.

95. All three projects were path-makers. Under the UESP a start was made towards decentralization in the urban environmental sanitation sector. The CWSP-2 and the VIP took decentralization further, succeeding in transferring implementation to the DAs, and then to rural communities. The CWSP-2 and the VIP decentralized well before nearly all other sectors in the country. The CWSP-2, the VIP and, to a lesser extent, the UESP have shown that decentralization can be successful. In itself this is important as reassurance to individuals and institutions that are skeptical of decentralization. These projects provide a rich experience as concerns their specific implementation modalities, mostly in best practice, but also with lessons stemming from mistakes or problems encountered.

96. The lessons fall under three broad areas. First, from the projects' experiences there are a set of lessons relating to what is needed in the **institutional and policy environment**. Second, all of the projects found that major **capacity building** was needed. Third, **sustainability** was a major issue, and needed to be addressed as a priority. Table 5 summarizes the points covered.<sup>49</sup>

### 1. AN ENABLING INSTITUTIONAL AND POLICY ENVIRONMENT

- **Long-term commitment:** Decentralization is a long-term process, and needs consistent and sustained support in order to succeed. This has been the case in Ghana. The Government's interest in decentralization started to develop in the early 1990s, well before the three projects commenced. The Bank has consistently supported the

---

49. It should be emphasized here that the points below are the practical lessons directly derived from the three projects reviewed. While the lessons are wide-ranging, they are not intended to provide comprehensive coverage of all issues related to decentralization and community driven development.

decentralization agenda, starting in the mid-1990s, and the 2004 CAS emphasizes continued support.

- **A demand-driven approach including beneficiary contributions:** The CWSP-2 and the VIP were implemented through a demand-driven approach requiring DAs and the communities to select themselves as project participants. In particular, they required an up-front financial contribution from the DA and community. The project experience has found this to be important: for DAs to demonstrate their commitment; for creating community ownership of the facilities; and to help reduce the “cycle of dependency” (expecting everything free) which has tended to prevail in Ghana’s rural societies.
- **Agreed institutional roles:** These need to be clear and agreed. The VIP involved a number of different ministries and agencies. Their roles and specific responsibilities were clearly defined. This was then formally agreed in Memorandums of Understanding between RICU and each agency. The projects also established the responsibilities of the PU, CWSA or RICU relative to those of the MAs or DAs. For the two rural projects (the CWSP-2 and the VIP), clear roles between the DAs and the communities also had to be defined and widely understood.
- **Clear and widely distributed “rules of the game”:** Understanding what to do and how to do it is key - many new actors are involved and they need to operate effectively. The Project Operation Manuals (POMs) for both the VIP and the CWSP-2 were clear, detailed, and distributed to all staff and agencies with implementation roles. Hence, there was sound guidance and minimal ambiguity at all levels. The CWSP-2 went further. After the POM (primarily for CWSA staff), there was then a DOM (District Operation Manual) for the DAs, and then a COM (Community Operation Manual). Thus, the DAs and Communities had focused material specifically needed for them.
- **Harmonized implementation modalities:** The borehole programs under the CWSP-2 and the VIP commenced a harmonization process, both among donors and among different government departments. The progress made, while only partial, has begun to exemplify the advantages of harmonized implementation. Previously, each donor tended to have its own implementation modalities, and projects even overlapped geographically. This confused the DAs and communities. Progressively, donors and government have been converging towards a single implementation model; for instance, for boreholes, essentially the CWSA model. This in turn will facilitate further harmonization to program approaches, with combined and simplified donor assistance.
- **Minimal political interference:** Cases where local political interests have influenced borehole committee membership have been reported, which would not necessarily enhance the committees’ social cohesion and capacity. Processes to minimize local political influences would be desirable.

## 2. A MAJOR DRIVE TO BUILD IMPLEMENTATION CAPACITY

- **Software, and software first:** Capacity building should be emphasized as much as or more than infrastructure, and most capacity building should be done up-front. The CWSP-2 and the VIP emphasized software (training, extension, technical assistance) for capacity building. Further, for every DA and every community, the capacity building was done before the infrastructure. For communities, completion of the required training and formation of their committees were mandatory before any construction. These two projects, and the UESP, provided substantial training for the DAs or MAs and for the communities in the case of the rural projects.
- **Massive training:** Training was massive. For the two CDD projects, training covered all actors: communities, DAs, and private mechanics and suppliers of spare parts. The UESP had intensive training for the MAs' Waste Management Departments. The scale of the training considered necessary for the CDD projects bears emphasizing for other decentralization projects. The CWSP-2 trained over 3800 communities, groups or individuals. The VIP, covering all of Ghana's districts and requiring a greater range of skill needs, had some 5800 such trainings.
- **Strong central coordination:** Strong central coordination and guidance is necessary. The very nature of decentralization means that many institutions have to quickly master their new responsibilities. Each project had a strong coordination unit: the PU for the UESP, RICU for the VIP and CWSA for the CWSP-2. Each managed to provide the MAs or DAs with the necessary significant training and technical assistance.
- **M&E to facilitate program adaptation:** Capacity to assess and provide feedback to management on project impacts is needed. M&E for all three programs was not sufficiently developed during project implementation to inform management on project impacts and issues. Thus, had CWSA's M&E been strong, issues such as the need or otherwise for follow-on support to communities would be clearly known, whereas, even now, this remains a question. Under the UESP, the PU and municipal WMDs, could have had monitoring systems providing regular reports on the state of maintenance and funds. This might have helped better decision making by the municipalities regarding both the allocation of funds and the need for increased municipal revenues.
- **Development of private sector service providers:** The CWSP in particular included training of interested individuals to be private mechanics, and facilitated the development of a network of shopkeepers to stock and sell spare parts for boreholes. Over 650 private individuals or entities were trained. These included: drillers, contractors, consultants, mechanics and other private parties where capacity enhancement was needed to foster the development of a private sector support network.
- **Including hygiene education:** The CWSP-2 (in particular) and the UESP included education in hygiene practices. For the CWSP-2, this was a fully integrated part of the training of the WATSANs. A health specialist was included in each DWST's extension team (the other two were an engineer and a CDD specialist). Significant improvements in community health were reported by several WATSANs visited. Hygiene education

initiatives by an urban school were considered important. Hygiene education and extension is a natural concomitant in water supply and sanitation programs. The costs of including hygiene education are usually modest relative to the benefits.

### 3. MAKING SUSTAINABILITY A CENTRAL FOCUS

- **Prioritizing revenues for O&M financing:** For the urban water and sanitation sector O&M funding needs to be a top priority. The UESP was well designed and implemented from an engineering perspective, but the primary issue for the UWSS sector – inadequate revenues and financial allocations for O&M, and, consequently, inadequate O&M – was not tackled. It would have been better to have placed as much, or even more, attention to the funding/O&M issue as to the physical works.
- **Creating self-sustaining support services:** This is important to ultimate success. The CWSP model is particularly interesting. Three needs were identified to provide long-term support to borehole communities under a demand-driven approach: (i) availability of spare parts, (ii) availability of private mechanics, and (iii) availability of technical assistance on a demand basis. The CWSP-2's promotion of the private sector rather than government as the long-term provider to communities of spare parts and mechanics, is more likely to be sustained over time than services reliant on government.
- **Follow-on training for local governments:** Given the chronic Ghanaian problem of turn-over of government staff, the follow-on project to the VIP and CWSP-2 – the CBRDP - will need to provide refresher training for the DAs as well as training for the CBRDP's specific implementation needs, The same need is present for the UESP, though the follow-on UESP-2 may be able to provide the necessary training for the WMDs.
- **A possible need for follow-on training for communities:** Neither the CWSP-2 nor the VIP, nor the design of the commencing follow-on project, CBRDP, included continued technical support (extension visits, refresher training) to the community organizations. At this juncture, it is not clear whether the communities' social cohesion and financial strengths are declining or remaining strong. More field assessments are needed to assess on-the-ground realities and what may or may not be needed to address the situation that is found.

**Table 5. Some Key Features for Successful Decentralization**

---

**An Enabling Institutional and Policy Environment:**

- Long-term commitment to decentralized development
  - A demand driven approach including beneficiary contributions
  - Agreed institutional roles
  - Clear and widely distributed “rules of the game”
  - Harmonized implementation modalities
  - Minimal political interference
- 

**A Major Drive to Build Implementation Capacity:**

- Software, and software first
  - Massive training
  - Strong central coordination
  - M&E to facilitate program adaptation
  - Enabling development of private sector service providers
  - Including hygiene education (for WSS projects)
- 

**Making Sustainability a Central Focus:**

- Prioritizing revenues for O&M financing
  - Creating self-sustaining support services
  - Follow-on training for local governments
  - A possible need for follow-on training for communities
-



## Annex A. Basic Data Sheet

### GHANA URBAN ENVIRONMENTAL SANITATION PROJECT (CREDIT 2836-GH)

#### Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
IDA Credit	71.0	63.8	90
Government	14.3	6.4	45
Total project costs <sup>1/</sup>	89.3	83.0	93

#### Cumulative Estimated and Actual Disbursements

	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>	<i>FY99</i>	<i>FY00</i>	<i>FY01</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>
Appraisal estimate (US\$M)	1.9	5.7	25.6	51.2	66.1	69.9	71.0	71.0	71.0	71.0
Actual (US\$M)	0	4.1	5.4	15.3	26.8	41.1	52.6	60.6	63.8	63.8
Actual as % of appraisal	0	72	21	30	41	59	74	85	90	90
Date of final disbursement:	5/3/2004									

#### Project Dates

	<i>Original</i>	<i>Actual</i>
Initiating memorandum	--	10/28/1991
Appraisal	--	06/01/1995
Board approval	--	03/26/1996
Effectiveness	09/03/1996	09/03/1996
Closing date	12/31/2002	12/31/2003

#### Staff Inputs

	<i>No. of Staff Weeks</i>	<i>US\$'000</i>
Identification, Preparation, Appraisal and Negotiations	--	--
Supervision	--	--
ICR	--	--
Total	--	1,029

\*\* <sup>1/</sup> Excludes financing by the Nordic Development Fund, the Netherlands and AFD (France).

## Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Implementation progress</i>	<i>Development objectives</i>
Identification/ Preparation	10/1994	7	UD, ENS (2), ENM (2), ENC, SWM,	n.a.	n.a
Appraisal/ Negotiations	07/1995	7	UD, ENS (2), ENM (2), ENC, SWM	n.a.	n.a.
Supervision 1	10/1996	5	UD, ENC, MFS, ENS, SWM	S	S
Supervision 2	03.1997	5	ENC, SWM, UD, ENS, MFS	S	S
Supervision 3	10/1997	7	SWM, UD, ENM, ENS, FN, MFS, ENC	S	S
Supervision 4	04/1998	4	UD, ENM, ENS, UP	S	S
Supervision 5	12/1998	5	TTL, TTL, ENS, UP, ENM	S	S
Supervision 6	05/1999	7	TTL, ENM (2), ENS, ENC (2), PH	S	S
Supervision 7	12/1999	3	TTL, EN, ENC	S	S
Supervision 8	03/2001	7	TTL, ENC, ENS, UD, PR, FN, PA	S	S
Supervision 9	02/2002	4	TTL,ENM, SWM. PA	S	HS
Supervision 10	11/2002	5	TTL, UD, MFS, PA, PR	S	S
Supervision 11	09/2003	5	ENC, ENS, UD, PR, PA	S	S
ICR	2/2004	10	TTL, ENC, ENV, PA		

Specializations Represented: EN- Engineer; ENS-Sanitary Engineer, ENM-Municipal Engineer, ENC-Civil Engineer, SWM-Solid Waste/Waste Management Specialist, UD-Urban Development Specialist, FN-Financial Specialist, IN-Institutional Specialist, EC-Economist, PH-Public Health Specialist, PR-Procurement Specialist, ENV-Environment Specialist, PA-Program/Team Assistant, MFS-Municipal Finance Specialist, UP-Urban Planner, TTL-Task Team Leader (where specialization not identified).

## Other Project Data

<i>PRECEDING OPERATIONS</i>			
<i>Operation</i>	<i>Credit no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
Urban II (Housing) Project	Cr. 2157-GH	70.0	FY90
Local Government Development Project	25680	38.5	FY94

## GHANA VILLAGE INFRASTRUCTURE PROJECT (IF CREDIT N020 GH)

### Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs	60.0	35.0	58
Loan amount	30.0	23.3	52
Cancellation		SDR 2.4	78

### Cumulative Estimated and Actual Disbursements

	<i>FY98</i>	<i>FY99</i>	<i>FY00</i>	<i>FY01</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>	<i>FY06</i>	<i>FY07</i>
Appraisal estimate (US\$M)	0.6	2.8	6.7	13.9	23.3	30.1	30.1	30.1	30.1	30.1
Actual (US\$M)	2.0	4.8	6.6	8.9	13.4	19.3	25.9	28.3	28.3	28.3
Actual as % of appraisal	333	171	98	64	57	64	86	94	94	94
Date of final disbursement:	11/23/2004									

### Project Dates

	<i>Original</i>	<i>Actual</i>
Initiating memorandum	--	11/01/1995
Appraisal	--	06/27/996
Board approval	--	05/30/1997
Effectiveness	--	02/04/1998
Closing date	12/31/2003	06/30/2004

### Staff Inputs

	<i>US\$'000</i>
Identification, Preparation, Appraisal and Negotiations	376
Supervision	200
ICR	40
Total	616

Staff weeks not available

## Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Implementation Progress</i>	<i>Development Objectives</i>
Identification/ Preparation	03/18/1996	8	TTL, IN, AGE, ENR, DB, PR, PA, LW	-	-
Appraisal/Negotiations	06/28/1996 & 11/22/1996	10	TTL, ENS, SO, ENR, AGE, IFAD, KFW, PA, FNS, DB, PR, IN, FN, LW	-	-
Supervision 1	11/30/1998	5	TTL, IN, CZS, FN, PR	HS	S
Supervision 2	06/18/1999	3	EC, FN, PR	HS	S
Supervision 3	0/18/1999	6	TTL/AG, PL,PR, FN, MGR, DB	U	S
Supervision 4	11/09/2001	21	AG, TTL, AGE, MGR, PR, ENC, SO, PA, FN, ENR, RD, SMGR, KFW, IN, RDS, MIS, IFAD, KFW, RDS, MIS, IN	S	S
Supervision 5	05/27/2002	18	TTL, OO, MGR, PR, FN, SO, AGE, IFAD (2), KFW, EC, ENC (2), RDS, EN (3), IN	HS	S
Supervision 6	02/28/2003	14	TTL, PR, FN, ENV, EN, ENR, IN (2), FN, ENC, GOVT	HS	S
Supervision 7	12/18/2003	9	TTL, AGE, FN (2), PR, PA, dep TTL, IN, SO	HS	S
ICR	3/19/2004	3	TTL, CON, KFW		

Specializations Represented: TTL-Task Team Leader, EN-Engineer, ENS-Sanitary Engineer, ENC-Civil Engineer, FN-Financial Specialist, IN-Institutional Specialist, EC-Economist, PR-Procurement Officer, DO-Disbursement Officer, ENV-Environment Specialist, LW- Lawyer, SO-Social Specialist, MGR-Manager, MIS-MIS specialist, CDD-CDD Specialist, PA-Program/Team Assistant, MFS, Financial Management Specialist, ENR-Rural Engineer, CZS-Coastal Zone Management Specialist, GOVT-Government Representative, AG-Agriculturalist, Planner, RDS-Rural Development Specialist, OO-Operations Officer, CON-Consultant (where specialization not recorded), PH-Public Health Specialist, RWSG-Regional Water and Sanitation Group, ENV-Environment Specialist, FN-Financial Specialist, IN-Institutions Specialist

## Other Project Data

<i>PRECEDING/SUCCEEDING OPERATIONS</i>			
<i>Operation</i>	<i>Credit no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
Community Based Rural Development Project	-	60.0	FY05

## GHANA SECOND COMMUNITY WATER AND SANITATION PROJECT AND REFORM PROJECT (CREDIT 3282-GH)

### Key Project Data (amounts in US\$ million)

	<i>Appraisal estimate</i>	<i>Actual or current estimate</i>	<i>Actual as % of appraisal estimate</i>
IDA Credit	25.0	26.6	106 <sup>1/</sup>
Government	3.0	5.7	190
Total project costs	28.0	32.3	115

<sup>1/</sup> Higher than appraisal due to strengthening of the SDR against the dollar

### Cumulative Estimated and Actual Disbursements

	<i>FY00x</i>	<i>FY01</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>
Appraisal estimate (US\$M)	3.7	11.7	21.7	28	28	28
Actual (US\$M)	0	2.5	3.4	8.7	19.8	26.6
Actual as % of appraisal	0	21	16	31	71	95
Date of final disbursement: 4/26/05						

### Project Dates

	<i>Original</i>	<i>Actual</i>
Initiating memorandum	--	07/22/1998
Appraisal	--	06/17/1999
Board approval	--	08/31/1999
Effectiveness	01/01/2000	07/07/2000
Closing date	06/30/2003	12/30/2004

### Staff Input Costs

	<i>No. of Staff Weeks</i>	<i>US\$</i>
Identification, Preparation, Appraisal and Negotiations	47	103
Supervision	203	285
ICR	26	57
Total	276	445

## Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Specializations represented</i>	<i>Implementation progress</i>	<i>Development objectives</i>
Identification/ Preparation Mission 1	11/17/1998	10	TTL, IN, SO, CDD, RWSG, FN, PA		
Appraisal/Negotiations	06/17/999	10	TTL, LW, PR, EN, CDD, IN (2), FN, RWSG, PA		
Supervision 1	11/03/2000	4	EN, PR (2), FN	S	S
Supervision 2	02/15/2000	4	TTL, PR, FN, CON (2)	S	S
Supervision 3	02/05/2001	6	TTL, CDD, PR, PH, FN, PA	S	S
Supervision 4	03/13/2001	4	TTL, ENS, SO, CDD	S	S
Supervision 5	07/14/2002	4	TTL, ENS (2), CON,	S	S
Supervision 6	12/11/2002	4	TTL, SO, PR, FN	S	S
Supervision 7	09/15/2003	5	TTL, FN, PR, ENM, TTL (2 <sup>ND</sup> )	S	S
Supervision 8	02/13/2004	5	TTL, PR, PA (2), FN	S	S
Supervision 9	10/07/2004	4	TTL, PR, FN, PA	S	S
Supervision 10	12/03/2004	4	TTL, SO, PR, FN,	S	S
ICR	02/18/2005	4	TTL, EC, ENS, PA	S	S

Specializations Represented: : EN- Engineer; ENS-Sanitary Engineer, ENM-Municipal Engineer Specializations Represented: TTL-Task Team Leader, EN-Engineer, ENS-Sanitary Engineer, ENC-Civil Engineer, FN-Financial Specialist, IN-Institutional Specialist, EC-Economist, PR-Procurement Officer, DO-Disbursement Officer, ENV-Environment Specialist, LW- Lawyer, SO-Social Specialist, MGR-Manager, MIS-MIS specialist, CDD-CDD Specialist, PA-Program/Team Assistant, MFS, Financial Management Specialist, ENR-Rural Engineer, CZS-Coastal Zone Management Specialist, GOVT-Government Representative, AG-Agriculturalist, Planner, RDS-Rural Development Specialist, OO-Operations Officer, CON-Consultant (where specialization not recorded), PH-Public Health Specialist, RWSG- Regional Water and Sanitation Group, , ENV-Environment Specialist, FN-Financial Specialist, IN-Institutional Specialist.

## Other Project Data

<i>PRECEDING OPERATIONS</i>			
<i>Operation</i>	<i>Credit no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
Community Water and Sanitation Project	2604	22.0	FY94

## Annex B. Project Components And Costs

Project Component	Estimated Costs at Appraisal (US\$ millions)	Actual Project Costs (US\$ millions)	Actual as Percentage of Appraisal Estimate
<b>URBAN ENVIRONMENTAL SANITATION PROJECT</b>			
1. Storm Drainage: Improving primary and secondary drains to alleviate flooding	33.4	33.8	101
2. Sanitation: Construction or rehabilitation of household, public and school latrines, septage treatment facilities, segments of sewerage systems, an abattoir and extension of one water distribution network.	9.9	10.7	109
3. Solid Waste Management: New sanitary landfills, assistance for privatizing solid waste collection, and ( <i>developing</i> ) cost sharing arrangements between user fees and general revenues.	18.9	13.7	72
4. Community Infrastructure Upgrading: Infrastructure upgrading in selected lower income communities; comprising access roads, drains, street lighting, water supply, solid waste management and sanitation.	15.1	13.0	86
5. Institutional Strengthening: Strengthening the capacity of municipal assemblies, land titling, and support for initiatives of the MAs to increase the funding of O&M through both user fees and general revenues.	12.0	10.6	87
(added to project: a transport terminal)		(1.2)	
<b>TOTAL</b>	<b>89.3</b>	<b>83.0</b>	<b>93</b>
<b>VILLAGE INFRASTRUCTURE PROJECT</b>			
1. Rural Water Infrastructure: Boreholes, dug-wells, small dams, small irrigation	17.0	6.7	39
2. Rural Transport Infrastructure: Access roads, tracks, intermediate transport.	16.2	5.7	35
3. Rural Post-harvest Infrastructure: markets, grain stores, processing facilities.	5.9	7.9	134
4. Institutional Strengthening: Strengthening of DAs, and establishment and strengthening of community organizations and NGOs through training and technical assistance.	11.3	5.0	44
(Project Management: Establishment and staff and operating costs for the Project Coordination Unit (RICU).	9.0	8.9	99
(Refinancing PPF)	1.2	0.9	75
<b>TOTAL</b>	<b>60.6</b>	<b>35.1</b>	<b>58</b>
<b>SECOND COMMUNITY WATER AND SANITATION PROJECT</b>			
1. Community Sub-projects: : Grants to communities and technical assistance and training.	21.1	23.0	109
2. Sector Strengthening: Strengthening of DAs and local providers of services through training and technical assistance, and supporting development of the national CWSA program	3.2	3.1	96
3. Program Management: Strengthening of CWSA and central management costs.	2.5	5.5	224
(PPF refinancing and unallocated)	1.2	0.6	
<b>TOTAL</b>	<b>28.0</b>	<b>32.2</b>	<b>115</b>



## Annex C. Infrastructure Achievements of VIP and CWSP-2

**Table I. Investment Achievements of VIP for Main Project Activities**

<i>Water Infrastructure</i>	<i>Appraisal Target</i>	<i>Actual Achievement</i>	<i>Percent Actual/Achievement</i>
Boreholes (No.)	Not specified	1114	na
Dugwells (No.)	Not specified	454	na
Water and sanitation committees (WATSANs) established (No.)	1300	1312	
Villages with access to safe water (No.)	1300	1993	153
Vegetable crops /annum (after irrigation) (No. of harvests)	2	4	200
<b>Transport Infrastructure:</b>			
Rural roads rehabilitated (kms)	750	364	49
Tracks constructed (kms.)	270	188	62
Intermediate means of transport (No.)	1000	207	34
<b>Post-Harvest Infrastructure:</b>			
Agro-processing machines/equipment (No.)	1000	425	43
Cribs and drying floors (No.)	600	43	7
Improved community level storage facilities (No.)	3000	19	1
Markets (No.)	Not planned	174	

**Table II: Investment Achievements of CWSP-2 for Main Project Activities**

<i>Activity</i>	<i>Appraisal Target</i>	<i>Actual Achievement</i>	<i>Percent Actual/Achievement</i>
Persons benefiting from investment in RWSS facilities	550,000	795,000	143%
Boreholes (number)	980	2723	302%
Dugwells (number)	380	57	15%
Water and sanitation committees (WATSANs) established (number)	Not specified	3143	n. a.
Household latrines completed (number)	6000	5814	96%
Small town systems established (number)	17	9	53%
School latrines completed (number)	240	440	183%
Community proposals for investments appraised and approved	980	3292	336%



## **Annex D. Monitoring and Evaluation**

All three projects' M&E systems improved over the project period, and there has been some further development since project closures. Much of the "M&E" tended to be more in the nature of management information systems (MIS), and developed to be good in this respect. Information on the progress of the project in terms of its physical implementation was generally thorough: for example, information such as the progress of contracting and implementation of works for the UESP; kilometers of roads rehabilitated for the VIP; WATSANs established and boreholes constructed for the CWSP-2; and other progress indicators. The universally weak area was in M&E of the qualitative achievements of each project. For example, the degree to which a rural market or a feeder road is used and appreciated, and their effects on incomes; the functioning of borehole committees and the degree to which they are collecting revenues for O&M; health impacts; and the status and funding of O&M.

### **M&E IN PROJECT DESIGN:**

The UESP did not have a specifically designated M&E unit, but each city produced good technical (quantitative) data, which was further consolidated for the project as a whole by the PU. However, for the project's second Development Objective – on establishing institutional and financing mechanisms for sustainability, a regular monitoring system was not established.

The VIP started weakly, with poor performance of the consultants contracted to prepare a MIS and M&E system. The initial system that was eventually established tended to be quantitative in nature. It was useful as a management tool but lacking in providing better understanding of project impact. A baseline survey was done, but several years after project commencement.

The CWSP-2 developed regular management reports on project progress and established MIS officers in each of CWSA's 10 regions. Again, data collected and reported tended to be quantitative, focused on physical project progress, but was useful for project implementation. The monitorable indicators established at appraisal were far too numerous and a number difficult to measure. This problem was rectified at mid-term review.

### **M&E IN IMPLEMENTATION**

For the UESP, reporting was quarterly and formed a good information base for the WMDs, the PU, the Government and the Bank to monitor the project's physical implementation. Monitorable indicators had not been included in the original project design, but were retrofitted during project implementation. However, such retrofitting did not rectify the M&E design weakness concerning lack of qualitative indicators. The ICR contains no data describing the status of O&M and O&M funding.

The VIP initially established its M&E team (one staff in the field for each of RICU's four zones, and one central coordinator) using staff seconded from government. These staff were

paid significantly less than RICU's consultants, and were unmotivated. After a period of staff turnover and weak performance, the team was newly staffed, entirely with consultants. Thereafter, though the M&E unit had to deal with a backlog of unanalyzed data, and other lagging aspects, performance progressively improved, to become good by the end of the project. RICU developed a computerized MIS – the “Village Infrastructure Management Information System” (VIMIS), which was a useful base for building and implementing its MIS/M&E system. The VIP was the only project to commission a consultant's study of the project. This “Beneficiary Assessment” (July 2003) provided useful qualitative data for evaluating the project, though, as it was at the end of the project, it was more useful for post-project activity - particularly for the ICR and for preparing the VIP's follow-on project, CBRDP - than for implementation of the VIP.

The CWSP-2 progressively improved its MIS/M&E system. As with the other two projects, data was useful as a project management tool. An impressive feature of CWSA's M&E program is its development after the project, with financial help from DANIDA. CWSA developed a more qualitative evaluation system, with better capacity to measure project impact and to develop insights on issues such as sustainability. The sub-sample of survey data in Table 4 of the main text, from a country-wide ongoing CWSA survey, is an illustration of the kind of data starting to be included in CWSA's program. The CWSA is also introducing a “Monitoring of Operations and Maintenance” (MOM) system. This is as much an extension tool as a M&E process, but is an encouraging development. The MOMs could be a precursor of a follow-on extension program, as discussed in this PPAR's discussion of CWSP-2's sustainability.

## **M&E UTILIZATION**

As indicated above, all three project managements, and, to a degree, the decentralized government structures (the DAs and MAs) used the MIS data that was collected to report on project progress, and also as a management tool for follow-up action based on the data findings.

For the UESP, information was being collected on municipal and WMD financing. This provides capacity for detailed analysis of the financial situation and constraints. This was found being used by both Kumasi and in Accra, but analysis did not appear to be provided regularly and in a uniform and organized presentation, which would enable easy comparison over time and between cities. It would be useful to take these initiatives further in short formalized reports, perhaps prepared quarterly or semi-annually by each city. Such reports could systematically analyze and report on city and WMD revenues and expenditures and report on the status of O&M and O&M needs. This would provide a base for review and actions in these critical areas. The UESP's follow-on project, UESP-2, could provide a source of financing for these activities.

For the VIP, RICU has maintained most of its M&E staff, and has continued to develop the VIP's MIS/M&E system, which is now being financially supported under the CBRDP. A CBRDP baseline survey has been prepared. Data is now being collected on qualitative aspects of the VIP/CBRDP program. RICU has drafted a M&E manual, and is developing a “results- based” M&E system, linked with the CBRDP log frame and monitorable indicators.

A strong MIS/M&E system is developing. The development of qualitative data on program performance is underway. With such, and also applicable to the UESP and CWSA programs, a base for adjusting project modalities in response to the performance findings of M&E would be present.

Concerning the CWSA, as indicated above and applicable to all three projects, an important usage of CWSA's data was as a basic management tool on the status of project implementation. CWSA's further progress since project closure, to planning and now implementing surveys aimed at assessing qualitative as well as quantitative aspects of implementation, will enable better evaluation of program impact. For instance, the as yet undetermined assessment of sustainability for the CWSP-2 and the VIP boreholes (rated "not evaluable") will be substantially illuminated as the recently compiled CWSA survey results are analyzed.



## **Annex E. The Benefits from Integrating Preventive Health with Water and Sanitation Investments**

Both the CWSP-2 and the UESP included a focus on hygiene. In the case of CWSP-2, hygiene was a core and fully integrated part of its program. This appears to have had significant impact.

One of the CWSP-2's activities was the provision of financial support to Ghana's part of a multi-country Hand-washing Campaign. Ghana had a national campaign, including use of television and radio, to promote hand washing and better hygiene practices, and this was reported to have been successful. Hygiene education was also integrated into school curricula. The UESP's community infrastructure (slum upgrading) program also had health benefits. Citizens in a community visited by the mission reported reduced incidence of water related diseases (malaria, diarrhea, typhoid and cholera) since the sanitation and drainage facilities had been installed.

Under CWSP-2, both CWSA's Regional Water and Sanitation Teams (RWSTs) and the DA's District Water and Sanitation Teams (DWSTs) had hygiene staff. A DWST would normally comprise an engineer, a CDD specialist and a health specialist. According to both CWSA and Bank staff, the strategy was to integrate, as a triad, water, sanitation and preventive health. The CWSP-2's WATSAN training included basic hygiene practices such as hand washing, clean water, keeping boreholes and their surroundings clean and free of weeds, and better village hygiene practices.

One WATSAN visited by the IEG mission illustrated some of the benefits of including hygiene training and extension in RWSS. The WATSAN had a female health representative who said she spent one hour every morning visiting households and talking to the women about hygiene practices. The villagers commented that the hygiene activities were useful. Attention to weeding and potential sources of mosquitoes, clean pumps and surrounds, hand washing, clean water and other practices were reported to have reduced the incidence of water borne diseases

An urban school visited illustrated the interest and potential impact of hygiene education. Without any government or donor funds, the headmistress had provided washbasins and soap outside every classroom, and intended if affordable to install running water. In her view, the value of this was as much in terms of hygiene education for the future as in the better health conditions specifically provided by the washbasins. The school also had a health and sanitation teacher.

The VIP only marginally included hygiene promotion with its RWSS program. The VIP's borehole program was, like the project's name, primarily treated as an investment program. Reduced benefits can be expected. This kind of situation is one of the potential drawbacks of multi-component, single window programs such as the VIP. The multiple activities that are sponsored may not enable sufficient concentration on each particular sub-program.



## Annex F. Borrower Comments

### COMMUNITY WATER AND SANITATION AGENCY

Head Office: Private Mail Bag, K.1.A., Accra – Ghana.

Tel: 021-518401 Fax: 021-518405, 518402 Email: info@cwsagh.org ; cwsahq@yahoo.com

June 27, 2006

Dear Sir,

DRAFT PROJECT PERFORMANCE ASSESSMENT REPORT – SECOND  
COMMUNITY WATER AND SANITATION PROJECT – (CREDIT 3283 –GH)

We refer to your letter dated June 19<sup>th</sup> 2006 on the above.

Please find attached our comments on the CWSP 2-2 part of the report for your information and action.

Yours faithfully,

R. K. D. VAN ESS  
AG. CHIEF EXECUTIVE

MR. ALAIN BARBU  
MANAGER  
THEMATIC AND GLOBAL EVALUATION DIVISION  
THE WORLD BANK 1818 H.  
STREET N.W. WASHINGTON.  
D.C. U.S.A.

FAX: 202 – 522 – 3123

CC: MR. SID AHAMED DIB  
EXECUTIVE DIRECTOR FOR GHANA  
WORLD BANK

COMMENTS

The report generally reflects on the CWSP 2; its focus, objectives, achievements and challenges.

- (a) However, the last sentence, paragraph 16, "Like the VIP, the sustainability of the CWSP 2's infrastructure and community organizations is a question" - (page 4) is not a reality on the ground. Among other things, the intensive Community development activities and well organized institutional structures at both community and district levels coupled with availability of spare parts at affordable prices and ever growing private sector are practical pre-requisites to promote sustainability.
  
- (b) Last sentence – paragraph 76 "A DANIDA funded project in Ghana exemplifies the supply-side approach" should be deleted. For the current DANIDA assisted WSS "District Based WSS" has several tenets of "demand driven" than "supply-driven". This project was launched in 2003/4. The phase II of DANIDA Project which was executed around the same time as CWSP-2 was also based on demand-driven approaches.

"Godfrey Ewool"  
<gewool@ilgs.org>

06/28/2006 06:26 AM

TO: <gkeithpitman@worldbank.org>  
cc: "CHARITY BOAFO PORTUPHY" <cboafoportuphy@worldbank.org>,  
<Cboakye@worldbank.org>, <Wmoes@worldbank.org>, [abarbu@worldbank.org](mailto:abarbu@worldbank.org)  
SUBJECT: Ghana UESP (Credit 2836-GH) IEG report

Dear George,

Thanks for the IEG report. The IEG may be right in identifying O&M as an important issue relevant for the sustainability of investments. However, we expect an evaluation to be based on original PLAN, rather than an alternate plan that the authors consider relevant. Para 40 of the report states "...minimal attention was placed on O&M financing by both Bank and Government. Yet this was the projects key issue". This statement, in our view, attempts to misrepresent the project as originally designed, and thereby evaluate it as unsatisfactory.

UESP 1 was largely intended to provide Urban Environmental Sanitation facilities such as storm drains, Sanitary Landfills, household/schools/public sanitation which had been determined to be lacking after a Bank urban sector study. We had expected the report to recognize this in the evaluation, rather than attempt to redefine what the project should have set out to do.

There is always the possibility of designing a new project specifically to address urban infrastructure O&M issues as is being proposed under UESP 2. We have always emphasized that there is a need for a free standing Institutional development programme, that addresses staffing, revenue mobilization and utilization, and O&M in all our urban towns. Such a project should not necessarily be tied to any infrastructure components. This is important since institutional changes are difficult, take a long time, and are influenced by many many factors beyond the scope of any particular project.

You may wish to review your findings accordingly.

Regards  
Godfrey Ewool

**Brown Matthew Opong**  
<tamfour2000@yahoo.com>  
06/28/2006 11:42 AM

TO: [gkeithpitman@worldbank.org](mailto:gkeithpitman@worldbank.org)

SUBJECT: Re: GHANA-Second Community Water and Sanitation Project  
(Credit 3283-GH) Urban Environmental Sanitation Project (Credit 2836-GH)  
Village Infrastructure Project (Credit N020-GH) Draft Project Performance  
Assessment Report

Reference your letter dated June 16, 2006 in respect of Draft Project Performance  
Assessment Report.

We have studied your report with respect to the Village Infrastructure Project and are in  
agreement with the findings and conclusions.

Yours sincerely

B.M. Opong  
National Co-ordinator

Cc: Mr. Alain Barbu  
Manager Sector, Thematic and Global Evaluation Division  
Independent Evaluation Group

Mr. Sid Ahmed Did,  
Executive Director for Ghana, World Bank

Hon. Kwadwo Baah-Wiredu  
Minister of Finance & Economic Planning  
Accra, Ghana

Mr. M. Ayensu  
HLead, World Bank Desk  
Ministry of Finance & Economic Planning  
Accra, Ghana

Mr. D. A Nyankamawu  
Ag. Chief Director  
Ministry of Local Government and Rural Development  
Accra, Ghana

Mr. R.K.D. Van-Ess  
Ag. Chief Executive  
Community Water and Sanitation Agency  
Accra, Ghana

Mr. G. Ewool  
Project Director  
Local Government Project Unit  
Accra, Ghana