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Report No: 21074

IMPLEMENTATION COMPLETION REPORT
(IDA-28780; PPFI-P9630; PPFI-P9631; TF-20193)

ON A

CREDIT

IN THE AMOUNT OF SDR17.00 MILLION

TO THE

REPUBLIC OF YEMEN

FOR A

PUBLIC WORKS PROJECT

December 29, 2000

**Infrastructure Development Group
Middle East and North Africa Regional Office**

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CURRENCY EQUIVALENTS

(Exchange Rate Effective as of March 1996)

Currency Unit = Yemeni Riyals
YR 1 = US\$ 0.00725
US\$ 1 = YR 138

FISCAL YEAR
January 1 to December 31

ABBREVIATIONS AND ACRONYMS

ERC	:	Emergency Recovery Project
PMU	:	Project Management Unit
MIS	:	Management Information System
NGO	:	Non-Governmental Organization
CAS	:	Country Assistance Strategy
CPPR	:	Country Portfolio Performance Review
PWP	:	Public Works Project (the Project)
PWP-II	:	Second Public Works Project
SSR	:	Staff Service Rule
MoP	:	Manual of Procedures
SC	:	Steering Committee

Vice President:	Jean-Louis Sarbib
Country Director:	Inder Sud
Sector Manager & Acting Director:	Sonia Hammam
Team Leader:	Somin Mukherji

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PREFACE

This is the Implementation Completion Report (ICR) for the Public Works Project (PWP) for which an IDA Credit (2878-YEM) of SDR17.00 million (US\$25.00 million equivalent.) to the Republic of Yemen was approved by the Board on June 11, 1996 and became effective on December 30, 1996.

The PWP was completed as planned on June 30, 2000 and no major problems were encountered during the four year implementation period. The Project substantially achieved its objectives including: the creation of 66,000 man-months of employment; infrastructure improvements that benefit approximately two million people; and bringing about extensive community participation. Other important achievements included a considerable strengthening of the local contracting and consulting industries, and increased procurement and contracting capacity at the national level. During implementation, the Project Management Unit evolved into a highly competent and efficient organization, at times disbursing over US\$0.8 million per month and managing several hundred community based projects simultaneously. The IDA Credit was fully disbursed (US\$23.18 million after exchange rate changes) and closed on schedule on June 30, 2000. In addition, the Project's PMU has attracted US\$28 million in funding from other donors to implement sub-projects similar to those done under the IDA Project. Given the success of this Project, a follow-on project was approved by IDA in early CY1999 (Public Works II, Cr. 31680).

The ICR was prepared by Messrs./Mmes. Ali Khamis (Implementation Specialist), Somin Mukherji (Team Leader), Alexander McPhail (Sr. Economist), Laverne L. Cook (Program Assistant), and Marie Ange Le (Operations Analyst). The ICR was reviewed by Messrs./Mmes. Sonia Hammam (Sector Manager), Tufan Kolan (Portfolio Manager), Amir Al-Khafaji (Lead Operations Specialist), Josephine Masanque (Sr. Financial Analyst/FMS), and Gianni Brizzi (Yemen Country Manager).

Preparation for the ICR began during the final supervision mission of June 2000 and it was completed in December 2000. The report is based on documents in the project files, information collected in the field and discussions with the Borrower, whose contribution to the ICR is attached as Appendix A of Annex 7.

<i>Project ID:</i> P043109	<i>Project Name:</i> PUBLIC WORKS PROJECT
<i>Team Leader:</i> Somin Mukherji	<i>TL Unit:</i> MNSID
<i>ICR Type:</i> Core ICR	<i>Report Date:</i> December 29, 2000

1. Project Data

Name: PUBLIC WORKS PROJECT *L/C/TF Number:* IDA-28780;
PPFI-P9630;
PPFI-P9631; TF-20193

Country/Department: YEMEN, REPUBLIC OF *Region:* Middle East and North
Africa Region

Sector/subsector: EE - Education Adjustment; SE - Labor Markets & Employment; UU - Urban Development Adjustment; UY - Other Urban Development; WW - Water Supply & Sanitation Adjustment

KEY DATES

	<i>Original</i>	<i>Revised/Actual</i>
<i>PCD:</i> 10/02/95	<i>Effective:</i> 12/30/96	12/30/96
<i>Appraisal:</i> 11/20/95	<i>MTR:</i> 01/01/99	05/15/98
<i>Approval:</i> 06/11/96	<i>Closing:</i> 06/30/2000	06/30/2000

Borrower/Implementing Agency: GOVERNMENT/MINISTRY OF PLANNING AND DEVELOPMENT
Other Partners: The Government of Netherlands

STAFF	Current	At Appraisal
<i>Vice President:</i>	Jean-Louis Sarbib	Kemal Dervis
<i>Country Manager:</i>	Inder K. Sud	Inder K. Sud
<i>Sector Manager:</i>	Sonia Hammam	Alastair J. McKechnie
<i>Team Leader at ICR:</i>	Somin Mukherji	Lars Rasmusson
<i>ICR Primary Author:</i>	Ali Khamis	

2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: S

Sustainability: HL

Institutional Development Impact:

Bank Performance: S

Borrower Performance: HS

	QAG (if available)	ICR
<i>Quality at Entry:</i>		S
<i>Project at Risk at Any Time:</i>	No	

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

3.1.1 According to the Staff Appraisal Report, *the overall objective* of the Project was to mitigate potential adverse effects of economic adjustment. Specific objective was to generate an estimated 75,000-96,000 work-months of employment at a cost range of US\$260 to US\$350 per work-month. It was also expected that the project would help deliver much needed infrastructure services, improve environmental and sanitary conditions and enhance community participation in preparing and implementing sub-projects for civil works.

3.1.2 The Gulf War of 1991 resulted in repatriation of a large Yemeni labor force from the neighboring Gulf countries. This led to a significant reduction in remittance from abroad and major increase in unemployment in the country. These in turn had a severe effect on the macro-economic stability of the country which reached a critical level in 1995. In order to deal with the economic problems, the government initiated a comprehensive program of economic stabilization and structural adjustment with support from IDA and the IMF. In this context, the Project was clear in its objective to support the government's efforts to mitigate the adverse effects of reform on the most vulnerable sections of society. The Project objective was also consistent with the 1996 Country Assistance Strategy (CAS) which focused on implementing stabilization, structural reforms and social protection measures, as well as improving portfolio implementation and the sustainability of past and future investments.

3.1.3 Even if not overly complex, the Project was demanding on the PMU given the sheer number and the dispersed locations of sub-projects (442 sub-projects, in every governorate of Yemen). Given the amount of information and analysis required for each sub-project (identification, screening, selection and then implementation) the initial stages of Project implementation went slowly. However, when the Management Information System (MIS) was installed and became familiar, these difficulties quickly subsided allowing the PMU to complete the Project satisfactorily on time.

3.1.4 The risks identified at appraisal included: (i) maintaining a high labor content; (ii) maintaining acceptable quality of works; and (iii) ensuring sustainability of completed sub-projects. The Project design successfully mitigated these risks through a rigorous application of the sub-project selection criteria, a limit on the size of any one sub-project, and involvement of the relevant communities and line ministries to ensure both smooth hand over of projects upon completion, and budgetary support for operations.

3.2 Revised Objective:

3.2.1 The Project's overall objectives were not changed and its design was maintained throughout implementation. During the Mid Term Review (MTR) of May 1998, the estimate of employment generation in work-months was revised downward from 126,000 to 80,000. At the time of appraisal, one work month was estimated at US\$100, but by the time of MTR the actual labor cost was observed at US\$160 per work month. This implied an investment cost of about US\$450 per work month (versus \$260-\$350 per work month at appraisal) and resulted in a one-third reduction in work months to be generated.

3.3 Original Components:

3.3.1 To achieve its objective the Project was to finance:

(a) small scale civil work contracts (including new construction and rehabilitation) in areas where the unemployment rate was above average in the following sectors: (i) waste management: wastewater collection systems and storm water drains, cleaning of such systems, and solid waste collection and sanitary landfills; (ii) urban development: water distribution systems, repairing and paving streets and footpaths, storm water drainage, flood protection; (iii) rural development: road repairs, water supply systems, cleaning and repairing of irrigation canals; (iv) soil conservation: terracing and drainage works, small dams; and (v) health and education: health centers and school buildings.

(b) development of project management capability through a Steering Committee (SC) and a PMU to be funded as the executive arm of the SC; and

(c) provision of technical assistance for: (i) establishment of the PMU: preparation of organizational and staffing structures; framework agreements for project management, personnel, administration, and operation; accounting and management information systems; (ii) investment program: programming, monitoring and review; (iii) sub-project preparation and implementation: including preparation of engineering design and tender documents, and construction supervision; (iv) training: support to local consulting and construction companies, including preparation for and organization of workshops; and (v) auditing.

3.3.2 Project components proved to be well suited to achieving the development objectives. Procurement of simple, small scale and labor intensive civil work contracts (which accounted for about 90 percent of the total project cost, or US\$26.90 million), was successful in creating employment. By Project end, over 51,000 work months were created. An inter-ministerial Steering Committee was created as part of the Project design to facilitate the government's handling of the Project, and this worked well as all major issues that came up during implementation were successfully resolved. Project design also fostered the development of the local contracting and engineering professions through the employment and training of 260 contractors and 147 consultants.

3.3.3 The Project design also included a PMU, taking into account lessons from other IDA Projects in Yemen, and consistent with recommendations of the 1996 Country Portfolio Performance Review. The PMU developed into a very efficient implementing agency—not only in sub-project selection, processing and procurement, but also in the areas of financial management and administrative procedures and practices. The latter included developing basic management tools, such as the Staff Service Rules (SSR), the Manual of Procedures (MoP), and the Management Information System (MIS). The technical assistance component of the Project also included a provision for hiring local consulting firms and individual consultants that helped the PMU to improve its implementation capacity.

3.4 Revised Components:

3.4.1 The Development Credit Agreement (DCA) was amended on May 19, 1998 to include a Netherlands Grant for an aggregate amount equivalent to NLG4.00 million (US\$1.96 million). The Project's design and components did not change.

3.5 *Quality at Entry:*

The ICR rating for quality at entry is *satisfactory*. The Quality Assurance Group (QAG) did not examine this Project for quality at entry. The following paragraphs highlights the supporting arguments for the ICR rating:

3.5.1 The objective of the Project was consistent with the CAS of 1996 and the priorities of the government to help mitigate the adverse effects of the economic reform programs. In this context, the Project was designed to be flexible and responsive with regard to meeting people's needs and priorities. A measure of this success is the outstanding requests for projects, which have consistently numbered over 3,000 since the second year of implementation.

3.5.2 The Project design was simple and straight forward and captured specific characteristics of the local conditions, fitting in well with the government's desire to provide employment and basic infrastructure during adjustment. Potential risks anticipated under the Project were adequately identified at design, and measures to minimize them proved to be reasonable and adequate. Implementation and procurement arrangements were also addressed up-front in sufficient detail, which contributed to smooth running of the Project during its four-year implementation period.

3.5.3 In terms of complying with the Bank's safeguard policies, the SAR classified the Project as category "B", stating at the same time that the overall environmental impact of the Project would be positive. During implementation, the Project design called for the PMU to assess the potential environmental impact of each sub-project. The PMU would prepare a Summary Environmental Assessment and include this in its annual reviews. Finally, the PMU was obligated to appoint an environmental specialist to coordinate and/or carry out this activity. No other safeguard issues were anticipated at the Project design stage, and none were encountered during implementation.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

The ICR rating for the outcome of the Project is *satisfactory* and this is based on the following reasons:

4.1.1 The Project met its developmental objectives. In terms of job creation, total employment created by the Project was about 66,000 work months which is about 80% of the total work-months as originally estimated during appraisal. The shortage of about 20 percent between the actual and projected was due to the following factors: (i) a large number of work-months was not recorded at the beginning due to lack of awareness by the site engineers; (ii) the percentage of labor content for schools and health units, which constituted around 70 percent of investment made, was lower than the average labor content of other types of sub-projects, and (iii) the investment costs required to generate a work month of employment was underestimated at appraisal. At the time of Project closure, this cost was about US\$500 for each work month of employment generated. This was higher than both the appraisal estimates of between US\$260 and US\$350, and the MTR estimate of US\$450. The underestimate at appraisal was likely due to a lack of familiarity with actual small scale labor costs, while the underestimate at the May 1998 MTR was based on the difficulty of timing the expected reduction in inflation, which took hold in the year 2000.

4.1.2 By the Closing Date, 46 small scale water projects had been completed, and 25 small wastewater projects were finished. Spot checks on these sub-projects reported in annual reviews reveal a high degree of satisfaction in these sub-projects by beneficiaries and are considered environmentally beneficial. With

very few exceptions, all sub-projects projects were either environmentally neutral or made substantial improvement in the local environment--although this was not adequately monitored or reported under the Project. The need for increased attention to environmental screening, monitoring and reporting procedures were highlighted by a QAG supervision assessment (carried out in October 2000) and are now being implemented under the follow-on Project, PWP II.

4.1.3 A beneficiary impact assessment was conducted in December 1998 by a local consultant and the outcome of the study was positive. At the time the survey was conducted, 146,500 people benefited from services rendered through the 46 sub-projects visited by the study team. At that time, this translates to an average number of about 3,200 people being served by a sub-project. By the end of the Project, the PMU estimated that over two million people are being served by the 422 sub-projects delivered under the Project; a number that by far exceeded all expectations.

4.1.4 Community involvement in the various stages of the Project activities was also satisfactory. Contribution by communities to sub-project costs were US\$2.4 million, which is about 9 percent of the civil works component of the Project. The impetus for most sub-projects came from the local level, who were also likely to be involved in sub-project design and construction supervision. After project completion, communities are normally responsible for operation and maintenance costs (except in the case of schools and health centers). The degree of community participation (cash or in-kind), as well as "expected sustainability," were both included as sub-project selection criteria.

4.1.5 The Project's successful implementation record allowed it to attract additional funding of about US\$10.20 million from the Governments of the Netherlands, Italy and USAID. The latter two continue to be managed by the PMU under PWP-II. In addition, and under PWP-II, the OPEC Fund, the French Government, and a second round of USAID contributions are expected (US\$10.0, US\$0.8, and US\$10.5 million, respectively).

4.2 Outputs by components:

4.2.1 Civil works, Goods, Equipment and Furniture: The output rating for this component is *highly satisfactory*. The Project delivered 422 sub-projects spread all over the country at a total cost of US\$27.66 million. By Credit Closing, except for the 16 health units, which are expected to be put into operation by the end of December 2000, all sub-projects financed by the Project were operational. The Project also financed the supply of classroom furniture for the schools and classrooms built under the Project. In total, two contracts for supply of 11,856 student combined seats were procured through international competitive bidding procedures. Table 1 below shows the distribution of investment made with the corresponding number of sub-projects according to sectors.

Table 1: Investment made according to sectors

Sector	1996	1997	1998	1999	Total	%
Education	8	96	85	34	223	53
Health	6	26	45	1	78	18
Water	4	14	24	4	46	11
Sanitation	5	16	3	1	25	6
Roads	3	21	7	9	40	9
Agriculture	3	1	2	2	8	2
General	0	1	1	0	2	
Social	0	0	0	0	0	
TOTAL	29	175	167	51	422	100

4.2.2 Project Management: For this component, the ICR rating is considered *highly satisfactory*. The Steering Committee and its implementing body the PMU, are considered to be among the most efficient and effective of all IDA projects in Yemen. The Steering Committee, established by Prime Ministerial decree, is composed of 9 senior government officials (usually at the ministerial rank) and is chaired by the Minister of Planning and Development. The Steering Committee meets regularly to set policies, resolve issues and oversee the operation of the PMU. The PMU is fully staffed with approximately 20 qualified professionals and support staff, and it is adequately equipped. It has written staff service rules, manuals of procedures, established a comprehensive management information system, demonstrated an ability to implement many sub-projects simultaneously, established regional offices and put in place a PMR based financial system under PWP II. During implementation, the PMU demonstrated an ability to disburse over US\$1.0 million per month and managed a US\$3.0 million Special Account (increased to US\$7.0 million under PWP II).

4.2.3 Technical Assistance: The ICR rates this component as *highly satisfactory*. Local consultants played a major role in providing support to the PMU, engineering and other related services. The services provided were mainly related to supervision of construction works and a few were related to sub-project designs, environmental assessment, or in doing social studies. Over 1,000 expressions of interest were received by the PMU from local consulting firms and individuals; of these 190 service contracts were signed. Training of consultants was undertaken through a series of six training workshops organized under the Project, and attended by about 280 consultants. The workshops discussed various topics such as construction supervision, and community participation in sub-project preparation and execution.

4.2.4 Given the positive outcome of all components, the ICR concludes the Project design was appropriate for achieving its stated objectives/outputs. Performance Indicators were detailed in Annex 6 of the PAD, however, during the Bank's changeover to the PSR format they were not consistently reported. In contrast, annual performance reports prepared by the PMU tracked these indicators. As was shown there, and as summarized in Annex 1 to the ICR, these indicators were adequate to measure achievement of the Project's development objectives.

4.3 *Net Present Value/Economic rate of return:*

4.3.1 For most sub-projects, a cost-effectiveness methodology was used to screen and rank proposed sub-projects from an economic perspective. Because revenue or other benefit stream from these sub-projects were not easily quantifiable, the least-cost option of accomplishing the Project objective was adopted through the application of a set of selection criteria that helped ensure funding of only the most cost-effective investments. Given the multi-sectoral and dispersed nature of the sub-projects, it was not possible to carry out any NPV/EIRR analysis during appraisal. With 422 sub-projects completed in eight sectors, and dispersed all over the country, the ICR did not attempt to carry out any NPV/EIRR analysis. However, at an average cost of US\$52,000 per sub-project and \$10 per beneficiary, the outcome is considered highly satisfactory.

4.4 *Financial rate of return:*

4.4.1 There was no FIRR analysis done at the time of appraisal and, given the nature of the Project, none was attempted for the ICR.

4.5 Institutional development impact:

4.5.1 The Project had a major institutional development impact in two areas: (i) capacity building for the local contractors and consulting industry; and (ii) decreasing civil works unit costs. Details of these are highlighted below.

4.5.2 The overall institutional capacity of the local consulting firms and individual consultants was strengthened under the Project by providing them with opportunities to work as full time consultants in their fields of expertise. This helped them improve their level of professional competence, initiate a spirit of competition and familiarize themselves with modern day trends in the consulting business through various seminars/workshops organized by the PMU. There were over a 1,000 consulting firms that expressed interest to work under the Project, out of which 190 were engaged. About 280 consulting firms and individual engineers attended six training workshops organized by the Project in various subjects such as construction supervision, preparation of sub-projects, IDA procurement guidelines and procedures.

4.5.3 On the whole, the capacity of local contractors (particularly small scale ones) improved significantly during implementation of the Project. Informal workshops were usually organized during bid opening sessions wherein contractors were trained on the bidding process and procedures, guidance on preparation of bids, issues related to submission of bid bonds and bid security, appreciation of Bank's procurement guidelines, evaluation of bids and criteria, contract execution and delivery schedule, and quality control. These training sessions had a positive impact in attracting more contractors, generated competition, enhanced the knowledge of contractors and finally helped completion of sub-projects on time and at competitive prices. Due to the strong interest shown, it has now become customary under the PWP-II that contractors and/or their representatives are given short lectures at the beginning of each bid opening session.

4.5.4 The PWP was very effective in lowering per unit construction costs across Yemen. For some simple structures, such as six room school buildings, construction costs were halved over the implementation period (dropping from US\$100,000 initially to US\$45-50,000 by Project end). Besides transparency in procurement and simple contracting procedures, the Project achieved this reduction in unit costs through: (i) an emphasis on fast payment (usually within 10 working days); (ii) encouraging competition and the use of a wide range of firms (as many as 30 firms might bid on any single sub-contract); and (iii) consistency over time in its treatment of contractors which built up confidence in the industry for PWP contracts.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

5.1.1 There were no factors outside the control of the government or implementing agency that affected the Implementation and Outcome of the Project

5.2 Factors generally subject to government control:

5.2.1 Future operation and maintenance of many of the facilities built depend on support from the government. Because of their involvement during selection/approval of individual sub-projects, subsequent budgetary support sub-projects has generally been adequate. However, the government was slow in responding to provide technical and financial support for 16 health units built under the Project and that

remained unused for many months. An agreement (refer to Operational Plan, Attachment 8 [pg. 28]) was reached between the PMU and the Ministry of Health to start operating these units before the end of 2000; this will be monitored during supervision of the PWP-II. As a precautionary measures, construction of new health units under PWP-II is strongly discouraged unless satisfactory arrangements for their operation and maintenance are secured up front by the PMU.

5.2.2 Contractors, consultants, and implementing agencies can face problems in processing payments or other documents through the relevant government agencies. In Yemen, the payment and reimbursement procedures under IDA projects are complicated, cumbersome and require a lot of time. Although this was not a significant problem under PWP I, it has recently become more of a concern under PWP-II, and as a result, payments to contractors and consultants are not as fast as they used to be.

5.2.3 Despite the comment above, government was overall very supportive of the Project and showed a high degree of commitment. Key appointments were made well, counterpart funds were generally provided adequately and on time, and government administrative procedures were established and implemented effectively through the Steering Committee.

5.3 Factors generally subject to implementing agency control:

5.3.1 There are three factors under control of the Steering Committee and the PMU that could have lead to better implementation.

5.3.2 Sustainability of sub-projects: In cases where future operations of the sub-projects are totally dependent upon government support (financial and technical), the PMU should ensure that such support is confirmed prior to start of implementation. These confirmations need to involve the Governor's office, Ministry of Finance and the line ministry involved.

5.3.3 Quality of workmanship: Awarding contracts to established non-performing contractors and consulting firms/individuals could be avoided by introducing necessary qualifying criteria during the bidding process.

5.3.4 Environmental specialist: The environmental aspects of sub-projects were not adequately addressed because of the absence of an environmental specialist with the PMU. This issue has recently been resolved and an environmental specialist was hired to take care of all the outstanding environmental issues under PWP I and to implement the relevant procedures under PWP II.

5.4 Costs and financing:

5.4.1 The only significant cost or financing change from appraisal was caused by a 7.5 percent decrease in the US\$/SDR exchange rate. This reduced the dollar amount available for financing the Project from US\$25.0 million at appraisal to US\$23.18 at the Closing Date. Upon completion, the total Project cost was US\$30.44 million, of which IDA financed US\$23.18 million, the Dutch Grant financed US\$1.96 million, and domestic contribution totaled to US\$5.30 million (including US\$2.40 million from community contribution).

5.4.2 Disbursements for the first 8 quarters of the Project lagged projections, but never by more than US\$2.5 million. After that, disbursements generally exceeded projections on a per quarter basis.

6. Sustainability

6.1 Rationale for sustainability rating:

6.1.1 The overall sustainability rating is *highly likely*, particularly for the physical infrastructure built. This is because the primary achievement generated through the Project (i.e. building of low cost and simple infrastructure primary facilities) is expected to be maintained. In addition, sub-projects put forward for selection were community demanded, and often included a community contribution of either cash or in kind--thereby increasing stakeholder commitment to future operations. Selection of each sub-project has the approval of the related line ministry (as a member of the Steering Committee), helping to ensure adequate funds for operation and maintenance (if applicable, e.g., for schools and health centers).

6.1.2 In areas of institutional capacity building, sustainability is *likely*. The project contributed to the capacity building of small contractors and the local consulting firms/individuals through seminars/workshops organized by the PMU. The knowledge and experience gained will help in improving the standard of the private contracting and consulting industry in the country. To the extent that these people remain in business, the benefits of the Project will carry on.

6.1.3 Finally, all these activities are continuing under the follow-on PWP II Project. Government commitment to the second project remains high and the benefits and sustainability of the Project are being expanded through increased funding, more projects and the establishment of regional PMU offices to better serve remote areas.

6.2 Transition arrangement to regular operations:

6.2.1 The Project is continuing under the follow-on PWP II Project and the implementation arrangements have not changed.

6.2.2 IDA's Country Office in Yemen agreed in 1999 with the government on transitional guidelines and requirements for all IDA Projects. These guidelines contain specific recommendations concerning the closing of PMUs, the disposal of equipment and a business plan for the transition from project to normal operations. The guidelines will come into effect if there is not an IDA project after PWP II.

6.2.3 Finally, and as mentioned in paragraph 5.2.1, the PMU agreed to follow up with the Ministry of Health the issue of the remaining completed but non-operational (16) health units. IDA will continue monitoring under the follow on PWP-II Project, the agreement reached in accordance with the Operational Plan, as agreed during the Completion Mission of June 2000.

7. Bank and Borrower Performance

Bank

7.1 Lending:

Identification, preparation and appraisal

7.1.1 The Bank response to the need of the government was positive and on the whole Bank's performance at identification, preparation and appraisal was *satisfactory*. First, the choice of public works as an option/vehicle to help the country create temporary jobs was appropriate and relevant to the country's

need especially, during the prevailing labor market conditions. Second, the preparation process was fast, it took only about nine months for the Bank team to process the Project for Board approval. Third, considerable efforts were spent by the Bank and the government to arrange and ultimately put in place an agency that played a key role in bringing the project into its successful completion.

7.1.2 Apart from the Project design, which was pragmatic, clear, and above all, responsive to the local market condition, essential activities were completed on time such as the provision of PPF, setting up of the PMU and the Steering Committee and the inclusion of the first and second batch of investment programs in the SAR; this allowed the Project to start about six months before it was declared effective on December 30, 1996.

7.2 *Supervision:*

7.2.1 Bank's performance on supervision was *satisfactory*. The Project was supervised from the field which helped in close monitoring and supervision. Necessary inputs and support from HQ were provided to the field team whenever needed. Ten supervision missions including a Mid-Term Review were conducted over the four-year implementation period. In accordance with the legal covenants, the PMU was required to carry out necessary environment assessment and adopt appropriate mitigation plans before implementing any sub-project. This was not done, and was not enforced by IDA, but is now being pursued under supervision of the follow-on PWP-II. In general, the supervision staff mix was adequate and served the purpose of providing appropriate guidance to the PMU. In October 2000, the quality of supervision was assessed by the Quality Assurance Group (QAG). The review rated Bank's supervision performance as satisfactory and also indicated that a strong supervision had contributed significantly to the success of the Project.

7.3 *Overall Bank performance:*

7.3.1 Based on the above and the achievements attained by the Project, the overall performance of the Bank was *satisfactory*.

Borrower

7.4 *Preparation:*

7.4.1 The performance of the Borrower at the preparation phase was *highly satisfactory*. The government, represented by the Ministry of Planning and Development, showed strong commitment during the preparation stage of the Project. This commitment was demonstrated clearly by the shorter preparation period of nine months, which compared favorably with the usual 24 months preparation period required by other projects during 1996. An appropriate Steering Committee (SC) was created quickly and staff selection and the formation of the PMU at an earlier stage was made possible through the necessary guidance of the SC and strong support from the Government.

7.5 *Government implementation performance:*

7.5.1 On the whole the government implementation performance is rated as *satisfactory*. Government support and commitment to the project has continued beyond the preparation period. Problems faced by the project were resolved and addressed quickly. For example, the opening of special account at the Central Bank of Yemen for the counterpart funds helped in reducing payment delays to civil work contractors.

7.6 Implementing Agency:

7.6.1 The performance rating of the PMU remained *highly satisfactory* throughout the project implementation period.

7.6.2 All Project covenants were complied with, good use was made of targeted technical assistance (e.g., the beneficiary assessment, establishment of the MIS system, and training for consultants and contractors), and timely progress reports were submitted. Implementation delays existed only at the inception of the Project. Staffing was adequate and management excellent.

7.6.3 The Project's DCA requires the submission of audit reports on a quarterly basis and the annual audit report within six months of year end. This financial covenant was always satisfactorily adhered to, except for the 1999 audit report, which was agreed to be submitted within nine months instead of the usual six months, due to a change in the system of appointing the auditor. All the audit reports were unqualified and the private auditor has always expressed satisfaction on the competency of the accounting staff, the financial, accounting and management information systems which are in place. The accounting system was later computerized and this set the stage for the follow-on Project (PWP II) to adopt the PMR-based disbursement system under the Bank's Loan Administration Change Initiative.

7.7 Overall Borrower performance:

7.7.1 In general, the rating of Borrower performance was *highly satisfactory*. However, some delays in processing payments to contractors and consultants remained an issue which the Borrower needs to resolve.

8. Lessons Learned

8.1.1 Key lessons learned form the Project include:

- Adoption of an appropriate project design supported by good implementation arrangements can deliver substantial benefits. This would include detailed, adequate and up-front arrangements to handle human relations (especially coordination procedures between government agencies and ministries), as well as employing competent project staff and providing the right salary and incentives.
- Requiring measurable local stakeholder participation helps to target results and ensure sustainability, but it also requires appropriate skills and effort;
- It is not necessary to create a bureaucracy to deliver substantial development benefits on a large number of sites;
- Good and transparent business procedures lower costs and build up institutional capacity and development. This would include the recognition that small contracts require their own set of simple and straight forward procedures and documents.

9. Partner Comments

(a) Borrower/implementing agency:

See Annex 7.

(b) Cofinanciers:

N/A.

(c) Other partners (NGOs/private sector):

N/A.

10. Additional Information

FY00 Quality of Supervision Assessment as reviewed and reported by the Quality Assurance Group

**FY00 QUALITY OF SUPERVISION ASSESSMENT
Guidance Questionnaire
Summary Assessment Sheet**

PROJECT	Ry-Public Works	COUNTRY	Yemen, Republic
SECTOR:	Urban Development	REGION:	MNA
TASK TEAM LEADER	Mukherji Somin	COUNTRY DIRECTOR	I.Sud
PROJECT ID	P043109	SECTOR MANAGER	J.Villiard
LOAN/CREDIT AMOUNT (\$MIL):	25	LOAN/CREDIT NUMBER	28780
DATE APPROVED	06/11/96	DATE EFFECTIVE	12/30/96
FY00 SUPERVISION BUDGET \$000			
WPA: 55		ACTUAL: 37	
PERSON(S) INTERVIEWED:	Somin Mukherji	<input checked="" type="checkbox"/> TTL	OTHERS: Ali Khamis
TTL WAS:	Headquarters		
AT RISK STATUS (as of 6/30/00):	Non-Risky		
ENVIRONMENT CATEGORY	B		
A, B, C OR FI			

FIRST STAGE REVIEW **SECOND STAGE REVIEW**

FIRST STAGE REVIEW:

QAG MODERATOR	H. Wyss		
PANEL LEADER	David Howarth	PANEL MEMBER(S)	Robert Panfil
SPECIALIZED REVIEWERS:			
1. Environment	Juan Quintero		

2. Social Assessment

Bruce Harris

3. Financial Management

Ivonna Teresa Kratynski

4. Procurement

Jorge A. Larrieu

OVERALL RATING 2

ASSESSMENT DATE 10/10/2000

FY00 QUALITY OF SUPERVISION ASSESSMENT
Guidance Questionnaire
Summary Assessment Sheet

PROJECT: Ry-Public Works **COUNTRY:** Yemen, Republic

Main points on which overall assessment was based

The supervision of the project, overall and in three of the four main assessment categories was rated as satisfactory. The remaining category, 'Quality and Realism of Reporting', was rated as marginally satisfactory.

1. Supervision was strong in many aspects. **Competent technical staff from the Bank's office in the country have supervised the Project for a number of years and have contributed significantly to the success of the Project.** The Aide Memoires and letters and subsequent follow-up were very good. A social assessment was undertaken and there was good follow-up on social development aspects. As part of supervision, the Bank team has helped improve the contracting of small works and the quality of the finish of civil works, the establishment of sound financial management procedures and audits related to the implementation of a foreign assisted project. Particularly, noteworthy is that the follow-on project is utilizing LACI disbursements procedures. Even though this project was graded as a "B" at appraisal, the panel nonetheless remains concerned that there appears to have been virtually no supervision of environmental aspects during implementation.

2. The 'Quality of Realism of Reporting' was rated as marginal. There were inconsistencies with respect to rating on the environment. Moreover, the development objective ratings were not explained or justified adequately, and the key performance indicators have not evidently been monitored and reported.

In light of this assessment, list two or three factors which will require particular attention to improve the prospects for achieving the project's development objectives

The project is now closed. The following recommendations thus are addressed to the follow-up project:

- increased focus on the sustainability of sub-projects.
- following up on the environmental procedures that were specified in the first project.
- additional analysis to determine which type of sub-project maximizes labor employment.
- formalizing the minimum amount of local contribution in a sub-project.

FY00 QUALITY OF SUPERVISION ASSESSMENT
Guidance Questionnaire
Summary Assessment Sheet

Assessment Rating
1 = Highly Satisfactory
2 = Satisfactory
3 = Marginal
4 = Unsatisfactory
NA = Not Applicable

SUPERVISION ASSESSMENT	
1. Focus on Development Effectiveness	<u>2</u>
2. Supervision of Fiduciary/Safeguard Aspects	<u>2</u>
3. Adequacy of Supervision Inputs and Processes	<u>2</u>
4. Quality and Realism of Reporting	<u>3</u>
Overall Assessment	<u>2</u>

The overall assessment is not an average of the assessments of the constituent elements of supervision. Instead, the reviewer should use his/her judgement in weighing the relative importance of each given the country and the project context. In making the assessment, reviewers should consider the importance of each category, and within each category, the various questions on supervision quality.

Completion Mission Aide-Memoire (June 2000)

Republic of Yemen Public Works Project (Cr. 2878-YEM) Completion Supervision Mission May 15 - June 10, 2000

Introduction

1. An IDA mission comprising Messrs./Mme. Ali Khamis (Operations Officer), Josephine Masanque (Financial Management Specialist) and Somin Mukherji (Senior Financial Analyst) carried out the final supervision of the project during the above period. The mission wishes to thank the officials and staff of the Ministry of Planning and Development (MOPD) and the Public Works Project Management Unit (PMU) for all the courtesies and assistance extended to the mission. This Aide-Memoire summarizes the mission's findings and agreements reached with the MOPD regarding the project and is subject to IDA management's review and concurrence. A list of people met during the mission is included in Attachment 1 and a list of agreement reached is included in Attachment 2.

Background and Development Objective

2. An IDA Credit of SDR17.0 million (US\$25.0 million equivalent) was approved on June 11, 1996 and declared effective on December 30, 1996. The Credit Closing date is June 30, 2000. The overall objective of the project is to mitigate the potential adverse effects of economic adjustment. The project aims at alleviating poverty by generating employment through the initiation of small scale works contracts. The project is also expected to deliver and improve infrastructure services, enhance environmental and sanitary conditions, and mobilize community participation in the development process and ultimately sustain the investments made.

3. Amendment to DCA: Schedule 1 Category 1 of the DCA was amended on April 27, 1999 to incorporate reallocation of funds; details of these are included in Attachment 3.

4. Netherlands Grant: The Development Credit Agreement (DCA) was amended on May 19, 1998, to include a Netherlands Grant Assistance for an aggregate amount equivalent to four million Netherlands Guilders (NLG 4,000,000). The grant allocation is intended to finance the construction of 13 girls schools at different locations. Due to the delay encountered in processing of the legal document, the Development Grant Agreement (DGA) was extended from May 31, 1999 until May 31, 2000.

5. Amendment to DGA: In order to include financing of school furniture, Category 1 of Schedule 1 of the DGA was amended on June 6, 1999. Details on reallocation of the grant fund is included in Attachment 3.

Status of Project Implementation

6. The implementation of the project has been rated as highly satisfactory with no major obstacles noted during the four years of its implementation. The project has met its developmental objectives. In term of job creation, a total of about 43,000 work-months was created by the project. This figure represents 80 percent of the MTR estimates (53,600) as included in the Performance Indicators table (Attachment 4). In addition to jobs created, thousands of people are benefiting from the services provided by the infrastructures built under the project. Now that the project is about to close on June 30, 2000, the

PMU confirmed to the mission that all the ongoing activities will be completed before current Credit Closing date, June 30, 2000; no contracts are expected to spill over this date.

7. IDA financed components: A total of 422 work contracts has been executed by the project for a total of US\$21.84 million. Of these, twelve contracts are still on-going and expected to be completed before June 30, 2000. Table 1 below shows the distribution of the investment made under the Project to the various sectors.

Table 1: Investment made according to sectors

Sector	1996	1997	1998	1999	Total	%	US\$	%
Education	8	96	85	34	223	0.53	11.52	0.53
Health	6	26	45	1	78	0.18	2.84	0.13
Water	4	14	24	4	46	0.11	2.23	0.10
Sanitation	5	16	3	1	25	0.06	1.74	0.08
Roads	3	21	7	9	40	0.09	2.85	0.13
Agriculture	3	1	2	2	8	0.02	0.55	0.03
General	0	1	1	0	2	0.00	0.09	0.00
Social	0	0	0	0	0	0.00	0.00	0.00
TOTAL	29	175	167	51	422	1.00	21.63	1.00

Through ICB procedures, two supply contracts for 11,856 student combined seats have been contracted to a local contractor for US\$0.39 million. The distribution of the seats under both contracts to the respective project sites has almost been completed. Attachment 5 summarizes the overall procurement activities carried out by the project.

9. Netherlands Grant financed components: The implementation of the girl schools contracted under the Grant for US\$2.02 million is complete now and all the thirteen contracts have been executed. Supply of all the student combined seats (4088) have been completed and, except for the last two school sites, delivery of all the combined seats to the respective schools have duly been completed; the PMU confirmed that the delivery of seats to the remaining two schools will be completed by the end of June 2000.

10. Site visits: The mission visited several sites financed by the project in the Hadramout Governorate. These included: (a) addition of six rooms for the Seiyun hospital; (b) a twelve classrooms school at Al-Shihr; (c) extension of six classrooms to an existing school in Seiyun; (d) construction of a 200 cum water tank in Al-Ghorfah in Seiyun; (e) construction of two water tanks (200 cum and 50 cum capacity) at Al-Ogibiah, Duw'an; and (f) construction of sewerage line at Al-Shihr. The mission noted that in general the quality of work was satisfactory at all the above sites. However, the wastewater system out of the sewerage lines built at Al-Shihr needs immediate attention by the PWP. All the wastewater was being discharged on the beach thereby causing severe health hazard for human lives using the beach facilities and the near-by marine life. In view of this, the mission strongly recommend that the PMU take up the matter immediately and arrange for necessary rectification so that the project is sustainable from an environmental aspect; the PMU agreed to inform IDA by June 30, 2000, on actions taken to resolve this issue.

Accounts and Finance

11. Audits: In accord with the DCA provisions, the PMU is required to submit to IDA within six months of the end of each fiscal year, its audit reports of project accounts including expenditures made through special accounts (SA) and statement of expenditures (SOE). The PMU has always submitted their

audit reports on time and the 1999 audit reports, due by June 2000, were submitted in March 2000 and thus the PMU continues to be in compliance with timely submission of annual audit reports. In addition, the PMU is also required to submit its interim quarterly audit reports, 30 days after the end of each quarter. Since the appointment of auditor for FY2000 is under discussion/finalization, it is expected that the quarterly audit reports for the first two quarters of 2000 will be made available by the end of July 2000.

12. Disbursements: As of May 31, 2000, a total of US\$22.4 million equivalent has been disbursed. The balance of about 1.0 million is expected to be disbursed by August 31, 2000. In total, the amount of US\$23.3 million is short of the US\$25.0 million as estimated during appraisal; the difference of US\$1.7 million is mainly due the unfavorable exchange rate between the SDR and the US dollar. A table showing a comparison of the actual disbursements to date with the appraisal projections is included in Attachment 6. For the Dutch Grant, US\$1.67 million (eq.) has been disbursed and the remaining balance of US\$0.19 million (eq.) is expected to be disbursed before the end of July 2000.

13. Special Accounts: As of May 10, 2000, the balance available in the special accounts (SA) at the Central bank of Yemen was at US\$0.08 million and US\$0.02 for the Dutch Grant. The PMU agreed that the undisbursed balance of both accounts will be transferred to IDA account by no later than May 30, 2000 for the Grant and June 30 for PWP-I.

14. Compliance with covenants: A status of compliance with covenants is included in Attachment 7.

Technical Assistance and Training

15. Training of PMU Staff: During implementation, ten PMU staff members attended various training courses. Three of them went for overseas training and seven participated in the two courses organized locally by the Bank. On the overseas training, one staff member went for the "Works Procurement Management" training at the ILO training Center in Turin, and the other two went for the "Information Technology Systems Development" training course held in Washington D.C. On the local training, four PMU staff members attended the 1999 capacity building seminar on "Procurement, Disbursement, and Financial Management" and three staff attended the March 2000 training workshop on "Project Management."

16. Support to local contractors, consultants and non-governmental organizations: During the entire implementation period, training of contractors has been done on a regular basis and is usually carried out at the beginning of each bid opening sessions. During these sessions, contractors were briefed about the bidding process, bidding documents, pricing of bids, contract execution, evaluation methodology etc. This practice started three years ago and will continue under the PWP-II. Training of local consultants has however not been done on such a regular basis. Under the project, only three training workshops were organized for consultants and non-governmental organizations.

17. Hiring of consultants: Local consultants have played a major role in the implementation of the project. During implementation, services of about 200 consulting firms and individual consultants were utilized. The total amount spent on consulting services is US\$1.64 million. Most of the assignments were related to the supervision of construction sites and a few to the sub-project designs and other kinds of consulting activities. A local consultant was also hired to conduct the Benefit Impact Assessment Study; and, an international consultant was hired for conducting two Annual Performance Reviews (APR) and a mid-term Review. The last APR was completed in May 15, 2000 and reports are expected to be submitted by June 15, 2000.

Operational Plan

18. The project delivered a total of 422 sub-projects scattered all over the country. They are small in size with an average cost of about US\$ 50,000 per sub-project. These sub-projects are operational except for 16 health units (out of 75 units built under the project) remained unused since they were completed. During mission, this issue was brought up again and discussed in details. The PMU informed the mission of the agreement reached with the Ministry of Public Health in which the later agreed to equip, furnish, and operate these 16 units within the next few months but by no later than December 2000. The mission acknowledges the efforts expended by the PMU towards resolving this issue, which has been pending for some time now. The PMU agreed to update IDA on the progress made in connection with the Operational Plan as outlined in Attachment 8.

Implementation Completion Report

19. In accord with IDA guidelines, after completion of each project, an Implementation Completion Report (ICR) is required within six months of Project Closure. The mission discussed with the PMU the information necessary to prepare IDA's part of the ICR and provided to the PMU with necessary advice and support for the preparation of the Borrower's contribution to the ICR. It was agreed that the PMU would submit to IDA the Borrower's contribution to the ICR by the end of August 2000.

List of Attachments

Attachment 1	List of people met
Attachment 2	Agreements reached
Attachment 3	Amendments to the DCA and the Dutch Grant
Attachment 4	Performance Indicators
Attachment 5	Procurement Status
Attachment 6	Disbursement Forecast
Attachment 7	Covenant Compliance
Attachment 8	Operational Plan

Saeed Abdo Ahmed
Project Director
Public Works Project

Anwar Al-Harazi
Deputy Minister
Ministry of Planning & Development

Somin Mukherji
Sr. Financial Analyst

List of People Met

Mr. Anwar Al-Harazi, Deputy Minister
Ministry of Planning and Development

Mr. Saeed Abdo Ahmed
PMU Director
Public Works Project

Mr. Abdulsalaam Kasim
Area Manager I
Public Works Project

Mr. Hassan Alhubaishi
Area Manager II
Public Works Project

Ms. Nasra Daair
Investment Planner
Public Works Project

Mr. Jamal AbdulAziz
Procurement Specialist
Public Works Project

Mr. Gamil Hizam
MIS Specialist
Public Works Project

Status of Agreements Reached during the last mission

Agreed Action	Completion Date	Status As of May 30, 2000
1. PMU to send details of contracts (and proposed mode of financing them) that are expected to spill over the Credit Closing Date.(para. 6)	June 30, 2000	PMU confirmed that all contracts will be completed by June 30, 2000.
2. PMU to pay special attention to implementation of contracts (under the Netherland Grant Financing) that are lagging behind, IDA to be informed.	Jan 31, 2000	Completed
3. PMU to take corrective measures to ensure quality of work at the school near Dhamar. PMU to provide IDA with a list of suppliers/contractors whose past performance were unsatisfactory and to provide safeguard policies to avoid recurrence of such in the future.	Dec 31, 1999	Done
4. PMU to start recruitment process for the new finance manager and have the position filled in.	June 15, 2000	Started processing (see PWP-2 aide-memoire)
5. PMU to submit to IDA the AIP for 2000 together with the associated work program and operating budget for necessary review and approval.	Dec 31, 1999	Done
6. For the Annual Performance Review, PMU to provide necessary TOR for IDA's review and approval.	Jan 15, 2000	Done
7. On the 35 non-operational health centers, PMU to provide with proposed actions.	Jan 15, 2000	PMU initiated some actions the reduced the non-operational health centers to 16.
8. PMU to provide IDA with details of the seminar for the consultants/contractors.	Jan 15, 2000	Done
9. PMU to inform IDA on changes required in the CP selection criteria .	Jan 31, 2000	Done
10. On the sub-project mix, PMU to inform IDA of the SC's decision .	Feb 28, 2000	Done
11. PMU will appoint the current auditor to compete audit of PWP-1 (para. 11).	June 6, 2000	PMU to submit the qtrly audit reports by July 31, 2000.
12. PMU to send follow-up letter to ASIF.	Dec 31, 1999	Done

Agreement Reached during the May 2000 Mission

Agreed Action	Completion Date	Status
1. PMU to complete all the ongoing activities, before May 30 for the Grant and June 30, 2000 for PWP-I (para. 6).	May 30 and June 30, 2000	
2. PMU to take appropriate action to ensure the environment safety aspects of the wastewater project built in Al-Shihr (para. 10).	June 30, 2000	
3. PMU to submit qtrly audit reports for the first two quarters of 2000 (para. 11)	July 31, 2000	
4. Undisbursed balance in both accounts to be transferred to IDA account (para. 13)	May 30 (IDA) June 30, 2000 (Grant)	
5. Submission of the last APR reports (para.17).	June 15, 2000	
6. PMU to update the Project Team at the WB-Country Office on the progress made in connection with the Operational Plan (para 18)	August 30, 2000	
7. PMU to arrange for sSubmission of the Borrower's contribution to the ICR (para 19).	August 30, 2000	

REPUBLIC OF YEMEN
PUBLIC WORKS PROJECT (CR. 2878-YEM)

Development Credit Agreement
Amendment to Schedule 1
IDA Letter Dated April 27, 1999 (column 1)
IDA letter Dated June 7, 1999 (column 2)

Category	Amount Originally Allocated in Credit Agreement (Expressed in SDR Equivalent)	(1) Amended Amount Allocated in Credit Agreement (Expressed in SDR Equivalent)	(2) Amended Amount Of Grant Allocated (Expressed in NGL Equivalent)
(1) Civil Works – Part A of the Project	12,700,000	14,550,000	3,750,000
(2) Goods and Equipment under Part B of the Project	300,000	216,000	
(3) Furniture	200,000	200,000	250,000
(4) Consultants' Services	900,000	964,000	
(5) Operating Costs	700,000	935,000	
(6) Refunding of Project Preparation Advance	1,000,000	123,966	
(7) Unallocated	1,200,000	11,034	
TOTAL	17,000,000	17,000,000	4,000,000

YEMEN: PUBLIC WORKS PROJECT
Performance Indicators

Quarters	1996		1997				1998			1999				2000				
	3	4	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	
Job Creation																		
(in work-month)																		
Projected																		
Quarterly	0	1953	5860	5860	5860	5860	5860	5860	5860	5860	5860	5860	5860	5860	5860			
Cumulative	0	1953	7418	13679	19535	25395	31256	37116	42977	54698	60558	66419	72279	78140	84000			
Revised cumulative (MTR)		1326	5305	9290	13260	15880	21230	25200	29200	37100	41100	45100	49100	53600				
Actual																		
Quarterly	0	159	1121	1966	4260	6108	4726	4809	3573	1892	1787	1,346	590	973				
Cumulative	0	159	1280	3246	7506	13614	18340	23149	26722	34626	36417	37,758	38,348	41,300				
Cost per work-month																		
Projected							To be within US\$ 260 to 350											
Actual		805	444	482	415	450	605	434	450	489	494	505	526	505				
Disbursements-Civil Works																		
(in US\$ million)																		
Projected (out of 25 million)																		
Quarterly	0	1	1	1.5	2.5	1.5	2	1.5	2	2	1.25	1.75	1.5	1.5	1.75	0.5	0.5	
Cumulative		1	2	3.5	6	7.5	9.5	11	13	16.25	17.5	19.25	20.75	22.25	24	24.5	25	
Revised Projected (out of 22 million)																		
Quarterly		0.88	0.88	1.32	2.2	1.32	1.76	1.32	1.76	1.76	1.1	1.54	1.32	1.32	1.54	0.44	0.44	
Cumulative		0.88	1.76	3.08	5.28	6.6	8.36	9.68	11.44	14.3	15.4	16.94	18.26	19.58	21.12	21.56	22	
Actual																		
Quarterly		0.128	0.498	0.947	1.766	2.749	2.864	1.2	2.463	1.071	1.05	1.08	1.12	0.7				
Cumulative		0.128	0.626	1.573	3.339	6.088	8.952	10.04	12.278	16.955	18.00	19.08	20.2	20.9				
Progress in Project Completion																		
(% of project cost spent)							Amounts spent on Civil Works = 22 million instead of 25 million											
Projected	0	4	8	14	24	30	38	44	52	65	70	77	83	89	96	96	100	
Actual		0.6	2.8	7.2	15.2	27.7	40.7	45.6	55.8	77.1	81.8	86.7	91.8	95				

YEMEN: PUBLIC WORKS PROJECT
Procurement Status Report

Description	Procurement Method	Bid Doc sent to IDA	IDAs NO Objection to Bid Doc	Prequalification	Bid Invitation	Bid Opening	Bid Evaluation Recommendation to IDA	IDAs No Objection	Award Date	Contract Amount (in millions)	Consultants/ Contractors Name	Completion Date		
												original	Revised	Actual
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Standard Bidding Doc.		30.697	27.97											
Tender No.1(6 sub-projects)					287.96	15.896	22.10.96	4.11.96		0.35		13.5.97		15.4.97
Tender No.2(2 sub-projects)					139.96	7.10.96	17.11.96	21.11.96		0.27		30.7.97		27.7.97
Tender No.3(11 sub-projects)					1.10.96	26.10.96	17.11.96	21.11.96		0.54		28.8.97		21.7.97
Tender No.4(14 sub-projects)					11.11.96	3.12.96	22.2.97	26.2.97		1.45		16.98		10.4.98
Tender No.5(24 sub-projects)					24.12.96	20.1.97	25.3.97	31.3.97		1.62		26.1.98		28.3.98*
Tender No.6(53 sub-projects)					3.4.97	8.5.97	26.6.97	30.6.97		3.15		10.5.98		10.11.98
Tender No.7(91 sub-projects)					6.7.97	14.8.97	16.6.97	29.9.97		4.39		24.4.99		27.5.99
Tender No.9(106 sub-projects)					1.11.97	6.12.97	24.1.98	2.2.98		4.70		27.9.99**		3.5.2000
Tender No.10(3 sub-projects)					2.1.98	15.2.98	25.3.98	30.3.98		0.09		15.1.99		29.6.99
Tender No.11(60 sub-projects)					283.98	6.5.98	24.6.98	7.7.98		2.55		22.3.2000		
Tender No.12(1 sub-projects)					136.98	2.7.98	10.8.98	30.8.98		0.17		14.8.99		28.8.99
Tender No.13(39 sub-projects)					4.1.99	9.2.99	14.3.99	5.4.99		2.00		19.2.2000		
Tender No.14(14 sub-projects)					307.99	23.8.99	9.6.99	14.9.99		0.65		20.6.2000		
							Subtotal amount committed in US\$=			21.93				
Sub-project design & supervision										1.7				
										Total amount committed in US\$=				
										23.63				
Tender No.8(9 sub-projects)														
* One sub-project not completed														
** 3 not completed														

YEMEN
Public Works Project (Cr. 2878-YEM)
Disbursement Forecast

Fiscal Year	Semester Ending	Cumulative Disbursement as Per SAR US\$M	Cumulative Disbursement Actual and Forecast US\$M
1996/1997	September 30, 1996	0.00	0.18
	December 31, 1996	1.50	0.42
	March 31, 1997	2.50	1.90
	June 30, 1997	4.00	1.98
1997/1998	September 30, 1997	6.50	4.02
	December 31, 1997	8.00	6.87
	March 31, 1998	10.00	9.49
	June 30, 1998	11.50	11.88
1998/1999	September 30, 1998	13.50	14.38
	December 31, 1998	14.75	16.40
	March 31, 1999	16.75	18.00
	June 30, 1999	18.00	19.11
1999/2000	September 30, 1999	19.75	20.22
	December 31, 1999	21.25	21.25
	March 31, 2000	23.00	22.28
	June 30, 2000	24.00	23.00
2000/2001	September 30, 2000	24.50	23.26
	December 31, 2000	25.00	

YEMEN
Public Works Project
Covenant Compliance

Agreement	Section	Covenant Type	Status	Original Fulfill Date	Revised Fulfill Date	Description of Covenant	Comments
Credit	3.01 (c)	03,04	C			Before November 1 of each year commencing Nov. 1, 1996, the Borrower shall furnish to IDA, for review and comments, an estimate of (i) the operational costs of the PMU for subsequent year and (ii) counterpart funding required to be provided by the Borrower for subprojects to be carried out during the subsequent year.	
Credit	3.01 (d)	04	C			The Borrower shall ensure that adequate annual budgetary allocations are made prior to February 1 of each year to cover the counterpart funding required for the operational costs of the PMU for subprojects to be implemented during such year.	
Credit	4.01 (a), 4.01(b) (ii)	01	C			The Borrower shall maintain or cause to be maintained records and accounts adequate to reflect the operations, resources and expenditures and have these audited by independent auditors acceptable to IDA; and to furnish to IDA no later than six months after the end of each fiscal year, a certified copy of the report.	
Credit	4.01(d)	01	CD			Not later than one month after the effective date, the Borrower shall appoint auditors acceptable to the Association for a 4-year period in order to carry the audits required.	
Credit	Sch.4 para2a	05	C			For the purpose of ensuring the proper coordination and execution of the Project, the Borrower shall maintain the Steering Committee, with membership and TOR satisfactory to the Association.	
Credit	Sch.4 para3(b) (i)	03	C			The Borrower shall ensure that the PMU will prepare quarterly Investment Programs consisting of subprojects that have been appraised in accordance with the Manual of Procedures, Prepare summary environmental assessments and furnish to IDA the proposed Investment Program.	
Credit	Sch.4 para 6 (b) (i) (ii)	09	C			The Borrower shall ensure that the PMU provide IDA quarterly progress reports and not later than January 31 of each year, a report integrating the results of the progress reports and review of performance indicators including recommendations.	
Credit	Sch. 4 Para4(6) (d)	09	C			The Borrower and IDA shall hold a mid-term exchange of views on the progress achieved.	

Status:

- C - Complied with
- SOON - Compliance Expected in Reasonable Short Time
- CD - Compliance After Delay

Public Works Project-I
Operational Plan

Operational Issues	Strategy	Performance Indicators	Timing
To expedite the operation of 16 health units in various governorates	The PMU will closely monitor the progress of actions agreed with the Health Ministry through the consultant who succeeded to help the PMU to reduce the number of non-operational units from 35 to 16 units.	1. Completion of the supply, installation, commissioning of furniture and equipment to the respective sites. 2. Staffing of the units	1. October 2000 2. December 2000

Annex 1. Key Performance Indicators/Log Frame Matrix

Outcome / Impact Indicators:

Indicator/Matrix	Projected in last PSR	Actual/Latest Estimate
(a) job creation in work-months;	50,000—60,000	43,365
(b) cost per work-month;	US\$ 260—350	US\$ 415—605
(c) disbursement under the civil works component;	US\$ 21.30 million	US\$ 21.7 million
(d) progress in project implementation as a % of project costs spent;	96%	99.29%
(e) community participation in number of subprojects without providing resources in kind or money; and	0	40
(f) community participation in number of subprojects with providing resources.	0	284

Output Indicators:

Indicator/Matrix	Projected in last PSR	Actual/Latest Estimate

End of project

Annex 2. Project Costs and Financing

Project Cost by Component (in US\$ million equivalent)

Project Cost By Component	Appraisal Estimate US\$ million	Actual/Latest Estimate US\$ million	Percentage of Appraisal
Sub-projects: Works	25.00	26.90	107.6
Sub-projects: Goods	0.70	0.76	108.6
Operating Cost	1.00	1.12	112
Technical Assistance	1.30	1.66	127.7
Total Baseline Cost	28.00	30.44	
Total Project Costs	28.00	30.44	
Total Financing Required	28.00	30.44	

Project Costs by Procurement Arrangements (Appraisal Estimate) (US\$ million equivalent)

Expenditure Category	ICB	Procurement Method¹		N.B.F.	Total Cost
		NCB	Other²		
1. Works	1.00 (0.90)	24.00 (21.10)	0.00 (0.00)	0.00 (0.00)	25.00 (22.00)
2. Goods	0.00 (0.00)	0.00 (0.00)	0.70 (0.70)	0.00 (0.00)	0.70 (0.70)
3. Services (PMU Operating Costs)	0.00 (0.00)	0.00 (0.00)	1.00 (1.00)	0.00 (0.00)	1.00 (1.00)
4. Technical Assistance	0.00 (0.00)	0.00 (0.00)	1.30 (1.30)	0.00 (0.00)	1.30 (1.30)
Total	1.00 (0.90)	24.00 (21.10)	3.00 (3.00)	0.00 (0.00)	28.00 (25.00)

Project Costs by Procurement Arrangements (Actual/Latest Estimate) (US\$ million equivalent)

Expenditure Category	Procurement Method ¹			N.B.F.	Total Cost
	ICB	NCB	Other ²		
1. Works	0.00 (0.00)	26.90 (19.64)	0.00 (0.00)	0.00 (0.00)	26.90 (19.64)
2. Goods	0.00 (0.00)	0.00 (0.00)	0.76 (0.76)	0.00 (0.00)	0.76 (0.76)
3. Services (PMU Operating Costs)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1.12 (1.12)	1.12 (1.12)
4. Technical Assistance	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1.66 (1.66)	1.66 (1.66)
Total	0.00 (0.00)	26.90 (19.64)	0.76 (0.76)	2.78 (2.78)	30.44 (23.18)

^{1/} Figures in parenthesis are the amounts to be financed by the Bank Loan. All costs include contingencies.

^{2/} Includes civil works and goods to be procured through national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Project Financing by Component (in US\$ million equivalent)

Component	Appraisal Estimate			Actual/Latest Estimate			Percentage of Appraisal		
	Bank	Govt.	CoF.	Bank	Govt.	CoF.	Bank	Govt.	CoF.
Civil Works	22.00	3.00	0.00	19.64	5.30	1.96	89.3	176.7	0.0
Goods	0.70	0.00	0.00	0.76	0.00	0.00	108.6	0.0	0.0
Operating Costs	1.00	0.00	0.00	1.12	0.00	0.00	112.0	0.0	0.0
Technical Assistance	1.30	0.00	0.00	1.66	0.00	0.00	127.7	0.0	0.0

Annex 3: Economic Costs and Benefits

Not Applicable as explained in paragraph 4.3.1

Annex 4. Bank Inputs

(a) Missions:

Stage of Project Cycle		No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
Month/Year	Count	Specialty	Implementation Progress	Development Objective	
Identification/Preparation 8/1995	5	Sanitation Eng./Fin. Anal./Private Sector Spec./SME Spec./Public Works Specialist			
Appraisal/Negotiation 12/95	3	San. Eng./Procurement Spec./Public Works Specialist			
03/96	4	San. Eng./Fin. Analyst/Lawyer/ Public Works Specialist			
05/96	1	Sanitation Engineer			
Supervision 08/96	3	San. Eng./Fin. Analyst/ Sector Director	HS	S	
11/96	5	San. Eng./Financial Analyst Impl. Spec./Operation Off./ Sector Director	HS	S	
03/1997	4	San. Eng./Financial Analyst/ Operation Off./Public Works Spec.	HS	S	
10/1997	5	San. Eng./Financial Analyst/ Operation Off./Public Works Spec./Impl. Spec./Economist	S	S	
03/1998	4	San. Eng./Financial Analyst/ Operation Off./Public Works Spec./Impl. Spec./Economist	S	S	
05/1998	4	San. Eng./Financial Analyst/ Operation Off./Public Works Spec./Impl. Spec./Economist	S	S	
12/1998	2	Fin. Analyst/Operation Off.	S	S	
06/1999	3	Fin. Analyst/Operation Off./ Fin. Analyst	S	S	
ICR 06/2000	3	Fin. Analyst/ Impl. Spec./ Fin. Management Specialist	S	S	

(b) Staff:

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US\$ (.000)
Identification/Preparation	23.8	89.7
Appraisal/Negotiation	25.4	93.6
Supervision	64.4	133.7
ICR	10.0	30.0
Total	123.6	347.0

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

	<i>Rating</i>				
<input type="checkbox"/> <i>Macro policies</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Sector Policies</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Physical</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Financial</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Institutional Development</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Environmental</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input checked="" type="radio"/> N	<input type="radio"/> NA
Social					
<input type="checkbox"/> <i>Poverty Reduction</i>	<input type="radio"/> H	<input type="radio"/> SU	<input checked="" type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Gender</i>	<input type="radio"/> H	<input checked="" type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Other (Please specify)</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Private sector development</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Public sector management</i>	<input type="radio"/> H	<input type="radio"/> SU	<input checked="" type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Other (Please specify)</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance

- Lending
- Supervision
- Overall

Rating

- HS S U HU
- HS S U HU
- HS S U HU

6.2 Borrower performance

- Preparation
- Government implementation performance
- Implementation agency performance
- Overall

Rating

- HS S U HU
- HS S U HU
- HS S U HU
- HS S U HU

Annex 7. List of Supporting Documents

A. Project Review from the Borrower's Perspective

REPUBLIC OF YEMEN
PUBLIC WORKS PROJECT
PROJECT MANAGEMENT UNIT
SANA'A



الجمهورية اليمنية
مشروع الأشغال العامة
وحدة إدارة المشروع
صنعاء

To: Somin Mukherji
Operations Officer
Infrastructure Sector Group
Resident Mission - The World Bank .
Sanaa.

Date: Nov 20, 2000
No. 65 / 00

From: Mr. Saeed Abdo Ahmed,
Project Director-Public Works Project

Sub: Borrower's Implementation Completion Report

Dear Sir,

Please find enclosed hereby the Borrower's contribution to the Implementation Completion Report.

Best Regards

Saeed Abdo Ahmed



الضواحي - صنعاء - شارع المستنير بجانب قاعة أكاديمية المعارف - كرفس 200415 - 200417 - فاكس 200416 - 200416 - تليفون 209369 - ص.ب. 18316
Al-Steen St. Near Expo. Enh. Hall - Tel. : 200415 - 200417 - Fax: 200416 - Telefax. : 209369 - P.O.Box : 18316

BORROWER'S IMPLEMENTATION COMPLETION REPORT:

ASSESSMENT OF DEVELOPMENT OBJECTIVES AND DESIGN AND QUALITY AT ENTRY

Original Objectives:

The overall objective of the Project was to mitigate the adverse effects of the Economic Reform Program.

The specific objectives are:

- i creation of an estimated 75,000 – 96,000 work-months at a cost range of US\$ 260 to US\$ 350 per work-month.
- ii help deliver much needed infra-structure.
- iii enhance community participation in preparing and implementing sub-projects for civil works.

The project objectives were in line with the Bank's Country Assistance Strategy of 1996 whose key thrusts are Economic Reform and Poverty Alleviation. They also conform to the Governments priorities of mitigating adverse Effect of the Economic Reform Program through creation of a Social Safety Net, targeting those communities with the highest poverty levels.

The framework of the Project was also to play a catalytic role in attracting donor financing.

The specific design of the project was to implement small civil works sub-projects, technically very simple but extremely complex in management and supervision, due to diverse geographic distribution and quantity.

Revised Objectives:

Although the objectives in themselves were clear and realistic, assumptions for quantifying them were unrealistic.

Labor cost were under-estimated at the time of Appraisal. During Mid-term review, the No. of work months to be created were revised (refer to MTR para 7.4 and annex 7 in PAD for PWP-II.)

At the time of Appraisal labor costs were estimated at US\$ 100 per month, while actual data established the rate at an average of US\$ 160 per month for both skilled and unskilled labor.

Based on actual data collected it was established that for an investment of US\$ 100,000 - 205 work months could be created. Thus for an investment of US\$ 25.0 million 51,250 work months should be generated.

Cost of Work-month (Investment Cost)

In the SAR the Investment cost of creating one work-month was estimated at a range US\$ 260-350. Calculations were based on investing US\$ 25.0 million and creating 75,000-96,000.

The revised cost assuming investment of US\$ 25.0 million should be US\$ 489.

Risks involved:

- Maintaining a high labor content
- Maintaining an acceptable quality of works
- Ensuring sustainability of completed works

Project Components:

The Project has three components:

- i. Implementation of 250-300 multi-sectoral, labor intensive small scale public works aimed at rehabilitating, extending or maintaining urban & rural infra-structure such as: water supply, streets and roads, storm water drainage, flood protection, irrigation, soil conservation, health and education facilities.
- ii establishment of a Steering Committee and a Project Management Unit for implementation.
- iii a technical assistance program for the PMU in investment programming, sub-project preparation & implementation ; support to local consulting and construction companies and auditing.

Project Cost Estimates :

a. According to the Credit Agreement:

Category	Original Credit Allocated in SDR	Re-allocated in SDR	Actual Disbursed in SDR
Civil Works	12,700,000	14,550,000	14,069,542*
Goods & equipment	300,000	216,000	207,511
Furniture	200,000	200,000	278,964
Consultants' services	900,000	964,000	1,191,188*
Operating costs	700,000	935,000	819,161
Refunding of PPA	1,000,000	123,966	123,966
Unallocated	1,200,000	11,034	0
Total	17,000,000	17,000,000	943,127

* These figures will be finally closed before October 31, 2000.

b. According to SAR:

	In SAR				Actual (latest estimates)			
	IDA	Govt	CP	Total	IDA	Govt	CP	Total
Civil works	22.0	3.0	0	25.0	19.57	2.50	2.4	24.47
Goods, equip. & furniture	0.7	0		0.7	0.76	0		0.76
Operating costs	1.0	0		1.0	1.11	0		1.11
Technical assistance	1.3	0		1.3	1.70	0		1.69
Total	25.0	3.0	0	28.0	23.14	2.5	2.4	28.03

Fluctuations in the exchange rate of the SDR V US\$ since appraisal of project has led to reduction in total value of the Credit from US 25.0 million to US\$ 23.14 million.

Exchange rate during signing of DCA was 1 SDR = US\$ 1.47 (July 1996).

Accordingly amounts requested as Government contributions were also reduced as these are related directly to values of contracts signed for civil works.

Exchange rate fluctuations were as follows (SDR V US\$):

FY	Jan	June	Dec
1997	1.4335	1.4015	1.3492
1998	1.3540	1.3339	1.4175
1999	1.3901	1.3224	1.3720
2000	1.3750	1.3207	

Percentage of Civil Works to Total Project Cost:	87.3 %
Percentage of Operating Cost to Total Project Cost:	3.9 %
Percentage of Consultant Services	6.0 %
Percentage of Goods & Eqpt	2.8 %
	<hr/>
	100 %

ACHIEVEMENT OF PROJECT OBJECTIVES AND OUTPUTS BY COMPONENTS:

Achievement of Objectives:

The project substantially achieved its objectives as follows:

i. **No. of work-months generated for direct Labor:**

Actual number of work-months generated by project for **direct labor is 43,365 work-months.**
This figure does not include labor generated by work done through communities.

Based on criteria established for revised objectives (205 work -months for every US\$ 100,000 investment), and with a total actual investment in civil works of US\$ 22.1 million (IDA + Govt), the total Number of work months that should be generated are 45,305 work-months.

- **The objective was achieved at 95.7%.**
- **Actual Investment cost is US\$ 509 per work month**
- **Overall Labor Content Achieved is 31.1 %.**
- **No. of Beneficiaries 2,359,553.**
- **Investment cost per beneficiary is less than US\$ 10. Investment of US\$ 50 attained the highest scoring in the selection Criteria.**

ii. **Delivery of infrastructure:**

The SAR estimated delivery of 250-300 sub-projects for an investment of US\$ 25.0 million.

The Project in actual delivered 422 sub-projects at an investment of US\$ 24.47 including Community Contributions in Kind.

Community Participation in kind includes material provided e.g building stones, pipes, digging of wells, water pumps; or work done upfront e.g built up to foundation or lintel levels.

Average cost of Sub-Project was US\$ 58,000.

The PWP has afforded large opportunities for contractors to bid and implement works with procedures that were not prevalent before its establishment, and has managed to reduce construction costs to minimum yet deliver on time high quality services.

This fact was evident in gradual drop of prices in subsequent tenders. For example, the cost of a six classroom school in the first four tenders ranged from US\$ 90,000 to US\$ 100,000 while subsequent tenders, cost ranged from US\$ 43,000 to US\$ 55,000.

This fact can be attributed to various factors, primarily:

Efficiency and transparency of PMU that has established simple and effective procedures has gained the trust and confidence of contractors,

Prompt payment procedures to contractors and consultants,

The unemployment in the country and potential in the construction industry (number of contractors bidding for one sub-project ranged from five to thirty).

iii. Enhance Community Participation:

It has long been recognised that community participation is a corner stone for the success of implementation and sustainability of sub-projects. The PWP-I was thus designed with the main purpose of introducing the concept as an objective in IDA financed projects as well as spread awareness of its importance within communities benefiting from services.

Thus the objective of enhancing community participation.

The project highly achieved this objective through direct contact with communities who were initially indifferent to the concept but slowly and gradually within the four year period, came to realise the importance of working in partnership with PWP.

This Partnership started with the identification of sub-project. All communities have expressed and prioritised their needs directly through submission of requests or indirectly through members of Parliament, NGO's and local governments.

In many sub-projects that are not of a typical nature such as water, sanitation, stone paving, communities/NGO's are involved in preparation of designs especially preliminary designs through coordination of concerned agencies such as NWSA and / or assignment of private engineers to prepare designs.

All Communities have been involved informally in the supervision of sub-projects on site.

Most communities have been willing to contribute to the cost of the sub-projects in kind whereby total contributions collected for PWP-1 amounted to US\$ 2.4 million equivalent to 10.8 % of total civil works investments.

Follow-up with relevant agencies for operation & maintenance was mainly the responsibility of the communities.

Clear evidence of the positive response from communities led to imposing 5% minimum community participation as a rejection criteria for the selection of sub-projects under PWP-II.

Output by Components:

i Multi sector basic infrastructure:

Sector	No. of S.P Implemented	Investment in US\$ (million)	% by investment
		Actual	Actual In SAR
Health	78	2.85	12.810
Education	223	11.5	52.010
Water	46	2.33	10.620
Sanitation	25	1.84	8.430
Roads	40	2.87	13.015
Agriculture	8	0.59	2.815
Pubic Buildings	2	0.09	0.40
	422	22.07	100100

Due to the nature of the project being very demand driven, distribution of investment sector-wise could no be fulfilled according to estimates of the SAR. Almost seventy percent of all requests submitted to the PWP are in the Education Sector. This matter was discussed and reviewed various times with the Steering Committee and Supervision Missions and it was concluded that education sector should be tentatively at 50 % . At this level communities priorities can be fulfilled to a great extent.

The percentage for sanitation could not be achieved due to several reasons mainly being:

- requests for these services were not many as they do not represent communities high priority especially in the rural areas, where water for domestic purposes is extremely scarce;
- in semi-urban areas, disposal and or treatment could not be solved at a small scale sub-projects thus could not meet criteria for environmental improvement;
- Sanitation sub-projects were envisaged in the SAR to be co-financed with other agencies for imported material like pipes, manhole covers, etc, which would otherwise create heavy burden to communities;
- Sustainability of sanitation sub-projects could be guaranteed only in some neighbourhoods of urban centres where handing over was to NWSA; and
- In urban centres large scale sanitation works are being undertaken by other implementing agencies.

Flood Protection was initially an important component and the PMU had initiated various sub-projects in coordination with affected governorates and Min. of Agriculture. But since Establishment of Cr. 2073 Emergency Flood Rehabilitation Project, these activities were transferred over.

The PWP did not indulge in to Soil Conservation sub-projects due to problems of ownership of agricultural land and terraces, which are mainly privately owned and benefit very limited number of families.

ii. Establishment of Steering Committee and PMU:

From the onset of the Project a steering Committee was established through a Prime Minister's Decree No. 3 of 1996, comprising of nine members and headed by the Minister of Planning and Development.

The S.C role has been very constructive. Meetings were held regularly where major issues were presented and discussed and practical decisions were reached that facilitated the efficient functioning of the PMU.

The PMU was established with highly qualified staff who developed and established procedures that facilitated efficient and transparent implementation. Various departments were established and fully computerised.

Computerised Accounting Software was installed in the Finance department and all staff had access to these systems thus enhancing their skills.

To facilitate monitoring and control of numerous small sub-projects scattered all over the country; the PMU has developed a very comprehensive and sophisticated Management Information System, that covers all activities of the PWP from registering to selection, all stages of procurement activities, monitoring of implementation, reporting at all levels and data library for unit prices, contractors and consultants.

Audit Reports:

Since its establishment the PWP has submitted timely audit reports. No significant discrepancies have been reported by auditors in management and accounting procedures, including internal controls, and all other aspects.

iii. Technical Assistance:

The PWP has effectively used technical assistance in the form of local consultants for numerous activities such as conducting site visits, preparation of designs, supervision of sub-projects on site.

In order to facilitate operation & maintenance, the PWP adopted standard designs of the concerned agencies like Min. of Education, Min. of Health, NWSA prepared or approved designs for sanitation & water schemes.

These designs have been subject to improvements by the PWP in order to adapt them to suit local environment and landscape, such as in Hadhramut schools and Health facilities were initially built with stone façades while now they are being built of local material with local architecture.

Modifications to designs are an on-going process. Modifications to sizes of classrooms for rural schools are currently being studied to suit remote and very remote areas.

Support to Local Contractors and consultants:

The PWP had contracted with 147 local consultants in the form of individual consultants and firms whose performance has been satisfactory.

Similarly the PWP had contracted with 260 contractors. In most cases performance of contractors

has been satisfactory. Diligent supervision of implementation had resulted in satisfactory quality of works.

A few cases of poor performance were encountered. These were dealt with either by terminating contracts and or enhancing supervision until quality is improved.

By affording opportunity to large numbers of contractors and consultants to have access to deal with institutionalised procedures and familiarising with World Bank Guidelines, the PWP has significantly contributed to the development of local consultants and contractors industry.

In addition, before opening each tender contractors were explained on PWP procedures and W.B guidelines, methods preparing bids, submission of effective bid bonds, good practise in implementation of different stages of works, quality of material (specimen are normally demonstrated) ensuring satisfactory quality of finishings ...etc.

This led to significant improvement in the preparation & presentation of bids by the contractors. Less arithmetical errors, random discounts and scribbling of figures were committed.

For supervision consultants, in addition to daily informal instructions, five workshops were held to discuss various topics with emphasis on:

- importance of presence of consultant / representative on site to ensure strict supervision and high quality
- records on site of every event occurring irrespective of its significance
- authority for variation orders/ prior approval from the Governorate Project Managers
- importance of abiding to the bi-weekly reporting system on the standard format and its significance to the Project's MIS monitoring.
- recording of labor on site in the log book on a daily basis
- relationship of consultant and sub-area managers, area managers and director.

Attracting Donor Financing:

Since 1998 the Project with support of the Minister of Planning & Development, Chairman of Steering Committee and the IDA has managed to attract several potential donors and has increased its portfolio from US\$ 28.0 million in 1996 to approximately US\$ 118.3 million

Source of Funding	Status	Foreign	Govt.	Beneficiaries	Total
IDA CR. 2878	Completed	23.0*	2.5	2.4	27.9
IDA Cr. 3168	On-going	50.0	6.0	4.0	60.0
Dutch Grant	Completed	1.98	0.45	0	2.43
American Grant I	On-going	6.0	0	0.3	6.3
Italian Grant	On-going	0.6	0	0	0.6
OPEC	Preparation	8.22	1.23	0.4	9.85
French Grant	In pipe-line	0.75	0	0.038	0.78
American Grant II	In pipe-line	10.0	0	0.5	10.5
Total		100.55	10.18	7.638	118.36

C. IMPLEMENTATION RECORD AND MAJOR FACTORS AFFECTING THE PROJECT:

In general there were no major factors that adversely affected implementation. The Project was completed on time and Credit was closed as per schedule on June 30, 2000.

The PWP launched advertising tenders in July 1996 with a high momentum. By December 1996 five tenders were announced representing 13% of total number of sub-projects. Peak momentum was reached during 1997 with the advertisement of an additional 60% of sub-projects, which were substantially completed by end of 1998. 15% and 12% of sub-projects were advertised during 1998 and 1999 respectively.

Due to depletion of funds there was decline in impetus.

To ensure overlapping of activities and continuity in delivering services PWP-II was negotiated and preparation activities were commenced under PWP-1.

The project was substantially completed by end of 1999, but due to the following reasons, it was decided that additional sub-projects should be implemented so as to fully utilise Credit funds:

- fluctuations in exchange rate of the US\$ against the SDR;
- transfer of operating costs since July 1 1999, from PWP-1 to PWP-2,
- inability of implementing civil works component of water sub-projects that were planned to be implemented in conjunction with the Emergency Flood Rehabilitation Project due to delays in procurement of imported material,

Besides risks envisaged in the SAR, the PWP was exposed to numerous risks in various situations

- Number of sub-projects being implemented simultaneously-posed a high risk in ensuring satisfactory quality,
- Geographic Distribution too dispersed and in extremely remote areas posed high safety risk especially during selection of sites that in many cases caused disputes,
- Dealing with numerous non-institutional contractors and having to impose strict regulations such as forfeiting of bid and performance bonds, imposition of liquidated damages procedures that are normally ignored.
- Too competitive construction industry led to low prices that could undermine quality of works.

6th. Sustainability:

To ensure sustainability, the PWP's main role was strict coordination with concerned agencies, who would be handed-over completed works.

The PWP undertook various initiatives in this respect for example education sub-projects that satisfied selection criteria were further subject to scrutiny and approval by the Min. of Education (who later became member of the Steering Committee) to ensure operational budgets.

For health facilities an agreement was reached with the SDF to equip and MOPH to operate completed facilities. But unfortunately, due to shortage of funds SDF could not fulfil this commitment. The MOPH also shortage of operational funds and had ceased employment of new staff.

Short-term sustainability in sub-projects was related to the sector. In **Education**, schools were

made operational by the Min. of Education immediately after completion, mainly because schools were built to replace those existing under informal shelter. Parent's councils established through schools participate in budgets for maintenance.

Operation of **health facilities** took a much longer time. By end of 1998, out of the 78 built 35 were still non-operational.

An initiative through a consultant was undertaken by PWP to find experiences and alternative operational schemes through local communities / NGO's / charitable organisations.

Conclusion of this initiative was health facilities can not be sustained without involvement of the MOPH especially in providing health staff.

The positive outcome was that the PWP could reach to an agreement with the MOPH who undertook to equip and operate all health facilities built by the project while the PWP undertook to construct new facilities that satisfy the selection criteria and are within the operational budget of the MOPH.

Since then 13 facilities in 10 governorates are still non-operational which are planned to be operational before the end of year 2000.

The MOPH has since introduced legislation for community participation program in health services. This policy should ensure long-term sustainability.

Water & Sanitation that have been handed over to NWSA are highly sustainable as schemes applicable to NWSA are also applied.

For rural water sub-projects that have not been handed to NWSA, short-term sustainability has been operation and maintenance.

Stone Paving works have been handed over to the local branch of the MCHUP. Maintenance is expected to be achieved through Local Councils and NGO's, who were mainly the initiators of these sub-projects.

In view of the recent legislation for establishing Local Authorities, long-term sustainability of all projects is expected to be more viable.

Environmental Assessment and compliance with schedule 4 Para 3 b (ii) of the DCA:

During implementation environmental assessment of sub-project that were environmental sensitive was a procedure incorporated within the design. Sub-projects that were expected to have negative impacts were dropped out from the beginning, being the main reason for not achieving percentage distribution of investments in sectors as in SAR (water & sanitation constituted only 19% of total investments).

This intrinsic exercise seemed satisfactory and no major environmental concerns were raised or issue of non compliance with environmental requirements of the DCA, during reviews and supervision missions, mainly, due to nature of sub-projects implemented were of very small magnitude that could not have significant environmental impact.

During the Mid-Term Review several sub-projects in all sectors were audited and the outcome as

stated, was that environmental impact of sub-projects is rather insignificant as no major water and irrigation schemes have been undertaken. Sewage networks and water distribution have a positive sanitary improvement aspect so as do urban pavement. Out of the 422 sub-projects implemented 223 are school buildings out of which 199 are in rural / remote areas.

In spite of conducting Annual Reviews that audited sub-projects in all aspects including environmental impacts, the PWP will conduct auditing of completed sub-projects with particular attention to environmentally sensitive sectors, through an Environmental Specialist consultant who will assess the impacts, and suggest mitigation measures for any negative impacts that may have occurred during operation of sub-projects, which will be dealt with under PWP-2

This is planned for Feb-March of 2001.

Socio-Economic Impact is annexed.

7th. IDA and Borrower's Performance:

IDA's performance was highly satisfactory during identification, appraisal and preparation. IDA staff assisted the Government and PMU in establishment of the Project and initial launching. Supervision missions were very supportive and played a positive role in problem solving of all major issues of concern. They thoroughly scrutinized all aspects of project implementation.

Borrower's Performance:

Government Performance:

The borrower's performance has been highly satisfactory. The MOPD has played an effective role in facilitating prompt payment procedure. Counterpart funds were made available on time within the budget of the MOPD. Serious efforts were taken to facilitate successful implementation of the Project. The Min. of Finance & CBY were cooperative.

Special arrangements were established in cooperation with Min. of Finance and CBY to reduce lengthy procedures for payments under counterpart funds to take into account numerous small payments to be made.

PMU Performance:

The PMU complied by all covenants in DCA and World Bank Guidelines. Audit reports of the required standards have been submitted on time.

Staff performance has been highly satisfactory, with minimum numbers and minimum operating costs.

The intrinsic nature of the Project entailed dealing with all government agencies at central and local level in addition to local councils, NGO's, MP's and individuals.

Activities were undertaken in each district and governorate of the Republic.

By building trust and confidence a lot of conflicts and that could have impeded progress were resolved in mutual manner.

Economy and efficiency have been the essence of performance.

Key Lessons Learned:

- i. Government agencies can be supportive and play a positive role of facilitator to PMU's, having proven efficiency, transparency, built trust and deliver tangible results.
- ii. Procurement Procedures should be modified to suit small-scale civil works.
- iii. Taxes imposed on contractors and consultants should be for new contracts not those on-going
- iv. Long-term sustainability can be achieved if community involvement in Operation & Maintenance are sector policies and introduced in all projects being implemented irrespective of source of finance.
- v. Effective implementation can be achieved through PMU's.
- vi. Non Institutional contractors can perform satisfactorily and abide to procedures given the right set-up that can enforce these procedures.

B. Comments from Government

REPUBLIC OF YEMEN
PUBLIC WORKS PROJECT
PROJECT MANAGEMENT UNIT
SANA'A



الجمهورية اليمنية
مشروع الأشغال العامة
وحدة إدارة المشروع
صنعاء

To: Somin Mukherji
Sr. Financial Analyst
Infrastructure Sector Group
The World Bank,
Yemen Field Office.

Date: Nov 26, 2000
No. 66 / 00

From: Mr. Saeed Abdo Ahmed,
Project Director-Public Works Project

Sub: Implementation Completion Report

Dear Sir,

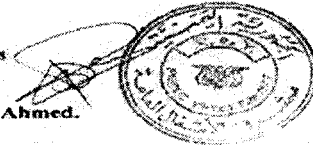
We have received the Implementation Completion Report for Public Works Project (Cr.2878-YEM)

Our review indicates that all revised objectives and facts and were correctly represented.

We would like to thank IDA staff for rating the Project as highly satisfactory, and we have great faith that the team work which brought this project to a successful completion will prevail.

Best Regards

Saeed Abdo Ahmed.



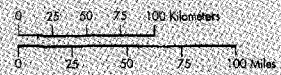
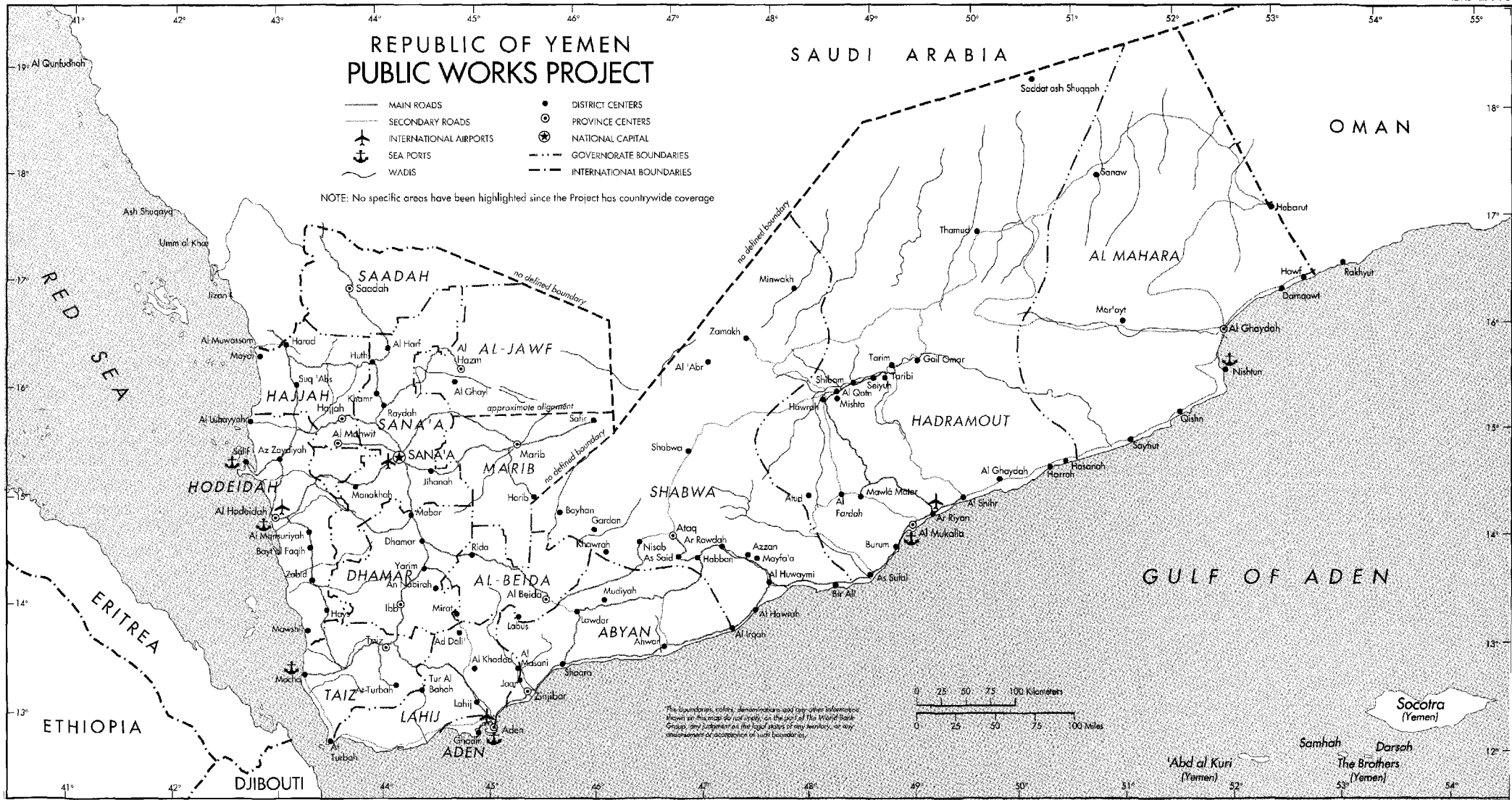
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MAP SECTION

REPUBLIC OF YEMEN PUBLIC WORKS PROJECT

- MAIN ROADS
- - - SECONDARY ROADS
- ✈ INTERNATIONAL AIRPORTS
- ⚓ SEA PORTS
- ~ WADIS
- DISTRICT CENTERS
- PROVINCE CENTERS
- ⊙ NATIONAL CAPITAL
- · - · - GOVERNORATE BOUNDARIES
- - - INTERNATIONAL BOUNDARIES

NOTE: No specific areas have been highlighted since the Project has countrywide coverage



The boundaries, colors, denominations and any other information shown on this map do not imply on the part of The World Bank Group any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.