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CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Control
 Symbol U-447

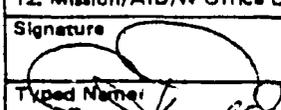
1. PROJECT TITLE Small Rural Water Systems	2. PROJECT NUMBER 279-0044	3. MISSION/AID/W OFFICE USAID/Yemen
4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 84-1		
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

5. KEY PROJECT IMPLEMENTATION DATES <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">A. First PRO-AG or Equivalent FY <u>79</u></td> <td style="width: 33%;">B. Final Obligation Expected FY <u>84</u></td> <td style="width: 33%;">C. Final Input Delivery FY <u>84</u></td> </tr> </table>	A. First PRO-AG or Equivalent FY <u>79</u>	B. Final Obligation Expected FY <u>84</u>	C. Final Input Delivery FY <u>84</u>	6. ESTIMATED PROJECT FUNDING A. Total \$ <u>12.031</u> B. U.S. \$ <u>8.691</u>	7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>4/82</u> To (month/yr.) <u>9/83</u> Date of Evaluation Review _____
A. First PRO-AG or Equivalent FY <u>79</u>	B. Final Obligation Expected FY <u>84</u>	C. Final Input Delivery FY <u>84</u>			

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. New TransCentury Foundation (NTF) should discuss with MPW/RWD the institutional development of the RWD, and health/sanitation issues noted in the evaluation to ensure all proposed project components in the project extension are agreed upon by the YAR, NTF and USAID.	New Trans-Century Foundation and USAID Project Managers	Feb 1984
2. New TransCentury Foundation should finalize its project extension proposal in consultation with the Rural Water Department and USAID, bearing in mind findings of the evaluation and recommendations of NEAC.	New Trans-Century Foundation	May 1984
3. With the USAID and AID/W approval of the proposed 5-year project extension, USAID should prepare the necessary documents to ensure an orderly transition from the current activity to the extension.	USAID Project Manager and Program Office Back-stop Officer	Jun 1984

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Project Paper</td> <td><input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network</td> <td><input checked="" type="checkbox"/> Other (Specify) <u>Ltr of Agreement</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Financial Plan</td> <td><input type="checkbox"/> PIO/T</td> <td><input type="checkbox"/> Other (Specify) _____</td> </tr> <tr> <td><input type="checkbox"/> Logical Framework</td> <td><input type="checkbox"/> PIO/C</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Project Agreement</td> <td><input type="checkbox"/> PIO/P</td> <td></td> </tr> </table>	<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input checked="" type="checkbox"/> Other (Specify) <u>Ltr of Agreement</u>	<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify) _____	<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C		<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT A. <input type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input checked="" type="checkbox"/> Change Implementation Plan C. <input type="checkbox"/> Discontinue Project
<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input checked="" type="checkbox"/> Other (Specify) <u>Ltr of Agreement</u>											
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify) _____											
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C												
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P												

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles) Dr Lynn Carter, Ass't General Development Officer Mohammed Seddiq, Chief of Party, NTF Donald Muncy, Mission Evaluation Officer Abu al-Bari Salah, Director General, RWSD/Min Pub Works Abdulkarem al-Kustaban, Director General for Tech Serv., CPO	12. Mission/AID/W Office Director Approval Signature  Typed Name <u>Charles F. Weden, Jr.</u> Date <u>06/05/84</u>
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13. SUMMARY AND CURRENT STATUS OF THE PROJECT

Project 044 is based upon Project 022 which was authorized in 1972 to assist the new Rural Water Supply Division of the Ministry of Public Works. A Memorandum of Understanding (MOU) was signed on July 9, 1980 between the Central Planning Organization (CPO) and USAID and was then followed by a Cooperative Agreement between New TransCentury Foundation (NTF) and AID on July 28, 1980. The initial project description called for the construction/rehabilitation of 80* small rural water systems which would improve domestic water supplies in the rural areas of the country; improve the administrative capabilities of the RWSD; and, in selected villages, train villagers in the development, maintenance and administration of rural potable water systems. The Peace Corps (PC) was to provide several volunteers who would work in the field to assist villagers and, in the RWSD, to assist NTF to provide training for RWSD staff.

The initial stages of 044 implementation were shakey, due to misunderstandings concerning the RWSD concept of project implementation and were exacerbated by poor relations between MPW and USAID dealing in part with the use of PCVs in the project.

Another problem that existed was the concept of institution building and how this objective was to be met. Additionally, the question of Chief of Party (COP) became an issue when a qualified senior engineer was not available to serve as the project's COP.

The evaluation conducted in February/March of 1982 led to a number of conclusions and action items for all the RWSD and NTF. These actions included appointing a full-time qualified COP, obtaining project counterparts, reducing the number of rural water projects to a more realistic number of 55 and obtaining consensus between RWSD/NTF/USAID on the type and extent of institution-building activities that would be undertaken under the revised project.

All the action items in the PES were accomplished on or before the due dates assigned. Since then the RWSD and NTF have moved forward in project implementation vigorously and in a spirit of mutual cooperation. This has led to a rate of implementation

NOTE: *The MOU called for 140 Rural Water Systems.

that is slightly ahead of schedule. This is important, considering that the earthquake of 1982 consumed some of NTF's personnel/financial resources in the Dhamar area as NTF provided technical and other assistance to restore and rehabilitate water systems.

The Mission supports the evaluation team's view that NTF and RWSD are progressing well toward the EOPS. The USAID endorses in principle the yet-to-be finalized project extension.

14. EVALUATION METHODOLOGY

The July 1980 Cooperative Agreement, Annex 1, Section C, "Implementation" states that the implementation plan will serve as a basis for "...periodic and annual evaluations..." While no evaluation plan is included in the Cooperative Agreement, the current evaluation is the second extensive evaluation since all Conditions Precedent were met in 1981.

The purpose of the current evaluation as outlined in the Scope of Work, was to assess progress of the project since the last evaluation conducted in early 1982. Further, it was designed to assess the continuing validity of the overall project strategy and progress toward meeting EOPs with respect to completing reliable water systems in 55 rural Yemeni villages and the institutionalization of the YARG's Rural Water Supply Division's ability to (1) determine requirements, (2) evaluate alternatives, (3) make site designs, (4) construct water systems, (5) operate completed water systems, and (6) administer and maintain water supply systems. The team was also required to prepare "lessons learned" and include, if appropriate, a recommendation for conducting a follow-on activity after the current project ends in September 1984.

The current evaluation was conducted in October 1983 by three individuals: (1) Team Leader Ms. Emily Hughes-Leonard, a USDH employee with an economics and public health background; Dr. Thomas Dichter, anthropologist and former Peace Corps Director in Yemen; and (3) Mr. James Arbuthnot, a sanitary engineer with extensive overseas experience in rural water projects. USAID augmented the team with a PSC social scientist and a female translator/interviewer. The team leader, anthropologist and social scientist were moderately competent in Arabic.

The evaluation involved reviewing all the pertinent documents relating to the project and other water resources studies that had recently occurred in Yemen. The team then interviewed key individuals from MPW-RWSD, NTF, USAID, NWSA and others. The team visited 23 subprojects outside of Sanaa and in four areas of Yemen. These sites represented all phases of design and construction and included two sites of another USAID project--045 (Local Resources of Development) in order to compare construction/design technologies. Interviews were conducted at each site to determine, inter alia, how water was used prior to the subproject; how was then being used; for what purpose, e.g., personal hygiene, economic activity, etc.; change in life styles and other questions to determine usage before/after the project and positive spread effects.

The evaluation team presented an oral report to USAID, to RWSD, the Ministry of Public Works and the Central Planning Organization prior to completing the written report. Each team member prepared his individual report and then departed Yemen. In early January 1984 USAID received the final typed report from the team leader. It was then translated into Arabic for RWSD. Total evaluation cost was estimated to be \$42,600.00.

The evaluation team was to assess the viability of conducting a follow-on project and, if possible, to prepare a draft Scope of Work for a larger water sector review scheduled for mid-1984. It was also to assess and compare the rural water construction component of Project 045, mentioned above, to provide any useful and related information for the current evaluation and lessons learned for the larger water study. All elements of the Scope of Work for the team were addressed in the team's final evaluation report.

The tenor of this current evaluation is radically different from the first one conducted in early 1982. The first evaluation was charged with finding a way to get the project back on track, to assess what was wrong in the project design and revise whatever was necessary to save the project from termination. All personnel working with the project fully cooperated in order to move the project in a positive direction. After nearly 18 months since the first evaluation, the October 1983 evaluation found the project to be ahead of schedule, and recommended a follow-on project after the September 1984 PACD.

044 EXTERNAL FACTORS

USAID began working with the Rural Water Supply Division in 1972, shortly after its establishment. Project 022 helped RWSD set up functional departments. This project ended in 1978. Owing to USAID's continuing belief that work in the rural water sector was vital, Project 044 was to begin thereafter. Unfortunately, it took approximately thirty months to sign all legal documents. Work was hampered from the start by bad relations between USAID and RWSD/MPW. In addition, YARG had come to have negative feelings about the work of volunteers, and MPW was reluctant to sign the agreements necessary to start up a project which depended on volunteers. Delay was also caused by USAID's insistence that NTF not begin work until it signed a Letter of Agreement which would set its relations with YARG/MPW. This Letter went through eleven drafts until it was finally signed in early 1981. Other issues, sometimes external to Project 044, arose from time to time and obstructed project activities. Counterpart training began in late 1980, and the first group of five subprojects was assigned by RWSD only in the spring of 1981. Construction began that summer with the help of RWSD and NTF counterparts and five new PCVs. Some problems, although of a much lower order than hitherto, remained--in part because of 044's lack of a permanent COP. NTF also had difficulty getting adequate lists of subprojects in a timely manner from RWSD. This made forward planning difficult and meant that there were lags in work. An evaluation in February 1982 set the terms under which USAID would continue to fund 044; activities picked up speed in the several months after that.

The arrival of a new COP in August 1982 made a considerable difference in project progress. Relations with RWSD improved enormously and trust began to grow. RWSD began to submit longer lists of potential subprojects with more lead time. RWSD's attitude toward the work of volunteers and particularly toward the Peace Corps improved. RWSD assigned more Yemeni counterparts for construction supervisor training and named a Yemeni engineer to serve as counterpart to the COP. Most recently, the COP has been asked to establish an office within RWSD/MPW so that NTF can help advise RWSD on other donor activities.

One important factor that has affected and will continue to affect 044 efforts is RWSD's staffing. Salaries are the problem here. Bound by civil service regulations, RWSD cannot pay salaries competitive with the private sector or with semi-autonomous agencies such as the National Water and Sewerage Authority (NWSA). This makes it difficult for RWSD to hire adequate numbers of the most qualified Yemeni. Thus RWSD depends greatly on Third Country engineers as well as the technical assistance of foreign donors. The hope at the moment is to make RWSD a semi-autonomous authority, where higher salaries can be paid. Realization of this status could take a few years.

The problem of staffing is compounded by Yemen's education system. There are very few secondary school graduates, let alone engineers. Competition for the few which exist is keen. Even were RWSD able to pay competitive salaries, it will be some years before it could end its reliance on foreign technical assistance.

Another factor which impinges on project activities is the government's relative poverty, owing to YARG's lack of natural resources, an inadequate tax base, and a severe foreign exchange problem. It will become increasingly difficult for the government to fund rural development. Money for activities has come in part, and will have to continue to increasingly come, from the villagers themselves.

Funding for the water projects contributed by the villages was noted in the evaluation to be an average of 32 percent. Remittances from abroad, most likely, are the source of a large percentage of the local development association/villager contribution. While the oil surplus has caused a levelling of remittances, so far this has not affected local contributions. It is expected that villagers will continue to find resources to help fund these water systems by providing their own labor and local materials where needed, and to dig deeply into their pockets when actual cash is required.

16. PROJECT INPUTS

In the 28 July 1980 Cooperative Agreement, Attachment I, "Program Description" and in the 9 July 1980 "Memorandum of Understanding," Section C, "USG Undertakings and Contributions," USAID inputs are identified. Amendments have increased inputs.

The Memorandum of Understanding defines these inputs:

- Salary and allowances for four (4) resident technical personnel.
- Fees and allowances for consultants.
- Technical equipment.
- Supplies/commodities such as cement, pipe and vehicles.
- Total dollar input for the LOP not to exceed \$6,833,000 in addition to the \$144,000 provided earlier.
- Peace Corps would provide 15 mid-level technicians for the project including engineers, architects/draftsmen, construction supervisors and mechanics.
- Training: On-the-job and short courses for recommended persons, and for long-term and Third Country training financed outside the project.

The Cooperative Agreement alludes to various inputs but does not provide a consolidated list, and no project document has a logical framework which could be used to identify inputs.

The Memorandum of Understanding defines these YARG project inputs:

- The YARG will provide, or cause to be provided, all other resources, financial or in-kind, required to carry out the project beyond the inputs of NTF and Peace Corps.
- Personnel, administrative support, office space, supplies, warehousing, fuel, rent for housing Peace Corps technicians and other labor and commodities.

-- RWSD will provide a counterpart to the NTF team leader.

-- Village level contribution, estimated at \$4.3 million in local materials, labor, well costs and other commodities, as required.

The evaluation of the project in 1982 modified the inputs by NTF by adding an additional position and required RWSD to supply the necessary counterparts/staff required to successfully implement the project. The evaluation did not burden NTF or RWSD with additional resource requirements other than those stated above.

The most difficult input for NTF was the provision of a Chief of Party who would be acceptable to both RWSD and USAID. This person was not appointed until after February 1982 and finally assumed the position in August 1982. Since then, the relationship between RWSD and NTF staff has been one of mutual cooperation. Other NTF personnel remained in Yemen and have been functioning well.

The 1982 evaluation did add an executive officer position to NTF's staff, raising the number to 5 full-time expatriate employees.

The YARG contribution to the project has exceeded the 25 percent requirement levied by AID.

17. OUTPUTS

The project outputs have been modified from the Memorandum of Understanding and Cooperative Agreements. Specifically, the Memorandum required construction or rehabilitation of 140 rural water systems while the Cooperative Agreement specified 80 such rural water systems. The evaluation of 1982 reduced this number to 55 systems. This was done to facilitate the achievement of a realistic number of construction activities premised on the implementation problems of 1981/1982. The project outputs are:

-- Construction or rehabilitation of 55 rural water systems.

-- Increase the capacity of the RWSD to survey, design, construct, and manage rural water systems.

A. Construction of 55 rural water systems.

The current evaluation executive summary notes that 044 has constructed 29 small water projects of good to excellent quality through October 1, 1983 with 3 more being completed during early October, putting it on schedule for the planned completion of 55 non-earthquake related projects by September 1984.

B. Increased Capacity of the RWSD.

The RWSD has made significant progress toward institutionalizing the ability to survey, design, construct and manage rural water systems. It has provided a fulltime counterpart to work with the NTF COP. RWSD has provided 9 technicians to be trained though the requirement was for only 5 to be assigned on a rotating basis. RWSD has 3 Yemeni construction supervisors who are now nearly qualified to supervise construction.

19. PROJECT GOAL/SUBGOAL

The project goal, "to provide improved potable water supplies to rural villages in the Yemen Arab Republic and to help develop, both at the local and national levels, a continuing capability to provide this service," is being obtained.

20. BENEFICIARIES

This project has three levels of beneficiaries: (1) the people in the villages receiving water systems designed to benefit an ultimate population of around 100,000; (2) MPW/RWSD personnel and staff who will, or have, received training; and (3) the general population of rural Yemen who will benefit from RWSD's increasing ability to provide well-constructed rural water systems and other related services.

The villagers benefit in several ways such as: (1) increased available water supplies, (2) personal hygiene, and (3) time saved from carrying water from distant sources. The RWSD staff benefits both directly and indirectly. They benefit directly from training

they receive in Yemen or Third Countries, enabling them to better perform their jobs. The staff benefits indirectly through future increases in performance and salary increases attributed to training and performance.

The general rural Yemeni population benefits from the increased ability of the RWSD to provide a service at a higher level of expertise and quality performance. As only 12% - 14% of the rural villages, per the current evaluation, have water systems in place, there are tens of thousands of future rural beneficiaries.

21. UNPLANNED EFFECTS

One unanticipated finding was the relative slowness with which water consumption has increased. Many villages, even those with household or compound connections, still use little water. Conservation is nearly guaranteed given that water is often available from subproject taps only a few hours every day. Water must still be stored in household containers, and this tends to limit consumption. This continuing conservation of water can perhaps be attributed to two factors: (1) a continuing perception that water is a scarce resource, and (2) a desire to keep pump and motor operation costs low. Water consumption, even in the oldest subproject villages, has not increased to the per capita level calculated into the project design.

A possible project externality was defined during the 1982 evaluation. This was that the wastewater which sometimes accumulated around public taps or the pump house might be creating a health hazard. Owing to this concern, an engineer from USAID/Jordan was brought to Yemen in the summer of 1982 visit sites and to consult with 044 staff. He found examples of standing water but felt that the health risk was low. He made suggestions for overcoming the problem. Project 044 engineers have since made improvements in public taps to reduce the problem. In addition, 044 staff have experimented with the planting of fruit trees and small gardens as a means of absorbing pump cooling water. Although problems with standing water have decreased, the evaluation team's engineer visited one site where malarial mosquitoes were breeding in waste water.

There is a lack of new economic activity usually correlated with additional water resources. Usage has continued in the traditional manner with some increase in use for cooking and washing. Little has been undertaken to increase agriculture production.

22. LESSONS LEARNED

The current evaluation articulated three lessons learned based on the finding. They are:

- Having tangible and near-term outputs strengthens AID's and AID-financed contractors' credibility and provides the basis for institutional development.
- Positive personal and working relationships between contractor and Ministry personnel are essential for institutional development.
- Peace Corps Volunteers have contributed immensely to project activities in villages, where volunteers hold responsible positions doing meaningful work in the field.

USAID would like to add the following additional lessons learned:

- Direct project interventions, such as installing rural water systems does not necessarily re-direct social or economic activities of the beneficiaries. New uses for resources (time and water) must be addressed by providing information to the recipients which will allow them to make rational decisions and, where necessary, assist in making/formulating those decisions.
- Design of products for Yemen must be done with considerable flexibility, allowing for mid-stream corrections. The project, as revised in 1982, proved that ambitious components of a project can fail when the cultural nuances or the difficulties of working in a society that so recently began its development are not understood.
- Institutional development in an excessively underdeveloped country is a long-term process, particularly if the education/human resource base is limited. Such development should be considered as a minimum of a 15 - 20 year commitment by donors if success is to be achieved.
- Evaluations of projects dealing with cultural issues must be done over a lengthy period of time. Bringing in a small team for a relatively limited period of time only allows for a broad-brush analysis and not for learning about the underlying socio-cultural factors.

23. SPECIAL COMMENTS

The evaluation of Project 044 did not raise any significant policy or program management issues. It did recommend a five-year extension with institutional and health/sanitation components. How to expand these areas was touched upon in the evaluation but these were left to NTF, RWSD and USAID to fully define.

The evaluation recommended the continuation of small scale health/sanitation interventions. USAID agrees with this.

It should be noted here that NTF was heavily involved in the earthquake of 1982 by providing assistance restoring damaged/destroyed water systems. Though NTF's inputs were accomplished with existing resources, the regular project activities proceeded unabated. NTF was asked to continue its assistance and this was granted with an A.I.D. contribution of \$500,000. An additional sum of \$1.358 million is being added in April 1984 to provide some additional assistance in the earthquake area and to cover some costs that were incurred when NTF provided its initial assistance in the area. It is commendable NTF has been able to carry on its regular activities and earthquake rehabilitation activities at the same time.

Attachment: Evaluation Scope of Work

PROJECT EVALUATION

SCOPE OF WORK

PROJECT 279-044

I. INTRODUCTION AND GENERAL OBJECTIVES

The purpose of this external evaluation is to assess progress of USAID/Yemen's Project Number 279-044 (Small Rural Water Systems) since the last evaluation which was conducted in March 1982. Additionally, it is to assess the continuing validity of the overall project strategy and progress toward meeting EOPS with respect to completing reliable water systems in 55 rural Yemeni villages and the institutionalization of the YARG's Rural Water Department's (RWD) ability to (1) determine requirements, (2) evaluate alternatives, (3) make site designs, (4) construct water systems, (5) operate completed water systems, and (6) administer and maintain water supply systems. Finally, it is to compile a list of applicable "lessons learned" which can be considered and, where appropriate, include in the revision and continuation of Project 044.

Project 279-0045 (Local Resources for Development) has similar water projects in rural villages. The evaluation team should avail themselves of the 045 USAID Project Manager and contract personnel and make 045 site visits, as appropriate, to accomplish the above six general evaluation objectives. While this is not an evaluation of Project 045, the lessons learned, contrasts and comparisons with Project 044, will assist in making recommendations on future potable water system activities, and thus should be part of the evaluation team's report.

II. SPECIFIC EVALUATION TEAM ACTIVITIES

- A. The evaluation team will review all appropriate Project 044 documents and files including PPs, the Project Cooperative Agreement, PIO/T, PIO/C, PIO/P, PES, PILs, official correspondence files and any other document or record which provides insight into project implementation.

- B. The evaluation team will appraise the project contribution toward meeting overall rural water requirements within the YAR and make specific recommendations for revising and continuing Project 044, including consideration of an added component which would specifically focus on strengthening RWD's institutional capabilities. This will include specific comments on the feasibility as well as means to accomplish institutionalization.

- C. The team will appraise New TransCentury Foundation's and EWD's progress toward meeting project objectives (EOPS) as prescribed in the Cooperative Agreement and further refined in the evaluation report dated March 19, 1982; specifically with respect to:
 - 1. Organization and staffing of TC and RWD including --
 - a. Rate of presentation of new subproject possibilities (under review of village water distribution systems) and selection of them.
 - b. Planning and data gathering for each subproject.
 - c. Subproject survey, well testing, engineering design, standardization and cost estimating.
 - d. Consideration of alternatives feasibility and subproject design.
 - e. Construction, contracting and supervision..
 - f. Final subproject inspection acceptances and start-up, including initial operations.

- D. Review contractor's record in meeting the established rate of project completions and cost-effectiveness criteria by:
 - 1. Assessing the development of standard TWD/village/LDA agreements.

2. Assessing RWD institutional development in terms of (a) counterpart and technician on-the-job training, (b) development of RWD and private contractor capabilities to manage construction programs and construct rural water systems, (c) improvements in construction and commodity tendering techniques, cost estimating standards, methods, procedures in RWD, (d) use of other in-country training facilities and opportunities, and (e) potential for and recommendations regarding long-term (degree level) training in the U.S.
- E. Review monthly, quarterly and semiannual reports and reporting procedures by TransCentury.
 - F. Review changes in water use priorities, if any, and progress toward recognizing and developing innovative solutions to the various drainage, health and sanitation problems within the rural villages which may be aggravated by the availability of water and their inclusion in project implementation.
 - G. Review change, if any, in YARG attitude toward the project as well as the political implications of the project accomplishments, level of understanding, goals and progress.
 - H. Review Ministry of Health role in the project.
 - I. Review the effectiveness of the project survey data questionnaire in meeting project engineering requirements and reconsideration of an expanded questionnaire designed to begin development of a relatively modest data base designed to assess the impact of the completed water supply systems on socio-economic and health aspects of village life.
 - J. Review Peace Corps and third country involvement and effectiveness.

- K. Review and make a general appraisal of the overall long-range requirements for similar rural water programs throughout Yemen together with order-of-magnitude costs and institutional requirements for implementation.
- L. Analyze the appraisal of the feasibility of continuing construction of rural water storage and distribution systems beyond September 30, 1984, on a loan rather than a grant basis.

III. LEVEL OF EFFORT AND BUDGET COSTS

- A. USAID Plans the evaluation to be undertaken during October-November 1983 by an IQC or other contractor consisting of the following;
 - 1. One water engineer
 - 2. One rural sociologist
 - 3. One development economist

These external evaluators will be supplemented by inputs from New TransCentury foundation, Chemonics International Management and staff, Ministry of Public Works (RWSD) personnel, and USAID.

BUDGET

Item	Cost (Rounded)
Engineer, sociologist, and economist Four weeks each @ \$220/day for 6-day work week	\$15,900
Airfare: U.S.-Sanaa-U.S. Three @ \$2,500 each	7,500
International Per Diem Six days @ \$100/day	600
In-Country Travel Six trips by air at \$100/trip	600
In-Country Per Diem \$105/day for 28 days X 3	9,000
U.S. Travel--Three trips to AID/W (\$1,050) and Per Diem/2 days (\$75/day)	1,500
Clerical support and reproduction costs	700
IQC Overhead @ 75% of D.C.	6,750
Total (Rounded)	<u>\$42,600</u>

Project Title and Number(s) Small Rural Water Systems Project No. 279-0044 (Grant)			Mission/Activity Office USAID/Yemen
PROJECT DESCRIPTION: This project is implemented by New TransCentury Foundation (NTF) with the YARG'S Ministry of Public Works/Rural Water Supply Division (RWSD). NTF is a private and voluntary organization. The Cooperative Agreement between NTF and AID was signed in July 1980. The project's purpose is to increase the capacity of the RWSD to survey, design, construct and manage rural water systems by providing on-the-job training to Yemenis and by the construction/rehabilitation of 55 rural water systems. The project goal is to improve the			
AUTHORIZATION DATE AND U.S. LOP FUNDING AMOUNT 1984 \$8,835,000	PES NUMBER 84-081	PES DATE 06/05/84	PES TYPE <input type="checkbox"/> Regular <input checked="" type="checkbox"/> Other (Specify) <input type="checkbox"/> Special Interim <input type="checkbox"/> Terminal
ABSTRACT PREPARED BY, DATE Donald Muncy Mission Evaluation Officer 05/84	ABSTRACT CLEARED BY, DATE David Fredrick Program Officer USAID/Yemen 06/84		

quality of life of the rural poor through improved access to potable water and to improve the RWSD's capability to develop these systems.

Purpose of the Evaluation: The purpose of this evaluation, which was conducted in October 1983, was to assess project implementation since the February-March 1982 evaluation and to assess the feasibility, if appropriate, of conducting a follow-on activity after the current project ends in September 1984. This was also occasioned by the mid-1983 Near East Bureau's ABS review which indicated it would reconsider a previous decision to withdraw from the water sector in Yemen if the current evaluation showed significantly improved project implementation progress.

The evaluation conducted in early 1982 found that significant problems existed for the project implementors, NTF and the RWSD. Actionable items noted in the 10 April 1982 PES were to be completed within a relatively short time frame. They were accomplished on or before the due dates and Project 044 has since been implemented by NTF and RWSD. As of the beginning of the current evaluation (October 1983), for example, NTF has completed 29 small water projects; 28 trainee/technicians have received on-the-job training; YARG financial/in-kind contributions have averaged 32 percent; and all the above have been done while helping the YARG in the Dhamar earthquake areas with technical assistance to restore/rehabilitate damaged/destroyed water systems.

NTF is submitting an unsolicited proposal for a project extension, increasing the number of rural water systems and expanding the work of institutionalizing, in the RWSD, the capability to meet the needs of rural Yemen for potable water. The extension will also continue and expand upon the initial work accomplished in the earthquake area. The Mission expects this 5-year extension request will be submitted to A.I.D./Washington in June 1984 and authorized in the fourth quarter 1984.