PD-ABH-354

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APPENDIX D
A.I.D. EVALUATION SUMMARY - PART I

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit:
Mission or AID/W Office (ES# _____) ANE/NE/DR

B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan?
Yes [X] Slipped [ ] Ad Hoc [ ]
Evaluation Plan Submission Date: FY 94 Q 1

C. Evaluation Timing
Interim [X] Final [ ]
Ex Post [ ] Other [ ]

D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
398-0365	Project in Development and the Environment (PRIDE)	FY 90	9/96	21,700	13,354

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director

Action(s) Required	Name of Officer Responsible for Action	Date Action to be Completed
Increase emphasis on core-funded strategy and policy activities:	*Dwight Walker ANE/NE/DR*	*Jan 94*
Insure coordination with EP3 component:	*Dwight Walker*	*Dec 93*
Increase focus on regional initiatives:	*Dwight Walker*	*Jan 94*
Increase focus on cross-cutting themes:	*John Woods/ Chemonics*	*Dec 93*
Incorporate safety & health management programs into WEC program:	*Dwight Walker George Lombardo/ WEC*	*Dec 93*
Determine whether one Gray Amendment firm can adequately meet the Gray Amendment requirements	*Dwight Walker*	*Jan 94*
Review LOE and funding fo NGO activities:	*Dwight Walker John Woods/ Chemonics*	*Jan 94*
Review additional staff requirements:	*Dwight Walker Avrom Bendavid/ Chemonics*	*Jan 94*
Establish a more accurate monitoring system:	*Dwight Walker Avrom Bendavid*	*Dec 93*
(See attachment for more detail on actions)		

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: (Month) August (Day) (Year) 1993

G. Approvals of Evaluation Summary And Action Decisions:

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
Name (Typed)	Dwight Walker		Lynn Carter	Satish Shah
Signature	D Walker			
Date	Nov. 30, 1993		12/3/93	12/3/93

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

This mid-project evaluation assesses accomplishments and shortcomings of PRIDE to date and recommends to USAID and to the PRIDE participants which program activities and management areas need adjustment or improvement during the remainder of the project. The approach consisted of: a review of PRIDE project documentation; a written survey and follow-up interviews with Mission personnel familiar with PRIDE activities; and discussions with contractor, subcontractor, and cooperative agreement personnel regarding project management, organization, and operation. It is important to note that this rather low-cost evaluation is comprehensive, provides considerable detail on a broad range of issues, and is considered to be fully adequate in meeting Bureau needs. The cost saving is primarily the result of limited travel. Despite having conducted the work primarily in Washington. the evaluators, through the intense use of a variety of communication techniques, were able to a mass considerable information and data.

Basically the evaluators found the level-of-effort, the quality of the TA Contract and the services provided under a cooperative agreement to be good and serving the needs of the four target countries in the Near East region. Technical assistance was provided in a timely and effective manner and is supportive of the USAID Environmental Strategy Framework and the ANE Bureau's Environmental and Natural Resources Strategy. The evaluators found no major flaws or deficiencies in either project design, management, or implementation.

Based on the conclusions drawn, the evaluation team formulated a number of recommendations to improve PRIDE effectiveness and operational efficiency during the remainder of the project. These include, among other things: significantly increasing activity in the Strategic Planning and Policy Analysis components; improving coordination among the various project implementation units; increasing focus more on regional programs; and assessing the administrative burdens of Q-Contract buy-ins.

COSTS

I. Evaluation Costs

1. Evaluation Team Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. $)	Source of Funds
Paul Printiss	DATEX	HNE-0365	$38,273	PRIDE
Peter Borgo	DATEX	C-00-3038-00		

2. Mission/Office Professional Staff Person-Days (Estimate) 40

3. Borrower/Grantee Professional Staff Person-Days (Estimate) N/A

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office:	Date This Summary Prepared:	Title And Date Of Full Evaluation Report:
ANE/DR/DR	November, 1993	Project in Development and Environment (PRIDE - #398-0305) Mid-Project Eval 7/21/93

1. Purpose of the activity

PRIDE is a five-year, $21.7 million project established to promote sound environmental and natural resource policies and programs in support of long term sustainable economic growth in the NE region. The project consists of four closely linked project components: strategic planning, policy analysis, private sector development, and public awareness/environmental education. PRIDE services are provided through two contracts with Chemonics International (CHEM), a cooperative agreement with the World Environmental Center (WEC), and support agreements with the U.S. Environmental Protection Agency and the Department of Energy.

2. Purpose of the evaluation and methodology used

This report documents the results of a PRIDE mid-term evaluation. The purpose of the evaluation was to: assess accomplishments and any shortcomings of the PRIDE project to date and to recommend to USAID and to the PRIDE participants which program activities and management areas need adjustment or improvement during the remaining three and one-half years of the project. The approach consisted of: a review of PRIDE project documentation; a written survey and follow-up interviews with Mission personnel familiar with PRIDE activities; and discussions with contractor, subcontractor, and cooperative agreement personnel regarding project management, organization, and operation.

3. Findings and conclusions: The Evaluators concluded the following regarding project design, organization, and management:

- There are no major flaws in either project design or management and Chemonics has assembled an outstanding group of subcontractors.
- Although Chemonics has made sincere efforts to involve NGOs in its project activities, to date it has been unsuccessful.
- Chemonics has undergone major shifts in key staff personnel without major impact on morale or performance.
- It is increasingly apparent that the support staff is overextended.
- Chemonics is making sincere efforts to improve coordination with its subcontractors. Tension exists in interpretation of USAID regulations, and

consultant maximum daily rates.

- Contacts between Chemonics and the ANE Bureau are frequent and at times the need for rapid response leads to the relaxing of standard procedures. This should occur only under extreme circumstances; whenever possible, established lines of communication and instructions should be used.

- The level of effort under the Core Contract has been reasonably spread among the four target countries in the Near East region. PRIDE has provided technical assistance in a timely and effective manner in response to Mission Q-Contract "buy-ins" and ANE Bureau Core activities.

- The quality of the technical assistance provided under the Core Contract is very good. PRIDE technical assistance has been supportive of the USAID Environmental Strategy Framework and the ANE Bureau's Environmental and Natural Resources Strategy. Planned interventions and activities under PRIDE have generally been responsive to USAID.'s needs.

- In general, sensitivity to the country's institutional structure is evident in the technical assistance provided. However, the sustainability of recommended programs and/or policy initiatives is not always clearly addressed.

- The level of detail in the technical assistance reports provided under the Q-Contract is high, but usefulness of recommended action is undermined sometimes by a lack of a clear methodology for implementation.

- WEC Environmental Audits do not always provide enough time to collect sufficient data to assess general production, pollution, resource, and raw material use. The audit reports often do not provide adequate information to plant managers.

4. Principal recommendations: The Evaluation Team formulated the following recommendations on PRIDE's effectiveness and operational efficiency during the remainder of the project:

- PRIDE should significantly increase activity in the Strategic Planning and Policy Analysis components.

- PRIDE/Chemonics and the WEC must coordinate and formally interface with the new Environmental Pollution Prevention Project (EP3).

- PRIDE should consider the systematic transfer of activity specifically related to industrial pollution prevention to EP3 as that project is implemented.

- Under PRIDE, the ANE Bureau should consider the establishment of an overseas position of "Regional Coordinator for Environmental Projects."

- PRIDE should begin to focus more on regional programs.
- PRIDE should consider expanding technical assistance to include unsound energy production and use and unsustainable agricultural practices.
- PRIDE activities should carefully consider and address appropriate cross-cutting themes consistent with other USAID projects and programs.
- Environmental Audits under the WEC Cooperative Agreement should be the initial step in development of broader environmental safety and health management programs for industrial facilities.
- PRIDE should combine the Strategic Planning and Policy Analysis Components.
- The Bureau should determine whether it is satisfied that only one Gray Amendment adequately meets the Gray Amendment requirement.
- The Bureau should review with Chemonics its interest in NGO activities.
- Additional staff assistance may be required for project Administration.
- The Bureau and Chemonics need to review the present allocation of funds and LOE under subcontracts, Core and Q-Contracts.
- A more accurate monitoring system is needed, if the ANE Bureau is going to require strict accountability for mandated LOE (Core and Q-Contract).
- The Bureau should clarify for Chemonics if it is willing to entertain on a case-by-case, ad hoc, basis waivers for high-level technical consultants.
- PRIDE/Chemonics and the Bureau should carefully assess the administrative burdens of Q-Contract "buy-ins" on before accepting the activity.
- The Bureau should favorably consider the eliminating monthly reports.
- The Bureau should use discretion and avoid bypassing or circumventing the implementing authority that it has delegated to the PRIDE Prime Contractor.

5. Lessons learned: In several ways the evaluators confirmed, what the Bureau has noted for some time, that missions are increasing more dependent on the services provided from projects such as PRIDE. Most people, including the project manager, believe this is largely the result of personnel cutbacks at the field level.

RESPONSE TO RECOMMENDATIONS
OF THE PRIDE MID-TERM EVALUATION

1. PRIDE should significantly increase activity in the Strategic Planning and Policy Analysis components. If funding is insufficient, then activity in the Private Sector Initiatives component should be reduced.

ANE/NE/DR and the PRIDE/Chemonics team agree that increased emphasis on core-funded activities in the SP/PA component is required to meet PRIDE objectives (also see no. 9 below). This increased emphasis in the SP/PA activities is reflected in Annual Work Plan 3. A review to determine progress will be conducted Jan. 1994. Action: Dwight Walker, ANE/NE/DR.

2. PRIDE/Chemonics and the WEC must coordinate and formally interface with the new Environmental Pollution Prevention Project (EP3). Both should consider joint or very closely linked project initiatives with EP3.

Chemonics has been cooperating closely with EP3 staff since early July, and hosted a major coordination meeting with the staff of EP3, WEC, and the NE Bureau in mid-July. The Annual Work Plan 3 reflects plans for joint activities. Action: Jack Stafurik, Chemonics; George Lombardo, WEC. Coordination efforts will be reviewed in early Dec at a major pollution prevention meeting in Tunsia.

3. PRIDE should consider the systematic transfer of activities specifically related to industrial pollution prevention to EP3, as that project is implemented.

This transfer from Chemonics is largely complete, in terms of both products and activities, and is reflected in Annual Work Plan 3. WEC will continue with pollution prevention activities. Action: Dwight Walker, ANE/NE/DR; Jack Stafurik, Chemonics.

4. Under PRIDE, the NE Bureau should consider the establishment of an overseas position of "Regional Coordinator for Environmental Projects." The position should be staffed with a specialist in arid land water supply and quality.

At the present time we feel that it is neither financially feasible nor operationally viable. No

Action.

5. PRIDE should begin to focus more on regional initiatives.

An increased focus on regional initiatives is reflected in Annual Work Plan 3. The PRIDE design projected that many regional activities would occur during the later stages in the life of the project - building on experience gained in individual countries. The NGO support activity presently being designed is a good example of a multi-country activity. Action: Dwight Walker, ANE/NE/DR; John Woods, Chemonics. Progress will be reviewed in Jan. 94.

6. PRIDE should consider expanding technical assistance to address environmentally unsound energy production and use, and unsustainable agricultural practices.

PRIDE has provided assistance in areas related to sustainable agricultural practices, principally through its activities in the areas of water quality, conservation, and management (through assistance to USAID/Jordan under Delivery Order #3 and to USAID/Egypt under Delivery Order #2). PRIDE expects to continue its water quality work under upcoming buy-ins from USAID/Egypt and USAID/Jordan. In addition, PRIDE will provide assistance to the Energy Demand Management Project in Morocco under Delivery Order #8. PRIDE will continue to work in these areas as we are able to do so, in accordance with Mission demands. Action: Dwight Walker, ANE/NE/DR.

7. PRIDE activities should carefully consider and address appropriate cross-cutting themes consistent with other A.I.D. projects and programs.

Annual Work Plan 3 shows that we intend to hold conferences on cross-cutting themes such as women in development, strengthening NGOs in the environmental field, and increasing public participation in environmental programs. A recent example of progress in this area involved participation in the environmental assessment scoping session for Tunisia's Housing Project. Action: Dwight Walker, ANE/NE/DR; John Woods, Chemonics.

8. Industrial environmental audits under the WEC Cooperative Agreement should be the initial step in development of broader environmental safety and health management programs for industrial facilities.

NE/DR/ENR and PRIDE/Chemonics recognize that this is an issue and both are attempting to address it with WEC. We

intend to continue our efforts to work out an arrangement with WEC to incorporate these broader concerns into their work. Action: Dwight Walker, ANE/NE/DR; George Lombardo, WEC.

9. PRIDE should combine the Strategic Planning and Policy Analysis Components and recruit a task leader to be specifically responsible for those initiatives. The Chemonics Chief of Party should be a full-time job with no additional responsibility for component-specific activities.

As mentioned in No. 1 above, we have combined these two components in next years Work Plan into a single SP/PA component. An additional person to handle this task would be ideal but the financial implications of creating an additional full-time position appear to be beyond what core funding can support. Short-term work may be a solution and will be considered. Action: Dwight Walker, ANE/NE/DR; Avrom Bendavid-Val, Chemonics.

10. The AID Near East Bureau should determine whether one Gray Amendment firm can adequately meet the Gray Amendment requirement, and convey that in writing to Chemonics.

CSG (a Gray Amendment firm) has performed nearly all of the level of effort authorized under its core subcontract. There is substantial additional opportunity for further effort using CSG under core and Q subcontracts, as indicated in Annual Work Plan 3. Additional information is required on the contract implications related to merging the existing Gray Amendment funds into a single subcontractor. A decision will be made by Jan. 1, 1994. Action: Dwight Walker, ANE/NE/DR.

11. The NE Bureau should review with PRIDE/Chemonics its interest in maintaining LOE and funding for NGO activities, making the appropriate decision and providing PRIDE/Chemonics with attendant instructions.

Major NGO activities are planned for the third year of the project, as specified in the contract. The Jordan and Egypt Missions have requested PRIDE assistance in strengthening NGOs in their countries to become more effectively involved in environmental programs. This will include training using the newly PRIDE developed environmental awareness handbook. A major regional NGO conference is planned for the summer/fall of 1994 which will bring together many of these activities and give NGOs more visibility. The NGO activities are also being linked to gender programs. Action: Dwight Walker, ANE/NE/DR; John Woods, Chemonics.

12. Additional staff assistance may be required for project administration.

The current Chemonics administration (support) staff resources are over-committed due to the consistently high level of project activities, including at present many core activities and mission demands for buy-ins, some of which contain multiple tasks. In addition, the support staff must fulfill other contractual and AID mandated administrative requirements relating to management of the seven subcontractors, budget and LOE monitoring, recruiting and backstopping field teams, and production of project progress reports. Wherever possible, Chemonics will build the costs of such support into delivery order budgets. The possibility of using more than very limited Core funding for additional admin. staff is being considered. Action: Dwight Walker, ANE/NE/DR; Avrom Bendavid-Val, Chemonics) Jan 94

13. The Near East Bureau and Chemonics need to review the present allocation of funds and LOE under subcontracts, core, and Q contracts.

Some reallocation is being seriously considered (see recommendation # 10). Definitive action is being taken to charge costs that would normally be core costs to all new buy-ins from Egypt, and Central and Eastern Europe. Core administrative costs associated with buy-ins from these two countries will be incorporated into the buy-in. Action: Avrom Bendavid-Val and Chemonics financial staff. This action is largely complete and and the issue should be fully resolved by Dec.

14. A more accurate monitoring system for level of effort, i.e., at the PRIDE/Chemonics project component level, is needed, if the NE Bureau is going to require strict accountability for mandated LOE (core and Q contract).

A recent review by CSG of the Project MIS system found that the existing system is adequate for monitoring core funding and should not be changed at this stage of the project cycle. Despite this finding, a project management tool is being devised which, when complete, will give an estimated total expenditure for each work order and delivery order and for each project component. The target date for have this to be in place is Dec. Action: Dwight Walker, ANE/NE/DR; Avrom Bendavid-Val, Chemonics.

15. AID should clarify for Chemonics if it is willing to entertain, on a case-by-case ad hoc basis, waivers for high-level technical consultants, noting that otherwise it may on occasion forfeit the potential input of key expertise and advice. Whichever decision AID makes, Chemonics should convey this policy decision directly to

the subcontractors.

Chemonics will continue to comply with the terms of the PRIDE contract, which states that no compensation shall exceed the maximum daily salary rate of FS-1 without specific approval of the Contracting Officer. The NE Bureau does not intend to seek waivers. Our experience indicates that on those few occasions when individuals have been unwilling to accept the A.I.D. rate we have been able to find adequate substitutes. No action.

16. PRIDE/Chemonics and the NE Bureau should carefully assess the administrative burdens of Q contract "buy-ins" on a case-by-case basis before accepting the activity.

A policy is now im place wher-in new buy-ins are critically monitored in terms of administrative cost. The buy-ins from Egypt and Central and Eastern Europe will cover all administrative costs. A major buy-in from Egypt will be treated in the same manner. On-going action: Dwight Walker, ANE/NE/DR; Avrom Bendavid-Val, Chemonics.

17. The NE Bureau should favorably consider the elimination of the requirement for monthly reports.

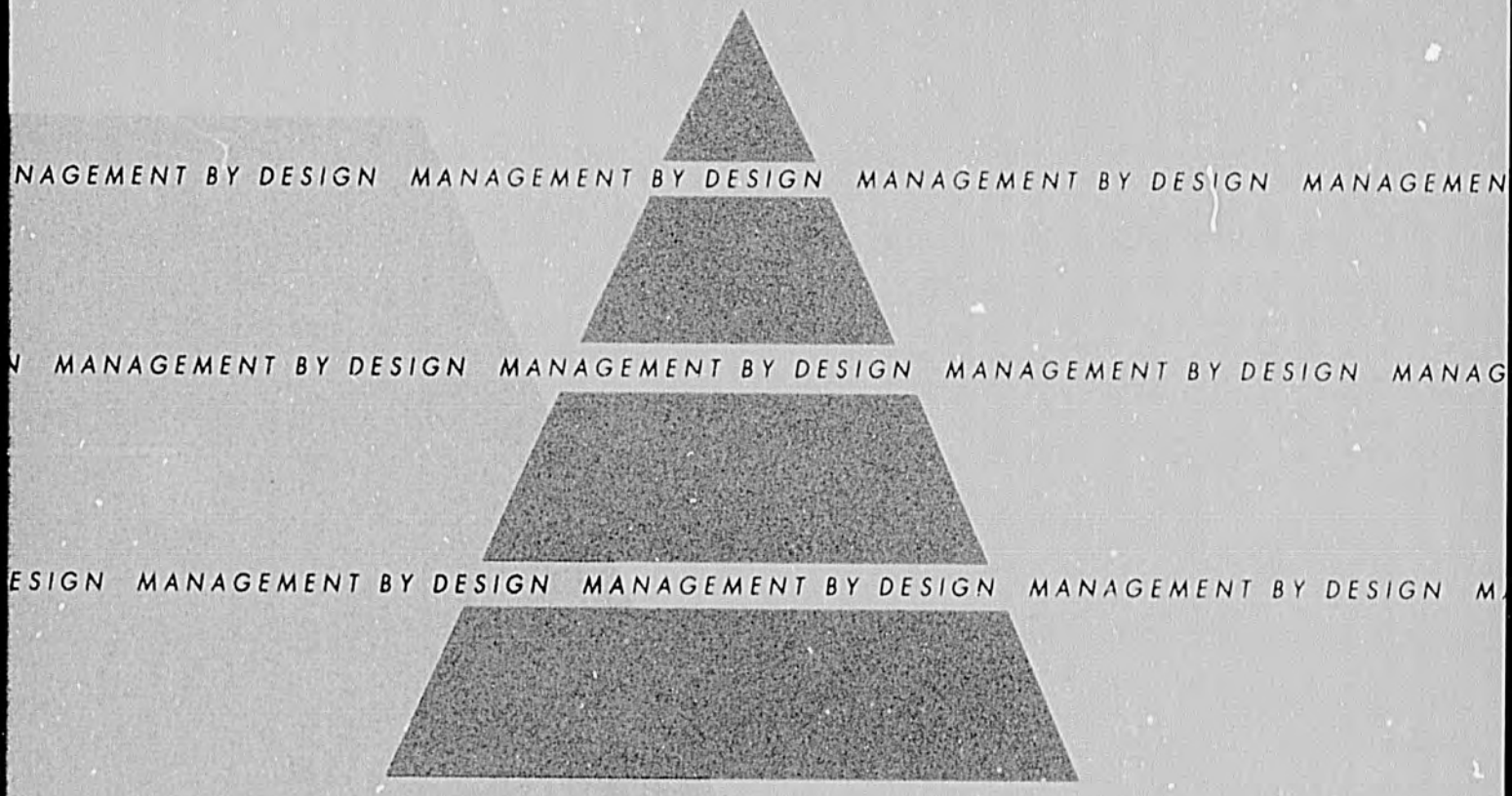
We will monitor this issue for six months and then decide whether or not to amend the contract. Since a well established system is being routinely used by Chemonics for all reporting, including the monthly reports, the proposed change may not be warranted and may actually be disruptive. Action: Dwight Walker, ANE/NE/DR; Avrom Bendavid-Val, Chemonics.

18. The Near East Bureau should use discretion and avoid bypassing or circumventing the implementing authority that it has delegated to the PRIDE prime contractor for expenditure of LOE and the implementation of WOs and DOs.

NE/DR personnel have been advised to coordinate closely with the PRIDE project manager and the Chemonics COP on all matters related to the sub-contractors. The project manager feels that having called this to everyone's attention should be sufficient to avoid future difficulties.

Final Report on the

PROJECT IN DEVELOPMENT AND THE ENVIRONMENT
(PRIDE - #398-0365)
MID-TERM EVALUATION



Submitted to
Near East Regional Bureau
U.S. Agency for International Development
Washington, D.C.

July 24, 1995

DATEX INC

PROJECT IN DEVELOPMENT AND THE ENVIRONMENT

(PRIDE - #398-0365)

MID-TERM EVALUATION

FINAL REPORT

July 31, 1993

Prepared by:

Datex, Inc.
2101 Wilson Blvd., Suite 100
Arlington, Virginia 22201

Prepared For:

Near East Regional Bureau
U.S. Agency for International Development
Washington, D.C.

The views and opinions expressed herein are those of the evaluation team, and are not necessarily those held by Datex, Inc., nor USAID.

TABLE OF CONTENTS

ANNEXES

EXECUTIVE SUMMARY

Issues of environmental quality and natural resource management have emerged as central economic and political concerns for four Near East (NE) countries (Morocco, Tunisia, Egypt, and Jordan). The Project In Development and the Environment (PRIDE) is a five-year, $19 million project established to promote sound environmental and natural resource policies and programs in support of long term sustainable economic growth in the NE region. The project consists of four closely linked project components: strategic planning, policy analysis, private sector development, and public awareness/environmental education. PRIDE services are provided through two contracts with Chemonics International (CHEM), a cooperative agreement with the World Environmental Center (WEC), and support agreements with the U.S. Environmental Protection Agency and the Department of Energy.

This report documents the results of a PRIDE mid-term evaluation. The purpose of the evaluation was to: assess accomplishments and any shortcomings of the PRIDE project to date and to recommend to A.I.D. and to the PRIDE participants which program activities and management areas need adjustment or improvement during the remaining three and one-half years of the project. The approach consisted of: a review of PRIDE project documentation; a written survey and follow-up interviews with Mission personnel familiar with PRIDE activities; and discussions with contractor, subcontractor, and cooperative agreement personnel regarding project management, organization, and operation.

Based on the information provided, the Evaluators made the following conclusions and observations regarding technical performance:

- The level of effort under the Core Contract has been reasonably spread among the four target countries in the Near East region. [Page V-1]

- PRIDE has provided technical assistance in a timely and effective manner in response to Mission Q-Contract "buy-ins" and NE Bureau Core activities. In most cases technical assistance has been country-specific. [Page V-1}

- The quality of the technical assistance (as judged by the content and quality of the final reports) provided under the Core Contract is very good. PRIDE technical assistance has been supportive of the A.I.D. Environmental Strategy Framework and the NE Bureau's Environmental and Natural Resources Strategy (which is not an "official strategy" per se). [Page V-1]

- Planned interventions and activities under PRIDE have generally been consistent with, and responsive to, A.I.D. policies, procedures, mandates, and Congressional directives. [Page V-2]

- In general, sensitivity to the country's institutional structure is evident in the technical assistance provided. However, the sustainability of recommended programs and/or policy initiatives is not always clearly addressed. [Page V-2]

- Approximately 48 percent of total technical assistance under the Core Contract has been provided under the Private Sector Initiatives component. [Page V-2]

- The quality of the technical assistance (as judged by the content and quality of the final reports) provided under the Q-Contract (Buy-ins) is very good. [Page V-2]

- The level of detail in the technical assistance reports provided under the Q-Contract is high, but usefulness of recommended action is undermined sometimes by a lack of a clear methodology for implementation. [Page V-2]

- USAID NE Missions were highly appreciative of PRIDE technical assistance and believed that the timeliness, usefulness, and overall impact for their environmental programs were very good to excellent. [Page V-3]

- Almost 83 percent of the Industrial Environmental Audits completed by the World Environment Center (WEC) were in Jordan and Tunisia. [Page V-3]

- The average duration of a WEC Environmental Audit is less than 4 days in-country. In many cases, this was not enough time to collect sufficient data to assess general production, pollution, resource, and raw material use. Often, the audit reports do not adequately inform plant managers of: (1) what can be accomplished in pollution prevention, (2) the cost/benefit of various levels of intervention (payback and financial analysis), and (3) how to implement recommendations. [Page V-3]

- WEC specialists have excellent technical credentials for conduct of Environmental Audits. In the great majority of cases, indications are that good information is provided, but the sustainability of long-term benefits is questionable. [Page V-3]

The Evaluators also made the following conclusions with regard to project organization, management, and operation:

- There are no major flaws or deficiencies in either project design, management, or implementation. [Page V-5]

- Chemonics has assembled an outstanding group of subcontractors with a broad range of expertise to respond to NE Bureau needs. [Page V-6]

- To date, the only Gray Amendment subcontractor used is the Capital Systems Group (CSG), in spite of efforts to actively involve other Gray Amendment organizations. [Page V-6]

- Although Chemonics has made sincere efforts to involve NGOs in its project activities, to date it has been unsuccessful. [Page V-6]

- PRIDE/Chemonics has undergone major shifts in key staff personnel without major impact on morale or performance. [Page V-6]

- It is increasingly apparent that both core and support staff are overextended attempting to meet the requirements of the core statement of work (SOW), including Work Orders (WOs), as well as to adequately manage and administer the increasing number of Delivery Orders (DOs). [Page V-6]

- PRIDE/Chemonics staff devotes considerable effort to the recruitment and fielding of technical teams. [Page V-7]

- Chemonics is making sincere efforts to improve coordination its subcontractors, particularly in response to the expressed desire of the subcontractors to be involved early on in identifying expertise required to implement WOs and DOs. [Page V-7]

- Early in the PRIDE implementation, a "buy-in" was received from the Central and Eastern Europe (CEE) Bureau; another request for a "buy-in" has recently been made. [Page V-7]

- The distribution of funding and level of effort (LOE) between PRIDE/Chemonics and the subcontractors (and between the subcontractors themselves) reflects decisions consciously made when the Core contract and subcontractors were negotiated. The allocations were based on assumptions of the types of activities in which each subcontractor and the prime contractor might be involved. [Page V-8]

- There have been two major areas of tension between Chemonics and its subcontractors; (1) interpretation of A.I.D. regulations, and (2) consultant maximum daily rates. [Page V-8]

- Contacts between PRIDE/Chemonics and the NE Bureau are frequent and at times the need for rapid response leads to the relaxing of standard procedures. This should occur only under extreme circumstances; whenever possible, established lines of communication and instructions should be used. [Page V-8]

- Monthly reports appear to be limited in use and not necessary for efficient project management and information dissemination. [Page V-9]

Based on the conclusions drawn, the Evaluation Team formulated a number of recommendations to improve PRIDE effectiveness and operational efficiency during the remainder of the project. These include:

- PRIDE should significantly increase activity in the Strategic Planning and Policy Analysis components. If funding is insufficient, then activity in the Private Sector Initiatives component should be reduced. [Page VI-2]

- PRIDE/Chemonics and the WEC must coordinate and formally interface with the new Environmental Pollution Prevention Project (EP3). Both should consider joint or very closely linked project initiatives with EP3. [Page VI-3]

- PRIDE should consider the systematic transfer of activity specifically related to industrial pollution prevention to EP3 as that project is implemented. [Page VI-3]

- Under PRIDE, the NE Bureau should consider the establishment of an overseas position of "Regional Coordinator for Environmental Projects." The position should be staffed with a specialist in arid land water supply and quality. [Page VI-4]

- PRIDE should begin to focus more on regional initiatives. [Page VI-5]

- PRIDE should consider expanding technical assistance to address environmentally unsound energy production and use and unsustainable agricultural practices. [Page VI-6]

- PRIDE activities should carefully consider and address appropriate cross-cutting themes consistent with other A.I.D. projects and programs. [Page VI-6]

- Industrial environmental audits under the WEC Cooperative Agreement should be the initial step in development of broader environmental safety and health management programs for industrial facilities. [Page VI-6]

- PRIDE should combine the Strategic Planning and Policy Analysis Components and recruit a task leader to be specifically responsible for those initiatives. The PRIDE Chief-of-Party should be a full-time job with no additional responsibility for component-specific activities. [Page VI-7]

- The AID Near East Bureau should determine whether one Gray Amendment firm can adequately meet the Gray Amendment requirement, and convey that in writing to Chemonics. [Page VI-7]

- The NE Bureau should review with PRIDE/Chemonics its interest in maintaining LOE and funding for NGO activities, making the appropriate decision and providing PRIDE/Chemonics with attendant instructions. [Page VI-8]

- Additional staff assistance may be required for project Administration. [Page VI-8]

- The Near East Bureau and Chemonics need to review the present allocation of funds and LOE under subcontracts, Core and Q-Contracts. [Page VI-8]

- A more accurate monitoring system for level of effort, i.e., at the PRIDE/Chemonics project component level, is needed, if the NE Bureau is going to require strict accountability for mandated LOE (Core and Q-Contract). [Page VI-8]

- A.I.D. should clarify for Chemonics if it is willing to entertain on a case-by-case, ad hoc, basis waivers for high-level technical consultants, noting that otherwise it may, on occasion, forfeit the potential input of key expertise and advice. Whichever decision A.I.D. makes, Chemonics should convey this policy decision directly to the subcontractors. [Page VI-8]

- PRIDE/Chemonics and the NE Bureau should carefully assess the administrative burdens of Q-Contract "buy-ins" on a case-by-case basis before accepting the activity. [Page VI-8]

- The NE Bureau should favorably consider the elimination of the requirement for monthly reports. [Page VI-9]

- The Near East Bureau should use discretion and avoid bypassing or circumventing the implementing authority that it has delegated to the PRIDE Prime Contractor for expenditure of LOE and the implementation of WOs and DOs. [Page VI-9]

SECTION I

INTRODUCTION AND EVALUATION APPROACH

A. Goal and Purpose of PRIDE

Issues of environmental quality and natural resource management have emerged as central economic and political concerns for the Near East (NE) countries (Morocco, Tunisia, Egypt, and Jordan). The NE region has an extraordinarily varied set of climates, ecological zones, economies, and political conditions. Nevertheless, these countries face common difficulties from environmental and natural resource depletion and degradation that adversely affect their ability to sustain economic growth. Environmental programs and policies are deficient in: strategic planning; systematic environmental monitoring; establishment of environmental priorities and legislative and regulatory standards; policy analysis; and regulatory enforcement related to inadequate delegation of authority to environmental agencies. The **PR**oject **I**n **D**evelopment and the **E**nvironment (PRIDE) is a five year, $19 million project that will provide the NE Bureau and NE Missions with technical, analytical, and information support for strategy objectives of common concern to the countries of the NE region: improved industrial efficiency coupled with pollution reduction, improved water management, and the introduction of private sector-oriented approaches to improving environmental management.[1]

The goal of PRIDE is to promote sound environmental and natural resource policies and programs in support of long term sustainable economic growth in the NE region. The purpose of PRIDE is to assist the U.S. Agency for International Development (USAID) Missions and both public and private sector host country institutions to:

- Identify and address critical environment and natural resources (ENR) management problems that threaten economic growth, public health, and ecological sustainability;
- Mobilize the private sector and non-government organizations (NGOs) to provide cost-effective sustainable solutions to these problems; and
- Promote information exchange in the NE region on shared ENR problems and workable approaches to address them.

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[1] Project in Development and the Environment (PRIDE) Project Paper, Agency for International Development, ENE Regional Bureau (ENE/TR/AE), Project No. 398-0365, February 1991.

B. PRIDE Implementation

The PRIDE contract with Chemonics International (the Core and Q-Contracts) consists of a project management task and four closely linked project components:

Strategic Planning - to help Missions and host countries identify the highest priority environmental management objectives so that limited resources can be applied in the best manner to promote long-term sustainable economic growth.

Policy Analysis - to test, adapt, and demonstrate emerging and innovative methods for ENR policy analysis through (1) support for economic analyses of macro, sector, or sub-sector level policies and economic development, and (2) transfer of the analytical framework of ENR economics to quantify costs associated with efficient use and ENR degradation.

Private Sector Development - to assist selected host country industries and private sector institutions in (1) identifying and implementing environmentally beneficial actions and cost-effective solutions to ENR management problems, and (2) developing an NE strategy for overcoming a range of barriers to private sector investments in pollution prevention, pollution control, and waste reduction.

Public Awareness/Environmental Education - to promote public awareness and accountability of both government and private sector decision makers through ENR activities coupled with selective training programs, i.e., the identification of environmental education initiatives, the development of regional (and sponsorship of country-level) action plans for promoting ENR education, and the sponsorship of U.S. international or local NGOs for in-country pilot educational activities by the award of small grants.

PRIDE services three distinct sets of clients (the bureau, the missions, and the region) using three types of resources:

- A Core contract and a supporting requirements contract (Q-contract) for Mission buy-ins.
- A Cooperative Agreement with the World Environment Center (WEC) that includes sub-grants to host country and U.S. trade associations and professional organizations.
- RSSAs with the U.S. Environmental Protection Agency and the Department of Energy (not exercised) to address water pollution and environmental effects and pollution from energy development and use.

C. Expected Accomplishments of PRIDE

The PRIDE Project Paper identified critical areas of need in existing NE Bureau programs that adversely affect the development of sound environmental and natural resource (ENR) policies and programs. PRIDE is intended to provide technical assistance and information to give the Bureau and participating Missions the resources and additional capability to implement ENR strategies and to address ENR constraints. According to the Project Paper, the major accomplishments of PRIDE will be:

- The adoption of ENR strategic planning concepts and methodologies by NE Missions and countries.
- Greater recognition and understanding of the costs of critical environmental trends in NE countries in terms of economic losses, environmental health, distributional effects, ecological sustainability, and biological diversity.
- Improved Mission ability to support the formulation of policies in NE countries that improve environmental quality and slow resource degradation and depletion.
- Demonstration of the financial and environmental benefits of NE private and public sector adoption of voluntary actions and investment in long-term solutions to industrial pollution.
- Improved level of environmental awareness in the media and among the public, and promotion of NGOs and private sector dialogue with government on ENR trends and policies.

The magnitude of specific PRIDE outputs for each component (strategic planning, policy analysis, private sector development, and environmental education) is given in the Project Paper Logframe (included as Annex A). The Logframe identifies the "End of Project Status" as follows:

- Specific policies are identified that can significantly reduce critical environmental problems.
- At least 4 NE Missions and countries adopt ENR strategic planning concepts and methodologies.
- At least 4 NE Missions and countries demonstrate greater recognition and understanding of the costs of critical environmental trends.

- At least 4 NE countries formulate policies that improve environmental quality and slow resource degradation.

- At least 8 industrial factories adopt voluntary actions and invest in industrial pollution abatement.

- Improved participation and public awareness and NGO voice on ENR trends, policies, issues in several countries.

D. Evaluation Approach

The original Project paper for the Project in Development and the Environment (PRIDE) described the initiative as a five-year project to be evaluated twice - at the mid-term (May 1994) and prior to project completion (October 1996). However, PRIDE is maturing at an accelerated rate - Egypt, Jordan, Morocco, and Tunisia have implemented Q-contract "buy-ins." Work Orders have been initiated for about 30 separate tasks that have resulted in documented technical assistance initiatives. The large number of initiatives, together with the anticipated expansion in environmental concerns in the NE Region that will receive more attention and priority at the Mission and Bureau level, justify an early evaluation of PRIDE. Therefore, the mid-term evaluation was moved up to June/July 1993.

The PRIDE Evaluation Statement of Work is included as Annex B. The objectives of the evaluation are to assess the progress accomplishments and any shortcomings of the PRIDE Project to date, and to recommend to A.I.D. and the PRIDE participants which areas of program focus activities and management need adjustment or improvement during the remaining three and one-half years of the contract.

Datex, Inc. was selected to conduct the PRIDE mid-term evaluation. They were given the responsibility to assess both progress and shortcomings of PRIDE and to recommend which components of project focus, both in technical assistance and/or management, need adjustment or improvement. The PRIDE evaluation statement of work (SOW) specifies that the evaluation shall "measure the performance of the project against the original SOW, keeping in mind cross-cutting evaluation themes of concerns to the Near East Bureau." The implementation of the PRIDE evaluation consisted of four activities.

1. Review of Documentation

From the PRIDE Status Sheets, the Evaluation Team developed a list of PRIDE technical services and documentation and requested copies of all documents from the PRIDE Core Contract Project Manager. Annex C lists the deliverables produced to date and the status of each document. Based on discussions with the Core contractor, 10 country-specific

documents were selected for technical review. Other items included on the original list either had been documented only in brief trip reports, were incorporated into subsequent documents, or represented technical work still in-process.

The documents reviewed represented technical work performed under both the Core and Buy-In contracts and represented contractor performance in all four PRIDE components. Each document was reviewed for quality and content. The review took into account the level of effort for each product as indicated on the PRIDE Status Sheets; however, the Project Manager stated that the level of effort recorded on the Status Sheets may not reflect the full amount of resources assigned to completion of the task and production of the document. Four of the PRIDE documents were also selected for a more detailed evaluation and analysis. Table I-1 lists the contractor-produced documents that were reviewed and notes (*) those that were selected for detailed examination. Selections were made to maximize breadth and diversity in terms of:

- PRIDE components;
- Core and Buy-In Contract activity with different host countries;
- The total level of effort applied;
- The level of participation by the contract and subcontractors;
- Use of in-country support; and
- Collaboration with outside organizations.

A sampling of industrial environmental audit reports completed by WEC consultants was also collected from the NE Bureau and reviewed for quality and content. A detailed review of the four WEC audit reports listed below was performed in conjunction with the PRIDE evaluation:

- Environmental Assessments of Tunisia Seafood Processing Plants
- Environmental Assessment - Societe de Fabrication de Produits Chimiques (ALKI), Tunisia
- Trip Report - The Jordan Tanning Company, Zarqa, Jordan
- Pollution Control Review of United Industries Corporation Lead Acid Batteries Factory, Amman, Jordan

2. Development of Mission Questionnaire

A questionnaire to assess the impact of PRIDE on various Mission activities and programs and to solicit recommendations for project improvements/modifications was developed and submitted to the NE Bureau for approval. The questionnaire (ANNEX D) was sent to four NE Missions, i.e., Jordan, Egypt, Tunisia, and Morocco for completion.

TABLE 1-1

PRIDE CORE AND Q-CONTRACT REPORTS REVIEWED

Core and Q-Contract Reports	Lead Firms	LOE (Days)	PRIDE Component (Percent)			
			SP	PA	PS	EE
Profile of the Environmental Business Sector in Egypt (October 1992)	HBI	62	0	0	100	0
USAID/Egypt Environmental and Natural Resource Program: A Recommended Strategy (March 1992)	IEc	28	0	100	0	0
* Egypt Water Quality Impact Assessment: Phase I (July 1992) **(Buy-In)**	RMI SAIC HBI	104 52 17	50	50	0	0
Egypt Water Management Action Plan (Phase II) (June 1993) - **(Buy-In)**	RMI SAIC	(incl. above)	50	50	0	0
An Analysis of Jordanian Environmental Laws and Institutions (April 1992)	SAIC	33	25	75	0	0
* Strengthening Environmental Information, Education and Communications in Jordan (April 1993)	CHEM	43	0	0	0	100
Jordanian Water Management and Conservation Plan (Phase I) (August 1992) **(Buy-In)**	CHEM SAIC RMI	353 21 84	100	0	0	0
Assessment of Small Wastewater Treatment Systems in Tunisia (April 1992)	CHEM	61	50	50	0	0
* Private Sector Development Environmental Strategy: USAID Tunisia (April 1993) **(Buy-In)**	CHEM SAIC HBI	24 16 16	100	0	0	0
* Mobilizing Morocco's Private Sector for Environmental Management (January 1993)	HBI CSG	100 40	0	0	100	0

3. Conduct of Mission Interviews

Personnel at each of the four Missions who were involved in PRIDE technical assistance provided through Buy-Ins were contacted by telephone to discuss the questionnaire and to obtain any other information regarding PRIDE technical and/or managerial interaction. Mission interviewees are included in a list of contacts (see ANNEX E).

4. Conduct of Interviews With Key Contractor Representatives

Key personnel in the NE Bureau, the Core Contractor, subcontractors in the Washington, D.C. area (in person), and subcontractors in California, Massachusetts, and Pennsylvania (by telephone) were interviewed to obtain their views on the conduct of the PRIDE, both in the delivery of technical assistance and in functional and organizational management. The Evaluation Team also visited the New York City office of WEC to interview the Senior Vice President for Technical Programs (who is also serving as the Director of NE Programs) and the Project Manager for PRIDE-related activities of the WEC. All personnel contacted are included in the list of organizations and individuals interviewed (see Appendix D).

SECTION II

BACKGROUND

This section summarizes environmental strategy and framework of A.I.D. and the strategy developed by the NE Bureau for natural resources and the environment that are responsive to the USAID guidelines. This section also addresses the specific requirements listed in the Core and Q-Contract SOWs and the World Environment Center (WEC) Cooperative Agreement to provide focus for the PRIDE evaluation and summarizes the technical assistance provided to date using PRIDE contracts and the cooperative agreement.

A. A.I.D. Environmental Strategy Framework

A.I.D. developed an environmental strategy and framework that placed significant threats to the environment into five categories:[1]

(1) Loss of tropical forests and other habitats critical for biological diversity;
(2) Unsustainable agricultural practices;
(3) Environmentally unsound energy production and use;
(4) Urban and industrial pollution; and
(5) Degradation and depletion of water and coastal resources.

Under the developed framework, A.I.D. will support activities that:

- Attack root causes of environmental degradation;
- Support local empowerment and public participation;
- Improve data on the natural resource base; and
- Promote cooperation with other environmental and developmental organizations.

The goal of the A.I.D. environmental strategy is to promote sustainable development through two parallel approaches: 1) ensuring that all A.I.D.-funded activities are environmentally sound, and 2) supporting activities designed to enhance the environment and promote the wise use of natural resources. Regional strategies are to focus on: strengthening human/institutional capacity and building public awareness; reforming unsustainable economic and environmental policies and procedures; and encouraging private sector participation in promoting environmentally sound development activities. Because

[1] Environmental Strategy Framework, U.S. Agency for International Development, Washington, D.C., Approved by the A.I.D. Administrator on December 31, 1991.

the constraints in any given country are usually interrelated, A.I.D. encourages interventions with an integrated approach that emphasizes public participation and local empowerment.

A.I.D. encourages bureaus to concentrate resources on no more than three priority areas. In addition, Bureaus should:

- Focus on environmental problems which are significant constraints to development at the country level;
- Select environmental constraints critical to sustainable development which directly impact economic development and affect the quality of human life;
- Emphasize the most urgent environmental problems and constraints to development where failure will result in irreversible damage; and
- Concentrate resources on problems that host countries have identified as priorities.

A.I.D. has provided guidelines to help regional bureaus identify appropriate region-specific interventions which are consistent with A.I.D. goals and objectives. These guidelines include:

- Ensure that A.I.D. environmental procedures are implemented and enforced;
- Apply regional approaches where appropriate;
- Increase awareness of decision-makers of the linkages between environment and development; and
- Focus interventions to achieve the greatest potential impact.

B. Near East Bureau's Environmental and Natural Resources Strategy

The NE Bureau's ENR strategy complies with guidelines of the A.I.D. Environmental Strategy Framework, and reflects existing programs and the current ENR issues facing the NE region.[2] Four of the five critical constraints to development outlined in the A.I.D. Strategy Framework are applicable to the NE region - only "loss of tropical forests" is not. The Bureau prioritized these critical environmental challenges for the NE region as:

[2] Natural Resources and the Environment Strategic Approaches for the Near East Bureau, Bureau for the Near East, U.S. Agency for International Development, 1992.

First:	Degradation and depletion of water resources;
Second:	Urban and industrial pollution;
Third:	Environmentally unsound energy production and use; and
Fourth:	Unsustainable agricultural practices.

Prior to becoming a separate autonomous regional bureau in October 1991, the NE region had been combined with Asia and most recently with Europe. As a result, limited focus was placed on issues specifically of concern to the NE. The NE Bureau currently has oversight responsibility for USAID field programs in Morocco, Tunisia, Egypt, Israel, Lebanon, Jordan, Yemen, West Bank/Gaza, and Oman. PRIDE activity, by NE Bureau mandate, is focused on Jordan, Egypt, Tunisia, and Morocco.

The NE Bureau has established four strategic objectives:

(1) Foster efficient resource use and conservation, especially water and energy;

(2) Promote the concept of waste minimization and pollution prevention in resolving problems facing the industrial and agricultural sectors in ensuring air, soil, and water quality;

(3) Increase accountability and local empowerment in addressing environmental and natural resource issues; and

(4) Foster private sector solutions and policy at the local, national, and regional levels.

C. PRIDE Contracts and Cooperative Agreement

1. PRIDE Core Contract

On August 29, 1991 Chemonics International Consulting Division was awarded two contracts to provide support for the NE Bureau PRIDE over a five-year period. One contract was to provide/perform 336 total person-months of direct employee consultant and/or subcontract labor. This contract (Number ANE-0178-C-1046-00) is referred to as the Core Contract. The second contract (ANE-0178-Q-00-1047-00) was to provide/perform an estimated quantity of 394 person-months of direct employee, consultant, and/or subcontract labor in accordance with "Delivery Orders" issued by country Missions. This contract is referred to as the Q-Contract or Buy-In Contract.

The PRIDE Core and Q-Contract Statements of Work (SOWs) comprise a very detailed accounting of activities to be implemented under a Project Management task (in the Core Contract) and in each of the four PRIDE components. PRIDE component tasks included in the SOW represented current thinking on project content at the time and the approximate sequencing and importance of tasks but were neither definitive nor prescriptive, reflecting the need for PRIDE to be flexible and responsive to specific targets of opportunity. A summary of the proposed taskings in each PRIDE component is provided below.

Project Management

The Core Contract is the primary vehicle for implementing PRIDE and therefore the Project Management task is a critically important contractor responsibility. The Core Contract SOW states that "Contractor project management and contract administration includes, but is not necessarily limited to the following:"

Task 1. Provide the services of key personnel as a project team ... a Senior Resource Economist (Team Leader), an Institution and Information Specialist, and a Private Sector Analyst.

Task 2. Identify, select, mobilize, and support in a timely manner the personnel necessary to carry out the services described (in the SOW) and in Mission Delivery Orders (under the Q-Contract).

Task 3. Maintain an environmental and natural resources network and prepare employment/consulting agreements or subcontracts described in the contractor's original offer.

Task 4. Establish a Management Information System (MIS) - (to implement and track project activities).

Task 5. Develop, maintain and continuously update detailed annual work plans and budgets for USAID/NE/DR approval.

Task 6. Prepare, edit, and distribute reports and other deliverables.

Task 7. Work closely with the USAID Project Officer and communicate at least semi-weekly.

Task 8. Coordinate and communicate regularly with other implementors and the managers of other relevant USAID projects.

Task 9. Provide the services of appropriate administrative, clerical and secretarial

support necessary for efficient project management and contractual administration.

Task 10. Provide or arrange for all logistic support necessary to implement this contract both in the U.S. and overseas.

Task 11. Provide daily accounting and time recording for all personnel, including the assignment of time against the core contract or appropriate delivery order under the Requirements Contract (the Q-Contract).

Task 12. Submit bills and invoices of project expenditures in accordance with contractual requirements.

Strategic Planning

Task 1. Develop an analytical framework for the NE Bureau to guide the selection of interventions and priorities to (...implement the bureau ENR strategy).

Task 2. Select NE countries for interventions and undertake country visits to work directly with Missions to integrate environmental concerns into their portfolios and policy dialogue.

Task 3. Begin the strategic planning process with problem identification.

Task 4. Rank problems in the host country, identifying the most critical based on health effects (using EPA's relative risk reduction methodology), environmental quality, and economic sustainability.

Task 5. Formulate strategic options for solving the most critical problems.

Task 6. Organize and conduct decision-maker workshops and seminars.

Task 7. Identify strategic planning procedures and action plans to implement options.

Task 8. Disseminate information on strategic planning methods and approaches.

Task 9. Identify and facilitate opportunities for Missions to use ENR centrally-funded USAID projects and other US government programs to implement high priority environmental interventions.

Task 10. Prepare materials for Missions to keep them informed about Congressionally-mandated analyses.

Task 11. Assist the NE Bureau to (a) monitor trends and initiatives in NE countries and assess progress in meeting objectives, (b) facilitate information exchange, and (c) apply strategic planning approaches with an initial focus on urban environmental quality and water resources management.

Policy Analysis

The function of the contractor will be to demonstrate and adapt emerging and innovative methods for ENR policy analysis. The emphasis will be on testing, adapting, and transferring existing policy tools and instruments and addressing implementation issues.

Task 1. Develop a list of very specific policy issues within the general subject areas of urban and industrial pollution issues and water resources management such as water pricing and allocation and ownership of the means of production.

Task 2. Develop criteria for selecting countries in which to conduct (a) demonstration analysis, and (b) broader or more detailed and longer term policy analysis.

Task 3. Prepare memoranda of understanding (MOUs) with host institutions for demonstration analyses.

Task 4. Organize and implement at least 4 "demonstration analyses."

Task 5. Assist host country specialists or institutions in developing a rudimentary data system, information from which will enable local institutions to quantify environmental degradation.

Task 6. Prepare and widely disseminate in the NE region at least 4 case examples based on the results of the demonstration analyses (see task 4 above).

Task 7. Determine the particular needs for policy implementation within the context of a given country's social, political and economic structure.

Task 8. Organize in-country workshops to highlight policy development results.

Task 9. Carry out at least 10 focused and applied studies in support of policy analysis.

Task 10. Formulate policy instruments based on the results of the above research and other available information.

Task 11. Disseminate information among and between Missions and NE countries regarding ENR policy research undertaken in NE countries.

Task 12. Assist Missions and NE countries in identifying the appropriate expertise for policy analysis.

Private Sector Development

Both the Core Contractor and the World Environmental Center (WEC), a not-for-profit organization, have important roles in planning and implementing activities under this component. WEC provides advisory services and training, but will not focus on commercial investments. The Core Contractor is responsible for stimulating efforts to promote private investments in pollution reduction and commercial transfer of environmental technology. The Core Contractor will complete the following tasks:

Task 1. Provide the services of a Private Sector Analyst.

Task 2. Assist Missions and host countries in identifying and analyzing regulatory and non-regulatory options for addressing industrial and urban pollution and for stimulating a dialogue and cooperative effort between host government agencies and those to be regulated.

Task 3. Develop a regional strategy for overcoming non-regulatory barriers to private sector investments in pollution prevention, control, or reduction.

Task 4. Provide the technical expertise required to develop and demonstrate the use of municipal or industrial bonds or other environmental financing options where Missions have active financial or capital market development projects.

Task 5. Identify opportunities for experimenting with various sources of host country technical assistance to promote commercial investment follow-up to WEC and other activities.

Task 6. Take the lead in identifying opportunities for private investment, drafting generic SOWs for feasibility studies in pollution reduction, and examine the prospects of improving waste water management in selected subsectors.

Task 7. Assist Missions in identifying other sources of private sector expertise.

Task 8. Conduct at least 3-4 country-specific feasibility studies and other financial analysis to complete a financial investment proposal that will improve environmental quality (primarily under the Q-Contract).

Environmental Education

The Core Contractor will promote public awareness and decision-maker accountability through environmental education and selective training. The Contractor will undertake the following types of activities:

Task 1. Assist the NE Bureau with the development of a regional action plan for promoting environmental education, i.e., develop an information clearinghouse; identify, organize, and implement regional initiatives for appropriate contract support; and prepare a plan for monitoring, evaluating, and disseminating lessons learned from contract pilot initiatives in environmental education.

Task 2. Develop an information clearinghouse that: (a) develops a network of contacts; and (b) promotes regional information exchange of PRIDE-sponsored and relevant information.

Task 3. Assist Mission to identify environmental education initiatives that can be implemented through their existing human resources development and education projects.

Task 4. Organize and carry out 2 or 3 country needs assessments using core funds.

Task 5. Organize and implement workshops and the development of the National Action Plans funded through a buy-in.

Task 6. Develop criteria for small grants and contracts to international and U.S. PVOs for in-country pilot activities to promote public awareness and environmental education.

Task 7. Maintain a database for the small NGO contracts and related grant activity.

2. PRIDE Q-Contract

Q-Contract (Buy-In) activities ideally should be integrated, interdisciplinary and comprehensive with the Core Contract activities. Buy-In activities may extend or broaden a core-funded activity or other activities initiated by the host country Mission. Buy-Ins may also initiate activity consistent with the PRIDE goal and purpose but distinct from core-funded, planned activities. At Mission request, the Core Contractor will help Missions identify specific activities so that limited funding resources can be targeted to those activities best promoting sound environmental management and long-term sustainable economic growth. Q-Contract SOW activity ($8 million ceiling) for each component include:

- Strategic Planning - The Core Contractor will respond to Mission requests for analyses requiring short (1-3 months), medium or long-term (12 months) technical assistance. Activities identified in Tasks 3 through 7 of the Core Contract SOW may also be conducted through Buy-Ins.

- Policy Analysis - At Mission request, the Core Contractor will promote economic analysis of macro, sector, or sub-sector level policies focusing on urban industrial pollution and water resources management. Activities identified in Tasks 4, 5, 7, 8, 9 (carry out 15 studies), and 10 of the Core Contract SOW may also be conducted through Buy-Ins.

- Private Sector Development - The Core Contractor, in coordination with the WEC, will respond to Mission requests to complete a wide range of possible private sector activities in environmental management and investment; commercialization of environmental technology; privatization and promotion of environmental services; waste management; and training in cost savings techniques and substitutes for pollutants. In addition, activities identified in Tasks 2, 4, and 8 of the Core Contract SOW may also be conducted through Buy-Ins.

- Environmental Education - The Core Contractor, at Mission request, will: (a) provide technical assistance to identify local NGOs capable of advancing public awareness on ENR issues; (b) determine needs to strengthen NGO ENR advocacy capabilities; and (c) assist in the design of NGO strengthening activities including training. In addition, activities identified in Tasks 3, 4, and 5 of the Core Contract SOW may also be conducted through Buy-Ins.

3. WEC Cooperative Agreement

USAID NE Bureau and the World Environment Center (WEC) entered into a $2.1 million Cooperative Agreement (ANE-0178-A-00-1023-00) on August 7, 1991 for a period of five years. The purpose of the WEC Cooperative Agreement is to provide support services to implement portions of the PRIDE, particularly to foster cost-sharing collaboration between the NE Bureau's PRIDE and the U.S. private sector in implementing AID's environmental priorities and the NE Bureau's ENR strategy for sustainable economic growth.

The Cooperative Agreement states that the Core Contractor will take the lead in implementing three of the project's four components - strategic planning, policy analysis, and environmental education. WEC is to take the lead on the private sector component, contribute to environmental education through information dissemination; and participate in policy analysis related to urban and industrial health, safety, and environmental

management. The primary focus of WEC assistance is urban and industrial pollution prevention, reduction, and control. The WEC provides:

- Short-term advisory services to assist local in-country industry associations, professional engineering associations, and/or independent WEC-type organizations;

- In-country training for local trainers, offering them in-plant experience in the U.S. or elsewhere;

- Experimentation with the promotion of waste reduction in ways that stimulates development of a local private sector industry for environmental services;;

- Participation in policy analysis related to urban and industrial health, safety, and environmental management; and

- Cooperative efforts with government and non-government organizations in ways that support or reinforce the Cooperative Agreement objectives.

The Cooperative Agreement Statement of Work (SOW) specifies that an estimated 80 percent or more of WEC efforts will be on private sector initiatives. If public sector industries are included, WEC is to ensure that those industries which are being privatized receive a high priority for assistance.

WEC private sector approaches will focus on urban and industrial health, safety, and environmental management (U-IHSEM) and local human and institutional capacity development through the following range of technical assistance and training activities:

- Identify industry-specific no cost/low cost actions;

- Establish and support host country U-IHSEM assistance programs through local industry and professional associations, or independent WEC-type organizations;

- Provide training in U-IHSEM to host country professionals such as local engineering firms or other service providers who can serve as trainers through joint in-country assessment exercises, hands-on short-term training, and internships for NE nationals in U.S. industries;

- Provide advisory services to specific industrial installations and governments for the resolution of priority U-IHSEM problems; and

- Organize and implement training programs and seminars for public and private sector personnel for NE countries in the U.S. or in appropriate facilities in other locations. This training will include in-country and regional in-plant training workshops and conferences, foreign practical study tours, and internships.

Through the International Environmental Forum (IEF) and other sources, the WEC has established working relationships with cooperating companies and other public or private agencies who would be willing to send technical experts, on a pro bono or cost shared basis to target NE countries. In selected cases, funding can be used to obtain short-term assistance through "sub-grants" when the requested assistance is not available from the WEC network of sources (these sub-grantees can include environmental NGOs, host country trade associations, and other not-for-profit organizations). Responsibility for the implementation of recommendations made by WEC consultants will lie with the appropriate host country.

The Cooperative Agreement stresses that technical assistance to the private sector include host country "capacity building" as a critical objective. The highest priority will be to train trainers in environmental management and to train local industry in providing environmental services. Key individuals who can serve as trainers are to receive a high priority for training in-country or elsewhere. In formulating approaches, WEC is to target trainees or organizations that have long-term ties or periodic interaction with WEC as opposed to a single training event or association limited to 1-3 months.

WEC's role in policy analysis is to provide technical assistance from U.S. industry to:

- advise government and industry on policy constraints that limit private sector investments or policies that are needed to effectively address U-IHSEM programs,
- participate in Mission-host country policy dialogue on selected topics, and
- collaborate with Mission and host country representatives to eliminate policy barriers that discourages private sector investment in U-IHSEM improvements.

WEC actions in environmental education focus on information dissemination and training related to U-IHSEM to heighten public awareness. Within this activity, WEC is to include the establishment of small environmental reference libraries within participating country industrial offices, plants, and relevant NGOs. Information dissemination activities are:

(1) preparation of technical reports, materials and short-term advisory services,
(2) procurement of training equipment and materials,
(3) production or adaptation of training materials, and
(4) provision of general WEC program information.

SECTION III

TECHNICAL PERFORMANCE

A. Overview of Technical Services Provided

PRIDE technical services have been provided or are in-process using approximately 50 Work Orders (under the Core Contract) and/or Direct Orders (under the Buy-In Contract). Additional effort has been provided under Work Orders (and at times has not been identified in any specific Work Order) for general activities such as Project Mobilization Workshops and Strategy Sessions, PRIDE Team Meetings and Annual Work Plan Reviews, and various technical assistance for NE Bureau strategic planning, project, design, and workshop activities. Table III-1 lists the types of technical work performed to date under the Core Contract and the Q-Contract.

The technical assistance provided to date has resulted in approximately twenty-four country-specific documented activities (Jordan - 10, Egypt - 7, Morocco - 4, and Tunisia - 3) and six regional documented activities. Some of these activities have produced only trip reports, e.g., Country Baseline Assessments for Egypt and Jordan, and some have been consolidated into single comprehensive Mission documents, e.g., Environmental Legislation Reviews in Egypt and Management Planning support to the World Bank in Morocco. In other cases, a number of activities have provided input to larger-scale initiatives, e.g., the information systems, promotion/distribution strategy and environmental assessment efforts by CSG are incorporated into various computerized databases and models that are currently being developed.

During the first two years of support for PRIDE, WEC has sponsored 23 industrial environmental audits in industrial plants, speakers and/or participants to conferences, a cement industry workshop, and the establishment of an environmental reference library for a Jordanian NGO. For the most part, these activities were requested by local industries and the NE Missions. Planned activities include three additional industrial plant environmental assessments, a leather tanning workshop in Tunisia, a pollution prevention assessment training program for Moroccan energy engineers, and the purchase of library materials. Tables III-2 and III-3 list WEC-sponsored activities to date.

The Evaluation Team reviewed reports that were funded under the Core Contract, the Q-Contract, and the Cooperative Agreement for technical quality and content. The team also surveyed responsible persons at the host country USAID Missions and conducted follow-up telephone interviews to solicit their assessment of the timeliness and value of the PRIDE technical assistance. The discussions below summarize the evaluators' direct assessment of PRIDE reports and the evaluator's interpretation of host country Mission responses to

TABLE III-1. PRIDE CORE CONTRACT AND Q-CONTRACT TECHNICAL SERVICES PROVIDED (AS OF APRIL 22, 1993)

EGYPT:	Profile of the Environmental Business Sector Egypt Environmental Strategy Private Sector Profile Promotion/Distribution Strategy Environmental Legislation Review Univ. of Illinois and American Univ. in Cairo Twinning Agreement General Environmental Services (Tasks 2-5) - Egypt Environmental Water Quality Impact Assessment (Phase I) Water Management Action Plan (Phase II) Water Quality Assessment and Management Plan Workshop (Phase III) Science and Technology Project Redesign Technical Support to Private Sector Activities - Egypt
JORDAN:	Water Quality Improvement and Conservation Project - Review of Applicability to GEF Criteria Environmental Legislation Review Jordan Water Conservation and Management Plan and Project Paper Profile of the Environmental Business Sector Environmental Information/Education Communication Needs Assessment Library and Information Center - Jordan Society for the Control of Environmental Pollution (JSCEP) Water Management and Conservation Plan (Phase I) Water Quality Improvement and Conservation Project Paper (Phase II) Technical Support to Private Sector Activities - Jordan
MOROCCO:	Design of the Private Sector Component of the World Bank's Environmental Management Project Pollution Prevention Seminars - Assistance to USAID/Rabat Environmental Management Plan Environmental Services Technical Support to Private Sector Activities - Morocco
TUNISIA:	Small Wastewater Treatment Plant Technology Assessment Profile of the Environmental Business Sector in Tunisia Environmental Action Plan
GENERAL:	Environmental Private Sector Initiatives in the Near East (EPSINE) Industrial Assessment-Based Information System Environmental Information Systems Draft PID for AID/NE Environment and Competitive Technology Services Regional Project Environmental Education and Awareness Campaign/Reference Training Package Earth Generation Presentation for AID/W, World Bank, EPA, et al. Environmental Assessment Computer Programs AID/NE Clean Technologies Project Design

TABLE III-2. WEC-SPONSORED FIRST YEAR PRIDE ACTIVITIES

TYPE OF PLANT	COUNTRY	DURATION OF VISIT
Pulp and Paper	Egypt	December 7-21, 1991
Cement (2 Plants)	Jordan	February 16-22, 1992
Printing and Packaging	Egypt	February 16-23, 1992
Cement (2 Plants)	Egypt	February 22 - March 1, 1992
Yeast	Jordan	April 24 - May 4, 1992
Paint	Tunisia	May 2-9, 1992
Leather Tanning	Jordan	May 3-11, 1992
Chemical	Jordan	May 10 and 13, 1992
Paint	Jordan	May 11 and 12, 1992
Battery	Jordan	June 19-26, 1992
Soap and Edible Oil	Tunisia	June 20-23, 1992
Detergent	Tunisia	June 24-27, 1992
Detergent/Household Chemicals	Tunisia	June 29 - July 1, 1992
Soap and Edible Oils	Tunisia	July 2-4, 1992
Detergent	Jordan	July 5-10, 1992
Paper and Cardboard	Jordan	July 27 - August 1, 1992

TABLE III-3. SUMMARIES OF WEC-SPONSORED SECOND YEAR PLANT ASSESSMENTS

TYPE OF PLANT	COUNTRY	VISIT DURATION
Seafood Processing	Tunisia	January 8-19, 1993
Chlorine Storage and Handling	Jordan	March 1993
Meat Packing	Jordan	March 30 - April 5, 1993
Fertilizer and Chemicals	Tunisia	April 22-28, 1993
Dairy Manufacturing	Jordan	May 1993

inquiries with regard to the technical assistance provided. Detailed review of four PRIDE documents is included as ANNEX F.

B. Core Contract Reports

The Evaluation Team reviewed six reports produced under the Core Contract. The results of these reviews are provided below.

Title: ASSESSMENT OF SMALL WASTEWATER TREATMENT SYSTEMS IN TUNISIA

Country: Tunisia
Publication Date: August, 1992
Level of Effort: The Scope of Work consisted of approximately three days of preparation, three weeks in-country to visit some small villages (approximately 10 villages of 2,000 to 10,000 people) and to interview appropriate government and private sector personnel, five days to write a draft report, and six days to finalize the report. The total level of effort was approximately 61 person-days.

Staffing: An Egyptian chemical and biomedical engineering specialist and a sanitary engineer with extensive experience in wastewater engineering in the U.S., Africa, Asia, and the Near East. The team was assisted in Tunisia by the staff of the Tunisian National Office of Wastewater (Office National de l'Assainissement - ONAS).

Background: This assessment of appropriate wastewater treatment technologies for small Tunisian towns was funded under PRIDE in response to a request from the GOT through the Ministry of Environment and National Physical Planning (MOE). The focus of the effort was limited to technology and did not involve an evaluation of the sanitation sector or specific program design.

Description: The main purpose of the project was to evaluate whether there are simpler, less costly, more appropriate wastewater treatment technologies for use in small villages than those used to date in Tunisia, i.e., the relatively complicated activated sludge process used in intensely developed areas throughout the country. The major result of the report is a recommended implementation program with the objective to:

- Develop within ONAS the capability to effectively and efficiently plan and oversee the design of wastewater facilities for small towns, and

- Demonstrate this capability by actually constructing a few wastewater treatment facilities in small towns.

Assessment: This report is well done. The information is clearly represented, in logical sequence, and comprehensive in nature. The report format presents the problem in the context of the Tunisian national strategy. A brief institutional analysis is presented that sets the tone for recommendations that follow. The essence of the report is an excellent summary of small-scale wastewater treatment technologies that covers all aspects of system design, operation and maintenance, and cost. Summary tables used to consolidate information are very clear and useful. The recommended implementation program is sensitive to perceived Tunisian requirements in terms of training, institution building, and financing. The critical requirement that the Tunisian private sector and ONAS engineers have hands-on participation in the pilot demonstrations to ensure a sustainable program is emphasized. One minor note: Annex E (the ONAS mission statement written in French) and Annex F (single page designs of two pilot wastewater treatment plants designed by ONAS) are not very useful and not necessary for the report.

TITLE: AN ANALYSIS OF JORDANIAN ENVIRONMENTAL LAWS AND INSTITUTIONS

Country: Jordan
Publication Date: April, 1992
Level of Effort: 33 person-days
Staffing: An environmental lawyer and senior corporate officer of SAIC

Background: This effort was commissioned by AID's Near East Bureau in response to a request from the Government of Jordan through its Ministry for Municipal and Rural Affairs and the Environment (MMRAE). The Hashemite Kingdom of Jordan had approved a National Environmental Strategy (NES) in May 1991. The NES covers a broad range of environmental problems in Jordan, i.e., water shortages, overpumping of aquifers, population growth, desertification, agricultural land loss, loss of critical cultural resources, and pollution of air, surface water, marine, and groundwater. The NES recognizes the need to strengthen institutions and consolidate a comprehensive legal framework for environmental protection in Jordan.

Description: The purpose of this PRIDE effort was to advise the Government of Jordan (GOJ) through the MMRAE on possible statutory and institutional changes. The PRIDE specialist considered the interrelationships and roles of various GOJ ministries and agencies in the environmental sector, the effect of the NES on MMRAE's roles in

environmental protection, and definition of MMRAE's optimal role in protecting the environment. In addition, the specialist reviewed existing laws and studies in two functional areas - environmental protection/regulation and resource management/conservation, analyzed a new draft environmental law, and conducted more than 30 interviews with Jordanian environmental officials to gain a "real world" understanding of current regulatory practices.

Major findings and recommendations in the report include:

- The GOJ has studied many environmental problems and is aware of the principal concerns;
- Institutional responsibilities for environmental protection are spread over numerous government agencies,i.e., no single agency exercises comprehensive environmental protection functions;
- Environmental programs in water pollution and supply are more developed than those for air pollution or solid waste management;
- Resource management programs have better funding and clearer statutory mandates than pollution control problems, i.e., the need for a comprehensive pollution control legal framework is clear;

The report also suggested 22 substantive changes to the draft legislation, made suggestions to improve enforcement effectiveness, and suggested several environmental areas that may need additional protection. The report also provided institutional recommendations for the Department of the Environment (DOE) with regard to regulatory authority, leadership responsibility, delegation of implementation authority, and future expansion and organizational function of the department.

Assessment: The 59-page report presents a comprehensive review or Jordanian environmental institutions, laws, and current regulatory practices in a concise and factual manner. The report states that, in the past 12 years, three attempts have been made to gain agreement on a draft environmental law. A fourth attempt commissioned by the Minister of MMRAE is currently circulating that was prepared by representatives of three ministries and two advisors from MMRAE. The draft is controversial and may need further work to build a consensus for its adoption. The PRIDE report presents a clear and concise overview of the draft law and then proceeds with a very detailed, essentially provision by provision, itemization of fundamental recommendations and specific technical changes to the draft law. This should serve as an excellent "working paper" for the MMRAE as they try to reach agreement on the content and substance of an agreed upon environmental law for Jordan. Finally, the report gives a clear statement of the current role of the DOE

within the MMRAE and the role envisioned under the new draft law and NES. Alternative roles are discussed and several options are presented. A straightforward set of recommendations based on these options are made which should be of help to the GOJ as a "functional response" to the NES is developed.

Title:	**STRENGTHENING ENVIRONMENTAL INFORMATION, EDUCATION AND COMMUNICATIONS IN JORDAN** (A detailed review of this report is included in Annex E)

Country: Jordan
Publication Date: April, 1993
Level of Effort: 43 person-days
Staffing: A four-person PRIDE Team

Background: The purpose of this mission was to help Jordanian environmentally-concerned agencies begin developing an action plan to implement the National Environmental Strategy (NES) by strengthening environmental information systems, education/communications/ awareness programs, technical/professional training programs, and organizational development activities. The in-country organizations involved with this PRIDE Core Contract Mission were the Ministry of Municipal and Rural Affairs and Environment (MMRAE), Department of Environment (DE), and the Jordan Society for the Control of Environmental Pollution (JSCEP).

Description: This review by the PRIDE Team is one step toward creating a road map to activate important elements of a national environmental program for Jordan. It addresses four important components for a successful program:

- Technical monitoring and information,
- Environmental education including professional training,
- Communications including ways to get people to change their behavior, and
- Organizational development to strengthen program implementation.

The PRIDE Team concluded that Jordan's environmental system has two weaknesses; (1) the Department of Environment (DE) is weaker than most other organizations concerned with environmental protection, and (2) the private sector does not participate fully in Jordan's environmental programs, i.e., in reducing pollution through clean technologies and developing an environmental services industry.

Pending legislation will transform the DE into a semi-autonomous General Environmental Corporation (GEC) with enhanced roles and responsibilities. The report emphasizes that a strong central environmental agency in Jordan is essential to provide leadership in the

environmental sector and to serve as a facilitator to encourage active participation by NGOs, the private sector, other ministries, educational institutions, mass media, and the scientific community. Much more strategic planning and organizational development planning are needed for all public/private sector groups to clarify roles and strengthen institutional capacities. However, the report focuses on recommendation related the transition of the DE to the GEC.

Assessment: The report makes twenty-one key recommendations in four areas: (1) Organizational Development - six recommendations, (2) Environmental Information Systems - five recommendations, (3) Environmental Education and Communications - five recommendations, and (4) Technical and Professional Education - five recommendations. In general, the report adequately identifies the necessary steps for environmental intervention in Jordan and the depth of coverage reflects a strong understanding of the Jordanian political climate. However, the recommended solutions tend to be very bureaucratic and possibly unnecessarily cumbersome for any government system. Recommendations in the "Opportunities for Donor Assistance" section reflect a more "grass roots" and practical approach to implementing environmental initiatives in Jordan.

TITLE:	PROFILE OF THE ENVIRONMENTAL BUSINESS SECTOR IN EGYPT

Country: Egypt
Publication Date: October, 1992
Level of Effort: 62 person-days
Staffing: Four-person team from HBI

Background: This 72-page report was one of the first activities supported by PRIDE. It was designed to help the Egyptian and U.S. private sectors participate in environmental development in Egypt. The basic methodology used includes a combination of desk, field, and survey research which is then synthesized and analyzed into the report.

Description: The document defines the environmental business sector in Egypt, describes products and services that the country will need, identifies opportunities for U.S. industry involvement. A list of approximately 100 companies (both public and private) was developed. Two-thirds of them were interviewed, and each was asked to complete a survey research questionnaire to define the company's specific type of environmental business and corporate demographics.

Assessment: The report is in a "handbook" format that gives quick and clear access to the best business opportunities in the environmental business sector in Egypt. A detailed description of ten environmental market segments is provided, with each organized in the

same way to provide and overview; a table assessing the appeal of each market; a description of the products services, and technologies in each segment; and information on potential clients, market demand, supply, competition, ownership, and strategies for and cost of entry. Appendices contain lists of companies and people to contact. This document should be very useful for any U.S. company considering involvement in the environmental business sector in Egypt. Similar documents are in preparation for Jordan and Tunisia. If they are of the calibre of the Egyptian report, they should serve as a very useful output of PRIDE.

TITLE:	USAID/EGYPT ENVIRONMENTAL AND NATURAL RESOURCE PROGRAM: A RECOMMENDED STRATEGY

Country: Egypt
Publication Date: March, 1992
Level of Effort: 28 person-days
Staffing: Three-person team from Chemonics

Background: The work was conducted in two phases: (1) the team prepared a background analysis to assess the current status of Egypt's environmental management program, and (2) the team recommended an environmental program statement for a mission environmental strategy.

Description: This 81-page report was prepared to: help the mission formulate a strategy for implementing its program in accordance with USAID's environmental initiative, and recommend an action plan to help the Government of Egypt (GOE) improve its environmental management program, consistent with sustained development principles.

Assessment: The report presents useful information, but the impact is lost somewhat because of a confusing format. It seemed difficult to go from the Executive Summary to the body of the report to find additional, more detailed supportive information. The report contains an annex that identifies in matrix form the functions of Egyptian Environmental organizations (public sector, private sector, NGOs, and international agencies/donors). While this approach is very high level, it is a useful summary.

In May 1992, the USAID/Cairo mission published a "Country Program Strategy for the Environment - FY 1992-1996. The strategy is outlined in very high level terms but generally follows the guidelines set down in the PRIDE report, i.e., it has as its main objective enhanced protection of the fresh water and urban air resources. In the program strategy extensive use is made of the expansion of existing mission programs, the importance of

private sector involvement is recognized, the need for policy and institutional reform is identified, and the need for free flow of information is stated.

TITLE:	MOBILIZING MOROCCO'S PRIVATE SECTOR FOR ENVIRONMENTAL MANAGEMENT (A detailed review of this report is included in Annex E)

Country: Morocco
Publication Date: January, 1993
Level of Effort: 140 person-days
Staffing: HBI

Background: The report was completed under both Core and Q-Contract (Buy-In) funding. In-country assistance was provided by staff at Formation Organization et Conseil de Societe (FOCS) in Casablanca. The effort was completed in coordination with World Bank staff and consultants. For the Government of Morocco (GOM), the Ministry of Interior was the lead agency. Results of this effort facilitated the design of a private sector component to the World Bank's Environmental Management Program for Morocco.

Description: The PRIDE Team found that the shortage and pollution of drinking water were the most serious natural resource problems for Morocco. These problems result from short-sighted irrigation techniques, fertilizer and pesticide applications, and industrial and municipal discharges into surface and ground water. The report also documents the results of a survey of 43 Moroccan companies designed to assess the private sector's environmental management capabilities and identifies policy and program options that will help mobilize private sector participation in environmental management.

Assessment: The report is a fairly comprehensive review of the Moroccan private sector capabilities for the provision of environmental management goods and services. However, it is somewhat dogmatic at times in its assumptions regarding the appropriateness of the "Western pattern" of environmental management. The recommendations presented seem rather "flat." The usefulness of the report to the Government of Morocco is limited since no clear "action plan" is presented. No implementation methodology or schedules are provided, and the cost to implement the "Program Options" is not address for the short- or long-term.

C. Q-Contract Reports

The Evaluation Team reviewed four reports produced under the Q-Contract. The results of these reviews are provided below.

TITLE:	A WATER MANAGEMENT STUDY FOR JORDAN

Country: Jordan
Publication Date: August, 1992
Level of Effort: 458 person-days
Staffing: CHEM, RMI, and SAIC

Background: This report was prepared by a large team of Jordanians and PRIDE personnel which was directed and supported by the Ministry of Water and Irrigation of Jordan and the USAID Near East Bureau. Studies and analyses were conducted by personnel skilled in economics and impact assessment, water and wastewater engineering, hydrology, administration and engineering, agricultural economics, communications and training, water quality engineering, agricultural engineering, and private sector development.

Description: The aim of the report is to help Jordan meet its looming crisis in water supply. The report findings focus on ways to enhance Jordan's future water availability, suitability, and sustainability. The report has two main parts: (1) a concise 22-page section that presents findings and recommendations, and (2) an extensive set of annexes (approximately 200 pages) with data and the analytical bases for the findings.

The Team found that Jordan does not have sufficient water for its desired standard of living; the development of industry, services, and tourism; and irrigation to expand food output for domestic consumption and export earnings. The report recommends the development of a comprehensive water management plan in four priority areas in order to:

- Strengthen the capability of the Ministry of Water and Irrigation, and encourage appropriate private sector participation in water resource management and pollution prevention and control;
- Reduce demand and increase conservation;
- Create real incentives to encourage efficient conservation and discourage waste; and
- Build and maintain a public knowledge of this vital resource and the means of conserving it.

Assessment: This report provides an excellent compilation and synthesis of 10 detailed studies (presented as annexes) into a concise, informative, and easily readable summary that clearly states the seriousness of the water problem in Jordan and the options available to begin to address solutions. The studies (annexes) address all aspects of the

problem, i.e., surface and groundwater supply, water demands and uses, wastewater and water pollution management, wastewater reuse and water quality, economics and finance, water conservation, institutional and management issues, agricultural management issues, municipal and industrial sector, and training and communications.

TITLE:	**PRIVATE SECTOR DEVELOPMENT ENVIRONMENTAL STRATEGY** (A detailed review of this report is included in Annex E.)

Country: Tunisia
Publication Date: April, 1993
Level of Effort: 56 person-days
Staffing: CHEM, SAIC, and HBI

Background: The Private Sector Development Environmental (PSDE) Strategy was initiated with USAID/Tunisia Mission Buy-In funding in late January 1993 and was completed in late April 1993. The PSDE Strategy was developed by a cooperative effort involving direct hire Mission staff, PRIDE personnel, and consultations with GOT personnel and the Tunisian private and NGO sectors.

Description: The PSDE Strategy developed responds to Tunisia's current situation and environmental programmatic criteria by requiring two levels of activities and support:

- Initiatives that USAID/Tunisia can implement with no material change, or with only modest modifications, to its current and planned project portfolio (and for which no additional NE Bureau support is required); and

- Complementary and more resource-intensive activities that can be implemented only with the assistance of centrally-funded R&D and NE Bureau projects.

USAID/Tunisia's overall program strategy focus on enhancing Tunisia's private sector to expand employment, enterprise, and exports, and to improve urban environmental services. The Mission examined and compared the environmental needs of Tunisia with its overall program strategy and surfaced three basic cross-cutting themes for the PSDE Strategy: (1) Develop the private sector, (2) Prevent pollution, and (3) Institutionalize improved environmental practices. The PSDE Strategy developed consists of "29 actionable elements."

Assessment: Although the strategy presented responds to USAID, NE Bureau, USAID/Tunisia and GOT environmental priorities, the "29 actionable elements" lack specificity, fail to address environmental priorities, and are not fully developed in terms of cost, schedules, etc.

TITLE:	EGYPT WATER QUALITY IMPACT ASSESSMENT: PHASE I (A detailed review of this report is included in Annex E.)

Country: Egypt
Publication Date: July, 1992
Level of Effort: 173 person-days (including 130 days in-country) for both Phase I and II
Staffing: RMI, SAIC, HBI and two highly-qualified consultants

Background: This PRIDE activity is Phase I of a two-phased assignment. Phase II is the design of a Water Management Action Plan for Egypt (see below). Both phases were funded by a Q-Contract with the USAID/Cairo Mission in Egypt. Some additional host-country funding was provided by the Water Research Center under the Egyptian Ministry of Public Works and Water Resources (MPWWR). The WRC was established in 1975 and includes four general departments and 12 research institutes to more effectively manage Egypt's water resources.

Description: This Phase I report covers:

- Historical patterns of water quality in the Nile River, canals, and drains;
- Current quality of groundwater and surface water;
- Municipal, domestic, and industrial wastes;
- Agricultural drainage water;
- Health impacts of the water quality situation;
- Water quality monitoring; and
- Capacity building and water quality management recommendations.

The body of the report is a 52 page document. In addition, very comprehensive annexes are included that were produced by the staff of the Water Research Center. These annexes, i.e., working papers that average about 50-60 pages each, include detailed discussions and analyses of Sources of Water Pollution, Drainage Water Quality, Groundwater Quality Hydrologic Balance, and Surface Water Quality Monitoring. The document points out two serious problems for any intervention in Egypt's water sector: data and information are scarce and not easily accessible; and waste discharge requirements, as established in the Water Pollution Control Act of 1982, are not enforceable.

Assessment: In general, the report provides a very comprehensive analysis of the water sector in Egypt - both current condition and future expectations. The report includes many statistics on discharges, constituents, and contaminants in water sources and drains. Inclusion of international standards data would have been helpful to allow for comparison with World Health Organization standards, for example, so that the magnitude of the problem could be assessed.

TITLE:	EGYPT WATER MANAGEMENT ACTION PLAN: PHASE II

Country: Egypt
Publication Date: July, 1992
Level of Effort: 173 person-days (including 130 days in-country) for both Phase I and II
Staffing: SAIC, RMI

Background: This activity, Phase II of a two-phased assignment, is based on the results of the Phase I water quality impact assessment (see above). The original request for this project (Phase I and II) was made by the MPWWR prior to the initiation of a similar project by the World Bank. The World Bank effort was much broader in that it included all aspects of the environment - the resulting document became the *Egyptian Environmental Action Plan*, a document that identified the major pollution problems in all media and recommended general actions to overcome them. The World Bank's document was a major source of information for this project.

Description: The 88 page report for this project re-analyzes the problems and takes the solutions one step further by:

- Developing an immediate action plan focused on specific targets,
- Outlining the major structure of a water quality management program, and
- Developing a water quality monitoring and survey program.

The Phase II report analyzes the pros and cons of 52 alternative courses of action related to 20 problems in the areas of pollution, water quality management, water quality monitoring, water management institutions, and legislative aspects of water quality management. This approach was taken to allow the Government of Egypt to systematically address key water quality management problems and to establish a new institutional and legislative foundation to integrate water quality into the national environmental strategy. This approach also offers a prototype planning process for all other pollution problems outside of the water sector.

Assessment: The Phase II report provides a detailed and comprehensive analysis of water quality management in Egypt. The report reflects a close reading of existing laws and an understanding of the institutions responsible for water quality. The report explicitly addresses problems that remain, i.e., the government's failure to take environmental action seriously and enforce existing laws. The report provides a good evaluation of the effectiveness of the water quality management process, the institutions that implement it, and the legislation that it is based on.

The report includes an action plan that is very comprehensive, perhaps to the point where government officials will be overwhelmed with the magnitude of what needs to be done. A total of 125 actions items are included. The inclusion of action item priorities and implementation costs for action items would have been helpful to Egyptian decision-makers.

D. Cooperative Agreement Services

The World Environment Center (WEC) is a not-for-profit, non-advocacy environmental organization. Although independent since 1981, WEC was founded in 1974 with seed funding from the United Nations Environment Programme. The Center currently receives funding from industry, government, international organizations, corporate or private foundations, and private citizens.

WEC has received A.I.D. funding since 1982 when the IEDS initiates pilot activities in Jordan and Tunisia. The PRIDE-funded activities began in August 1991 with the signing of the Cooperative Agreement. Approximately $1.5 million of an authorized $2.1 million has been obligated through August 1994.

The Evaluators visited WEC in New York to discuss their activities in support of the PRIDE Core and Q-Contract. Discussion with the WEC Project Manager for PRIDE-related activity provided the following specific information:

- When industrial plant assessments are conducted, WEC makes an agreement with the plant management that the resultant report is considered as "confidential" and will not be disseminated to government regulatory agencies or other organizations without the approval of the participating plant management. Occasionally, reports are "sanitized" by deleting references to the specific plant and distributed so that some regional utility can be made of similar environmental problems and solutions.

- WEC consultants completed an environmental assessment of the Suez Cement Company in Egypt in February 1992. This plant is moving toward privatization (it is about 40 percent privately owned and on the market for an 80 percent private

ownership). The interest generated by the assessment culminated in a 4-day workshop for 60 to 70 people that provided information dissemination, technology transfer, and training in bag-house and precipitator technology. The cement plant management co-sponsored the workshop.

- In Tunisia, a significant amount of interest has been generated by WEC initiatives. The small USAID Tunisia Mission has asked WEC to hire a local contractor to handle logistics for Mission requests for additional environmental interventions under the PRIDE. WEC views this as a means to build local capacity to conduct PRIDE-type activity in the country.

- Almost 83 percent of the industrial assessment in the first two years have been in Jordan and Tunisia. Except for the cement industry training workshop (in Egypt), other PRIDE-related activity has also been conducted in those two countries. This heavy focus on Jordan and Tunisia in the first two years has occurred because that is where the Mission requests have come from.

- WEC staff in New York spend a considerable amount of time "editing" the consultant's reports to get them into a standard format. Follow-up contact is often required with the consultant to clarify information or to elicit additional data or information. WEC appreciates that the utility of the industrial environmental assessments can be enhanced by a more standardized report, both from the perspective of format and level of detail. The PRIDE Core Contractor is developing an automated reporting systems which WEC refers to as the Industrial Assessment Information System (IAIS). WEC has been involved in the development of this system although they believe that some important elements of the system were developed unilaterally, i.e. the decision to use a "Windows" operating system rather than "DOS." WEC also expressed concern over the "proprietary nature" of some of the information that the IAIS will require, i.e. their "NE Protocol" that they have developed over the past decade will be available to other NGOs. WEC claims that they were not really aware of the widespread dissemination that is intended for the IAIS until as late as March 1993. WEC does realize the fact that information that was collected with USAID funding is different that obtained with funding from other WEC sponsors. WEC is confident that the existing minor differences with regard to these elements of the IAIS can be worked out.

As part of the evaluation of the PRIDE-related activities of the WEC, a few industrial environmental assessment reports were randomly selected for review of quality and content. The following are brief summaries of the findings of those reviews.

TITLE:	ENVIRONMENTAL ASSESSMENTS OF TUNISIA SEAFOOD PROCESSING PLANTS

Country: Tunisia
Publication Date: March, 1993
Level of Effort: 11 person-days
Staffing: The WEC volunteer specialist was an environmental consultant with over 25 years of varied environmental expertise, the last 10 years as Corporate Manager of Environmental Engineering at Star-Kist Foods, Inc.

Background: A total of 19 seafood processing plants, located throughout the southern part of coastal Tunisia. The assessment was organized by the WEC under the USAID NE Bureau Cooperative Agreement for PRIDE. The purpose of the visit was to determine whether the plants were causing significant pollutant contamination, and if so, to give recommendations as to how to minimize or eliminate the problems in the most cost effective manner.

Description: The WEC specialist observed various types of seafood processing operations in many of the plants. Plant management described the processes used and the wastes generated. The specialist also met with two regional fisheries administrators and key representatives of the Chamber of Commerce of the Southern Region in Tunisia. A seminar was given by the WEC specialist to several owners of seafood processing plants in Sfax, Tunisia. Ample time was allowed for the plant managers to ask questions and to offer any comments or suggestions as to additional information that might be useful to them. The seminar was also attended by the Director of the USAID Mission in Tunis, the USAID Mission Agricultural Specialist, the Director of the Chamber of Commerce for the region, and the General Engineer and Director General of the Office of Development of the Southern Region.

The 27-page double-spaced report gives one-half page descriptions of five pollution prevention techniques: water minimization, dry cleanup, screening, byproduct recovery, and wastewater treatment. The report findings discuss the production processes for the products of the plants (shrimp, cuttlefish, octopus, tuna, and sponges) and give a description of key environmental issues (emissions and control systems).

Conclusions of the visits covered wastewater, water use, and toxic chemicals; solid waste, air pollution, and toxic or hazardous materials and wastes. Recommendations included construction of a combined wastewater pretreatment plant in Sfax because of the density of processing plants there, the potential of producing fishmeal from scrap fish, counter-flow multi-stage washing systems for raw product to minimize fresh water use, and wet

vacuuming systems for floors in areas of high concentration of solids and blood. Appendices include brochures on screening and wastewater treatment systems and a cost analysis for fishmeal production.

Assessment: The qualifications of the WEC specialist are excellent for the mission. However, the level of effort may have been too small to result in a meaningful report for plant managers. Very little cost data are presented and no indication is given of the impact on plant operations of implementing the recommendations. Also certain statements indicate that the report could have benefitted from more effort, e.g., actual plant product capacities were not obtained, the number of operating days at the plants was not known, a proprietary chemical was used to "bleach" the cuttlefish (chemical constituents unknown). While it is realized that a mission of this type cannot be expected to result in detailed designs or hard and fast recommendations, a visit to 19 plants in 11 days leaves very little time at any one plant to collect the data and information necessary to make recommendations to a level of detail that will help the plant manager with decisions on what to do to mitigate any potential environmental problems.

TITLE:	ENVIRONMENTAL ASSESSMENT - SOCIETE DE FABRICATION DE PRODUITS CHIMIQUES (ALKI)

Country: Tunisia
Publication Date: July, 1992
Level of Effort: 20 person-days
Staffing: An environmental engineer with more than 40 years experience in the detergent industry.

Background: The purpose of this activity was to examine the environmental control program of Societe de Fabrication de Produits Chimiques (ALKI), to assess the soundness of the program, and to suggest areas for improvement.

Description: The assessment describes manufacturing processes with an emphasis on wastewater, gas emission, and discard of material. Some assessment of hazards to worker's health or to the environs of the plant is also included in the report. While in Tunisia, the WEC specialist completed the following assessments: (1) soap and edible oils plant in tunis (June 20-23), ALKI plant (June 24-27), detergent and household chemicals plant (June 29-July 1), soap and edible oils plant in Monastir (July 2-4), and detergent plant (July 5-10).

In general, the detergent industry is allowed to discharge wastewater in combination with community wastewaters into community-owned treatment facilities. In Tunisia, industrial wastewater characteristics must be the same as those found in residential sewage. This

requires a complicated pretreatment process. The WEC assessment judged the appropriateness of those pretreatment facilities in service, or being planned, and provided suggestions for improvements.

Assessment: The 47-page report is generally good and comprehensive in its description of plant processes and byproducts. This may be an indication of the benefit of spending up to four days for a single plant visit. The ALKI engineers and management were concerned about their environmental problems and enthusiastic for help. The report mentions that information requested by ALKI engineers on measuring sulfur compounds in emissions (not available in Tunisia) was provided by the WEC specialist in a separate communication with the plant management. In a number of places in the report, the WEC specialist mentions "admirable practices" by the ALKI engineers to limit emissions and effluent discharges.

The report lists 21 pages of Findings and makes 17 recommendations for further investigation by ALKI management. Approximately 20 pages of informative discussion is provided for the recommendations. Unfortunately, very little indication is given of the magnitude, both in time and money, of implementation. No specific cost data (only "higher cost" or "lower cost") are provided for ALKI management to do any payback analyses for incorporation of recommended equipment and/or process changes. Also, no equipment availability information or hardware specifications is given (nor are points of contact provided) to help ALKI management in any follow-up initiatives.

TITLE:	TRIP REPORT - THE JORDAN TANNING COMPANY

Country: Jordan (Zarqa)
Publication Date: July, 1992
Level of Effort: 3 person-days
Staffing: Two specialists: one with 33 years experience as Vice President for Corporate Facilities for a U.S. tanning plant and one who was a Professional Engineer licensed in 10 states with more than 20 years experience in industrial/environmental control problems in the chemical, tanning, finishing, electroplating, pulp and paper, and food processing industries.

Background: The purpose of this visit was to evaluate, comment on, and recommend improvements to the environmental controls associated with the Jordan Tanning Company (JTC), located in Zarqa, Jordan.

Description: The JTC employs approximately 270 personnel to tan both cowhides and sheepskins. Between 200-400 cowhides are entirely tanned daily, while 3000 sheepskins per day are tanned only through the pickling process. The tanning processes used at the plant are conventional and the equipment installed is state-of-the-art. The WEC specialists noted that the plant management and staff were very proud of the facility and the quality of the final product.

The basic technology for environmental control exists at the plant. Treated wastewater flows from the tannery to the regional wastewater treatment plant for final treatment before being discharged into the Zarqa River, which flows into the King Talal Reservoir. Contaminants in the wastestream appear to be heavy metals and a high concentration of total dissolved solids. The Government of Jordan has instituted strict regulations regarding pretreatment. JTC management provided the specialists with effluent limits that were enforced (others are in the standard), although an attempt to get a copy of the legislation (the Jordanian Environmental Pretreatment Standard #202) failed.

The WEC specialists concluded that knowledge regarding the waste treatment system and adequate training to operate the treatment system effectively is missing. In addition, the JTC does not have the capability of performing the necessary analyses for compiling data to adequately judge whether the treatment processes are optimized. The report contains standard method procedures for making the required measurements as an appendix. the report also recommends that polymers be used to help coagulate solids in the settling tanks. An "attempt" was made to determine if any were available in Jordan.

The priority recommendation in the report is to develop a training program and operating system to allow the JTC staff better control of their wastewater treatment systems. The training program would consist of a 3-4 day course using materials from internationa' organizations (such as the Water Environment Federation in Alexandria, Virginia). The course includes classroom training with practical demonstrations on an actual treatment system. The WEC specialists suggest that the Government of Jordan support this training since the need appears to be country-wide affecting both industries and municipalities.

Assessment: The 35-page double-spaced report is comprehensive and well written. It addresses a large number of operational practices and processes and makes suggestions on how to improve them. In a number of areas, questions are raised because insufficient data are available to adequately assess the situation. While the report is helpful, one get the distinct impression that without adequate follow-up to assist the JTC to obtain required data and training the long-term benefits will not be realized.

TITLE:	POLLUTION CONTROL REVIEW OF UNITED INDUSTRIES CORPORATION LEAD ACID BATTERIES FACTORY

Country: Jordan (Amman)
Publication Date: July, 1992
Level of Effort: 5 person-days
Staffing: A specialist with over 19 years experience and currently the Director of Engineering of a U.S. company involved with water treatment, recycle and waste handling systems.

Background: The purpose of this visit was to assess the wastewater treatment system of the United Industries Corporation in Amman, Jordan.

Description: The WEC specialist report states that a very comprehensive operation is managed at the site that involves the manufacturing of a variety of starting, lighting, and ignition (SLI) batteries. The plant employs over 100 people to process 2 to 6 tons of lead and manufactures approximately 400 12-volt batteries daily. The plant is planning to install a wastewater treatment system to process its industrial effluent and needs technical guidance in view of the limited industrial wastewater treatment technology available in Jordan. The report suggest that the most useful assistance would be information regarding the process chemistry for the from aqueous streams and the equipment with permanent controls for implementing the wastewater process. The plant personnel also need technical assistance in general pollution control measures.

The WEC specialist found the plant personnel to be enthusiastic and self-confident. Over the course of five working days, he believed that a substantial transfer of technical knowledge took place. The specialist did suggest, however, that specific problem areas be documented prior to an expert's visit so that the quantity and quality of results can be enhanced. Further, the specialists suggested that significant progress could be made by providing continued technical liaison, support through active communications, and follow-up visits when the plant implements a wastewater treatment system, process waste collection, and improved scrap handling technology.

Assessment: The 15-page double-spaced report leaves the impression that a very competent specialist provided much needed and appreciated technical assistance within the limitations of a 5 working day period. At one point, the specialist mentions that suggestions were made with the lead reclaim process that the plant technicians tried immediately as an experiment. The mechanical foreman indicated that he would continue to document experimental changes in the composition of the amount of lime per scrap lead charge to monitor improvements in the yield/quality of lead ingots. At another point, the specialist

conducted a minor demonstration of how to use smoke and shredded toilet tissue to evaluate the effectiveness of vent hoods for dust and powder. the specialist states that the factory is currently capable of fabricating from steel numerous types of equipment for in-house use and has innovative employees who can easily grasp new technology concepts.

The report lacks any cost data or information regarding schedule and impact of implementation of the many recommendations. Points of contact and list of equipment suppliers, etc. are also not given.

TITLE:	TRIP REPORT - MISSION TO RAKTA, GENERAL COMPANY FOR PAPER INDUSTRY

Country: Egypt (Alexandria)
Publication Date: January, 1992
Level of Effort: 4 person-days
Staffing: Technical Director of a Canadian pulp and paper company with more than 33 years experience and 10 patents on pulping technology.

Background: The objective of this visit to the Rakta Paper and Pulp Company in Alexandria, Egypt, the largest rice straw pulp mill in the world, was to discuss the plant's main water pollution problems, i.e., sewering of pulping and bleaching effluent into the Mediterranean Sea without treatment and to develop an action plan to solve these problems. The specialist visited the Rakta plant, recent suppliers of equipment and technical assistance to Rakta, Lurgi and Kraftanlagen in Germany, and UNIDO in Vienna, Austria which has closely followed similar development work in India.

Description: Rakta has been discharging untreated effluent into the Mediterranean Sea since start-up in 1961. Currently, the most environmentally objectionable components are dilute spent liquors from soda pulping of rice straw (known as "black Liquor") and waste waters from bleaching of the pulp with hypo-chlorite. Rice straw black liquor cannot be processed for recovery of soda chemicals with currently available technologies because of the extremely high silica content. Rakta is currently bleaching bagasse and rice straw pulps with two stages of calcium hypochlorite in sequence. the bleaching facilities are antiquated and have limited capacity. Rakta is proposing to replace the existing bleach plant with modern facilities using environmentally sound chemicals such as oxygen and peroxide in alkaline medium or ozone. Laboratory experiments in Germany with Egyptian bagasse have given promising results. Trials in Kraftanlagen's bleaching pilot plant are planned.

The WEC specialist stressed that Rakta has competent chemical engineers with research experience in silica removal from rice straw black liquor and with production experience in bleaching of bagasse and rice straw pulps. With this background, the Specialist believed that good results can be expected in future development projects. The results should be valuable to other companies and countries using agricultural raw materials for pulping.

Assessment: The report describes the Ratka plant as antiquated and not efficient, even though there are apparently good personnel working there. The solution for the problems associated with rice straw pulping are described and "research programs" and pilot plant demonstrations. In one case, i.e., the Lurgi process, trials were terminated in the mid-1980s due to a lack of funds. The Kraftanlagen pilot plant was tried in Indonesia with mixed results, purportedly because French equipment was used. In short, this does not seem like a very useful PRIDE project in that the solution is essentially a research and development program and the impression from the report is that the plant is in such poor condition that it should probably be shut down anyway. One wonders why the environmental assessment was conducted at all.

SECTION IV

PROJECT ORGANIZATION, MANAGEMENT, AND OPERATION

As the prime contractor for the PRIDE Core Contract and Q-Contract, Chemonics is responsible for project management and administration. Chemonics shares project implementation with seven subcontractors (Annex G):

RCG/Hagler, Bailly, Inc. (HBI);
Science Applications International Corporation (SAIC);
Capital Systems Group, Inc. (CSG);
Industrial Economics, Inc. (IEc);
Lincoln University (LI);
Environomics, Inc. (EI); and,
Resource Management International, Inc. (RMI).

The first five organizations are subcontractors under both the PRIDE Core and Q Contracts. The last two are sucontracted only under the Q (or Mission "buy-in") contract. Core Contract activities are performed under Work Orders (WOs) while Q Contract activities are performed under Delivery Orders (DOs). Both CSG and Lincoln University are Gray Amendment institutions, in response to a contractual requirement that up to 20% of the dollar value of the Core contract, and not less than 20% of the Q contract, must be performed by such institutions. This is an impressive group of organizations, representing a resource that can provide high quality, professional expertise for the NE Bureau and USAID mission to implement A.I.D. environmental and natural resource strategy.

A. Prime Contractor

1. Staffing

Chemonics has established a "field office" for the project, modeled, with modifications, on overseas field offices. The senior, or core, staff consists of the Chief of Party (COP), the Institutional and Information Specialist, and the Private Sector Specialist. In addition to overall project management, the COP is also responsible for the Strategic Planning and Policy Analysis components. The Institutional and Information Specialist is responsible for the Public Awareness/Environmental Education component, and the Private Sector Specialist is responsible for Private Sector Initiatives. The Chief of Party and the Institutional and Information Specialist positions are filled by Chemonics staff; the Private Sector Specialist is filled by an HBI employee funded through the subcontract with HBI. Each senior staff person is assisted by a Project Assistant.

Since country-specific concerns may cut across the project components, PRIDE has assigned general oversight for a country to one of the senior staff: Chief of Party, Tunisia; Private Sector Specialist, Morocco; and Institutional and Information Specialist, Jordan. All three share responsibility for Egypt, although the COP is chiefly responsible. This does not mitigate their primary, project component assignments; rather it provides a means of assuring that each of the four countries, currently designated by the NE Bureau as PRIDE beneficiaries, receives timely and appropriate attention.

In addition to the project-funded staff (i.e., three senior specialists and three project assistants), Chemonics has assigned a full-time Project Administrator to PRIDE, funded from overhead, to oversee project administration details including dealings with subcontractors, billing functions, and WO/DO Team recruitment/backstopping. She is assisted by the three PRIDE Project Assistants with backstopping and oversight provided by Chemonics headquarters. A Chemonics Publications Editor also currently devotes about 90 percent of her time to project documents -- reports, newsletter, studies, and other publication materials. These costs are covered by appropriate Core and Q-Contract projects. All of these individuals are in the PRIDE office, which is physically separate from Chemonics headquarters.

Chemonics has assigned a senior officer to be Project Supervisor, on a part-time, as-needed basis. He participates in review and planning exercises and takes the lead in key contractual relationships. He had the lead responsibility in preparing the Chemonics proposal and in orchestrating inputs from the selected sub-contractors. Overall project management and administration are shared by the Project Supervisor and the PRIDE COP, with the latter assuming major but not complete authority or responsibility. If PRIDE were a field office operating overseas, the project might be organized differently. However, the organizational arrangement is similar to two other Chemonics "field" projects located in Washington -- DESFIL and DIS.

The Project Administrator reports directly to the Project Supervisor, although she must coordinate all effort with the COP and is located with, and viewed as a member of, the PRIDE staff. Similarly, the three Project Assistants report directly to the Project Administrator, although they each work with the Core senior staff person to whom they are assigned. Although these mixed affiliations are potential areas of organizational tension, no problems were detected by the Evaluators. The Evaluators noted a high degree of collegial activity between and within Core staff and support staff.

There has been some staff turn-over. Initially, there were two project assistants. A third project assistant was added just prior to the end of the first project year. The original project assistants were reassigned to Chemonics, and were replaced with two new project assistants early in the second project year. Halfway through the second project year, the

COP was reassigned by Chemonics to an overseas assignment, and a new COP was nominated and approved by the NE Bureau. These staff changes appear to have been accomplished with minimal impact on staff morale or performance.

2. Recruitment and Fielding of Technical Teams

PRIDE must be demand responsive, given the nature of the project, i.e., two clients -- the Near East Bureau (the prime client) and the USAID missions (including close ties with relevant government agencies and ministries, as well as private sector enterprises). Initially, while the NE Bureau was aware of PRIDE as a resource and effectively used it, PRIDE found it necessary to market its program to the various USAID missions and make them aware of the variety of technical assistance activities PRIDE could offer and the manner in which they could be accessed.

PRIDE staff discuss details of anticipated or desired technical assistance activities with the NE Bureau and/or the relevant USAID Mission as appropriate. The Scope of Work (SOW) for each WO or DO is negotiated directly with the Bureau and/or the requesting USAID Mission. Each SOW specifies type of expertise and level of effort required. The Project Administrator, in coordination with the Project Assistants, contacts the subcontractors to determine whether they are interested in participating in the proposed WO or DO and whether they have staff or consultants which meet the specifications detailed in the SOW. Simultaneously, Chemonics provides potential candidates from its extensive computer lists of consultants or by nominating a Chemonics employee to undertake the assignment. Exceptions to this procedure might be when it is apparent that a given WO or DO falls almost exclusively within the area of expertise of one of the subcontractors or of Chemonics. One or two PRIDE senior staff may also be nominated to fill one of the DO or WO slots. The resumes for the proposed team are submitted to the NE Bureau and/or the requesting USAID Mission for approval. This process may need to be repeated if one or more candidates do not meet the requirements of the Bureau and/or USAID.

Once the team of consultants is assembled, PRIDE provides a one-to-two day orientation covering topics such as country-specific background, key contacts, issues and technical areas not discussed in the SOW, administrative details (travel, per diem, related costs, fee reimbursement, etc.), and final report or study requirements. The support staff, led by the Project Administrator, takes the lead in planning and conducting these orientations. PRIDE senior staff participate in some of these orientation sessions. On occasion, a NE Bureau representative may also provide additional information, particularly regarding A.I.D. concerns or priorities.

Following termination of the assignment and presentation of a final report or study, each WO or DO consultant is requested to prepare a questionnaire/evaluation regarding PRIDE orientation and backstopping, as well as identification of specific issues or follow-up which may be required. USAID Missions are also requested to provide their assessment of the performance of each PRIDE team and of the overall PRIDE objectives and program.

A spot check of consultants who have participated in field activities indicates that they were satisfied with the thoroughness of the orientation and the support received while overseas. In fact, there were indications that some felt that the orientation was too thorough and could be shortened. However, Chemonics believes it is preferable to err on the side of too much rather than too little information. Similarly, a spot check of the Missions indicates a high degree of satisfaction regarding both the timeliness and the professional level of PRIDE technical assistance.

B. Sub-Contractors

1. Distribution of Work

To date, Lincoln University and Environomics are the only subcontractors which have not been involved in funded project activities; i.e. either WOs or DOs. This will change in the near future in that Environomics will be involved in a DO, funded by USAID/Egypt. Since the subcontract period of performance for Lincoln extends only through August 28, 1993, it is unlikely that it will be involved in any funded WOs or DOs.

All WOs and DOs, with the exception of one, have focused exclusively on either the Near East, from a regional perspective, or on one of the four countries currently designated by the NE Bureau as PRIDE clients. The exception was Delivery Order #1: PRIDE Environmental Business Activities in Eastern Europe. This was in response to a commitment when Eastern Europe and the Near East were one bureau. The tasks in this delivery order were assigned to HBI and were performed over a period of 1.5 years, involving four technical experts and a total of about 500 person-days of LOE. The Central and Eastern Europe Bureau was satisfied with the level of expertise demonstrated by the technical team and by PRIDE's backstopping, and has requested a second DO. Apparently, there was tacit understanding that PRIDE would honor two requests for buy-ins from Eastern Europe.

2. Funding

The Core budget allots specific dollar amounts per subcontractor. The total Core budget is $6,083,521. Original percentage distributions per prime contractor and subcontractors were:

Chemonics	53.0%
HBI	21.4%
CSG	5.0%
Lincoln University	3.0%
SAIC	2.7%
NGOs	1.7%
Industrial Economics	0.9%
Other	12.2%

Table IV-1 presents the allocations and existing balances as of June 24, 1993. According to Table IV-1, at the conclusion of the third quarter of the second year of the project, i.e., with more than three of the five authorized project years left, there is a funding balance of 58 percent. Chemonics has a balance of 52% and the major sub-contractor (HBI) has a balance of just over 50%. However, HBI is only funded for four years. CSG, IE, and SAIC have significantly lower margins: 32%, 34%, and 43%, respectively. On the other hand, Lincoln and NGOs have 100% balances, indicating that no activities have been funded under these two categories.

The "Other" category is rather ambiguous. A portion of the amount was originally set aside for Layton and Associates, a third Gray Amendment organization which dropped out before contractual arrangements had been finalized. It is possible that the allotted 12.2% of the overall budget, together with the 5% allotment for CSG and the 3% allotment for Lincoln, comprise the "up to 20 percent for Gray Amendment firms" that is possible under the Core contract.

A different perspective regarding overall funding was provided by the COP, based on some preliminary, rough estimates prepared by the Project Administrator of total budget divided into estimated fixed costs (Core Prime Contractor and Sub-contractors) and estimated discretionary Core funds. These estimates were predicated on an assumption that the remaining balance of funds, after deducting estimates for June and July expenditures, would be $ 3,271,035.57, or 53% of total budget.

Using these rough estimates, projected fixed costs represent 76% of overall budget, with a balance of 24% available for estimated discretionary Core funds. However,

TABLE IV-1 ALLOCATIONS AND EXISTING BALANCES FOR PRIDE AS OF JUNE 24, 1993

CHEMONICS INTERNATIONAL PRIDE CORE BUDGET MONITOR 24-JUN-93	BUDGET	INVOICED TO DATE 1991-1993	REMAINDER IN BUDGET	INVOICED TO DATE (PERCENT OF TOTAL BUDGET)
HBI	$1,299,912	$ 640,198	$ 659,714	49.25
SAIC	163,219	93,185	70,034	57.09
IEc	55,579	36,863	18,716	66.33
LI	185,120	0	185,120	0
CSG	307,144	208,681	98,463	67.94
NGOs	103,630	0	103,630	0
Other	744,371	34,750	709,621	4.67
Total Subcontracts	$2,858,975	$1,013,677	$1,845,298	35.46
Chemonics Only	$3,224,546	$1,544,190	$1,680,356	47.89

this ratio apparently changes for the remaining three project years. Of the remaining overall balance of $3,271,035.57, 82% would be required to cover estimated fixed costs, leaving a balance of only 18% for discretionary Core funds. A more careful analysis of the budget, expenditures to date, and anticipated fixed costs might provide a more accurate picture of the financial situation of the project, but even the originally estimated 76/24% ratio between fixed costs and discretionary Core funds indicates the need for careful monitoring and judicious drawdown of limited discretionary Core funds. Discretionary Core funds are the sole funding source for WOs, with the exception of Core PRIDE staff assigned to specific WOs since their remuneration is calculated under fixed costs.

3. Level of Effort (LOE)

PRIDE calculates total level of effort (LOE) under both Core and Q-Contracts. The original planned LOE, detailed in the Contract SOW in person-months (p/m), is presented below by Core staff and PRIDE component.

CORE STAFF LOE - LONG-TERM

Senior Resource Economist (COP)	60 p/m
Institutional/Information Specialist	60 p/m
Private Sector Specialist	48 p/m
Administrative Assistant	60 p/m
Total Core Staff LOE	228 p/m

COMPONENT LOE - SHORT-TERM

Strategic Planning	26 p/m
Policy Analysis	34 p/m
Privates Sector Initiatives	18 p/m
Environmental Education	
Environmental Education	20 p/m
Subcontracts with NGOs, equivalent of:	10 p/m
Total Component LOE	108 p/m

Table IV-2 illustrates anticipated/authorized level of effort (LOE) compared with existing balances. Person/months have been converted to person/days since LOE for individual WOs and DOs is specified in person/days.

TABLE IV-2 SUMMARY BY PRIDE PARTNER OF CORE AND Q-CONTRACT LEVEL OF EFFORT

CORE LOE SUMMARY BY PRIDE PARTNER (UPDATED 07-JUN-93)

PRIDE PARTNER	TOTAL LOE AUTHORIZED	TOTAL INVOICED	TOTAL LOE REMAINING
CHNC	353.00	241.00	112.00
SAIC	187.97	129.06	58.91
HBI	473.75	366.32	107.43
IEc	45.00	35.74	9.26
LINCOLN	0.00	0.00	0.00
CSG	389.50	318.37	71.13
TOTAL	1449.22	1090.49	358.73

Q LOE SUMMARY BY PRIDE PARTNER (UPDATED 07-JUN-93)

PRIDE PARTNER	TOTAL LOE AUTHORIZED	TOTAL INVOICED	TOTAL LOE REMAINING
CHNC	440.00	436.63	3.38
SAIC	91.00	83.23	7.77
HBI	714.00	676.48	37.52
IEc	0.00	0.00	0.00
LINCOLN	0.00	0.00	0.00
CSG	6.00	2.00	4.00
ENV	0.00	0.00	0.00
RMI	187.00	185.50	1.50
TOTAL Out of 4160 budgeted	1438.00	1383.83	54.17

NOTE: Data included in Tables IV-1 and IV-2 were extracted by PRIDE/ Chemonics from its computerized financial data base and reflect status only through May 1993. The evaluators were advised that some of the data were preliminary. Without access to more detailed contractor and subcontractor financial data, it was not possible to present more precise information. However, this does not impair the usefulness of these data in illustrating the trend in drawdown of funding and LOE.

According to the LOE allocations compiled by Chemonics, Core LOE distribution provides HBI with the highest percent of authorized LOE, i.e., 33 percent. The remainder of the LOE in descending order is CSG - 27 percent, Chemonics - 24 percent, SAIC - 13 percent, and IEc - 3 percent. Lincoln University was not authorized any Core LOE. Given the fact that there are more than three years remaining of the five-year project life, it is apparent that authorized Core LOEs are being used at a rate which suggests some of the partners will exhaust their authorized LOE well before project completion date. Authorized LOE remaining per partner range from 18% for CSG to 32% for Chemonics.

Table IV-2, however, does not provide a complete picture of Core LOE. "Total LOE Authorized" refers only to LOE specifically authorized in Work Orders. The subcontracts apparently state a higher LOE. For instance, HBI - 1430 (which includes the full-time Private Sector Specialist), SAIC - 195, IEc - 65, Lincoln - 260, and CSG - 479. Chemonics probably has a total of over 7000 person/days LOE (which includes the COP and the Institutional and Information Specialist). These figures alter the calculations regarding LOE balances.

TOTAL SUBCONTRACT LOE AND BALANCES

	TOTAL AUTHORIZED LOE	UNEXPENDED LOE	PERCENT *
SAIC	195	65.94	34%
HBI	1430	1063.68	74%
IEc	65	29.26	45%
LINCOLN	260	260.00	100%
CSG	479	160.63	34%

* Percent remaining of total LOE assigned to each subcontractor.

This table underscores the fact that with more than three-fifths of the project life left, two subcontractors (SAIC and CSG) have only one-third of subcontracted LOE available, while one (IEc) has less than 50%.

While Chemonics is contractually obligated to deliver the LOE specified in the Core contract, it is noted that each time one of the Core senior staff is assigned to a DO, his chargeable days are charged to the relevant DO and, thus, are not tabulated in the Core staff LOE requirements. This means that upon project completion, each of the three senior positions will show less LOE than specified in the contract. Since PRIDE/Chemonics does not monitor LOE per project component, it is not possible to state with any accuracy the extent to which the specified LOE per component has been achieved, nor what balances remain to be achieved. However, a cursory review of WOs suggests that Strategic Planning

achieved, nor what balances remain to be achieved. However, a cursory review of WOs suggests that Strategic Planning and Policy Analysis (with 24% and 34% of total obligatory LOE, or more than 50% together) are lagging far behind the two other components -- Private Sector Development and Public Awareness/Environmental Education.

Although it was tacitly understood during negotiations and in the preparation of the Core SOW that LOE per component was suggestive rather than mandatory, it would be prudent for PRIDE to determine just what levels of LOE should now be assigned per component and document this officially for NE Bureau consideration and approval. Otherwise, on project completion Chemonics may find it necessary to defend tha actual use of LOE by component compared to LOE stated in the SOW.

It is noted that while the components define in general terms the areas in which technical assistance will be provided, it is more difficult to categorize a specific WO or DO exclusively under one component or to specify exact percentages of components in a given WO or DO. Most are a blend of two or more components.

While the private sector and environmental education components address specific target groups or population, strategic planning is more of a tool to be utilized in conjunction with the other components while policy planning provides the umbrella under which project activities and their continuation after project completion will presumably operate.

One area, "Subcontracts with NGOs", has had no LOE used, nor have any funds been expended under this category. Considerable effort was devoted by the Information and Institutional Specialist to incorporate NGO activities in the project, with minimal success. His attempts to interest World Resources Institute (WRI) in becoming the channel for these activities (including the provision of small grants to selected NGOs) are not reflected in the data, since these did not result in positive involvement by WRI or other NGO.

C. Relationships between PRIDE and Subcontractors

PRIDE is sometimes referred to as a consortium. It is essentially an organizational structure involving a prime contractor and seven subcontractors. This type of arrangement is never completely free from inter-corporate tensions. Nevertheless, the Evaluators find that these tensions are minimal and generally evolve from the implementation of the WOs and the DOs.

In terms of subcontractual arrangements, including funding and LOE allocations, there are three levels of relationships:

- HBI, as the major Q-Contract and Core subcontractor, with a full time representative physically located in the PRIDE office who participates in the operations discussion and decision-making process, is actively involved in both WOs and DOs;

- An up-front, funded contractual relationship benefitting the four other Q-Contract and Core subcontractors -- SAIC, CSG, Industrial Economics, and Lincoln University, providing opportunities to participate in both WOs and DOs;

- A contractual relationship, similar to an IQC, with the two Q subcontractors -- Environomics and Resource Management International -- which facilitates their participation in Delivery Orders.

Some, but not all subcontractors, expressed concern over items such as disallowances for invoiced costs, application or interpretation of AID regulations, rejection of proposed candidates, and inability to get waivers to field highly qualified experts whose daily rate exceeds the AID maximum. The Evaluators did not feel justified in pursuing this topic in greater detail since Chemonics is aware of these concerns and is attempting to decrease the level and number of misunderstandings. Communications have improved and a forum has been established for discussing and resolving differences.

This is a "two-way street" - Once A.I.D. regulations and Chemonics' procedures in adhering to those regulations have been explained to the subcontractors, it is incumbent on them to operate within the provided guidelines, or provide Chemonics with justification for any deviation.

Since most of the subcontractors have greater experience working with EPA than with A.I.D. (two subcontractors have never worked with A.I.D.), the difference between AID and EPA regulations (i.e. maximum salary and/or daily fee, level of detail required in invoices, allowable other direct costs) initially caused some misunderstandings. Although the A.I.D. PRIDE/Chemonics contract establishes the salary and daily fee ceilings (Section H.4. Personnel Compensation), it allows for possible exceptions, or waivers, with "...advance written approval...by the Contracting Officer." Although Chemonics policy is generally not to request waivers, two waivers have been requested and both were not approved.

Two areas which appear to concern some of the subcontractors the most are the A.I.D. maximum daily rate, and the allowed multiplier for DO direct labor. For instance, the EPA maximum hourly rate is $60+, while A.I.D.'s is $40+. This means that there may be instances in which a highly qualified, technical expert may not be proposed by a

subcontractor because of the A.I.D. maximum rate, or the subcontractor may have to absorb the difference.

At least one subcontractor has indicated that it will not participate in any DOs since the 2.0 multiplier would not cover all costs (the multiplier goes up to 2.2 in August 1993). This is an area over which Chemonics has no control since this multiplier is established by the A.I.D. contract office and is, probably, not subject to renegotiations.

The new Chemonics COP has instituted procedures for notifying the subcontractors as early as possible when potential assignments are under consideration so that they have a more advantageous lead time in identifying potential candidates. Lead time is of critical importance to those contractors who nominate staff and seldom if ever contract outside consultants to perform contractual obligations.

While all subcontractors are invited to participate in the PRIDE Quarterly Meetings, and expenses for attendance are covered for those with Core subcontracts and/or WOs, many view these meetings as informational rather than opportunities to become more intimately involved in review and planning. The COP is cognizant of this concern and is attempting to focus the meetings away from a "show-and-tell" approach to discussion of issues and a degree of integrated planning.

Smooth working relationships are also affected by the manner in which the subcontractors view their participation in PRIDE activities. There is reason to believe that some market their availability for direct USAID Mission contracts, bypassing the PRIDE mechanism, by taking advantage of the presence of one of their staff or consultants on a given field DO or WO. This undermines the overall purpose and raison d'etre of PRIDE and of overall contractual relationships and has the potential of diverting funds which might otherwise be channeled through PRIDE. Since this is an evaluation and not an audit or inspection, the Evaluators only note that this has happened in at least one instance, maybe more. However, there is no evidence that any funds which might have been channeled through PRIDE have been diverted to a subcontractor.

D. Relationships with A.I.D./USAID

1. Communications and Meetings

The NE Bureau is both contract manager as well as the major project client. The Development Resources/Environment Office (DR/ENR) is responsible for program management and supervision, and signs off on all WOs and DOs. In some instances, the NE Bureau initiates and prepares the SOW for specific WOs.

The key officials in DR/ENR are the Environmental Coordinator and the Project Officer. Working within the overall PRIDE umbrella is an EPA RSSA employee, assigned to DR/ENR, whose position is funded by the overall PRIDE portfolio. In addition, two AAAS fellows are assigned to the office to work on environmental issues. All of these individuals have been involved to a greater or lesser degree with PRIDE/Chemonics activities, with the Environmental Coordinator and the Project Officer having the most direct and regular contact.

The contract specifies, in general terms, the relationship between the NE Bureau and PRIDE/Chemonics. Most activities requested by the Bureau are formalized in WOs which are discussed in advance with PRIDE. The particular SOW may be drafted in either the NE Bureau or PRIDE, but is officially approved by the NE Bureau and issued by PRIDE.

Communications are maintained through frequent phone calls, facsimile, electronic mail or office visits. More formalized communications are achieved through weekly joint staff meetings in which the NE Bureau Environmental Coordinator and the Project Officer participate, on behalf of A.I.D., together with PRIDE Core (senior) staff. These meetings provide a forum for the discussion of issues, exchange of information, identification of existing or actual problems or of anticipated imminent or future events and activities. The meetings may include the participation of a representative of one of the subcontractors, when the subcontractor is involved in delivering a service or product under a WO which is of special interest to the NE Bureau. This type of special meeting, or briefing, however, is usually in addition to the weekly meeting.

Given the nature of the contract and the frequent exposure of NE Bureau personnel with PRIDE core and support staff and to key subcontractors, lines of communication and authority are, at times, blurred. NE Bureau instructions or requests for information made directly to subcontractors, which may require a level of effort or activities beyond those specifically stated in a WO, can cause problems for both PRIDE core staff and the subcontractor. These NE Bureau interventions, whether frequent or infrequent, represent a circumvention of accepted procedures and contractual relationships.

In some instances, it might appear as though the NE Bureau uses the core contract as an open-ended, funded IQC. Since the NE Bureau is the prime beneficiary, this is not necessarily a negative factor. However, it is incumbent on the NE Bureau to determine whether a specific request is ad hoc or a programmed use of PRIDE Core Contract resources. The NE Bureau should also consult with PRIDE Core staff before commiting Core resources to a USAID Mission.

2. Reporting

Apart from the requisite financial reports, PRIDE is required to provide the following program reports:

Annual Work Plan
Annual Report
Quarterly Report
Monthly Report
Final Project Report

In addition, PRIDE is obligated to prepare a newsletter -- EnviroNet -- twice a year (Chemonics has opted to publish it three times a year), Work Order Reports, Delivery Order Reports, and Special Studies. Given the frequency of meetings between key Bureau and PRIDE core staff, it is reasonable to question whether a monthly report is really essential.

To date, three issues of EnviroNet have been published, with the fourth ready for circulation early in August 1993. The first three issues were prepared in English and French. While the French version is useful in Morocco and Tunisia, it is of limited value in Egypt and Jordan. PRIDE decided to discontinue the French version and opted for an Arabic insert which would be useful in all four target countries.

PRIDE distributes approximately 300 copies to the field and 1000 copies in the U.S. Another 3 to 400 copies are used as handouts or enclosures to letters and other communications. Recipients include USAID missions, AID (NE Bureau and other appropriate bureaus and offices), other donor and multilateral organizations (e.g. UN, IBRD, GTZ), EPA, environmental NGOs, PRIDE subcontractors and other interested firms.

The draft of each issue is prepared by the Chemonics Publications Editor and is reviewed, modified, and approved by the NE Bureau prior to publication. Each issue is limited to eight pages.

Topics are selected for their applicability to Near East environmental problems. Each issue usually has a lead article by a U.S. environmental expert. Subcontractors have also been contributors. In one instance an issue presented an excerpt of an Egyptian newspaper editorial dealing with key environmental problems. EPA material is also used. Two issues were prepared featuring specific themes: one -- information, eduation, and communications; another -- private sector.

PRIDE has received positive feedback from recipients of bulletin and attempts have been made to be responsive to suggestions which have been made regarding specific topics or information.

D. World Environment Center (WEC) Cooperative Agreement

The World Environment Center (WEC) is a not-for-profit, non-advocacy environmental organization. Although independent since 1981, WEC was founded in 1974 with seed funding from the United Nations Environment Programme. The Center currently receives funding from industry, government, international organizations, corporate or private foundations, and private citizens. WEC has three major programs:

1. The International Environment Forum (IEF) - since 1971 has offered industry executives the opportunity to meet senior international policy makers for discussions on environmental and resource management issues. Currently 58 multinational corporations, based in eight countries and engaged in nine industrial sectors, participate in the IEF.

2. The International Environment & Development Service (IEDS) - has provided pro bono services in 37 countries through technical assistance from over 290 environmental, health, and safety volunteer experts. From 1982 through January 1993, IEDS has completed over 280 projects involving 700 host country professionals.

3. WEC Gold Medal for International Corporate Environmental Achievement - Annual since 1985, WEC has honored multinational corporations that have outstanding sustained worldwide environmental policies and practices.

WEC maintains a headquarters office in New York City with additional "field" offices in Bangkok, Jakarta, Mexico City, Prague, and Washington, D.C. The Center is currently staffed with 65 full-time employees, 5 part-time employees, 8 in-country coordinators, and 2 senior fellows (they are Program Managers for a special assistance program in Mexico and a Local Accident Mitigation Program). In addition, the Center has two long-term advisors in Eastern Europe specifically to serve the Slovac Republic, Hungary, and Poland. WEC has received USAID funding since 1982 when the IEDS initiates pilot activities in Jordan and Tunisia. The PRIDE-funded activities began in 1991 with the signing of the Cooperative Agreement. About $1.5 million of an authorized $2.1 million has been obligated through August 1994.

The WEC maintains a "data base" of volunteer experts who have expressed a willingness to participate in international technical assistance on a pro bono basis. WEC stresses that

personnel from working industries are used for these missions, thus ensuring that recent skills with regard to processes and equipment are applied to host country problems. An additional benefit accrues from the fact that many of WEC's consultants are retired industrial executives. They have been in the industry for many decades and therefore are familiar with much of the equipment and processes that are still in use in the developing world. Also, WEC believes that they can respond quickly to Mission requests.

In keeping with NE bureau and PRIDE objectives, WEC's Near East strategy has evolved to center around the goal of establishing high-impact and sustainable pollution prevention (PP) programs which result in measurable waste reduction and economic savings in Near East industries. In coordination with the NE Bureau, WEC activities have recently been focused in "hot spot" regions of the Near East in four targeted industrial sectors.

TARGETED SECTORS	HOT SPOTS
Cement	Nile Basin, Egypt
Food Processing	Zarqa Basin, Jordan
Leather Tanning	Mohammedia, Morocco
Chemical	Gulf of Gabes, Tunisia

In addition, the following life-of-project goals have been established for WEC PRIDE-related Near East activities:

- Train private sector consultants and local organizations in pollution prevention assessment and training techniques,
- Disseminate the results of successful pollution prevention programs sector-wide and provide support to industries starting their own programs,
- Provide local organizations with pollution prevention libraries accessible to industry and the private sector.

The Cooperative Agreement details implementation procedures for the WEC activities. Under the Cooperative Agreement, WEC has a core staff of a Project Director and Project Manager (each for two-thirds time) and a Project Assistant (for full-time). The salaries for these positions are cost-shared between the NE Bureau (90 percent) and WEC (10 percent).

Under the Cooperative Agreement, WEC is to participate in PRIDE implementation meetings and retreats and maintain regular, informal contact with the other PRIDE project contractors. WEC representatives generally attend the quarterly PRIDE meetings at the Core Contractor's office in Washington, D.C. In addition, WEC and the PRIDE project contractor (Chemonics) may collaborate on joint or coordinated activities in a target NE country.

The Cooperative Agreement describes the technical assistance private sector approaches to pollution prevention activities and environmental education/public awareness in some detail. Requirements for consultant approval and in-country logistic support are outlined. While the details of each consultant visit will vary according to the nature of the specific tasks requested, the Cooperative Agreement specifies the following general requirements:

- visits will last between one and three weeks,
- a visit to several plants or sites is preferred,
- initial meetings should be held with plant managers and officials,
- site inspections should follow the meetings,
- findings will be presented to all concerned parties in a seminar,
- if requested, related topics of interest may be covered in the seminar.

SECTION V

CONCLUSIONS AND OBSERVATIONS

TECHNICAL ASSISTANCE

1. **The level of effort under the Core Contract has been reasonably spread among the four major countries in the Near East region.** The core contract level of effort (LOE) for core staff and work orders for activities directly supporting mission environmental programs through June 1993 is as follows:[1]

Country	Core Staff	Work Orders	Total(*)
Egypt	11.8	10.6	22.4 (30.6)
Jordan	8.7	10.5	19.2 (26.3)
Tunisia	5.2	12.0	17.2 (23.5)
Morocco	6.2	8.1	14.3 (19.6)

(*) = Person-months (percent of total)

These data do not include LOE used for PRIDE administration, management, and general activities such as annual reporting and work plan development.

2. **PRIDE has provided technical assistance in a timely and effective manner in response to Mission Q-Contract "buy-ins" and NE Bureau Core activities. In most cases, technical assistance has been country-specific.** Obviously, Mission "buy-ins" involve country specific activity. Core-funded activities have also focused on country-specific issues, partly because they have actually been Mission requests (as opposed to NE Bureau initiated) for technical assistance to address specific local issues that either the Mission was unable to fund or funding under the Core-Contract was more expedient.

3. **The quality of the technical assistance (as judged by the content and quality of the final reports) provided under the Core Contract is very good. PRIDE technical assistance has been supportive of the USAID Environmental Strategy Framework and the NE Bureau's Environmental and Natural Resources Strategy (which is not an "official strategy" per se).** Six reports written under the Core Contract were reviewed - two were the reports selected as representative of their respective PRIDE component, and thus were reviewed in some detail. PRIDE activity has exclusively focused on two NE Bureau critical environmental challenges, i.e., urban and industrial pollution and degradation

[1] PRIDE Quarterly Report #7, page 7, Chemonics International and its Associates, April-June 1993.

and depletion of water resources.

4. **Planned interventions and activities under PRIDE have generally been consistent with, and responsive to, A.I.D. policies, procedures, mandates, and Congressional directives.** A total of ten reports written under the Core and Q-Contracts were reviewed - four were selected as representative of their respective PRIDE component, and thus were reviewed in some detail.

5. **In general, sensitivity to the country's institutional structure is evident in the technical assistance provided. However, the sustainability of recommended programs and/or policy initiatives is not always clearly addressed.** Occasionally, the reports assume that "lessons learned" in the western world should make environmental management more readily acceptable in the NE region. While one of PRIDE's objectives should be to "shorten the learning curve" for NE countries, the Evaluator's believe that this can be overly optimistic at times. Sometimes the approaches taken by PRIDE for program development are quite bureaucratic and no real implementation methodology or estimated schedule are given. The cost to implement "program options" is not always specified.

6. **Approximately 48 percent of total technical assistance under the Core Contract has been provided under the Private Sector Initiatives component.** The current accounting procedures for the Core Contract may not accurately reflect all level of effort (LOE) completed for each activity. The above percentage estimate is made from the PRIDE Core Status Sheet (as of April 22, 1993). The LOE provided under the Q-Contract is not itemized by component. However, based on the activities completed, about 17 percent is from the Private Sector Development Component.

7. **The quality of the technical assistance (as judged by the content and quality of the final reports) provided under the Q-Contract (Buy-ins) is very good.** Four reports written under the Q-Contract were reviewed - two were the reports selected as representative of their respective PRIDE component, and thus were reviewed in some detail.

8. **The level of detail in the technical assistance reports provided under the Q-Contract is high, but usefulness of recommended action is undermined sometimes by a lack of a clear methodology for implementation.** Based on the excellent ratings given to PRIDE interventions by the NE Missions, the technical assistance provided satisfied requirements of the Mission Terms of Reference. However, in one report, 29 "actionable elements" are identified without sufficient indication of prioritization, urgency or cost to implement them. In another, the "action plan" is so comprehensive (a total of 125 "action items" are listed) that without some indication of implementation schedule and cost, the reader may be overwhelmed with the magnitude of what needs to be done.

9. **USAID NE Missions were highly appreciative of PRIDE technical assistance and believed that the timeliness. usefulness, and overall impact for their environmental programs were very good to excellent.** Questionnaires were sent to the four NE Missions and telephone discussions were held with responsible Mission personnel. Morocco abstained from comment as their only PRIDE intervention was in conjunction with a larger World Bank initiative (Morocco is the recipient of a significant PRIDE initiative for Environmental Services over the next year). Tunisia [the recipient next year of a PRIDE-supported NE Bureau buy-in to the Environmental Pollution Prevention Project (EP3) Country Support Program] and Jordan were highly pleased with previous PRIDE interventions. Discussions with the Egypt Mission indicate that they are pleased with PRIDE technical assistance; the questionnaire has been circulated for comment and not returned as yet.

10. **Almost 83 percent of the Industrial Environmental Audits completed by the World Environment Center (WEC) were in Jordan and Tunisia.** This heavy focus was a result of Mission requests inspired by initial "business development" visits.

11. **The average duration of a WEC Environmental Audit is less than 4 days in-country. In many cases, this was not enough time to collect sufficient data to assess general production, pollution, resource, and raw material use. Often, the audit reports do not adequately inform plant managers of: (1) what can be accomplished in pollution prevention, (2) the cost/benefit of various levels of intervention (payback and financial analysis), and (3) how to implement recommendations.** The average duration is computed from the itineraries of 19 Environmental Audits. Five of the audit reports were reviewed in detail. One of the reports that indicated an 11-day visit (although the itinerary indicated only 6 days for plant visits in-country) included visits to 19 plants.

12. **WEC specialists have excellent technical credentials for conduct of Environmental Audits. In the great majority of cases, indications are that good information is provided, but the sustainability of long-term benefits is questionable because of a lack of sufficient "follow-up."** In the 5 reports reviewed, two specialists specifically stated that significant progress could only be made by providing continued technical liaison and support through follow-up visits. There is also some indication that the quantity and quality of results could be enhanced by: (1) more pre-visit preparation to identify specific problems to expect, and (2) a more careful selection of plants. One plant was so antiquated and inefficient that proposed solutions were "research programs" and "pilot plant demonstrations," not a very useful PRIDE initiative.

The use by WEC of pro bono services provides Missions with technical assistance by well qualified specialists. However, the very nature of the pro bono approach makes long-term follow-up very difficult, i.e., companies (and retired consultants) cannot generally provide

free labor over an extended period. A continuing technical and supportive relationship between the plant manager and the auditor (or other qualified supporting personnel) is necessary if a meaningful environmental benefit is to be gained from the activity. A firm commitment is required from the NE Bureau for PRIDE funding of the necessary follow-up activity to substantially enhance the possibility for achieving long-term benefits for the affected plant.

Environmental Audits, provided by WEC or any other PRIDE-funded mechanism, should not be continued unless they are the first step of a broader initiative to structure an industrial environmental management program and to assist the plant manager with its implementation. The PRIDE-funded Tunisia Country Support Program under EP3 provides an opportunity for the "pilot demonstration" of this concept.

The basic approach initially should be to help carefully selected firms advance their already intended programs in environmental management to be implemented more quickly than they would have otherwise. Plant selection criteria should include consideration of the following factors:

- Plant is economically viable. For the public sector, the plant is a candidate for privatization.
- Plant is not unique. Measures selected for plant would likely be replicable.
- Competence of plant management
- Geographic location.
- Plant management has demonstrated interest and commitment to environmental protection.
- Plant size and type of operations are such that reasonable levels of improvement can be made within limited capital constraints.
- Type and amount of air and/or water pollution from the plant is significant.

The institution building and training that will be part of the intervention and information learned can then be used to further advance the movement of a broader segment of industry toward effective environmental management. The initiative should not be oriented to specific technologies but be based on the assumption that pollution prevention is a broadly applicable approach that can benefit almost every industrial firm. Thus, the Mission (with the help of PRIDE) can identify firms with significant environmental problems who are ready to act to correct them.

The following general steps should be implemented in a coordinated program among the WEC, PRIDE, and EP3:

- Assignment of Team
- Detailed Plant Survey
  - Development and Implementation of Sampling and Testing, Quality Assurance/Quality Control Program
  - Analysis of Management Structure
  - Analysis of Management Practices
  - Detailed Engineering Analysis of Processes
- Development of Environmental Management Program
  - Analysis of Technical Options
  - Preliminary Design of Selected Measures
  - Selection of Funding Options
  - Development of Incentive Program
  - Development of Draft Program
  - Negotiations With Plant Management
- Implementation of Program
  - Design
  - Procurement
    * Order
    * Ship
    * Pass Customs
  - Installation
  - Debugging
  - Determine Performance
  - Operations and Maintenance

The environmental management plan that is developed will provide a guide for the plant to follow to move from current pollution conditions to very low levels of pollution along a least cost curve. A sequence of measures should be identified, costed, and designed, that the plant can implement to achieve any desired level of cost-effective pollution control.

PROJECT ORGANIZATION, MANAGEMENT AND OPERATIONS

13. **There are no major flaws or deficiencies in the PRIDE design, management, or implementation.** However, the project has gone through an evolutionary process as originally anticipated during project design and contract negotiations. It is apparent that all of the over 50 separate tasks detailed in the Core contract will not be undertaken, either in part or in whole. This is in keeping with the original intent that the project be flexible and responsive to specific targets of opportunity since PRIDE is a demand-driven project. A more accurate accounting of past and current project activities is derived from the annual work plans, and the quarterly and yearly reports. However, the NE Bureau needs to document the fact that the changes inherent in the annual work plans are, in fact, acceptable modifications of the original SOW.

14. **Chemonics has assembled an outstanding group of subcontractors with a broad range of expertise to respond to NE Bureau needs.** Chemonics is to be congratulated on assembling a representative group of organizations as its subcontractors who bring unique or complementary, specialized talents to the project. Given the fact that this is a response driven, program support project and that the prime client is the NE Bureau, it is incumbent on PRIDE to satisfy the demands and needs of the Bureau while maintaining the correct balance between these and USAID missions and country demands and needs. It is apparent that the Chief of Party (COP) would like to use the subcontractor pool of talent more aggressively in the three remaining project years.

15. **To date, the only Gray Amendment subcontractor used is the Capital Systems Group (CSG), in spite of efforts to actively involve other Gray Amendment organizations.** There are valid reasons to subcontract with CSG to provide the LOE and funding set-aside for all Gray Amendment activities. The time limit on the subcontract for Lincoln University (another Gray Amendment subcontractor) ends in August. Given the lack of responsiveness demonstrated by Lincoln University, Chemonics is justified in not extending the subcontract. However, the NE Bureau needs to determine whether the use of only one subcontractor satisfies the Gray Amendment requirements.

16. **Although PRIDE has made sincere efforts to involve NGOs in it project activities, to date it has been unsuccessful.** Either this contractual requirement should be dropped by the NE Bureau or the mandate needs to be reiterated with clear indications of the role the Bureau perceives NGOs can and should play.

17. **PRIDE has undergone major shifts in key staff personnel without major impact on morale or performance.** In March, the COP for Chemonics was replaced. Recently, the Private Sector Initiatives component task leader notified PRIDE/Chemonics of his intention to leave PRIDE within the next month or so to become the COP of the EP3 Project. Thus within six months, two of the three senior PRIDE staff will have been replaced. However, no gaps in service have been or will be realized. The recruitment/replacement of the Private Sector Initiatives component task leader, currently underway, provides Chemonics and the NE Bureau an opportunity to review the function of this position, which is currently funded only through year four.

18. **It is increasingly apparent that both core and support staff are overextended attempting to meet the requirements of the core SOW, including WOs, as well as to adequately manage and administer the increasing number of DOs.** Given the heavy workload carried by the Chemonics COP, including responsibilities for the PRIDE Strategic Planning and Policy Analysis components, it would appear reasonable for Chemonics to request, and the NE Bureau to approve, an increase in funding and LOE to hire an additional core specialist, probably one who could combine the functions of Strategic Planning and Policy Analysis.

The Chemonics PRIDE Project Administrator also requires additional assistance, given the heavy workload she carries, particularly related to DOs. Currently, PRIDE with CSG assistance is analyzing workload and administrative burden patterns with the streamlining and simplification of procedures being one of the anticipated results. Once this has been completed, Chemonics will be in a better position to document what additional assistance is required.

19. **PRIDE staff devotes considerable effort to the recruitment and fielding of technical teams.** Chemonics attempts to spread team assignments as equitably as possible among the subcontractors. At times, this attempt is not appreciated or perceived by the subcontractors. The Evaluators did not perceive any blatant favoritism or bias in team assignments, but are aware that given the number of potential subcontractors who could be used compared to the limited number of assignments available on any given work order (WO) or delivery order (DO), a prime contractor is always exposed to the possibility of this type of criticism. When teams are finally selected and approved by the Bureau and/or USAID missions, Chemonics does an exceptionally thorough job of orienting and backstopping them, as evidenced by feedback from both consultants and USAID Mission personnel.

20. **Chemonics is making sincere efforts to improve coordination with its subcontractors, particularly in response to the expressed desire of the subcontractors to be involved early on in identifying expertise required to implement Work Orders (WOs) and Delivery Orders (DOs).** While Chemonics cannot always control the deadlines set by the NE Bureau or the USAID Missions for fielding technical assistance teams, it does exercise a degree of control through negotiations and reasoning with the authorities responsible for issuing the WOs and DOs. PRIDE finds it necessary to regularly remind the Bureau and the USAID missions that short deadlines for fielding teams are often not feasible and may prevent the recruitment of the best candidates.

21. **Early in the PRIDE implementation, a "buy-in" was received from the Central and Eastern Europe (CEE) Bureau; another request for a "buy-in" has recently been made.** The first PRIDE delivery order was for "Environmental Business Activities in Eastern Europe," reflecting the fact that the project was originally designed to provide services to the then Eastern Europe/Near East (ENE) Bureau. The final report for this effort was delivered to the CEE Bureau late in April 1993. The CEE Bureau has expressed satisfaction with the activities performed and the final report, and has requested a second delivery order, or buy-in. This is in keeping with an understanding that the CEE Bureau could access PRIDE for two delivery orders.

Both the CEE and the NE Bureaus and Chemonics need to review this new request to determine how the service requested will affect the workload of core staff -- particularly the COP and the Project Administrator. Chemonics may need to request additional

administrative support funding if providing the services requested places an unacceptable burden on PRIDE core and support staff and dilutes attention from NE Bureau priorities.

22. **The distribution of funding and LOE between PRIDE/Chemonics and the subcontractors (and between the subcontractors themselves) reflects decisions consciously made when the Core contract and subcontracts were negotiated. The allocations were based on assumptions of the types of activities in which each subcontractor and the prime contractor might be involved.** Chemonics and HBI have the highest proportion of both funding and LOE, reflecting mainly the long-term core positions assigned to each -- Chemonics, two; HBI, one. This was not a capricious or inequitable exercise in project resource allocation. However, given the fact that PRIDE is currently preparing its Third Annual Work Plan, with projections covering years four and five, Chemonics and the NE Bureau may decide on a different configuration of funding and LOE allotments.

23. **There have been two major areas of tension between Chemonics and its subcontractors; (1) interpretation and/or application of A.I.D. regulations, and (2) consultant maximum daily rates.** Some of the subcontractors have never had direct, contractual dealings with A.I.D.; rather they have had direct dealings with EPA. As a result, there is an understandable desire to view allowable costs within EPA regulations. This has caused some tension between these specific subcontractors and PRIDE/Chemonics. The recently appointed COP, with the help of the Project Administrator, is making every effort to improve communications with the subcontractors, including more explicit explanations of AID regulations and why certain costs have been or will be disallowed.

Some of the subcontractors believe that the A.I.D. maximum allowable daily rate for consultants prevents them from nominating highly qualified experts whose usual remuneration exceeds the A.I.D. rate but is within the EPA allowable rate. Although Chemonics has a policy of not requesting waivers, it has done so on two occasions and A.I.D. rejected both. Given the sensitivity of this issue, Chemonics may wish to adopt an ad hoc, case-by-case approach as the need arises, provided A.I.D. indicates a greater willingness to support requests for waivers. The evaluators do not suggest that waivers be automatically sought and granted. Rather, they note that there may be some instances where A.ID. could benefit by the input of a highly specialized individual who would otherwise not be proposed for a specific, discrete activity.

24. **Contacts between PRIDE and the NE Bureau are frequent and at times the need for rapid response leads to the relaxing of standard procedures. This should occur only under extreme circumstances; whenever possible, established lines of communication and instructions should be used.** The Evaluators noted earlier that there are frequent scheduled as well as ad hoc communications between the NE Bureau and PRIDE, and, to a lesser extent, between the Bureau and some of the subcontractors. Ad

hoc as well as weekly scheduled Bureau/PRIDE meetings complement the more frequent person-to-person communications.

The NE Bureau is PRIDE's prime client and PRIDE is charged with assisting the Bureau in implementing its ENR strategy. Therefore, it is understandable that the NE Bureau requires direct access to PRIDE project staff, including subcontractor staff. Certainly the need for information, clarification, and rapid response fully justify a reasonably relaxed communications style.

However, the Evaluators note that there are occasions when the Bureau has given instruction to, or requested information from, either Core staff or subcontractors without observing the formal contract communication channels; i.e. through the COP. This, at times, results in a level of effort or specific activities beyond those specifically stated in an authorized WO. This has caused problems for Chemonics and its subcontractors. PRIDE must be demand responsive, but it must do so within the agreed parameters of contractual obligations and priorities established by the Bureau.

The Evaluators emphasize that the relationship between the NE Bureau and PRIDE is cordially correct. No major areas of conflict, either institutional or personal, were detected during the evaluation.

25. **Monthly reports appear to be limited in use and not necessary for efficient project management and information dissemination.** Given the frequent occasions in which PRIDE staff brief the NE Bureau or discuss issues with key Bureau staff, one mandated report seems superfluous -- the monthly report. A well-documented quarterly report, coupled with special reports and meetings, should provide the NE Bureau with the information it needs to effectively monitor the project.

SECTION VI

RECOMMENDATIONS

The initial PRIDE evaluation was to occur in May 1994 at the mid-term of the project. However, the evaluation was moved up approximately one year because the PRIDE was progressing at an accelerated rate. In addition, anticipated response to a new NE Bureau Environmental Strategy indicated expansion in environmental concerns by the NE Missions as well as the Bureau itself.

The level of activity for PRIDE over the project's 22 month existence has been impressive:

- 52 separate Work Orders under the Core Contract;
- 7 Mission buy-ins under the Q-Contract (four with multiple phases); and
- 23 industrial environmental assessments under the WEC Cooperative Agreement.

This level of activity alone justifies an accelerated evaluation of PRIDE. The increasingly dynamic nature of A.I.D. environmental programs at the Agency, Bureau, and Mission levels, and changes to PRIDE itself, lend further support to an evaluation at this time. However, these rapid changes have also presented a "moving target" that has made definitive recommendations from the evaluation difficult to formulate. In the past few months, and over the next few months, the following has occurred or will occur:

- the PRIDE Chief-of-Party (COP) has changed;
- the PRIDE Private Sector Initiatives Component task leader is leaving;
- a contract for a major USAID pollution prevention project, the EP3, has been awarded (with a purpose and mission that overlaps and complements PRIDE activities);
- an RFP for a major environmental awareness project, GREENCOM, has been announced (with a purpose and mission that overlaps and complements PRIDE activities);
- NE Bureau re-structuring of funds previously earmarked for a separate clean technology project has resulted in at least two significant environmental projects that directly affect PRIDE;
- the Central and Eastern Europe Bureau has requested a significant buy-in to PRIDE (potentially expanding the project's outreach); and
- the imminent re-organization and re-structuring of the A.I.D. itself will have a definite (though unknown) affect on any changes to PRIDE.

The evaluators have tried to view PRIDE from the perspective of a "snapshop" during the June/July timeframe. However, it is neither possible nor desirable not to be influenced by changes in PRIDE management, changes in the overall A.I.D. infrastructure, and future complementary and/or competing environmental projects that will be initiated within the next few months. With this in mind, the following recommendations are made for adjustments and/or improvements to the existing PRIDE.

TECHNICAL ASSISTANCE

1. **PRIDE should significantly increase activity in the Strategic Planning and Policy Analysis components. If funding is insufficient, then activity in the Private Sector Initiatives component should be reduced.** Nearly 50 percent of all PRIDE Core technical assistance to date has been in the Private Sector Initiatives component. Where assistance has been focused in the other three PRIDE components, there has been a very significant additional private sector component. In addition, WEC initiatives have almost exclusively been to provide "engineering" technical assistance through environmental audits - these audits being naturally focused in the private sector. This emphasis on the private sector has occurred for two major interrelated reasons: (1) a very successful "marketing and business development" initiative early in the PRIDE; and (2) an enthusiastic response by country Missions which see the best chance for near-term improvement in environmental conditions by working with the private sector.

The initial emphasis on the private sector was not detrimental to PRIDE, in fact it has resulted in some early successes with pollution prevention initiatives that have established the project as a strong key component in the NE Bureau environmental strategy and have gained PRIDE the "trust" of the NE Missions. However, when asked recently which "target groups" they would like to emphasize in future collaboration with PRIDE, the country Missions stated: Government (Morocco, Tunisia, Egypt, Jordan); NGOs (Jordan); Mission (Egypt); and Private Sector (Morocco).

PRIDE must re-evaluate how best to allocate very limited Core funding, both in Core-funded initiatives and in expenditures to support Mission buy-ins. PRIDE should focus on a longer-term view of sustainable development with regard to environmental intervention in the NE region. PRIDE assistance must establish an infrastructure in the country that will guarantee a commitment to broader environmental interventions, i.e., the development and implementation of environmental management plans in a systematic, cost-effective manner across both public and private sector facilities supported by programs to increase environmental awareness and education. This should be accomplished by increasing emphasis on: (1) strategic planning and policy development with the public sector; and (2) increased involvement of NGOs, PVOs, universities, and foundations.

2. **PRIDE/Chemonics and the WEC must coordinate and formally interface with the new EP3. Both should consider joint or very closely linked project initiatives with EP3.** PRIDE has a unique opportunity to work closely with the new EP3 project, i.e., a major subcontractor of the PRIDE/Chemonics contract is the prime contractor for EP3 and the PRIDE Private Sector Initiatives component task leader will be the EP3 Chief-of-Party. In fact this coordination is already occurring. PRIDE/Chemonics recently hosted a coordination meeting with the EP3 contractors. In addition, a significant amount of the initial EP3 activity will be the result of "PRIDE initiatives," i.e., the Tunisia Country Support Program and general environmental services activity in Morocco and Egypt. An essential element of EP3 country support programs is "environmental audits" which include detailed plant surveys; development and implementation of sampling/testing and quality assurance/quality control programs; analysis of management structure and practice; and detailed engineering analysis of processes - all services that the WEC is qualified to provide.

3. **PRIDE should consider the systematic transfer of activity specifically related to industrial pollution prevention to EP3 as that project is implemented.** The goal and purpose of EP3 are reduction in environmental pollution associated with urbanization and industrialization and to establish conditions for decision makers in the public and private sectors to implement proper urban and industrial pollution management, i.e.,:[1]

- knowledge of the means for pollution prevention and control
- familiarity with the advantages of cleaner production methods
- assistance for introducing industrial process and equipment innovations that minimize waste generation.

EP3 will accomplish this primarily by:

- providing technical assistance, training, and information services for environmental awareness and pollution prevention at the plant, industry, and national levels

- strengthening and expanding in-country sources of technical expertise for pollution prevention

- identifying, promoting, and expanding sources of financing and creating linkages between host country firms and U.S. suppliers of expertise and equipment

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[1] Environmental Pollution Prevention Project (EP3) - Project Paper, Project No. 936-5559, USAID Research and Development Bureau, Office of Environment and Natural Resources, Washington, D.C., April 1992.

- helping to improve national environmental policies, laws, regulations, and their implementing institutions

- promoting and serving as a catalyst for international cooperative activities to encourage, combine, and coordinate pollution prevention activities of USAID and other donor agencies.

While the technical assistance provided under the PRIDE/Chemonics Private Sector Initiatives component and the WEC activities is broader than industrial pollution prevention per se, the initiatives proposed for the EP3 are complementary (and in some cases very similar) to many of them. In addition, the evaluators realize that EP3 is a worldwide project and as such is not specifically tailored to NE regional or country needs. However, many pollution prevention technologies and methodologies have widespread applicability and the promise of close coordination with PRIDE (see Recommendation #2 above) increases the potential for meaningful EP3 activity in the NE region.

If the transfer of industrial pollution prevention activity can be efficiently accomplished as the EP3 matures, and the activity supported by the WEC can be expanded to include more than environmental audits (see Recommendation #8), the PRIDE/Chemonics involvement can become one of close coordination only and activity under the Private Sector Initiatives component can be reduced and focused on other aspects of private sector development.

4. **Under PRIDE, the NE Bureau should consider the establishment of an overseas position of "Regional Coordinator for Environmental Projects." The position should be staffed with a specialist in arid land water supply and quality.** With the exception of Egypt, NE Missions are small. While Mission personnel have been sensitive to the environmental needs in their country and enthusiastic and supportive of PRIDE initiatives, in general they do not have the knowledge or time to be adequately involved with the public and private sectors on environmental issues. With the expansion of PRIDE activity into other NE countries and the initiation of new central- and bureau-funded environmental projects, coordination among numerous activities within their country will be an additional management burden and certainly strain the current capability to make sound technical judgements on environmental priorities and implementation planning.

A Regional Coordinator would enhance technical assistance, especially with regard to water issues, and facilitate environmental program planning and implementation support and management coordination. Coordination among an increasing number of organizations (as PVOs, NGOs, local universities and foundations, etc. become involved with PRIDE activity) would be more efficient. The Regional Coordinator could ensure that proper liaison is made with the appropriate local counterparts to maximize results of in-country visits and activities. He/she could also provide on-site expertise and knowledge of regional

environmental concerns to maximize PRIDE influence through the development of sound regional activities.

Care should be exercised in the selection, placement, and functional relationship of the Regional Coordinator to ensure that an additional layer of bureaucracy is not established. The need for this position should be weighted against potential increased efficiency of the overall PRIDE due to the influence of other projects coming on-line and the re-organization of A.I.D. expected in the near future. For example, the benefit of regional coordination may be equally achieved by increased short-term LOE under the Core contract focused specifically on regional needs.

5. **PRIDE should begin to focus more on regional initiatives.** Current PRIDE activities have focused on country-specific issues, partly because of Mission "buy-ins" and partly because NE Bureau Core-funded activities have been in direct response to Mission needs and funding limitations. The initial PRIDE interventions, while country-specific, have addressed many issues that are NE regional in nature. Issues dealing with water quality and supply and urban industrial pollution and current efforts to develop environmental "handbooks" and other public awareness campaign initiatives (being "pilot tested" in Jordan) have application in all of the NE countries. A number of other issues and "lessons learned" in a specific country can be viewed by the NE Bureau from a "regional perspective" to enhance their usefulness by providing the NE Missions with important information and technical assistance that they could not afford to fund separately. While the NE countries often view "regional" problems in country-specific ways, many issues have a regional similarity that would benefit from shared results of PRIDE interventions, e.g.,:

- Fragmentation of authority and responsibility for environmental protection;
- Proliferation of bureaucratic "Higher Councils" and committees within multiple ministries with overlapping political authority for administrative actions;
- Lack of qualified staff in government environmental organizations to set standards, issue regulations, review licenses, perform inspections, etc.;
- Lack of enforcement or inconsistent enforcement of existing environmental laws;
- The need for environmental education and public awareness;
- Desertification and hazardous waste disposal; and
- Groundwater salinity and coastal environmental management.

Efforts for PRIDE to become more regional in nature would be enhanced by the placement of a Regional Coordinator (see Recommendation #4). Also, interface and cooperation with EP3 provides an opportunity to cost-share regional interventions and, for PRIDE, to develop methodologies and an environmental education/information base that EP3 can "market" globally (see Recommendation #2).

6. **PRIDE should consider expanding technical assistance to address environmentally unsound energy production and use and unsustainable agricultural practices.** PRIDE technical assistance to date has focused exclusively on industrial pollution prevention and water quality and supply. These areas are the top two critical environmental challenges identified by the NE Bureau. Two other NE Bureau priorities deal with the environmental impact of energy development and agricultural practices. PRIDE could begin to address these issues as important regional problems, either as an element of a broader regional focus (see Recommendation #5) or in collaboration with PRIDE-supported EP3 initiatives (see Recommendation #2). In the area of energy production and use, PRIDE could begin a dialogue to explore collaborative activities with one Cairo Mission project, the Energy Conservation and Efficiency Project (ECEP) and two USAID centrally-funded projects, the Energy Technology Innovation Project (ETIP) and the Energy Efficiency Project (EEP). The ECEP is broadening its mandate to include environmental activities. The ETIP and EEP have mandates to mitigate environmental impact through the use of clean technologies for energy capacity growth, and improved distribution and use through integrated resource planning and energy demand management.[2] The capability of the NE Bureau to initiate environmental activities that address unsound energy production would be significantly enhanced by the execution of the Department of Energy's RSSA under the PRIDE.

7. **PRIDE activities should carefully consider and address appropriate cross-cutting themes consistent with other A.I.D. projects and programs.** A total of ten reports written under the Core and Q-Contracts were reviewed - four were selected as representative of their respective PRIDE component, and thus were reviewed in some detail. The PRIDE contract state that the contractor and its personnel must be fully informed on relevant A.I.D. policies, procedures, mandates, and Congressional directives. Planned interventions and activities under PRIDE have generally been consistent with, and responsive to, these pronouncements. However, there is room for improvement. For example, the PRIDE contracts specifically state that "the contractor will insure to the maximum extent possible that gender issues are addressed in all project interventions." The Evaluators do not believe that gender issues were adequately addressed in the documents reviewed.

8. **Industrial environmental audits under the WEC Cooperative Agreement should be the initial step in development of broader environmental safety and health management programs for industrial facilities.** The WEC Environmental Audits have not included sufficient data or information for a plant manager to decide on a course of

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[2] The Energy Conservation and Efficiency Project (ECEP) is currently undergoing a re-design to include an environmental activity component. Both the Energy Technology Innovation Project (ETIP) and the Energy Efficiency Project (EEP) are about to undergo a mid-term evaluation. This could be an opportune time for PRIDE to discuss with them the possibility of joint energy-related environmental projects focused on the NE region.

action to implement environmental initiatives within the plant. Additional elements must be included in the audit procedure that emphasize training, information dissemination and the transfer of skills.[3] As currently structured, further audits are of marginal use to PRIDE. Environmental Audits, provided by WEC or any other PRIDE-funded mechanism, should not be continued unless they are the first step of a broader initiative to structure an industrial environmental management program and to assist the plant manager with its implementation. The PRIDE-funded Tunisia Country Support Program under EP3 provides an opportunity for the "pilot demonstration" of this concept.

PROJECT ORGANIZATION, MANAGEMENT AND OPERATIONS

9. **PRIDE should combine the Strategic Planning and Policy Analysis Components and recruit a task leader to be specifically responsible for those initiatives. The PRIDE Chief-of-Party should be a full-time management position with no additional responsibility for day-to-day component-specific activities.** Currently, the COP is also the designated task leader for the Strategic Planning and Policy Analysis Components. PRIDE is a major environmental project for the NE Bureau and has expanded at a rapid rate. Based on the number of on-going separate activities involving 7 subcontractors and the increasing interest in Mission buy-ins, the project absolutely requires a full-time manager, who is also a professional specialist in an area identical or complementary to the project components, and has Near East experience. The present incumbent meets these requirements. An increased emphasis on strategic planning and policy analysis requires the services of a dedicated component task leader at an appropriate level of effort (see Recommendation 1).

10. **The AID Near East Bureau should determine whether one Gray Amendment subcontractor can adequately meet the Gray Amendment requirement, and convey that in writing to Chemonics.** If not, the NE Bureau should instruct Chemonics to seek other qualified candidates and seek NE Bureau approval of the best one to become involved in the project, complementing the current and future activities conducted by Capital Systems Group.

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[3] The World Environment Center (WEC) has recently submitted a draft of its Third Year Workplan to the NE Bureau. The plan contains many new initiatives that address the shortcomings of previous activities. For example, follow-up assessments and training workshops are scheduled, Waste Minimization Demonstration Projects are proposed that include continuing plant visits and technical assistance using process and effluent monitoring instrumentation, and the establishment of in-country pollution prevention information centers. The approach described in the Workplan is a step in the right direction to enhance the potential for lasting environmental benefits.

11. **The NE Bureau should review with PRIDE its interest in maintaining LOE and funding for NGO activities, making the appropriate decision and providing PRIDE with the attendant instructions.** If the decision is positive, the Bureau should provide guidelines to PRIDE regarding the role it perceives should be played by NGOs. If the decision is negative, it should discuss the reallocation of NGO funding and LOE to other budget categories and subcontractors.

12. **Additional staff assistance is required for project administration.** Following the completion of the current study of administrative workload and procedures, Chemonics should request the additional funding required to provide the requisite additional administrative duties.

13. **The Near East Bureau and Chemonics need to review the present allocation of funds and LOE under subcontracts, Core and Q-Contracts.** Some subcontract expenditures are not within reasonable limits for this point in the project. The overall LOE is being expended at a rate that is not consistent with the planned life-of-project. The LOE review should determine where adjustments, including increased funding and LOE, need to be made.

14. **A more accurate monitoring system for LOE, i.e., at the PRIDE project component level, is needed, if the NE Bureau is going to require strict accountability for mandated LOE (Core and Q-Contract).** PRIDE should initiate a more accurate monitoring system of LOE by component. Agreement should be reached with the NE Bureau that LOE per core staff person/position be tracked, differentiating between specific core LOE and DO LOE. This should include a formula for subtracting LOE devoted exclusively to DOs from the LOE mandated for each core staff position.

15. **A.I.D. should clarify for Chemonics if it is willing to entertain on a case-by-case, ad hoc, basis waivers for high-level technical consultants, noting that otherwise it may, on occasion, forfeit the potential input of key expertise and advice. Whichever decision A.I.D. makes, Chemonics should convey this policy decision directly to the subcontractors.** To provide the justification for favorable action on the part of A.I.D., Chemonics should discuss with the subcontractors the probable types of high level technical consultants and the frequency with which they may be needed to perform DO or WO activities effectively.

16. **PRIDE and the NE Bureau should carefully assess the administrative burdens of Q-Contract "buy-ins" on a case-by-case basis before accepting the activity.** The recent request for a second buy-in from the Central and Eastern Europe Bureau demands that PRIDE and the NE Bureau assess the administrative burden this could place on PRIDE staff. Care needs to be exercised in order to prevent any diluting of support for specific

NE Bureau activities. However, even Near East "buy-ins" also need to be assessed as to their administrative support costs prior to final approval.

17. **The NE Bureau should favorably consider the elimination of the requirement for monthly reports.** Unless there are overriding reasons for requiring a monthly report, the NE Bureau should consider eliminating this requirement. The regularly scheduled status meetings (currently on a weekly basis) and a well-documented quarterly report should suffice for efficient NE Bureau information and project management.

18. **The NE Bureau should use discretion and avoid bypassing or circumventing the implementing authority that it has delegated to the PRIDE Prime Contractor for expenditure of LOE and the implementation of WOs and DOs.** The NE Bureau needs to use greater discretion in its requests for information or in the issuance of specific instructions, particularly those directed towards PRIDE Core or Q-Contract subcontractors. Without developing a burdensome bureaucratic structure or system, this could be accomplished by maintaining the channels of communication, instructions and responsibility established under the existing Core and Q-Contracts.

ANNEX A

PRIDE PROJECT PAPER
LOGFRAME

LOGICAL FRAMEWORK
PROJECT IN DEVELOPMENT AND THE ENVIRONMENT

PROGRAM OR SECTOR GOAL:	OBJECTIVELY VERIFIABLE INDICATORS Measure of Goal Achievements	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
To promote sound environmental and natural resource policies and programs in support of long-term sustainable economic growth in ENE countries.	Improved efficiency of natural resource use Improved environmental quality	Host country and Mission reports on key environmental indicators. Bureau reports Project evaluation reports	ENE Missions and host countries integrate sound environmental management into their strategic planning. -Rational changes in environmental policy can be made that are cost effective. -Governments will enact policies and implement programs encouraging private sector & NGO participation.
Project Purpose	**End of Project Status**		
To assist the ENE field Missions and host country institutions to: 1. identify and address critical environmental issues that threaten economic growth, public health and ecological sustainability; 2. mobilize the private sector and NGOs to provide cost effective solutions to these problems, and 3. promote regional information exchange.	1. Specific policies are identified that can significantly reduce critical environmental problems. 2. At least 4 ENE Missions and countries adopt ENR strategic planning concepts and methodologies. 3. At least 4 ENE Missions and countries demonstrate greater recognition and understanding of the costs of critical environment trends. 4. At least 4 ENE countries formulate policies that improve environmental quality and slow resource degradation. 5. At least 8 industrial factories adopt voluntary actions and invest in industrial pollution abatement 6. Improved participation and public awareness and NGO voice on ENR trends, policies, issues in several countries	-Several ENE missions incorporate Bureau-identified critical environmental and natural resource strategies into CDSS, policy reform agenda and/or design projects with environmental components. -Host country governments act on recommended policy reforms and private sector initiatives. -The general public and NGOs have greater access to information and opportunities to express views and concerns to decision makers. Media (radio, tv, journal) discuss ENR issues; information networks developed	1. USAID Missions and ENE governments perceive the project TA as an important service 2. Technically + financially attractive options exist and are available to those who make resource allocation decisions. 2.1 It is in the perceived self interest of ENE governments and those with effective control over natural resources and allocation decisions to protect and enhance the environment. 2.2 Governments allow NGOs to organize, develop and have an effective voice on environmental issues.

OUTPUTS	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Strategic Planning	Magnitude of Outputs		
1. Identification and dissemination of new and emerging ENR strategic planning concepts and methodologies useful to ENE Missions and host country institutions	1. Documents or reports produced and disseminated or TA provided which is useful in: -assessing the significance of ENR trends and conditions in terms of economic growth, environmental health and ecological sustainability. -selecting priorities for action based on Mission portfolios and resources -identified specific opportunities for policy reform or change private sector initiatives and environmental education	1. Documents, reports	1. Quality contractor performance, effective interaction with Missions to insure project outputs are relevant and incorporated.
2. Demonstration of strategic planning techniques that can help both Missions and host country institutions to develop action plans for using existing projects and programs to address critical ENR problems	2.1 At least two risk reduction/decision maker workshops organized and implemented involving 50 participants. 2.2 Mission buy-ins to support workshops & follow-up activities 2.3 Identify 10 environmentally beneficial actions, four of which have significant economic benefits.	2.1 Workshop schedules, attendance lists 2.2 Mission PIOT for buy-ins 2.3 Project, reports and demonstrations	2. USAID/host country interested in incorporating ENR into strategic planning
3. Seminars which address emerging regional priorities enhance the participation of the private sector and the role of environmental NGOs for promoting democratic pluralism	3.1 Seminars organized and implemented in 4 ENE countries in areas such as environmental education, urban environmental quality, and water resource management. 3.2 Mission buy-ins	3. Seminar schedules, attendance lists	3. Private sector and NGOs are receptive and political atmosphere does not overly inhibit their activity.

1. Environmental economic and institutional analyses that contribute to broad ENR country assessments and profiles	1. TA delivered in at least 4 countries which analyzes: 1.1 Costs of critical environmental trends to host country health, distributional effects, ecological sustainability, and biological diversity 1.2 AID-hostcountry identify policies/lack of policies fostering inefficient resource use and market failure	1. Documents containing analyses	1. Missions and host countries interested in addressing ENR policy issues.
2. Assistance to Missions to carry out policy development initiatives that address ENR issues	2.1 Seven or more requests for assistance received annually to identify technical assistance, prepare scopes of work. 2.2 supporting studies completed on policies affecting: -urban-industrial environmental quality -water resources quality and availability including tenure issues associated with water allocation and living aquatic resource exploitation -public access to information on critical environmental trends and public participation in ENR policy formulation	2. Correspondence, SOWs, copies of studies.	2. USAIDs will have funds to permit them to take advantage of assistance offered and project can deliver expertise to meet mission/host country needs.
3. Information disseminated on policy research and reform in ENE countries and on methods and approaches to ENR strategic planning, policy formulation and implementaion	3. Semi-annual (9) newsletters distributed for use by USAIDs and made available to other interested audiences	3. 9 newsletters distributed to USAIDs by core contractor	3. Information generated is useful, relevant

Private Sector

1. World Environment Center transfers U.S. experience and technical expertise in industrial pollution control and acts as an environmental information service for the industrial sectors in the Near East.	1. At mission, host country, or private sector request, WEC experts or associates conduct 50 TA/training workshops/seminars, assist to establish 4 counterpart organizations, demonstrate at least 10 industrial audits, and provide internships to at least 25 participants.	1. 1991 baseline vs mid-project evaluation assessing WEC.	1. WEC has organization and management ability to handle expanded operations or ability to access service of associate institutions.
2. Testing of alternatives for expanding the adoption of voluntary private sector actions for addressing industrial pollution. 2.2 Creating or strengthening indigenous institutions which can promote private sector actions through training, environmental consulting services and information dissemination.	2.1 Two or more alternatives tested in collaboration with ENE private, industrial firms 2.2 At least two private (industrial) firms in ENE countries develop capability to provide environmental consulting services.	2. Project and mission reports	2.1 TA provided is effective. 2.2 Private sector industry exists, incentives exist and local firms are motivated to develop capacity to address pollution problems
3. Complete country/subregion feasibility studies promoting voluntary pollution reduction measures in the urban private sector.	3. Studies completed on (e.g.) tourism waste water management and commercial transportation (buses) air pollution, and host country firms use them to address pollution abatement.	3. Project and Mission reports	3. Studies are relevant to ENE countries and form basis for action
4. The identification and analysis of regulatory options for addressing urban/industrial pollution by drawing on U.S. expertise to work with host country institutions and promotion of dialogue between private and public sectors through workshops and/or the establishment of in-country working groups or advisory committees.	4.1 TA on ways of addressing urban/industrial pollution provided to host country institutions and firms which results in action in at least 4 countries. 4.2 Services of experts from several U.S. institutions delivered to 4 countries.	4. Workshop agendas, participant lists. Mission requests for TA and SOWs.	4. Services of U.S. expertise from, municipal organizations, are available through the project.
5. Development of a regional strategy for overcoming non-regulatory barriers to private sector investments in pollution prevention, control or reduction.	5.1 Mechanisms for improving indigenous private sector access to information on environmental costs and technology options developed and shared. 5.2 Project leverages non-USG sources of capital investment through co-financing.	5. Requests from USAIDs and documented responses from project contractors.	5. Organizations such as WEC can provide expertise and/or information and information is relevant and acted upon.

Environmental Education and Accountability

1. Develop and implement an EHE regional strategy to promote environmental education	1. Project contractor and associates produce: 1.1 inventory of U.S. and international institutions, expertise and resources, including A.I.D. Washington projects that can be accessed. 1.2 A plan for supporting regional initiatives, such as short-term training for journalists, translation and dissemination of audio-visual and printed materials, etc. 1.3 A plan for monitoring, evaluating and disseminating the results of the lessons learned from project pilot initiatives and ongoing efforts by others in the region.		
2. Environmental training needs assessments that identify priorities, key local institutions that can develop and implement a national action plan, and opportunities for donor assistance	2. At least 2 country needs assessments completed	2. Printed documents	2. USAID and host institutions support
3. Assistance to Missions to identify environmental education (EE) initiatives and technical expertise and programs to implement these initiatives	3.1 Missions request and project identifies and provides or brokers TA 3.2 Several missions incorporate EE into existing human resource development and education programs.	3.1 Mission requests, procurement documents 3.2 Missions project documents, PP amendments, PIO/Ps	3. USAID interested in incorporating PA/EE in existing programs/projects.
4. Collect and disseminate information on existing programs, expertise, activities and experience in EHE countries, and core materials for establishing in-country libraries.	4. Semiannual dissemination of information to missions and local networks developed in several countries	4. Printed documents	4. Contractor or other service can access information and disseminate it in useful form.
5. Support selected in-country activities to demonstrate approaches to promote public awareness and government accountability by use of small grants	5. PIO/Ts prepared by USAID offices. Ten grants of $40,000 or less provided to 5 NGOs in 3 countries for PA/EE activities	5. Grant documents	5. There are local NGOs and they are interested in PA/EE activities. USAIDs and are interested in and support democratic pluralism in environment

ANNEX B

PRIDE EVALUATION
STATEMENT OF WORK

Contract No: HNE-0365-C-00-3038-00

SECTION C

STATEMENT OF WORK

Evaluation of the Project in Development and the Environment (PRIDE) (398-0365)

A. Background and Purpose

Issues of environmental quality and natural resource management have emerged as central economic and political concerns for many of the countries in the Near East (NE) region. These concerns have arisen in response to polluted environmental systems, inefficiency and waste in resources use, depleted natural resources and damaged ecological systems. Increasing environmental and natural resource use depleted degradation in the NE region represents a significant impediment to sustainable economic development and sociopolitical progress.

The NE region has an extraordinary varied set of climates, ecological zones, economies, and political conditions. Nevertheless, these countries all faces the common difficulty of sustaining economic growth throughout the 1990's. Common to most of the region is the high level of urbanization, important industrial and processing sectors, and basic economic options and socio-economics conditions which are profoundly affected by the state of each country's ecological and natural systems. The NE nations depend on these systems to provide public services such as water supply, flood control, air purification and temperature moderation.

Many of the Near East countries have very limited arable or forested land, with large areas used for seasonal grazing. These countries are becoming rapidly urbanized, with nearly half of the population in cities and towns. This urban expansion brings associated problems of sanitation, solid waste disposal and environmental health. The industrial base of most of these countries, with the exception of Egypt, is limited and oriented towards import substitution. Scarce water resources are a major factor affecting the economic and political configuration in this sub-region where international and transnational as well as domestic conflicts over water use are intensifying.

The focus of PRIDE is on three of four priority problem areas identified in 1989 through a series of background analyses and a report by the World Resources Institute: (1) water and soil resource degradation and mismanagement, (2) energy shortages, inefficiencies and the environmental impact of energy production and consumption, and (3) urbanization and industrial pollution.

The project is also consistent with the Near East Bureau's strategic objectives:

- o Foster efficient resource use and conservation, especially water and energy.
- o Promote the concept of waste minimization and pollution prevention in resolving problems facing the industrial sector in ensuring air, soil, and water quality.

- o Increase accountability and local empowerment in addressing environmental and natural resource issues.

- o Foster private sector solutions and policy at the local, national and regional levels.

The goals of the project is to promote sound environmental and natural resource policies and programs in support of long-term sustainable economic growth. The purpose is to assist USAID Missions and host country institutions to (1) identify and address critical environmental issues that threaten economic growth, public health and ecological sustainability, (2) mobilize the private sector and NGOs to provide cost-effective solutions to these regional information exchange.

This regional project acts as a catalyst to stimulate Mission Near East activities, to support Mission with technical assistance in certain areas, to access other resources, and to help Missions define their environmental strategies. It emphasizes a strategic approach to help Missions and host country instructions set priorities for incorporating environmental objectives into existing projects and programs. The project focuses on critical areas where innovative methodologies, analytical tools, information, technical expertise and training are still emerging and are not sufficiently available through existing programs.

The project paper identified three critical areas of need in existing NE programs which hinder the development of sound environmental and natural resource policies and programs. The assumption linking PRIDE project purposes to goal achievement is that PRIDE inputs (expertise in the form of long and short term technical assistance and information accessed from a broad range of sources) will give the Bureau and the Missions the resources and additional needed skills and capabilities to address these needs, and, as a result, enable NE to implement its strategy and to assist A.I.D. Missions and host country institutions in addressing major environmental and natural resources constraints.

The three purpose-levels needs which PRIDE is designed to fill are:

1. improve recognition by both Missions and host country institutions of how environmental conditions and trends in resource use are threatening economic growth, public health and ecological sustainability;

2. improve understanding of how to mobilize the private sector and non-governmental organizations (NGOs) to participate in policy formulation and in programs which effectively address

environmental problems; and

3. develop effective information sharing among USAID Missions, host country institutions, and AID/Washington or synthesizing of the experience to date with different environmental initiatives and policy reform programs.

Based on these three needs, four PRIDE components have emerged and now have relevance: (a) management of national environmental programs strategic planning; (b) policy prerequisites (policy analysis); (c) promote sector opportunities; and (d) environmental education needs.

The original project paper described PRIDE as a five-year project to be evaluated twice, at the mid-term and prior to project completions during the fifth year; this would translate as May 1994 and prior to October 1996, respectively. Moreover, because the program is maturing at and accelerated rate and it is anticipated that environmental concerns in the Near East Region will be receiving more attention and priority, the mid-term review has been moved up to May/June 1993.

The purpose of the evaluation is to assess the immediate results of the individual initiatives financed under the project and evaluate the success of the project in promoting follow-on activities to the new initiatives under this project. The evaluation will determine the degree to which PRIDE successfully facilitated NE Bureau priorities.

B. Objectives

The objectives of this evaluation are: (a) assess the progress accomplishment and any shortenings of the PRIDE Project to date, and (b) to recommend to A.I.D. and the PRIDE participants which areas of program focus activities and management need adjustment or improvement during the remaining three and one - half years of the contract.

C. Scope of Work

1. Tasks to be accomplished:

a. Review all documentation pertaining to the PRIDE Project.

b. Analyze and classify by component area the activities of this project since its inception.

c. Select one sample from each of the PRIDE components for further evaluation and analysis below.

d. Prepare a brief questionnaire for Mission response to determine if the Mission were satisfied with the

usefulness and timeliness of the technical assistance provided under this project, to measure the quality of service provided by PRIDE to its clients.

e. Identify and interview the Project Officer at the Mission who requested the assistance as well as other Mission and/or Host Country person familiar with the project activities.

f. Measure the performance of the project against the original SOW, keeping in mind cross-cutting evaluation themes of concerns to the NE Bureau.

g. Prepare and submit the written reports and deliverables as outlined below.

2. Study questions to be answered:

a. What has been the impact and effectiveness of the technical assistance provided under this project?

b. Given the emphasis on flexibility and timeliness, what has been the degree of flexibility and timeliness and to what extent has this been effective?

c. What have been the major accomplishments of the project activities and related sub-projects to date? What have been major obstacles to progress?

d. What evidence exists to indicate that one type of activity of sub-project is more effective than other types? Have these activities been consistent with Agency priorities.

e. Given the recent priority given to the private sector component of PRIDE how may the SOW be modified to reflect current priorities in a mutually agreeable manner?

D. Special Skills Required

The contractor shall provide the services of two persons to conduct this evaluation. One must have at least five years of experiences in private sector development in third-world nations and an MA in business management of equivalent. The other must be familiar with USAID programming and project requirements, including evaluation requirements, have broad experience in private-sector development and at least 5 years experience working for a development agency in a developing nation. Both must have strong verbal and written communication skills.

E. Time Frame and Person Hours

The contractor shall provide the above services beginning as soon as possible for a period of two working months (forty person days), but not to exceed three calendar months. No international travel is required. All communication with Mission and host country nationals shall be the phone, FAX or express mail.

F. Reporting Requirements

1. Work Plan: Within five person days from the first day of reporting to the NE Bureau, the contractor shall submit a draft written workplan based upon this scope of work to the NE bureau but modified as agreed upon with the NE Bureau.

2. Preliminary Outline: Within twenty-person days from the first day reporting to the NE Bureau the contractor shall submit a draft outline of the final report for NE Bureau approval.

3. Preliminary Report: Within thirty-person days from the first day reporting to the NE Bureau the contractor shall submit a preliminary draft of the final report for NE approval. This report shall contain a brief executive summary, the main findings, conclusions and recommendations and any annexes necessary to support the report.

4. Final Report: Within forty person days from the first day reporting to the NE Bureau the contractor shall submit the final evaluation report considering the revisions and changes recommended by the NE Bureau to the preliminary report.

G. Deliverables

1. The written reports as noted in F. above.

2. Copies of the questionnaires.

3. Computer diskette submitted in Work Perfect (3-1/2) containing the written reports and any data bases acquired in the course of the evaluation.

Tentative Schedule for PRIDE Evaluation

May 12	Initiation of Project
May 17	Draft Written Workplan
June 1	Draft Outline of Final Report
June 14	Preliminary Draft Final Report
June 21	Final Report Submission to NE/DR

The above schedule is based on the time estimated to be required to complete the various tasks, and is subject to minor revisions.

ANNEX C

PRIDE CONTRACT TECHNICAL ASSISTANCE AND DOCUMENTATION

ANNEX C

PRIDE CONTRACT TECHNICAL ASSISTANCE AND DOCUMENTATION

EGYPT

1. Country Baseline Assessment (Egypt) **(SAIC)**
2.(**) Profile of the Environmental Business Sector in Egypt **(HBI)**
3.(**) Egypt Environmental Strategy **(IEc)**
4. Egypt Private Sector Profile Promotion/Distribution Strategy **(CSG)**
5. Egypt Environmental Legislation Review **(HBI)**
6.(**) Environmental Water Quality Impact Assessment (Phase I) **(RMI, SAIC, HBI - Mission Buy-In)**
7.(**) Water Management Action Plan (Phase II) **(RMI, SAIC, HBI - Mission Buy-In)**
8.(**) Egypt Country Strategy Program: FY 1992-1996 - Environment (USAID/Egypt, May 1992)

NOTE: #1 resulted in a trip report, #4 and #5 were incorporated into other documents.

JORDAN

1. Country Baseline Assessment (Jordan) **(SAIC)**
2. Water Quality Improvement and Conservation Project - Review of Applicability to GEF Criteria **(CHEMONICS)**
3.(**) Environmental Legislation Review in Jordan **(SAIC)**
4. Jordan Water Conservation and Management Plan and Project Paper (Support to Report #1) **(HBI)**
5. Profile of the Environmental Business Sector in Jordan **(HBI)**
6.(**) Jordan Environmental Information/Education Communication Needs Assessment **(CHEMONICS)**
7. Library and Information Center - Jordan Society for the Control of Environmental Pollution (JSCEP) **(CSG)**
8.(**) Water Management and Conservation Plan (Phase I) **(CHEMONICS, SAIC, RMI -Mission Buy-In)**
9. Water Quality Improvement and Conservation Project Paper (Phase II) **(CHEMONICS, SAIC, RMI - Mission Buy-In)**
10. Technical Support to Private Sector Activities - Jordan **(HBI - Revise Private Sector Profile)**

NOTE: #1 and #4 resulted in trip reports, #2 is a 3-page report, #5 is being edited, #7 and #10 were incorporated into other documents, #9 supported #3.

MOROCCO

1.(**) Design of the Private Sector Component of the World Bank's Environmental Management Project **(HBI)**
2. Pollution Prevention Seminars - Assistance to USAID/Rabat **(HBI)**
3. Morocco Environmental Management Plan **(HBI - Private Sector Profile for World Bank Report)**
4. Technical Support to Private Sector Activities - Morocco **(HBI - Input to Environmental Business Module)**

NOTE: #2 is in French, #3 and #4 were incorporated into #1.

TUNISIA

1.(**) Small Wastewater Treatment Plant Technology Assessment **(CHEMONICS)**
2. Profile of the Environmental Business Sector in Tunisia **(HBI)**
3.(**) Tunisia Environmental Action Plan **(CHEMONICS, SAIC, HBI - Mission Buy-In)**

NOTE: #2 is in progress.

REGIONAL

1. Environmental Private Sector Initiatives in the Near East (EPSINE) **(HBI)**
2. Industrial Assessment-Based Information System **(CSG)**
3. Draft PID for AID/NE Environment and Competitive Technology Services Regional Project **(CHEMONICS)**
4. Environmental Education and Awareness Campaign/Reference Training Package **(CHEMONICS)**
5. Environmental Assessment Computer Programs **(CSG)**
6. AID/NE Clean Technologies Project Design **(CHEMONICS - Drafting of Annexes for Project Paper)**
7.(**) Natural Resources and the Environment - Strategic Approaches for the Near East Bureau (Agency Framework - 1992)

NOTE: #1 consisted of one contractor representative on a larger Program Design Team, #2 and #4 are in progress, #5 is not published yet, #3 and #6 are available in project files.

GENERAL DOCUMENTS

- PRIDE Project Paper (with Annexes)
- PRIDE Proposal
- PRIDE Core Contract (ANE-0178-C-00-1046-00)
- PRIDE Q-contract (ANE-0178-Q-00-1047-00)
- PRIDE First Annual Workplan (DRAFT) - October 1991 - September 1992 (Project Number 398-0365), March 6, 1992
- PRIDE Second Annual Workplan: October 1992 - September 1993 (Project Number 398-0365), October 14, 1992
- Egypt Water Quality Buy-In Contract (ANE-0178-Q-00-1047-00, Delivery Order No. 2) [Phase I: Environmental Water Quality Impact Assessment; Phase II: Water Management Action Plan]
- Egypt Environmental Services Buy-In contract (ANE-0178-Q-00-1047-00, Delivery Order No. 5)
- Environmental Strategy Framework - Agency for International Development (December 31, 1991)

ANNEX D

PRIDE MISSION QUESTIONNAIRE

PRIDE EVALUATION QUESTIONNAIRE

For Questions 1 through 7, please rate PRIDE activities on the following scale:

Excellent	Very Good	Good	Fair	Poor	Not Applicable
1	2	3	4	5	6

Additional comments are welcome in the space provided to clarify or caveat the rating given.

General Questions:

1. Impact of PRIDE on the Mission's and host country institutions' recognition of how environmental conditions and trends in resource use are threatening:

   a. economic growth — Rating: ___
   b. public health — Rating: ___
   c. ecological sustainability — Rating: ___

   Comment: _____

2. Impact of PRIDE to improve understanding of how to mobilize the private sector and NGOs to:

   a. participate in policy formulation — Rating: ___
   b. participate in programs that address environmental problems — Rating: ___

   Comment: _____

3. Impact of PRIDE to help develop effective information sharing among the Mission, host country institutions, and AID/Washington:

   Rating: ___

   Comment: _____

10?

4. Impact of PRIDE to help synthesize the experience with both in-country and other international environmental initiatives and policy reforms:

Rating: ___

Comment: _____

_____

_____

_____

5. Impact of PRIDE in Mission efforts to:

a. foster efficient resource use and conservation — Rating: ___
b. promote the concept of industrial waste minimization and pollution prevention — Rating: ___
c. increase accountability and local empowerment in addressing environmental issues — Rating: ___
d. foster private sector solutions and policy at local, national, and regional levels — Rating: ___

Comment: _____

_____

_____

_____

Questions on Specific Services Provided by PRIDE:

6. Rate the impact and effectiveness of PRIDE activities to date in:

a. technical assistance — Rating: ___
b. project management? — Rating: ___

Comment: _____

_____

_____

_____

7. Rate the degree of flexibility and timeliness of PRIDE activities to date?

Rating: ___

Comment: _____

_____

_____

_____

_____

10c

Recommendations for Improvement/Modification to the PRIDE:
(Please use additional pages keyed to the question number)

8. What is your overall assessment of the progress and accomplishments of PRIDE to date?

9. What in your opinion have been the major accomplishments to date?

10. What in your opinion have been the major obstacles to date?

11. Once PRIDE activities have been initiated, have they been consistent with Mission priorities?

12. How can PRIDE better serve your needs to accomplish Mission goals and objectives for the environment?

13. If you could re-orient PRIDE for its remaining three years:

    a) what primary target audiences and central themes would you emphasize?

    b) what environmental concerns would you stress?

    c) In what ways would you adjust or improve technical assistance or project management in any specific component(s) of PRIDE focus (i.e., Strategic Planning, Policy Analysis, Private Sector, or Environmental Education)?

ANNEX E

LIST OF ORGANIZATIONS AND INDIVIDUALS INTERVIEWED

ANNEX E: LIST OF ORGANIZATIONS AND INDIVIDUALS INTERVIEWED

AID NE BUREAU -- DR/ENR

Gil Jackson, Environmental Coordinator
Dwight Walker, Current PRIDE Project Officer
Curt Nissly, First PRIDE Project Officer
Paul desRosiers, RSSA
Alex Segarra, AAAS Fellow

CHEMONICS HEADQUARTERS

Chris Smith, Deputy Regional Director, NE
Paula M. Hirschoff, Pride Publications Editor
Bonnie Lewis Sheehan, Field Office Manager

PRIDE/CHEMONICS - CORE STAFF

Larry Morgan, First Chief of Party
Avrom Bendavid-Val, Current Chief of Party
John L. Woods, Institutional and Information Specialist
James D. Westfield, Private Sector Specialist (HBI)

PRIDE CHEMONICS - SUPPORT STAFF

Julie D. Bourns, Project Administrator
Cathleen Belliveau, Project Assistant
Judith Scholar, Project Assistant
Alaa G. Schoreibah, Project Assistant

SUBCONTRACTORS - CORE AND Q-CONTRACT

RCG/Hagler, Bailly, Inc. (HBI)

Mary C. Harris, Vice President
Ross S. Douthard III, Senior Contract Administrator
C. Samuel Kerns, Accounting Manager
William R. Meade, Manager
Lisa Anderson, Administrative Assistant

Capital Systems Group, Inc. (CSG)

Raj N. Shah, President and CEO
Christopher T. Stathes, Executive Vice President

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C. Samuel Kerns, Accounting Manager
William R. Meade, Manager
Lisa Anderson, Administrative Assistant

Capital Systems Group, Inc. (CSG)

Raj N. Shah, President and CEO
Christopher T. Stathes, Executive Vice President

Industrial Economics, Inc.

Thomas H. Walker, Principal
Cathy Walsh, Accounting

Lincoln University

Dr. P. J. Kennedy
Dr. Willie Williams

Science Application International Corp. (SAIC)

Peter B. Trick, Corporate Vice President
Melissa Constans, Senior Contract Representative (initially)
Derek Goldin, Senior Contract Representative (current)
Mary Levick, Vice President for Administration
Susan E. Moore, Project Manager
Tim Brown, Economist

SUBCONTRACTORS - Q-CONTRACT ONLY

Environomics, Inc.

Stuart Sessions, Principal
Kathryn Steucek, Research Assistant

Resource Management International, Inc.

Ghassan F. Nakad, Director of International Affairs
Lynn A. Pirozzoli, Vice President (Washington office)
Debbie Riederer, Accounting

USAID MISSIONS

Morocco	Richard Scott, Environmental Officer
Tunisia	Barry Hill, Desk Officer of AID/W
Egypt	Marc Madland, Project Manager, Environment Office Clem Weber, Chief, AG/IL
Jordan	Abdullah Ahmad, Private Enterprise and PD Office Dr. Carl Dutto, Director, Office of Water, Environment & Agribusiness

WORLD ENVIRONMENT CENTER

Frank T. Wood, Senior Vice President, Technical Programs
George J. Lombardo, Project Manager, Technical Programs
Katherine Stenberg, Deputy Project Manager, Technical Programs

ANNEX F

SUMMARY OF DETAILED REVIEW OF SELECTED PRIDE DOCUMENTS

PRIDE STRATEGIC PLANNING COMPONENT

Private Sector Development Environmental Strategy: USAID/Tunisia (April 1993)

BACKGROUND

Tunisia is tied with Lebanon and Yemen as one of the three smallest USAID Missions in the Near East (NE) Bureau. Tunisia has recently had its budget reduced below the level of recent years, requiring a concentration of program efforts, a re-examination of staffing levels, and consideration of extending current initiatives rather than beginning new ones.

Funding for FY 93 was about US$ 10 million.[1] to help tunisia in promoting its environmental strategy in the face of reduced funding. PRIDE has completed two technical assistance projects for Tunisia: (1) a Small Wastewater Treatment Plant Technology Assessment by Chemonics, and (2) the subject of this review, i.e., a Private Sector Development Environmental Strategy: USAID/Tunisia. In addition, PRIDE (Hagler-Bailly) is currently in the process of completing a Profile of the Environmental Business Sector in Tunisia and a two-person subcontractor team is current in the field (June 1993) working on a Programmatic Environmental Assessment for Tunisia.

The principal projects of the USAID/Tunisia Mission are:

1. The Private Enterprise Promotion Project (PEP) - with a focus on privatization of government-owned enterprises and financial market development;

2. The Management Training for the Private Sector Project (MTPS) - to provide business management and development assistance for small and medium size firms;

3. The Private Provision of Environmental Services Project (PPES) - to support the Government of Tunisia (GOT) efforts to improve urban environmental services by accelerating decentralization and increasing private sector participation;

4. The Development Studies Project (DSP) - to assist the GOT to implement economic adjustment programs by supporting selected analyses to formulate and implement them.

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[1] Annual Budget Submission, FY-93, Near East, A.I.D., Washington, D.C., July 1991.

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The GOT has begun to expand and accelerate environmental and economic restructuring programs and has asked for donor support in three key areas: (1) privatization, (2) private enterprise development, and (3) urban development. Private sector support is high among the strategic objectives of the NE Bureau. Urban and industrial pollution resulting from urban development is the number two priority of the NE Bureau to address critical environmental challenges.

Therefore, it is appropriate that PRIDE provided technical assistance to USAID/Tunisia for The Private Sector Development Environmental (PSDE) Strategy. The effort was initiated with USAID/Tunisia Mission Buy-In funding in late January 1993 and was completed in late April 1993. The PSDE Strategy was developed by a cooperative effort involving direct hire Mission staff, PRIDE personnel, and consultations with GOT personnel and the Tunisian private and Non-governmental organization (NGO) sectors. The technical assistance from PRIDE was provided by a team comprised of environmental and developmental specialists from Chemonics (24 persondays), SAIC (16 persondays), and Hagler-Bailly (16 persondays).

DOCUMENT REVIEW

The PSDE Strategy developed responds to Tunisia's current situation and environmental programmatic criteria by requiring two levels of activities and support:

- initiatives that USAID/Tunisia can implement with no material change, or with only modest modifications, to it current and planned project portfolio (and for which no additional NE Bureau support is required); and

- complementary and more resource intensive activities that can be implemented only with the assistance of centrally-funded R&D and NE Bureau projects.

USAID/Tunisia's overall program strategy focus on enhancing Tunisia's private sector to expand employment, enterprise, and exports, and to improve urban environmental services. The Mission examined and compared the environmental needs of Tunisia with its overall program strategy and surfaced three basic cross-cutting themes for the PSDE Strategy:

- **Develop the private sector** by expanding the roles of private enterprise in environmental management and improving performance;

- **Prevent pollution** by reducing it at its source and improving urban environmental services; and

- **Institutionalize improved environmental practices** by upgrading legal and regulatory frameworks and enforcement, by fostering a market-driven environmental performance, and by offering shared learning experiences for public and private sector enterprises.

The PSDE Strategy consists of "29 actionable elements" sub-divided with respect to technical assistance and training and organized under the strategic categories of:

- **Stimulating demand** for private sector environmental services and technologies;
- **Fostering private sector supply** of environmental services and technologies;
- **Improving the performance and efficiency** of private enterprises.

The PSDE Strategy document presents the "29 actionable elements" as a table format that indicates related or complimentary Mission projects, the related centrally-funded R&D or NE Bureau project, the overall contributing private sector development and/or environmental objective, and the Mission Program Outcome to which the "actionable element" will contribute.[2]

In Section III, 10 of the 29 "actionable elements" are listed as "high priority for near term implementation."[3] The selection is made by eliminating elements through the application of a set of four eligibility criteria and then a preference criterion. The eligibility criteria deal with relation to the current portfolio, potential for funding from various sources, the amount of funding required, and the level of management and administrative burdens. The preference criterion reflects a preference for elements that would result in clearly sustainable and/or follow-on activity.

Section IV addresses the relationship of the PSDE Strategy to the four main Mission programs. It presents a more detailed description of the goals, objectives, and activities of each of the USAID/Tunisia projects and identifies which "actionable elements" listed in Table 1 apply to a specific project.

The relationship of the PSDE Strategy to the Near East Bureau ENR strategy, to the GOT environmental programs, and to other donor programs is discussed in Sections V, VI, and

---

[2] Private Sector Development Environmental Strategy: USAID/Tunisia, April 1993 (Table 1, page II-5 through II-13).

[3] Private Sector Development Environmental Strategy: USAID/Tunisia, April 1993 (Table 2, page III-2 and III-3).

VII respectively. Section VIII discusses in very broad terms the involvement of the U.S. private sector with Tunisian counterparts to provide environmental services and products.

In summary, the case is made that the PSDE Strategy is responsive to A.I.D., NE Bureau, USAID/Tunisia and GOT environmental priorities, framework and guidelines. However, specificity is lacking when the PSDE Strategy formulates the 29 "actionable elements." The urgency of environmental problems in Tunisia is not discussed, nor are most urgent problems identified. The cost to implement the "actionable elements" is not discussed, nor is a schedule presented that integrates these activities with ongoing GOT and other donor programs. Given the limited budget and staff of the USAID/Tunisia Mission, the usefulness of an environmental strategy that does not discuss these essential factors of any environmental action plan appears to be limited. Specific comments are given below.

COMMENTS

1. The table format presented in the document is a concise way to present a "shopping list" of potential "actionable elements." However, it provides no information on the level of effort, cost, or schedule that would be required to implement any sub-set of these initiatives. As such, it does not appear to be a very useful outcome of the effort.

2. The intended audience for NE Bureau, and hence PRIDE, initiatives should be regional in nature. It would be helpful if a short description of the "Related R&D or NE Bureau Projects" would be included in the document as an annex. Annex D attempts to do this, but except for providing points-of-contact it is too brief to be of much use.

3. USAID/Tunisia PRISM Program Outcomes are identified in Table 1 and the PRISM Program Objective Tree is provided in Annex G. The report does not inform the reader on what the PRISM Program is. Also, the Private Sector Pollution Prevention (PSPP) Project, while mentioned in Table 1, is not addressed in Annex D. Are the PSPP goals and objectives well known?

4. The designation of 10 "actionable elements" as high priority for near term implementation is a worthy exercise. However, the eligibility criteria and preference criterion used do not address (at least explicitly) the strategic objectives of A.I.D. nor those of the NE Bureau. For example, the criteria do not necessarily focus on environmental problems which are significant constraints to development in Tunisia, those that are critical to sustainable development, nor those that are most urgent environmental problems where failure will result in irreversible damage (see page II-2 of this evaluation report). While it is certainly important to be realistic and focus on those elements that can be funded, perhaps some attention to the relative

need for initiatives would show that the implementation of one or two critical elements is better than pursuing those whose major redeeming value is that they require the least funding, result in the least managerial burden, or provide the most (perhaps useless) follow-on activity.

5. In a footnote in Table 1, and by asterisks in Table 2, three of ten "strategy elements" that were selected as "high priority for near term implementation" are identified and illustrative statements of work (SOWs) are presented in Annex C. No reason is given why SOWs are presented for those three, i.e., are they the three most important at this time for Tunisia? The SOWs are very brief, but serve a purpose to at least provide the Mission with an understanding of the technical assistance expertise required and a general estimate of the level of effort and schedule. A very brief discussion of the "conditions that make Tunisia an ideal site for an EP3 Country Support Program" is also presented in the Annex that is somewhat out of context. The discussion would have been better placed (along with a more detailed description of what EP3 is) somewhere in the body of the report when the strategy for implementation of the PSDE was addressed (a part of Section V, VI, VII?).

6. There appears to be a contradiction with respect to Table 2. The table is comprised of "actionable elements" that were selected essentially by their funding potential and requirements, yet the PSDE Strategy does not assign them a relative priority. In an environment of limited funding, it is most imperative that potential activities be listed according to relative priority so that some indication is given as to how many, and in what order, they may be initiated.

7. Section IV applies a textual description to Table 1. Besides providing some more detailed information regarding the goals, objectives, and activities of the Tunisia Mission projects, the section does not really lend any new information to the report. It did point out that certain "actionable elements" in Table 1 should be corrected to have the proper USAID/Tunisia project listed under the "Related Mission Project Component" column, i.e., #4 should be PEP, #23 should include MTPS, and #27 should be MTPS.

8. Sections V, VI, and VII discuss the relationship among GOT, NE Bureau, and other donor environmental program goals and objectives. However, the listing of the PSDE Strategy elements that directly respond to these priorities is not consistent with the text in Table 1 and becomes rather confusing to follow. If in fact this level of detail is helpful to assure the reader that the PSDE is in fact responsive to other ongoing Tunisian environmental programs, some form of graphic representation of the interrelationship would be helpful.

9. In Section VII, some of the other donor programs are not specified with respect to the specific donor country. More importantly, on page VII-2 the statement is made that "the (PSDE) strategy complements existing bilateral and multilateral aid programs by addressing specific needs expressed by the GOT that other donors are not supporting.", yet the report does not identify what the specific needs are.

10. Section I (page I-2) states that the development of the USAID/Tunisian Private Sector Development Environmental (PSDE) Strategy was "to ensure the most efficient, effective allocation of scarce mission resources." Section VI (page VI-1) discusses the GOT specific environmental actions as based on the fundamental principle that "environmental costs of all actions must be identified and internalized." On the same page, the "urgency of certain environmental problems" and the GOT's National Environmental Protection Strategy (NEPS) and the Action Plan for Environmental Protection (APEP) are mentioned, but no specifics are given. It is difficult for the outside reader to understand how all these objectives and priorities fit together into a coherent environmental strategy for Tunisia - an outcome that should be the objective of this document.

PRIDE ENVIRONMENTAL EDUCATION COMPONENT

Strengthening Environmental Information/Education/Communications in Jordan (April 1993)

BACKGROUND

The purpose of this PRIDE Core Contract-funded mission was to help Jordanian environmentally-concerned agencies begin developing an action plan to strengthen environmental information systems, education/communications/awareness programs, technical/professional training programs, and organizational development activities. A four-person PRIDE Team spent three weeks in Jordan working closely with governmental and nongovernmental agencies to complete this needs assessment. The in-country organizations involved with this PRIDE Core Contract Mission were the Ministry of Municipal and Rural Affairs and Environment (MMRAE), Department of Environment (DE), and the Jordan Society for the Control of Environmental Pollution (JSCEP). The total level of effort was approximately 43 person-days.

DOCUMENT REVIEW

In the past year, Jordan has adopted a National Environmental Strategy (NES). As with most similar documents in other countries, the NES makes passing references to the need for environmental information, education, and communications activities, but contains no overall plan on how to implement them. This review by the PRIDE Team is one step toward creating a road map to activate important elements of a national environmental program for Jordan. It addresses four important components for a successful program:

(1) technical monitoring and information,
(2) environmental education including professional training,
(3) communications including ways to get people to change their behavior, and
(4) organizational development to strengthen program implementation.

Jordan's environmental system has two weaknesses: (1) the Department of Environment (DE) is weaker than most other organizations concerned with environmental protection, and (2) the private sector does not participate fully in Jordan's environmental programs, i.e., in reducing pollution through clean technologies as well as to develop an environmental services industry.

Pending legislation will transform the DE into a semi-autonomous General Environmental Corporation (GEC) with enhanced roles and responsibilities. The PRIDE Team believes that a strong central environmental agency in Jordan is essential to provide leadership in the environmental sector and to serve as a facilitator to encourage active participation by

NGOs, the private sector, other ministries, educational institutions, mass media, and the scientific community. The PRIDE Team believed that much more strategic planning and organizational development planning was needed for all public and private sector groups to clarify roles and strengthen institutional capacities. However, the report focuses on recommendation for the transition of the DE to the GEC.

The report makes twenty-one key recommendations in four areas: (1) Organizational Development - six recommendations, (2) Environmental Information Systems - five recommendations, (3) Environmental Education and Communications - five recommendations, and (4) Technical and Professional Education - five recommendations.

Organizational Development

A very comprehensive development approach is presented that covers elements ranging from passing the pending Environmental Law to establishing 7 new units in the newly created GEC. The report does a good job to identify the necessary steps and the depth of coverage reflects a strong understanding of the Jordanian environment. However, many of recommendations are not simple to implement. For example, the recommendation is made for the Jordanian government to pass the Environmental Law in Jordan, an enabling law creating the GEC (the keystone to strengthening the DE). This law has been pending in the Prime Minister's Office since 1981. This law contains very little specific language concerning the roles and responsibilities of the GEC and therefore will only begin the process to formulate by-laws and regulations/standards.

Environmental Information Systems

Two types of environmental information systems were investigated:

> (1) **the collection, processing, and dissemination of environmental monitoring information** - The PRIDE Team believes that a major effort is needed to establish policies to promote free flow of environmental monitoring data and to create the mechanisms to capture, process, and widely disseminate the necessary environmental information to interested groups within the country. A major recommendation was to institute a bi-annual "State of the Environment Report Card" that summarizes and provides easy access to current vital data on the Jordanian environment.
>
> (2) **technical literature/information available outside Jordan and within the country for government and nongovernmental agencies** - This includes library information, laws and standards from other countries, electronic databases, audio-visuals, etc. The PRIDE Team worked with JSCEP to prepare a list of books and other materials that will be procured by the World Environment Center (WEC) to establish an information center at this NGO (see page III-12).

The report makes 6 recommendations for Jordanian institutions to enhance information flow in the country. In short, the PRIDE Team recommends the establishment of a National Environmental Information Cooperation Committee that will prepare a plan for the establishment and operation of a National Environmental Information Center (EIC). The NIC will develop the "Environment Report Card" (to establish the Center's operating "modalities"), interface with the existing National Information Center, and promote Center services by training potential users.

Environmental Education/Communication

The PRIDE Team found that most environmental activity in Jordan is currently isolated, limited to a single institution, and loosely coordinated. The DE should provide leadership, but the Team found it to have no staff committed to such a function. The PRIDE Team believed that the behavior of target groups for priority environmental concerns must be changed for progress to be made. The Team recommended two tracks: (1) get more benefits from the current resources through better planning and collaboration among active units, and (2) bring in more resources and upgrade the skills of personnel involved in carrying out environmental communication/education programs. The PRIDE Team made five recommendations for improvement. They range from establishing a national committee to represent, and encourage cooperation among, groups with a major stake in environmental issues to setting up focal points for training/interaction and environmental awareness.

Technical/Professional Training

The PRIDE Team studied two types of technical and professional training:

(1) **formal university-level courses and degree programs** - at least three universities in Jordan offer courses and/or degrees in environmental subjects. The PRIDE Team believed that the Jordan academic program is a leader in the Near East region. A recent visit by U.S. university faculty support this belief. The Team recommended that the academic community be encouraged to continue to improve the quality and relevance of their environmental programs.

(2) **in-service or continuing professional short-term training** - the PRIDE Team intended to complete a preliminary assessment of technical/professional training needs. This was not possible in the short time of the visit. The PRIDE Team concluded from discussions with organizations that opportunity is almost unlimited for providing short-term environmental training in Jordan. However, despite the apparent demand, the Team found that managers/administrators in government and NGOs have not linked the provision of training to the strengthening of their institutions. The Team identified at least 20 groups in training institutions that could do environmentally-related short-term training and identified Human Resource

Development as a high priority in the environmental field.

COMMENTS

1. The Executive Summary includes an outline of recommendations for Jordanian environmental organizations to develop environmental action plans and suggestions on how donors might support the programs involved. While this is a concise way to enumerate the large number of recommendations, some supportive and descriptive text, short of the 20 pages of Section I, would help to clarify some of the items identified and make the Executive Summary a more useful document for decision-makers in Jordan.

   For example, the outside reader is told ways to "strengthen and focus the roles/responsibilities of DE/GEC" (page vi - item I.E.). The reader must look to the list of acronyms to realize that this means the Department of Environment, General Environmental Corporation but she/he would still not know what the GEC is or does. For the Executive Summary to be useful, it would be worth a few more pages to help the reader to better understand the recommendations. Also, the "Opportunities for Donor Support" sections are repetitive of previous recommendations and could be included in the text when they are mentioned the first time. Finally, Exhibit 1 serves no useful purpose and is not needed.

2. Section I (pages I-2 through I-8) could contain some indication of the difficulty that one could expect in implementing the numerous recommendations made for "Organizational Development." Perhaps a prioritized list of necessary activities would help. Also some indication of the time schedule involved would be helpful for the reader to better understand the magnitude of the potential problems that might be encountered in the "Organizational Development" phase of the activity.

3. Section I (pages 8 through 11) discusses and recommends the establishment of an information committee and a National Environmental Information Center. The whole process appears to be bureaucratic and perhaps unnecessary. On page I-5, an "Environmental Information Center" is mentioned [paragraph B2f(3)]. On page I-9, a "National Information Center" is mentioned (paragraph C2a) along with the "National Environmental Information Center" (paragraph C2a). There appears to be too many information centers already. Who insures coordination among this myriad of information centers, the National Environmental Information Cooperation Committee?

4. Section I (pages 11-14) discusses and recommends the establishment of a National Cooperation Committee, a Cooperation Committee for Environmental Awareness in School Programs, a focal point for training and facilitating interaction, and an

Environmental Awareness Program Unit in the Department of Environment (the establishment of an Office of Serving the Public is recommended in the "Opportunities for Donor Assistance" section - page I-13).

This approach seems very bureaucratic and possibly unnecessarily cumbersome for any governmental system. In the "Opportunities for Donor Assistance" section, recommendations are made that imply a much more "grass roots" approach to environmental initiatives in Jordan. For example, the PRIDE Team suggests provision of funds for a Train-the-Trainer program; financial support to public, NGO, and private sector groups for awareness programs; provide funds and technical assistance to strengthen the capacity of existing groups to study major audiences for environmental intervention, etc. This "bottom-up" approach makes more sense and, if the U.S. is any indication, will result in a ground-swell of environmental concern for change.

PRIDE POLICY ANALYSIS COMPONENT

Egypt Water Quality Impact Assessment: Phase I, USAID/Cairo (July 1992)

BACKGROUND

A.I.D. commissioned this environmental water quality impact assessment in response to a request from the Government of Egypt through its Ministry of Public Works and Water Resources (MPWWR). The MPWWR is the only government agency concerned solely with water resources in Egypt. As such, the Ministry has responsibility for water planning and management, water allocations, and the development, operation, and maintenance of the irrigation and drainage systems.

This PRIDE activity is Phase I of a two-phased assignment. Phase II is the design of a Water Management Action Plan for Egypt (see Section III, page III-??). Both phases were funded by a O-Contract "buy-in" by the USAID/Cairo Mission in Egypt through the PRIDE. Some additional host-country funding was provided by the Water Research Center under the Egyptian MPWWR. The effort involved three PRIDE contractors, (Resource Management International, Science Applications International Corporation, and RCG/Hagler, Bailly, Inc.) and two consultants (1) an engineer with over 40 years experience in water resource planning and water quality evaluation, and (2) a water quality specialist who is the Chairman of the Department of Environmental and Industrial Health at the University of Michigan School of Public Health. The total level-of-effort was 173 person-days, including 50 person-days in country working with the Egyptian Water Research Center (WRC). The WRC was established in 1975 and includes four general departments and 12 research institutes to more effectively manage Egypt's water resources.

The goal of Phase I of the project is to assess water quality and water pollution in Egypt and to describe their environmental and health impact. The goal of Phase II, presented in a separate report, is to develop a water management action plan for environmentally sound water use and development in Egypt. Both phases rely on existing data and information from policy and technical experts. Both documents are intended for the use of policy officials and decision-makers who are responsible for Egypt's water resources management.

The Phase I report covers:

- historical patterns of water quality in the Nile River, canals, and drains;
- current quality of groundwater and surface water;
- municipal, domestic, and industrial wastes;
- agricultural drainage water;
- health impacts of the water quality situation;

- water quality monitoring; and
- capacity building and water quality management recommendations.

The body of the report is a 52 page document that covers the above topics. In addition, very comprehensive annexes are included that were produced by the staff of the Water Research Center. These annexes, i.e., working papers that average about 50-60 pages each, include detailed discussions and analyses of Sources of Water Pollution, Drainage Water Quality, Groundwater Quality Hydrologic Balance, and Surface Water Quality Monitoring.

DOCUMENT REVIEW

Under 1990 conditions, Egypt has sufficient water of adequate quality in the Nile system to meet current water needs. The needs to the year 2000 can be met if Nile supplies increase and irrigation efficiency improves, and most importantly, if water quality is maintained. Some serious problems are apparent:

- Agriculture diverts water from other uses and produces more wastewater than any other use,

- Domestic and industrial water usages are much smaller than agricultural uses but often produce inadequately treated wastewater, and

- The quality of industrial waste discharge is generally very poor; heavy metal discharges pose the greatest concern, followed by toxic organic discharges.

The Nile's water quality declines and biological productivity increases as the river flows north. The causes include major withdrawals for irrigation, minor municipal and industrial withdrawals, large agricultural drainage returns to the river, and discharges of municipal and industrial wastes. In addition, salinity and organic loading substantially increase particularly in the drains.

Municipal and domestic wastes are a problem for Egypt's rural population. An estimated 95 percent of Egypt's 31 million rural persons have no access to sewer systems or wastewater treatment facilities. This lack of rural sanitation is the major health-related water quality problem in Egypt.

Egypt has three major water quality monitoring programs, each with its own shortcomings:

(1) Nile River and Delta Measurement Program - develops little diversity of data, has inadequate funding and staffing, and needs upgrading for its laboratory facilities.

(2) Drainage Monitoring Program - limited mainly to the measurement of salinity,

(3) Groundwater Monitoring Program - focused mostly on specific investigations.

To meet water planning, pollution control, and research needs, Egypt needs a comprehensive water quality data program. The program must have adequate funding, effective laboratory facilities, competent professional staff, and effective data storage and retrieval systems. These efforts should be centered in MPWWR and they should be supported by the Ministry of Public Health and other concerned agencies. The country must better control agricultural, municipal, and industrial wastes. Egypt should move forward on Phase II of this environmental water quality assessment. finally, Egypt should develop a water and waste disposal cost recovery plan that could create an adequate financial base and provide an equitable distribution of costs for the country's water use and waste disposal systems.

COMMENTS

1. The document points out two serious problems for any intervention in Egypt's water sector:

   (1) data and information are scarce and not easily accessible - information is scattered among many government agencies, is in various formats, and quality control of measurements is generally unknown. One of the most useful sets of data was the comprehensive water quality information system developed through a joint project of the University of Michigan and the Academy of Scientific Research & Technology. The data bank was computer-based housed at the National Research Center. The Center no longer exists - activities were shut down when funding ceased. The only complete set of data is at the University of Michigan.

   (2) waste discharge requirements are not enforceable - The MPWWR is responsible for establishing and enforcing waste discharge requirements under the Water Pollution Control Act of 1982. However, the law set standards which are essentially unenforceable. Many industries are in violation of discharge requirements.

2. A great many statistics are given in the report with regard to discharges and constituents and contaminants in water sources and drains. It would be helpful to have also provided international standards data. A comparison could then be made between existing Egypt levels and World Health Organization standards, for example, so that a general feeling for the magnitude of the problem could be reached.

PRIDE PRIVATE SECTOR DEVELOPMENT COMPONENT

Mobilizing Morocco's Private Sector for Environmental Management (January 1993)

BACKGROUND

This 48-page report was completed by two Core contractors (a major subcontractor and a Grey Amendment subcontractor) and in-country staff at Formation Organization et Conseil de Societe (FOCS) in Casablanca. The effort was completed in coordination with World Bank staff and consultants, although no formal agreement was in place. For the Government of Morocco (GOM), the Ministry of Interior was the lead agency. The total level of effort for the Core contractors was 140 person-months, funded by both Core and Q-Contract funds. At least two separate efforts were consolidated under this funding arrangement for essentially four clients: the World Bank, the NE Bureau, the Moroccan Mission, and PRIDE itself. The report facilitated the design of a private sector component to the World Bank's Environmental Management Program for Morocco.

DOCUMENT REVIEW

The main purpose of the report was not to review Moroccan environmental problems, but to indicate the role for the private sector in dealing with them. Morocco has a well developed private sector that can provide environmental solutions and pollution prevention services - over 100 companies are already involved in the environmental business.

The PRIDE Team found that the most serious natural resource problem for Morocco is the shortage of drinking water. While water availability is primarily a resource shortage problem, it is magnified by pollution. The major Moroccan environmental problem is deterioration of surface and underground water as a result of short-sighted irrigation techniques, fertilizer and pesticide applications, and industrial and municipal discharges in to surface and ground water. Morocco's growing resource shortages are casting doubts on the strategy of postponing environmental clean-up by allowing pollution for the present to establish a situation that will attract investment now.

A survey of 43 Moroccan companies was completed to better assess the private sector's environmental management capabilities. The objectives of the survey were to identify:

- existing and potential environmental capabilities,
- environmental areas to expand private sector operations or capabilities,
- impediments to developing markets for environmental goods and services, and
- means of overcoming these impediments.

Subsequent sections of the report build upon the findings of the survey and identify policy and program options that will help mobilize private sector participation in environmental management.

Section II describes and analyzes the environmental capabilities of the Private sector. The private sector environmental businesses perceive themselves as key figures in environmental management who present solutions to private and public sector polluters. With a conscious policy decision by donors and the government, the investment in solutions is likely to be led by privatization and recognition that the public can turn to the private sector for solutions. the capacity for solutions exists in the private sector pool in Morocco. with occasional technical assistance for abroad.

The PRIDE Team believes that a proactive private sector will help abate the environmental pollution problem over time as environmentally aware thinking is adopted. If the Moroccan economy grows and modernizes, clean technologies can reduce the problems of the past and the optimism expressed in the survey responses will be justified. The approach taken is the "Western pattern" wherein the government sets priorities for controls and the private sector develops technologies to comply with the government regulations. In this manner, the report hopes to "gain developing country foresight with developed country hindsight."

Section III addresses the private sector's relation to government policy incentives. Incentives are set in the larger context of environmental management by command-and-control mechanisms, market mechanisms for allocating clean-up priorities, pollution prevention by source reduction, and application of environmental management techniques. A number of incentives for enhancing the role of the private sector in environmental management are presented as "program options" - with suggestions on where financing could be included in the World Bank's Environmental Management Plan for Morocco.

Section IV provides an outline of three pilot activities to illustrate major principles of environmental management. The World Bank's Environmental Management Plan is seeking donor support for these and other projects. The focus for World Bank donor interest is on:

(1) a waste management plan for Safi leading to privatizing of collection and disposal,

(2) an eco-tourism project in Souss-Massa designed to involve the private sector in the management and development of the national park, and

(3) an environmental loan fund to facilitate the public/private institutional nature of the program.

Section V makes recommendations for a private sector component in the World Bank's Environmental Management Plan for Morocco. Recommendations for the donor community include demonstrations of pollution control and natural resource preservation methodologies by funding the pilot projects and others by establishing and using the Environmental Loan Fund.

Recommendations for the private sector deal with establishing joint U.S./Moroccan partnerships to provide environmental management goods and services. Recommendations for the Government of Morocco generally summarize the thrusts mentioned in the body of the report, i.e., to set standards and regulations, develop financial instruments, define boundaries of regulatory bodies, and enlist the private sector for positive gains.

COMMENTS

1. While this effort was selected at least partially because it included the services of a wide range of contractor and outside agencies, the evaluator was told that it may have suffered from an unclear statement of work that did not clearly define roles and responsibilities. The coordination of disparate groups, i.e., the Moroccan Mission, the World Bank, and the Core Contractors, can be difficult even when the topic is a universally accepted one.

2. The report hopes to "gain developing country foresight with developed country hindsight." The approach taken is the "Western pattern" wherein the government sets priorities for controls and the private sector develops technologies to comply with the government regulations. The pattern stated is that a domestic market driven by public concern and regulation, leads to the development of domestic capability, further leading to significant international demand for goods and services. This approach assumes that the environmental business will be regulation-driven and that the government will set up the necessary laws and apparatus for enforcement.

   Realistically, one must remember that the process described as the "Western pattern" took nearly three decades to evolve in the U.S., i.e., the Clear Air Act was first passed in 1965. And then it only "evolved" because of public awareness and demand that overtook political pressure placed on Congress by a Western corporate structure that fought environmental regulations and clean-up every step of the way. Also with regard to technology development, certainly the environmental market drove pollution mitigation hardware development, but a great deal of U.S. technology advancement was delayed (and is still delayed in some cases) until international balance of trade made it essential, e.g., the development of the very modest 25 MPG automobile or the more interesting electric car.

3. Three pilot activities are described in Section III that "illustrate major principles of environmental management..." While they are presented in adequate detail and format, it is not clear why these particular three were chosen, i.e., a waste management plan for Safi, an eco-tourism project in Souss-Massa, and an environmental loan fund. If they were intended for consideration for World Bank donor funding, perhaps they should be in a format consistent with World Bank requirements?

4. The report is a fairly comprehensive review of the Moroccan private sector capabilities for the provision of environmental management goods and services. It is somewhat dogmatic at times. The recommendations presented seem rather "flat." The usefulness of the report to actually get the Government of Morocco to begin to address private sector participation in environmental management may be limited since no clear "action plan" is evident. No implementation methodology or schedules are given, and the cost to implement the "Program Options" is not address for the short- or long-term.

ANNEX G

PRIDE/CHEMONICS SUBCONTRACTOR CAPABILITIES

PRIDE/CHEMONICS SUBCONTRACTOR CAPABILITIES

RCG/Hagler, Bailly, Inc. (HBI), located in Arlington, Virginia, has worked extensively with the U.S. Environmental Protection Agency (EPA), and to a lesser extent with A.I.D. It has provided a broad range of energy and environmental services, in the U. S. and overseas. HBI's environmental management expertise is complemented by its resident capability in energy efficiency, energy planning, and environmental equipment.

Science Applications International Corporation (SAIC), located in Falls Church, Virginia, is a leading EPA contractor. Prior to its role as a PRIDE subcontractor, it had no direct working relationship with A.I.D. SAIC's strength lies in its track record in assessing environmental problems and recommending feasible, alternative solutions. The range of its activities include hazardous waste field investigations, waste treatment technologies, and the production of educational and training materials.

Capital Systems Group (CSG), located in Rockville, Maryland, has had direct working relationships with a number of U. S. Government departments and agencies, including EPA and A.I.D. CSG's major contribution to the project is its proven track record in the development of information technologies for data management and analysis.

Industrial Economics, located in Cambridge, Massachusetts, has had broad experience providing services to a wide range of both government and private sector clients, including EPA. Of importance to PRIDE is Industrial Economics' experience in relative risk assessment and regulatory impact analysis.

Lincoln University is located near Philadelphia, in Lincoln University, Pennsylvania. Through its biology, chemistry, and physics departments, Lincoln University represents an environmental education resource.

Environomics, located in Bethesda, Maryland, while a relative newcomer, has already proven its corporate capability in cost-effective approaches to environmental problems.

Resource Management International, located in Sacramento, California, with a subsidiary office in Washington, DC, brings to PRIDE an impressive track record in addressing utility and waste management issues.