PD-ABE-397
78011

ENERGY DEMAND MANAGEMENT
(608-0193)
PROJECT PAPER SUPPLEMENT # 1

USAID MOROCCO
May 5, 1992

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: C (A = Add, C = Change, D = Delete) — Amendment Number: ONE — DOCUMENT CODE: 3

2. COUNTRY/ENTITY: MOROCCO/USAID

3. PROJECT NUMBER: 608-0193

4. BUREAU/OFFICE: NEAR EAST BUREAU — NE

5. PROJECT TITLE (maximum 40 characters): ENERGY DEMAND MANAGEMENT

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 30 YY 95

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4): A. Initial FY 92 — B. Quarter 3 — C. Final FY 93

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. Total	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. Total
AID Appropriated Total	4500	500	5000	7600	1000	8600
(Grant) ESF	(4500)	(500)	(5000)	(7600)	(1000)	(8600)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
Host Country		800	800		1123	1123
Other Donor(s) Private Sector	1000	1200	2200	1000	2214	3214
TOTALS	5500	2500	8000	8600	4337	12937

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	C. 2. Loan	D. OBLIGATIONS TO DATE 1. Grant	D. 2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	E. 2. Loan	F. LIFE OF PROJECT 1. Grant	F. 2. Loan
(1) ESF	741	878		5,000		3,600		8,600	
(2)									
(3)									
(4)									
TOTALS				5,000		3,600		8,600	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To develop and implement the core of a national Energy Demand Management Program in Morocco.

14. SCHEDULED EVALUATIONS: Interim MM 12 YY 90; MM YY; Final MM 09 YY 94

15. SOURCE/ORIGIN OF GOODS AND SERVICES: [X] 000 [ ] 941 [X] Local [ ] Other (Specify) 608

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment.)

This Project Paper Supplement #1 amends the Project Paper for the USAID financed Energy Demand Management Project (608-0193), to include additional ESF funds and to extend the PACD in order to accomplish enhanced project objectives as described herein.

USAID/Morocco Controller approves methods of implementation and financing.

Signature James R. Funkey — Title: Acting Controller

17. APPROVED BY — Signature: Dennis M. Chandler — Title: Mission Director, USAID/Morocco — Date Signed: MM 06 DD 26 YY 92

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (8-79)

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ACTION MEMORANDUM TO THE MISSION DIRECTOR

Date: JUN 26 1992

From: Richard P.Burns, Chief/PDPE RB

Problem: Approval of Project Paper Supplement #1 and related Project Authorization Amendment for the Energy Demand Management Project (608-0193)

Background:

The Energy Demand Management Project was authorized at its current $5 million level by the USAID Mission Director on July 22,1988. To date the Project Authorization has not been amended.

The project is assisting Morocco to save foreign exchange used to purchase commercial energy by providing technical assistance to the Moroccan private sector. This technical assistance provides businesses with ways and means of decreasing the demand for necessary commercial energy, thus lowering energy costs. This decreases the cost of doing business making Moroccan firms more competitive. One of the objectives of the project is to assure the sustainability of energy conservation services in the country after the PACD by leaving 2-4 firms in the marketplace that provide such services at a profit.

The Energy Demand Management Project has been judged a success by the recently completed Mid-Term Evaluation report. The work that has been done under the Project has saved Moroccan private enterprise the equivalent of $1.9 million per year in energy costs.

The project is implemented within the Moroccan private sector by a U.S. technical assistance contractor. The funding levels decided upon during the design phase were limited due to Mission questions about the potential for this private sector-based project. In fact, the contractor's best and final offer was $.5 million over the entire amount budgeted in the Project Paper, and $1.5 million over the amount budgeted in the original $4 million PIO/T issued for technical assistance. USAID was able to negotiate a contract of $4.475 million which was still over the PIO/T amount. Because of this funding shortfall problem, the Mission decided to cut the project into two functional periods . The first was a "base" period of 36 months which would allow the Mission to obligate $3.5 million to the contractor. After this base period, the Mission was to decide whether or not to commit another $866,450 for the 16-month "option" period which would fully fund the contract estimated amount.

A mid-term evaluation held in September-October of 1991 found the project to be highly successful and recommended an increase in the activities and funding as well as an extension of the PACD.

The project gained good momentum during the "base" period. It carved a niche in the Moroccan private sector for energy conservation services and trained Moroccan engineers to a high level of proficiency in the provision of these services. Exercising the option period as it was originally designed would limit both the availability of funds and the project length. This would mean that the project would not fully capitalize on the gains already made. Increasing funds and lengthening the LOP will provide USAID with more of an assurance that the project will be sustainable and that energy efficiency activities will continue in the private sector after the PACD. Therefore, the Mission Review Committee agreed to not exercise the option period of the contract but to extend the PACD, increase the activities of the contractor, and increase the funding levels.

Discussion:

Based on evaluation recommendations, the Mission determined that the extended project should focus on certain areas that will strengthen the potential for sustainability. The extended project will thus include: a modification to the current contract which is based on a justification for other than full and open competition; an additional expatriate engineer to assure follow-up and further economic analysis; two additional junior Moroccan engineers and increased funding for subcontracting to assure a wider pool of engineers providing conservation services after the PACD; increased emphasis on U.S. training and study

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tours; and increased emphasis on demonstration projects with the objective of showing to the Moroccan market the potential for energy efficiency equipment.

The Mission Review was held on March 27, 1992. The Mission agreed that the project extension will be for two years until September 30, 1995. The amount of funding increase will be for $3.6 million. The project was approved pending treatment and resolution of the problem of client fees generated through project activities. The client fees issue was discussed at a meeting held on April 8, 1992. The result of this meeting was a mission-wide approach to client fees. In summary, this approach requires contractors/grantees to use 50% of client generated fees to off-set A.I.D. funded project costs and to use the other 50% for project related expenditures (see Memorandum to the File, dated May 22, 1992 for a full explanation of the Mission policy on client generated fees).

The Mission also considered whether the demonstration component of the project is consistent with OECD tied aid rules. In this small component, which is designed to demonstrate to the Moroccan private sector the potentially significant cost savings in using state-of-the-art energy efficiency equipment, USAID reimburses firms up to 25% of the cost of such equipment once it is installed and running correctly. Funds budgeted for this component will be disbursed for equipment from only the authorized source/origin (000/000) following appropriate competitive procedures and the assurance from the project's prime contractor that any costs for such equipment are reasonable. Given that the amount involved is very small (about 3% of A.I.D. funded project costs), that the component is part of the original project design and has not been changed, and that the equipment is solely for demonstration purposes in close conjunction with other project activities, the Mission believes that this component is not inconsistent with tied aid rules.

During the course of the project extension, the contractor will be required to provide USAID with non-proprietary information regarding the firms with which it works. Such information, useful in the EDM project monitoring system, will feed into and be used in the USAID/Morocco computerized Private Sector Monitoring System (PSMS).

The Congressional Notification was forwarded to Congress on May 22, 1992 and expired without objection on June 5, 1992.

Under Redelegation of Authority No.654, as amended on September 1, 1986, you have the authority to approve project amendments which do not exceed $30 million in total LOP funding, present no significant policy issues, which require no further issuance of waivers by AID Washington and which do not exceed two years if the total LOP is not more than ten years.

Recommendation:

(1) That you approve PP Supplement #1 by signing its Project Data sheet; and,

(2) that you sign the attached Project Authorization Amendment # 1 increasing the LOP funding level to $8.6 million, of which $2 million will be obligated in FY 1992.

Dennis M Chandler

APPROVED: ____________ Date: 6/26/92 DISAPPROVED: __________

Dennis M. Chandler
Mission Director

Dennis M. Chandler
Mission Director

Drafted: RScott, RDPE 4/7/92

Clearance:

JLowenthal, D/DIR (in draft)
BBarrington, RLA (in draft)
MReynolds, RCO (in draft)
JFunkey, A/OFM (in draft)
MKraczkiewicz, A/PROG (in draft)

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PROJECT COMMITTEE MEMBERS

Rick Scott	Project Officer
Rick Gold	Mission Evaluation Officer
Mark Kraczkiewicz	Program Economist
Eric Loken	Mission Environmental Officer
James Funkey	Acting Mission Controller
Mary Reynolds	Regional Contracting Officer

AMENDMENT NUMBER ONE
TO THE
PROJECT AUTHORIZATION

Name of Country: Morocco

Name of Project: Energy Demand Management Project

Project Number: 608-0193

Pursuant to Section 531 of the Foreign Service Assistance Act of 1961, as amended, the Energy Demand Management Project for Morocco was authorized on July 22, 1988. That authorization is hereby amended as follows:

> The level of planned obligations is increased from not to exceed $5,000,000 to not to exceed $8,600,000 in grant funds over a seven year and two month period from the date of initial authorization;

The Authorization cited above remains in full force except as hereby amended.

Dennis M. Chandler

Dennis M. Chandler, Director

6/26/92
Date

Drafted by: RScott:PDPE:04/20/92

Clearance:

DDir: JLowenthal
A/Prog: MKraczkiewicz
PDPE: RBurns
RLA: BBarrington BKB (in draft)
A/Cont: JFunkey
RCO: MReynolds

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608-0193
Energy Demand Management Project
Project Paper Supplement No.1

I. SUMMARY AND RECOMMENDATIONS

1.1 The Problem:

Morocco relies heavily on imported energy for domestic commercial energy use. The availability of sufficient amounts of energy at reasonable cost is essential for sustained economic growth. In Morocco, energy costs are wholly determined by factors beyond the country's control. While more energy is needed to ensure economic growth, efficient management of energy can assure that Morocco can control its demand.

The Energy Demand Management Project works directly with the private sector to ensure that the minimum amount of commercial energy required is utilized. Technical services are provided to the private sector on a cost-sharing basis. To date, at a minimum estimate, the project has saved the private sector the equivalent of $1.9 million per year in energy costs, and, saved Morocco an estimated $1 million per year of foreign exchange for the purchase of imported energy.

1.2 Project Summary:

The Energy Demand Management is a 52 month project which was authorized and obligated in July of 1988 with an A.I.D. contribution of $5,000,000.

The purpose of the project is to develop and implement the core of a national energy demand management program.

The two major modifications in this PP Supplement are:

1. to add an additional $3.60 million increasing the total LOP funding amount to $8.60 million, obligating $2.0 million of this during FY 1992, and,

2. to extend the PACD from September 30, 1993 to September 30, 1995, or twenty-four months.

The project will continue to be implemented by a U.S. contractor, Hagler-Bailly, Inc., through an amendment to its existing contract under the project. The purpose of this PP Supplement is to show that a project extension is technically, institutionally, financially, economically, socially and environmentally sound, and that there is sufficient justification to make the two major modifications.

Project activities in the four components - increasing awareness, technical assistance, training,and, policy studies - will continue. The Project Paper Supplement will require the contractor to increase levels of training activities (both US and local), demonstration projects, policy studies, assessment of the economic impact of already completed projects, and, subcontracting in order to provide a broad base of qualified energy engineers by the project's conclusion.

There is a demand-driven market in Morocco for EDM services. The contractor, with its current financial and staff resources is unable to keep up with the demand. As a result of the extension, a private sector-based **sustainable** energy demand management service will be developed. More than one local engineering firm will be providing EDM services to the private sector on a commercial basis after USAID and GOM support is withdrawn.

To ensure that the increased activity levels will be accomplished, the PP Supplement proposes an increased level of effort on the part of the contractor. Increased effort will be given to training Moroccan engineers both on the contractor's staff and on subcontractor staff. This responsibility will be assumed primarily by the new expatriate energy training and marketing expert, and two new junior engineers to be added to the contractor's staff. Increased levels of subcontracting will also be required in order to ensure that as broad a base as possible is covered for training engineers in EDM so that there will likely be more than one group of skilled experts after the PACD.

Another change proposed by the PP Supplement is that all project activities will be implemented by the contractor. Currently, USAID has procurement responsibilities for some related services and commodities. Specifically, USAID must hire teams to perform policy analyses and studies, and, USAID must facilitate purchase of commodities for demonstration projects. In order to capitalize on the contractor's connections in the energy field in the United States, these duties, with concurrent funding, will be passed to the contractor. A small amount will be left in a USAID contingency fund.

Finally, the PP Supplement proposes that more level of effort be given to: US training, local technical training and awareness campaigns, and increased follow-up analyses of work already completed in order to facilitate measurement of impact.

During the project extension the cooperating Ministry will remain the Ministry of Energy and Mines, but as experience has shown, the EDM Project is firmly rooted in the private sector.

RECOMMENDATION

It is recommended that the Project Authorization be amended to add $3.60 million in ESF grant funds making the total authorized amount of the project $8.60 million and that the PACD be extended until September 30, 1995.

II BACKGROUND/RATIONALE

2.1 BACKGROUND:

Except for prohibitively expensive deposits of oil shale, Morocco has no fossil fuel resources, requiring it to rely on imported fuels to meet the bulk of its commercial energy needs. The country spends up to 50% of its annual foreign exchange earnings on imported energy resources. The expansion of its private sector is constrained by the reliance on imported energy resources, the cost of which is determined by external factors. Maximizing efficiency of energy use for sustained economic growth minimizes demand, thus saving users and the country funds that can be more productively invested.

Morocco's energy pricing policy maintains domestic prices sufficiently above border prices to provide the country with a major component of its government revenues. The current level is almost $ 1 billion per year. This policy was confirmed most recently when the government raised most energy prices 10% during the Gulf War. These domestic prices have not been lowered even while international prices have fallen to levels that existed prior to the Gulf War.

An energy demand management study carried out in 1986 recommended a major national energy efficiency program after finding that Morocco -- as do many other developing countries with similar economies --- has substantial potential to save energy. The feasibility study estimated savings of about $100 million and a rate of return of 22% assuming static oil prices. Energy demand management provides Morocco with one economically viable approach to address its energy needs.

2.1.1 EDM Project

The Energy Demand Project (EDM) Project was designed in 1988 to develop and implement the core of a national energy demand management program that would result in increasing energy use efficiency. USAID chose the project name -- Energy Demand Management -- after extensive discussions with GOM. The choice of the name underscores the importance of being more efficient without calling for conservation, which in the French translation suggests using less energy. "Conservation" programs proposed by the Government of France and the World Bank in the early 80's met with little success because Moroccans conceptually want to use more energy to promote economic development.

The Project Agreement was signed with the Government of Morocco's Ministry of Energy and Mines in July 1988. A competed contract for implementation of the project was signed with Hagler-Bailly, Inc., a private US energy firm, in March 1989. The contractor was fully mobilized by September 1989. The current PACD is September 30, 1993.

The project initially targeted three industrial subsectors (hotels, agro-industry, and, construction). Provision of the project's services has saved industry money and has saved the country foreign exchange used for its imported energy bill.

2.1.2 Key Design Points

2.1.2.1 Non-Price Barriers to Energy Efficiency

One attractive dimension of the EDM project was that price incentives were already a part of Moroccan policy. With a positive pricing regime in place, the Project Paper discussed the importance of addressing and overcoming a set of non-price constraints to adopting energy efficient practices. These included (i) investment attitudes, (ii) access to information and awareness, (iii) availability of EDM services and equipment, (iv) policy incentives, and (v) institutional coordination. These factors represent a critical element in the long term success of EDM.

2.1.2.2 Private Sector Orientation and the Steering Committee

The Ministry of Energy and Mines preferred at the outset of project negotiations to build institutional capacity within the ministry itself, which would apply new techniques to obtain efficiency gains in the energy sector. They argued that the demonstrated success in the energy sector would lead the way to similar gains in other sectors.

USAID advocated building the expertise directly in the private sector because this approach would narrow the distance and focus the attention on the key actors at the micro level: the market for energy services, and local technical capacity to supply the market. The project concentrated initially on three selected sectors where market forces played an important role. By this concentration, success in the application of efficiency techniques would have visibility and lead to broader introduction throughout the economy.

At the conclusion of negotiations, the GOM accepted the USAID proposal for the innovative -- and as yet untried -- effort to create sustainable capacity in the private sector to deliver market-driven services.

The design challenge was to set up a viable approach for the transfer of expertise from a qualified U.S. firm to Moroccan private sector experts. This challenge led to design decisions requiring the U.S. firm (i) to employ 3-4 Moroccan professional staff as part of its project team, and (ii) to sub-contract with existing Moroccan service firms, which would learn and apply selected energy efficiency techniques. The project design contemplated that the market in Morocco would set the salary level for both the employees of the U.S. contractor, and the subcontractors.

To insure that the Moroccan Government exercised broad public policy oversight and provided the essential inputs of GOM public policy direction, the design incorporated a Steering Committee comprised of USAID and MEM representatives. USAID's representatives would transmit the Steering Committee decisions to the contractor through the direct contract administration process. To insure efficient contractor operations and a needed degree of independence, neither the Steering Committee nor the MEM representatives would have responsibility over day-to-day project implementation.

2.1.2.3 Minimal USAID Management Requirements

The project design called for minimal USAID management responsibility. The design and implementation details required a detailed and careful review of the contractor's work plan, to be approved by the USAID after discussion at a Steering Committee meeting. The work plan structure established a set of discrete project actions and targets for accomplishment. USAID instructed the contractor to submit monthly reports to serve as the basis for a monthly meeting between the contractor and the USAID project officer. Quarterly reports served as the basis for review at the quarterly Steering Committee meeting. The approach has worked well to assure necessary oversight while limiting contractor and USAID staff time, and assuring that MEM has full opportunity for policy direction.

2.1.2.4 Project Components

The project design incorporated activities that would ensure a complete and solid foundation for the promotion and implementation of energy use efficiency practices in the country. The contractor works directly with the private sector, and the original project design included the following elements:

- the development of an understanding, awareness, and consciousness of EDM, first within key sectors and then throughout Morocco;

- technical intervention with selected firms within identified key sectors through audits, feasibility studies and demonstration projects;

- the development within Morocco of the capability to conduct energy audits and implement

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energy demand management techniques, through training Moroccan engineers;

▸ the completion of specific studies to influence policy decisions on energy management issues and to provide a deeper understanding of energy use and demand management in the country.

2.1.2.5 Initial Project Funding Issue

Hagler-Bailly, Inc.'s original proposal was almost $2 million over the cost estimate in the Project Paper. Contract negotiations between USAID and Hagler, Bailly reduced the cost proposal substantially, but the final figure was still over $900,000 in excess of the funding available from the Project Paper and ProAg. One of the reasons that the cost proposal was higher than in the design documents was that in response to the RFP, Hagler-Bailly proposed to field three expatriate staff, because they felt the scope of work and project objectives could not be achieved with only two expatriates. Even though the original design had contemplated three expatriate experts, USAID could not accept this proposal due to funding constraints.

After completing the negotiations and agreeing to an amount of $4,475,000 for the work to be included in the contract, USAID faced four options:

1. Amend the Project Authorization and the ProAg to include funds to cover the overrun, and proceed with the original project design. The Mission considered this option consistent with the ceiling of $5 million that had been established for the project;

2. Reduce or eliminate other components of the project to be within the $4.475 million. Such a course had serious drawbacks; (i) to reduce or eliminate essential components of the project prior to the start of project implementation would not be consistent with the objectives of the design, and, (ii) USAID would have needed to obtain GOM concurrence to the funding changes incorporated in the ProAg at a time when the Ministry of Energy and Mines still wished to orient the project towards its own public sector programs rather than concentrate on the private sector institution-building dimension.

3. Execute a 36 month contract with a 16 month option, and consider adding funds after the mid-term evaluation either confirmed or called into questions the basic project hypotheses, and the project's value.

4. Deobligate the project.

USAID selected the contract and option period alternative, option 3. Although this was the most efficient choice at the time, it meant that the contract was still to be underfunded until such time as it was determined that new funds could or should be added.

2.2 CURRENT SITUATION

In September, 1989, the contractor fielded a team including an expatriate Chief of Party, an expatriate energy conservation specialist, and three Moroccan engineers, plus office staff. Since the inception of the EDM Project (locally called **PROJET GEM**, Projet Gestion de l'Energie dans les enterprises Morocaines), this team has been working directly with the private sector, with oversight provided by the USAID/GOM Steering Committee (see Section 2.1.2.2), on the implementation of the four components of the project.

The team has marketed the idea of feasible energy efficiency actions within three sectors of Moroccan enterprise: hotels, agro-industry, and, construction materials. Initial hesitation by Moroccan business to participate in the project has been overcome by the provision of world class energy demand management services - primarily audits that have resulted in savings for firms that have implemented the recommendations. Provision of quality services, coupled with a successful awareness campaign, has made the project, and the concept of energy efficiency, well known, particularly in the three targeted sectors.

As noted above, the project was considered to be experimental during the design phase. A crucial event was to be the midterm evaluation, originally scheduled for December of 1990. Due to the Gulf Crisis, however, the evaluation was postponed until September, 1991.

The evaluation found that to date the EDM Project has been very successful. It marks a radical departure from other energy projects in the developing world because it builds institutional capacity for carrying on energy demand management services **directly in the private sector**.

When the project began, Morocco had no capability of carrying out energy audits and industry was skeptical of paying for energy management consulting services. In fact, any energy demand management services that industry paid for, such as audits, were provided by foreign engineering firms, mostly French.

In two years, the project has succeeded in convincing the private sector that it is in its interest to pay for local energy demand management services, and it has:

- created a brand image ("PROJET GEM", Projet Gestion De L'Energie Dans Les Enterprises Marocaines) for its for-fee technical assistance services, which is now accepted as the standard for energy efficiency and management services in Morocco;

- established technical credibility in its three target sectors (construction materials, agro-industry, and, hotels) for high quality work to international standards; and,

- developed a commercial market for energy audits and other services beyond the point where the project can meet the demand for services with current resources;

PROJET GEM has already:

- saved the Moroccan private sector the equivalent of at least $1.9 million per year in energy costs, and has reduced Morocco's oil and coal import requirements by nearly $1 million per year;

- trained 340 Moroccan engineers and technicians in different aspects of energy efficient plant management; and,

- published and disseminated French Language training manuals on boiler efficiency, electrical bill analysis, thermal and mass balance in cement industry kilns, audit techniques, and, a quarterly technical newsletter that is sent to 420 subscribers, including senior private sector managers.

2.2.1 Evaluation Recommendations

In addition to finding the project to be successful, the evaluation made several recommendations which are incorporated into the design of this Project Paper Supplement. The six key recommendations are: (1) the project be extended and funding increased, (2) promotion of the project should do more to attract small and medium enterprises, (3) the project can offer a mix of audits, from in-depth, complex ones, to simple, less complex system ones, (4) more engineers should be trained by the project and subcontracting increased, (5) the project should be expanded beyond the three sectors in which it is currently involved, and, (6) there should be more communication between the project and the Ministry of Mines and Energy (see Chaper III for a description of how these recommednations are incorporated into the project).

2.3 RATIONALE FOR PP SUPPLEMENT

As the project is becoming more widely known in the country, the demand for its services is growing. Project momentum is high: the contractor cannot keep up with the demand for services. This high demand has confirmed that there is a market for energy demand management services in the country. The demand is a sophisticated one: the market requires high quality. The project has demonstrated that the volume of demand is such that more than one firm could survive if they were able to provide consistently high quality services.

The fact that project implementation to date has proven that this is true, and that it was confirmed by the midterm evaluation has made the extension of this project crucial. While the market exists, more time and funds are needed to ensure sustainability, specifically by increasing exposure of the project, increasing training, and, increasing the amount of funds for subcontractors to carry out much of the work.

An infusion of new funds and the understanding that the project is to be extended will allow project engineers to hone their skills with continued project support. With the planned increase in funding for subcontracting, engineers working for subcontractors, will with USAID support, have more practical training under the supervision of highly skilled expatriate engineers, and will be that much more capable and confident of providing the kinds of services that the market will purchase.

Allowing the project to run the course planned for in the current Project Agreement would leave the country with highly trained engineers, but, there would be less of a guarantee that the "core of a national energy demand management program" will be in place where it belongs - the private sector. A new project focus within the framework of the original purpose and goal, supported by an increase in funds and an extension of the PACD, will be the guarantee to USAID that it is making prudent use of funds to ensure that a critical mass of private sector capability is sustained after the PACD.

There are four other reasons why the project should be extended and funding increased. They are:

▸ the cost of technical assistance to accomplish the objectives of the original Project Paper were higher than estimated (see Section 2.1.2.4). Because of this, crucial areas of the project have suffered: training (particularly the U.S. portion), policy analyses and studies, subcontracting, and, the demonstration projects, all of which will be important parts of the extension;

▸ the contractor's work in Morocco was interrupted by the Gulf War which forced the evacuation of key contractor personnel for a four month period. This caused a break in momentum, which effectively hindered achievement of objectives for a minimum of six months;

▸ enhanced energy efficiency is **essential** to Morocco as it competes in world markets. With continued USAID support, increased awareness of energy savings potential will assure the sustainability of Moroccan provided energy services; and,

▸ the project can serve to encourage important niche markets for U.S. products. Now that **PROJET GEM** has become well-known, and contacts with industry have been made and nurtured for a year, the demonstration project component of EDM will be emphasized. During the extension, this important component will receive renewed funds and, to ensure implementation, will be made a direct responsibility of the contractor. The component will introduce Moroccan firms to energy efficient products that are manufactured in the United States on a cost-sharing basis.

2.4 RELATIONSHIP TO USAID'S CURRENT ACTION PLAN

PROJET GEM directly supports achievement of the Mission's Strategic Objective No.1 in the draft FY 1992 Program Performance Assessment Plan. The project provides technical assistance and equipment that directly aids businesses increase resource use efficiency (sub-Output No. 1.1.1), and it leads to increased application of improved technology in energy use (Program Sub-Output No. 1.1.2). The policy analysis component leads to enabling policies and regulatory reforms (Sub-Output No. 1.1.3). These outputs lead to the improved productivity of Moroccan firms which leads to the Strategic Objective of, "increased competitiveness of Moroccan firms in selected export markets". While it will continue to provide services in the three sectors it is already in, the project extension will expand to all sectors in the economy. One of the new criteria for determining selction of industries and sectors will be export capability, planned, or current (see Section 3.4).

PROJET GEM was the pioneer project for USAID/Morocco's private sector portfolio. The project has demonstrated that at least in the area of energy efficiency, Moroccan private enterprises make the decision whether or not to (1) invest in the services provided by the project, and, (2) invest in projects recommended, as a result of the energy service provided, based on market forces. To date the project has, at a most conservative estimate, saved the private sector in the country $1.9 million per year through the provision of its services. As mentioned in the Action Plan, "capacities to develop, adapt, and improve production and other technologies will be critical to maintaining cost and quality advantages over competitors." Through adoption of recommendations by the project, Moroccan enterprise has lowered the cost of doing business, thus, making it more competitive.

The Action Plan also stresses that, "access to foreign technology must be made easier in order to diversify and improve the range of Moroccan products." Through the demonstration project component, access to energy efficient products will be facilitated and introduced to the Moroccan marketplace.

III DETAILED PROJECT DESCRIPTION

3.1 PROJECT GOAL AND PURPOSE

The goal of the EDM Project Extension will remain the same as in the current Project Agreement: that is, to save foreign exchange and increase productivity by reducing waste and by improving the efficiency of energy use in Morocco. The purpose of the project also remains the same: to develop and implement the core of a national energy demand management (EDM) program.

While the goal and purpose of the extension will remain the same, the project will be amplified to reflect the most important lessons learned from project implementation to date. There is a growing market in Morocco for energy services, and there is a qualified group of engineers capable of and interested in being trained in energy efficiency. They are capable of providing world class energy efficiency services to all industrial sectors.

The project extension will be implemented to: continue and amplify services currently being provided; to increase the coverage of the project; to increase subcontracting funds; to increase training, particularly the U.S. portion; and, to provide the framework for leaving more than one Moroccan engineering firm providing these services in a competitive market after the PACD. The project is breaking new ground: the core of the national energy demand management program will be the *sustained private sector institutional capacity that will be created through project activities.* The new private sector entities will operate within the new energy framework that will be established with the GOM through technical assistance provided by the project.

3.2 PROJECT COMPONENTS

The original PP described the four project components. These components are: awareness building, technical assistance, training, and, policy studies. The components will not change during the project extension.

The PACD of the project will be extended to September 30, 1995. The Chief of Party for the contractor will remain in country through December 31, 1994 , an extension of the current departure date by 16 months.

The remaining nine months of the project (from January 1, 1995 to September 30, 1995) will be the private sector "transition" phase. The objectives of this transition phase are to continue to provide for the implementation of high quality engineering services required by the contract without the full-time presence of expatriate staff and to provide technical assistance to more than one Moroccan firm to ensure that they become self-sufficient in the marketplace after the PACD. The contractor will be required to submit to USAID no later than December 31, 1992, the first draft of a detailed transition phase plan. This will be a structured plan including detailed descriptions of project activities during the transition phase designed to 1) provide assistance to Moroccan consulting firms specializing in energy management services with a view to maximizing their viability and chances of success in the Moroccan market after the PACD, and 2) assist the transition by Moroccan engineers employed by the project to develop their own, viable, private sector consulting activities. The detailed private sector transition phase plan will contain descriptions of how the above two objectives will be attained in such a way that no one group of engineers will be favored, promoting competition and assuring that there will be more than one firm sustaining project activities after the PACD.

3.2.1 Project Outreach/Awareness Activities

While the project has made great strides in increasing awareness of energy demand management in Morocco, both through the publication of its numerous technical brochures and booklets, and, through numerous press releases and articles, the extension is necessary to ensure that maximum

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understanding of the potential savings is realized throughout as many industrial sectors as is possible.

Awareness/outreach activities will continue as in the current project, but their intensity will be increased with the arrival of a third expatriate energy demand management engineer who will focus on training subcontractors and consultants. Such activities as continued production of the widely read GEM-O-GRAMME, attendance at Chamber of Commerce meetings, the creation of a Moroccan Energy Management Association, focussing on private marketing of energy efficiency services and attendance at seminars, publication of papers, and publication of brochures will continue. During the extension the contractor will identify and develop plans for a local institution to assume these critical awareness-building and information dissemination activities. One possible place for this to be centered will be with the Energy Management Association.

Depending on the decision of the Steering Committee, the contractor will work with the Ministry of Energy and Mines on the preparation of a regional energy demand management conference in Morocco that will be an opportunity for representatives from North Africa and Europe to learn from similar types of programs in these various countries. A.I.D. R&D/E&I could possibly provide support and enlist private sector interests of the World Bank participate in this conference.

During the extension, three other discrete activities will be accomplished by the contractor. First, three regional EDM Centers will be established through private sector channels, including Chambers of Commerce, trade associations, the Energy Managers' Association, or other viable establishments. These centers will contain EDM information and will serve as clearinghouses for energy efficiency activities and information throughout the country. Second, the contractor will provide specific short term services to assist the Ministry of Energy and Mines to improve its already existing Documentation and Information Center. Both of these activities will require short term expert analysis and recommendations for implementation, plus, the purchase and publication of relevant materials. Thirdly, the contractor will publish its second **PROJET GEM** Information Brochure which talks about the project services for distribution to a minimum of 4000 firms and individuals.

Awareness/Outreach Activities during extension

- continue ongoing activities
- increase intensity with arrival of third expatriate team member, EDM (training) engineer
- publicize Project Agreement signing ceremony
- create Energy Management Association
- identify local institution for follow-on of awareness-building/outreach activities
- host regional energy conference
- develop three regional energy information centers
- assist MEM in the development of the Energy Documentation and Information Center
- publish and distribute **PROJET GEM** Information brochure.

Inputs

- 17 person months LTTA
- 6 person months STTA (expatriate)
- journals, equipment, etc. for Centers, and, publication of brochure

3.2.2 Technical Assistance

The Chief of Party position will be extended until the end of 1994 -- an additional 16 months. The Energy Conservation Specialist will be extended for two years, until the end of August, 1994. As in the original proposal, a third expatriate energy conservation marketing/training expert will be hired for a two year period from the summer of 1992. Responsibilities of this staff member will include training subcontracting engineers the two new contractor junior engineers, increasing and developing new energy demand management marketing measures, and follow-up on previous audits and other project service activities to determine rates of investment and economic impact.

The three-person expatriate team is essential to fully implement the expanded training components for new contractor staff and subcontractors which the evaluation report identified as an important future focus. Without increased staff levels, the contractor will not be able to complete the required training.

In addition, to ensure that more engineers receive intensive, practical training in order to meet the demand for energy demand management services, the contractor will hire two more Moroccan junior engineers who will be with the project until September 30, 1995.

In addition to STTA requirements under the awareness component, the contractor will require other short-term assistance/consultancies from time to time during the extension as is the case in the current project. Short term staff have been instrumental in developing plans with educational institutions, helping orient project engineers on extremely difficult and complicated audits, and, providing technical advice and project planning assistance when deemed necessary by the Chief of Party, USAID, and the MEM.

All services provided to private sector entities assist them in saving energy, and, also serve as practical training exercises for the contractor and subcontractor engineers. Subcontracting will be augmented by $600,000. This increased level of practical training is essential to the extension's overriding purpose: to ensure that more than one firm continues to provide energy demand management services after project support is terminated. (Fully loaded subcontracting costs were budgeted at $200/person/day during the original project design, but, today these costs are $400/person/day, fully double the original estimate). Subcontractors provide project services under the guidance of the prime contractor. This gives an opportunity to a wider spectrum of engineers to get practical, "hands on" experience in providing high quality services, which increases the pool of capable engineers and also increases awareness and allows project services to reach a larger number of firms.

In depth, factory-wide energy audits will continue at the same rate as they are currently being completed by the project (approximately 9 per year). Based on the midterm evaluation, two features will be added to the audit portion of the project. First, in addition to the in-depth audits, simpler audits will also be implemented. The private sector entity requesting the audit will be given a menu of types of audits offered - from full audit of all systems, to technical audits of one part of the operation to a mixture of the two options. Second, increased staff levels also means that more efforts can be made to bring more small and medium enterprises into the market for audit (and other) services.

While completion of simple audits will mean that the overall number of audits increases, the extension will emphasize the impact of audit recommendations, not the number of audits completed. The number of audits included in the output table is a guide and it is not as important as whether audit recommendations are implemented. With the addition of the third expatriate expert, audit recommendation implementation rates and economic impact will be followed more closely.

Due to the high impact of electrical bill analysis during the first phase, this portion of the project will be expanded to a rate of approximately 40 per year. In order to facilitate the objective of sustainability, subcontractors will continue to handle the majority of these services under the close supervision of the contractor.

Boiler analysis and tune up will also be increased during the project extension. This rate will also be at about 40 per year.

During the project extension, the contractor will also look for other energy efficiency services to supply to the private sector, and, will offer them as part of its activities (for example, on-site EDM training, thermal balance study with recommendations, etc.).

All technical assistance activities in the project except for visits undertaken for promotional purposes will be supplied on a cost sharing basis. Cost sharing applies in two ways in the project. First, firms pay a gradually increasing portion of the expenses for direct services provided by the contractor, such as for audits. The formula will be as follows:

> for in-depth audits, a minimum of 75% of the total cost, except in cases where the project moves into new sectors and needs to charge less of a percentage of total cost for marketing and increased awareness campaigns. Simple audits, from 50% to 75% as determined by the contractor. For electrical analyses, 50% to 75% for the first year of the extension, to be modified as is feasible. For training workshops, perticipants pay up to Dh 1,200 per topic covered which represents approximatley 20% of total workshop cost.

Second, firms pay for a portion of the cost of energy efficiency demonstration projects which should involve the purchase of equipment from the United States (see Section 3.3).

The midterm evaluation found that firms using the project's services paid 18% of the 25% owed to the contractor during the first year that the cost sharing formula was used. (One hotel paid 0 % because of management problems, and, because of low occupancy due to the Gulf Crisis). The fact that firms in Morocco will pay for this service is one of the main reasons for believing that a sustainable activity will emerge from the A.I.D. investment.

One of the most important activities during the extension will be to thoroughly investigate the implications of the cost sharing in Morocco, and, to work towards establishing a rate for service that will enable more than one firm to continue in business after project support is withdrawn. By the end of the extension, a commercial fee structure will be developed.

Direct Technical Assistance Activities (Service Provision) during extension

- extend COP by 16 months to December 31, 1994
- extend energy conservation specialist by two years to August 31, 1994
- hire third expert expatriate engineer for two years from summer, 1992
- augment funds for subcontracting to ensure a broad base of trained engineers after PACD
- implement simple audits at faster rate
- continue electrical bill analysis
- continue boiler analysis
- involve SMEs more to the extent it is cost effective and feasible
- develop fee structure for transition phase
- develop new energy efficiency services
- implement demonstration projects involving the purchase of US made energy efficiency equipment
- develop detailed private sector transition phase plan and implement it

Inputs

- 25 person months expatriate LTTA
- 410 person months local LTTA
- $600,000 increase funding for subcontracting
- 8 months STTA (expatriate)
- $325,000 for demonstration equipment

3.2.3 Training

Training activities will be enhanced during the project extension. Training will focus on technical issues surrounding energy efficiency services, such as electrical bill analysis, boiler efficiency, and other relevant subjects. With the third expatriate specialist, it will be possible to devote sufficient time to developing the yearly training plan, and planning and implementing US study and training tours.

Senior engineers on the contractor staff at the current time are "almost ready" to provide audit services on their own without expatriate supervision. The process of turning full responsibility over to the Moroccan engineers will continue during the extension. The emphasis will be on practical training not only for project engineers, but also for subcontractor engineers with the objective of leaving behind more than one firm providing energy demand management services after the PACD. Specific details will be presented by the contractor in the detailed transition phase plan.

The project will also continue its work with higher education institutions. These are National School of Mineral Industry (ENIM), the National Vocational Training Office (OFPPT), Mohamedia School of Engineers (EMI), and, the Institute of Agronomy and Veterinary Medecine (IAV). Assistance to these institutions will be through technical assistance on curriculum design (the project has already been instrumental in assisting the ENIM to develop a sixth year major in energy demand management), provision of limited amounts of reference materials and journals, attendance at technical seminars and workshops, and lecturing in relevant courses. Technical equipment purchases, such as computers and software for these institutions will be made on a case-by-case basis.

Other activities will include theoretical and practical training for senior engineers, the current subcontractor staff training initiative, the two additional HB Junior Staff, US trips for HB staff and subcontractors, and a continuation of the highly successful in-country technical workshops.

The U.S. study tours component will become a more important part of the project. These study tours will be provided for both public and private sector representatives. Subject areas may include, but are not limited to, sugar production energy efficiency (Morocco does not export sugar), demand management in the US which would include the recent California experience in which utilities are now investing large sums of money to improve consumer efficiency (Pacific Gas and Electric and SoCal Edison, the two largest utilities in the U.S., have already started major efficiency campaigns and expect the major share of new power requirements to emanate from consumer gains). High efficiency electric motors and hotels (which complements other USAID private sector initiatives in the tourism sector) are additional areas where Moroccans can benefit from seeing first-hand US practices and products that may be appropriate for Morocco. US training and study tours will be included in Annual Workplans. They will be arranged by the contractor.

English language training will continue to be funded by the project for contractor engineers and for potential US training candidates. Because the project will be attempting to leave functioning firms, management training will also be added to the types of training to be offered. Linked to English language training will be one or two management training courses that will be open to a limited number of engineers to assist them in better management practices for the transition phase. A possible source of such training will be the USAID sponsored Training for Development Project.

Training during extension

- begin US short course training
- begin US study tours
- work with three engineering educational institutions
- continue English language training
- open management training course to engineers to help prepare them to run business
- continue in-country technical workshops
- provide on-site technical training as feasible

Inputs

- 20 months LTTA
- 4 months STTA
- $50,000 for reference materials and equipment to schools and for transition phase
- US short courses ($200,000)
- US study tours ($150,000)

3.2.4 Policy Analysis

The original project design called for the contractor to develop terms of reference for policy studies to be undertaken in support of MEM to aid in decision-making in the energy demand field. After terms of reference were prepared and approved by the MEM, USAID was to contract the work. Until now, no policy studies or analyses have been undertaken, due to underfunding of the project (see Section 2.1.2.5) and to other priorities within the project and the Ministry. However, at recent Steering Committee meetings, the subject has been brought up and several areas have been identified for implementation.

Currently in the final planning stages is a study of the constraints to cement production caused by problems of electricity supply. Other possible ideas for policy studies include, but are not limited to: sector analysis to provide a point of departure for energy use information about a sector, (especially when the work can be implemented by a Moroccan firm), study of potential for the introduction or greater use of high efficiency electric motors, in-depth study of the non-price barriers to investment and use of energy efficiency practices, and a review of possible projects for the Global Environment Facility (GEF).

The basic thrust of this component is to provide the Ministry of Energy and Mines and the Government of Morocco with information that can be used to develop a framework for energy demand management throughout the 90's and beyond. During the extension, in addition to writing the Terms of Reference for the analyses and getting them approved by USAID and the MEM, the contractor will provide the experts to carry out the studies.

Policy Studies during the extension

- complete at least 10 policy studies/analyses

Inputs

- 30 months STTA ($400,000)

3.3 COMMODITIES

Demonstration Projects will receive greater attention during the extension. The objectives of the demonstration projects are to introduce to the Moroccan market high quality energy efficiency equipment available from U.S. manufacturers that will have a high impact on energy savings, and to open possible niche markets for this equipment. The contractor will work with interested firms on the specifications of equipment that is available from U.S. manufacturers that will have an immediate and significant impact on energy use and expense for the firm. In order to assist the Moroccan private sector to utilize this new equipment, the project will reimburse the beneficiary firm up to 35% of the cost of the equipment after the contractor certifies that the equipment has been installed and is being used correctly, and that the price paid for the equipment is reasonable. The following rules will be followed regarding the procurement of such equipment:

1. For beneficiary firms familiar with importing and foreign procurement:

   a. beneficiary firm procures recommended equipment. This is strictly a commercial transaction between the Moroccan and U.S. firm with technical assistance in terms of equipment specifications and procurement advice provided by the contractor as necessary;

2. For a beneficiary firm unfamiliar with or unable to complete foreign procurement by itself:

   a. contractor provides technical advice in terms of specifying equipment, and procures equipment in U.S.

   b. contractor is reimbursed 100% of the cost of the equipment (including any necessary taxes) by the firm.

3. In both cases:

   a. USAID reimburses up to 35% of the cost of the equipment to the beneficiary via the prime U.S. contractor through contractor voucher/invoice submissions;

   b. reimbursement for demonstration project equipment is only made after the contractor certifies the proper installation and operation of the equipment, and that it was purchased at a reasonable price, and;

   c. all beneficiary firms will be majority Moroccan ownership.

Possible equipment candidates include automated kiln controls or recuperators in cement plants, and the introduction of high efficiency electric motors. Such activities provide a good opportunity for opening up niche markets in Morocco for specialized U.S. equipment. With increased staff and funds, the contractor will be required to put more effort into this portion of the project.

The project extension also will require adequate equipment, materials and supplies to provide quality analyses, including monitoring and audit equipment, computers and some office equipment. The contract will contain funds for the purchase of two all-terrain vehicles which will be retrofitted for diagnostic visits by the project team.

3.4 SECTORS OF CONCENTRATION

Currently, the project has limited itself to working with three subsectors of the Moroccan economy (hotels, agro-industry, and construction materials), even though the Project Agreement states that, "the project will concentrate **initially on, but not be limited to,** three sectors that offer promising energy savings potential,...." During the extension, the project will work with other sectors, to the extent that USAID and the contractor agree that an activity would fall within the purview of the project, and, that the contractor has the resources to undertake such an activity. The criteria for determination of new sectors will be: (1) potential energy savings, (2) capability of implementing energy conservation measures, (3) potential for

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replicability throughout the sector, (4) availability of EDM technology from U.S. suppliers, and (5) potential export capability, current, or planned.

3.5 OUTPUTS

The extended PACD will allow for more outputs and activities in the following areas: training (both local and U.S.), study tours, policy and energy sector studies and analyses, subcontracting, simple audits, boiler and electrical analyses, follow-up economic analyses, demonstration projects, and awareness/outreach actions. Another output will be sustained energy services provided by more than one firm after the PACD. Table 3.1 shows what outputs were anticipated in the original Project Paper, what had been achieved by the contractor up to June, 1992, and what is expected for the extension period.

TABLE 3.1 EDM EXTENSION OUTPUTS

	Original PP	Completed a/o 6/92	Extension	Total
Information and Awareness				
EDM Information packages	3	3	3	6
Seminars/Workshops Presentations	2	2	8	10
Technical publications	6	6	10	16
Information Centers	3	0	3	3
Energy Manage Assoc	1	0	1	1
Energy Documentation and Info Center (MEM)	1	0	1	1
Information Brochure	1	1	1	1
Technical Assistance				
Audits (in-depth)	40	14	22	36
Audits (simple)			40	40
Feasibility and pre-Feasibility Studies	45	115	30	145
Demonstration Projects	15	5	10	15
large			2	2
small		5	8	8
Electrical Bill Analysis	0	15	105	120
Boiler Tune-ups	0	26	59	85
Audit and Other TA follow-up	0	5	35	40
Development of new services	0	0	2	2
No. of local firms providing energy services after project support withdrawn	0	0	2-4	2-4

Training	Original PP	Completed a/o 6/92	Extension	Total
Study tours	5	0	5	5
US short courses and internships (participants)	30	0	30	30
In-country training:				
workshops (Participants)	150	340	220	560
practical training (") (on-site)	400	100	300	400
Educational institutions	1	1	2	3
Management training (courses)	0	0	2	2
Policy Analysis				
Studies and Analyses	4	0	6	10

3.6 INPUTS

This extension will fund an amendment to the Hagler-Bailly cost plus fixed-fee direct contract. The major project input will be $3.6 million in A.I.D. funds, of which $2 million will be obligated in FY 1992. The life of project funding level will increase from $5 million to $8.60 million. Most of the additional funds will purchase goods and services from the contractor. A small amount will be left under USAID direct control for end of project evaluation, audit, and, contingency (see Chapter 4).

The contractor will provide long term technical assistance: a Chief of Party, an energy demand specialist, an energy marketing/training expert, three senior Moroccan engineers, and, two junior engineers. This technical assistance will help private sector firms determine and then implement projects that will save on energy costs, thereby, making them more competitive. Short term expert assistance will be used to undertake policy studies and analyses, to assist the contractor in working with higher educational institutions, to help with unique or extremely complicated technical issues that may arise during the extension, to provide follow-up and assistance during the transition phase, and, to provide other assistance as necessary.

Training inputs will assist a core of engineers reach a level of competence in the field of energy efficiency that will allow them to continue in the market after project support is withdrawn. In addition, training funds will support seminars and workshops that will introduce and expand on energy efficiency themes and practical procedures that firms can take to save on energy costs, building on the highly successful workshops currently being undertaken. Training and study tours will also take place in the United States for public and private sector representatives.

IV FINANCIAL PLAN

4.1 GENERAL

The project will be extended until September 30, 1995. The contractor Chief of Party will remain in country through December 31, 1994. After January 1, 1995, the contractor's remaining Moroccan engineers will continue to provide assistance along with short term expatriate technical assistance until the PACD.

The TA contract was divided into a "base" period of 36 months and a 16 month "option" period. Out of the $5 million obligated for the project, $3.67 million was committed to fund the Technical Assistance contractor until May 1, 1992. Out of the remaining $1.33 million, $866,450 was earmarked for the 16 month "option" period for the contractor, and the remaining $463,550 was to be used by USAID for policy studies, demonstration projects, evaluation, audit, and contingency.

This Project Paper Supplement will authorize $3.6 million to be added to the project. The total life of project funding for the project through September 30, 1995 will be $8.6 million. During the extension phase of the project, the bulk of funds will purchase contract services in order to accomplish discrete activities. Approximately $389,000 will finance audit, evaluation, and, other contingent expenses.

The financial plan presented in the original Project Paper is modified as reflected in the Tables on the following pages.

4.2 Client Fees Component

Section 3.2.2. discusses the cost sharing/client fee feature of the project. The contractor will be required to offset the amounts in the vouchers it periodically submits to USAID/Morocco by $50,000 a year (or $150,000 for the duration of the contract - Table 4.3 contains estimates for client fee receipts) for local currency costs). Any client fees received over and above this amount will be used by the contractor to continue to offset local costs or for other activities that enhance the objectives of the project.

Each Annual Workplan will contain a general explanation of how the contractor intends to use cost-sharing revenues received in excess of $50,000 per year. Approval of the Workplan by USAID will be considered approval for the use of these funds. If identified uses of the funds arise after the submission of the annual workplan to A.I.D., the contractor will be submit alternative plans for use of these monies to USAID for approval.

Should the contractor not be able to generate through client fees the minimum amount, or $50,000 per year, the total amount generated will be used to offset voucher amounts. In this case, the activities in the statement of work will be reduced in the final year of project implementation.

This means that the amount of funds required for the extension is reduced by $150,000, to $3,600,000 (see tables 4.1 and 4.2 for details of the budget and the offset).

4.3 Methods of Implementation and Financing

Item	Methods of Implementation	Method of Financing	Revised LOP funding Totals $ 000's
Contract:			
Technical Assistance	A.I.D. Direct Contract	Direct Reimbursement	6,161 million
Commodities	A.I.D. Direct Contract	Direct Reimbursement	880
Training	A.I.D. Direct Contract	Direct Reimbursement	670
Policy Analysis	A.I.D. Direct Contract	Direct Reimbursement	500
USAID:			
Evaluation, audit	A.I.D. Direct Contract	Direct Reimbursement	194
Contingency	To be determined	To be determined	195
		Total:	8.600

Table 4.1

BUDGET SUMMARY

EDM PROJECT
EXTENSION

USAID	TOTAL PREVIOUS AUTHORIZATION/ OBLIGATION	EXPENDITURES TO DATE (7/1/82)	PIPELINE	AUTHORIZED THIS AMENDMENT	REVISED LIFE OF PROJECT TOTALS
Tech Ass't	$2,800,000	$2,700,551	$87,346	$3,511,980	$6,311,980
Commodities	$850,000	$304,684	$545,316	$29,684	$879,684
Training	$500,000	$59,288	$440,712	$169,288	$669,288
Policy Analysis	$200,000	$0	$200,000	$300,000	$500,000
Evaluation/audit	$150,000	$54,048	$95,952	$44,048	$194,048
Contingency	$500,000	$20,000	$480,000	($305,000)	$195,000
SUBTOTAL:	$5,000,000	$3,138,571	$1,849,526	$3,750,000	$8,750,000
Client Fees		$52,500		($150,000)	
GRAND TOTAL:	$5,000,000	$3,191,071	$1,849,526	$3,600,000	$8,600,000

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Table 4.2

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category	7/92-9/92	10/92-9/93	10/93-9/94	10/94-9/95	total
1. Technical Assistance:					
COP	$62,500	$257,500	$265,225	$68,295	$653,520
EDM spec	$62,500	$257,500	$221,021		$541,021
Trng/mkting spec	$41,667	$257,500	$243,123		$542,290
Senior eng 1	$10,000	$41,200	$42,436	$32,782	$126,418
Senior eng 2	$10,000	$41,200	$42,436	$32,782	$126,418
Senior eng 3	$10,000	$41,200	$42,436	$32,782	$126,418
Junior eng 1	$8,500	$35,020	$36,071	$27,865	$107,456
Junior eng 2	$8,500	$35,020	$36,071	$27,865	$107,456
Admin Ass't	$6,250	$25,750	$26,523	$20,489	$79,011
Sec 1	$3,750	$15,450	$15,914	$12,293	$47,407
Sec 2	$3,750	$15,450	$15,914	$12,293	$47,407
Helper 1	$1,250	$5,150	$5,305	$4,098	$15,802
Helper 2	$1,250	$1,288	$1,326	$1,024	$4,888
Short Term TA (local and expatriate @20,000/month)		$160,000	$100,000	$80,000	$340,000
Operating Costs/equipment	$12,500	$51,500	$53,045	$40,977	$158,022
Subcontracting	$50,000	$250,000	$450,000	$50,000	$800,000
Subtotal:	$292,417	$1,460,728	$1,388,843	$443,544	$3,623,532

Notes on technical assistance:

Obligation:	$2,800,000
Budget for Period 7/92-9/95:	$3,623,532
Expenditures as of 7/1/92:	$2,700,551
Projected Balance as of 7/92:	$87,346
Needed to Obligate for Extension Period:	$3,511,960
Total for Project including extension:	$6,311,960

Costs:

60 months additional expatriate LTTA

141 months additional Moroccan engineer LTTA

$600,000 additional funds for subcontracting

more office support staff

new office equipment

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category	7/92-9/92	10/92-9/93	10/93-9/94	10/94-9/95
2. Commodities				
All Terrain Vehicles x (2)	$50,000			
Computer equipment	$10,000	$65,000	$25,000	
Energy monitoring and audit equipment		$25,000	$25,000	
Demonstration Projects		$200,000	$125,000	
Reference materials	$5,000	$30,000	$10,000	$5,000
Subtotal:	$65,000	$320,000	$185,000	$5,000
		Total:	$575,000	

Notes on Commodities:

Obligation	$850,000
Budget for Period 7/92-9/95:	$575,000
Expenditures as of 7/1/92:	$304,684
Projected Balance as of 7/92:	$545,316
Needed to Obligate for Extension Period:	$29,684
Total for Project including extension:	$879,684

Costs:

2 new all-terrain vehicles

2 sets audit/monitoring equipment for all-terrain vehicles

journal/reference material for new schools

new computer equipment for selected schools, subcontractors.

prime contractor

purchase of energy efficient equipment for demonstration

projects by contractor

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category	7/92-9/92	10/93-9/93	10/93-9/94	10/94-9/95
3. Training				
US study tours		$75,000	$75,000	
US short courses/internships		$100,000	$100,000	
In-country:				
workshops/conferences	$10,000	$40,000	$25,000	$10,000
practical training/seminars	$10,000	$15,000	$20,000	$30,000
educational institutions	$5,000	$5,000	$5,000	
Training aids		$15,000	$15,000	$5,000
Management training		$20,000	$20,000	
Training equipment	$6,000	$4,000		
Subtotal:	$31,000	$274,000	$260,000	$45,000
			Total:	$610,000

Notes on Training:

Obligation	$500,000
Budget for Period 7/92-9/95:	$610,000
Expenditures as of 7/1/92:	$59,288
Projected Balance as of 7/92:	$440,712
Needed to Obligate for Extension Period:	$169,288
Total for Project including extension:	$669,288

Costs:

more study tours

more short-term training in the US

provision of on-site, in country training

addition of management training for engineers

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category	7/92-9/92	10/92-9/93	10/93-9/94	10/94-9/95
4. Policy Analysis				
Policy studies		$200,000	$100,000	
Sectoral analyses		$100,000	$100,000	
Subtotal:		$300,000	$200,000	
			Total:	$500,000

Notes on Policy Analysis

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Initial obligation:	$200,000
Budget for Period 7/92-9/95:	$500,000
Expenditures as of 7/1/92:	$0
Project balance as of 7/92:	$200,000
Needed to Obligate for Extension Period:	$300,000
Total for Project including extension:	$500,000

Costs:

Increased emphasis on policy and sectoral analyses
in order to assure that GOM has sufficient background to
make informed decisions

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category	7/92-9/92	10/92-9/93	10/93-9/94	10/94-9/95
5. Evaluation/Audit				
Evaluation			$100,000	
Audit		$40,000		
Subtotal:		$40,000	$100,000	
		Total:	$140,000	

Notes on evaluation/audit

Initial obligation:	$150,000

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Budget for Period 7/92-9/95:	$140,000
Expenditures as of 7/1/92:	$54,048
Project balance as of 5/92:	$95,952
Needed to Obligate for Extension Period:	$44,048
Total for Project including extension:	$194,048

Costs:

need one audit and one end of project evaluation

EDM EXTENSION BUDGET OVERVIEW FOR THE PERIOD 7/1/92 - 9/30/95

Breakdown By Budget Category		7/92-9/92	10/92-9/93	10/93-9/94	10/94-9/95
6. Contingency			$75,000	$75,000	$25,000
	Subtotal:		$75,000	$75,000	$25,000
				Total:	$175,000

Notes on contingency

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Initial obligation:	$500,000
Budget for Period 5/92-12/95:	$175,000
Expenditures as of 7/1/92:	$20,000
Unexpended as of 5/92:	$480,000
Needed to Obligate for Extension Period:	($305,000)
Total for Project Including extension:	$195,000

BUDGET SUMMARY:

Initial obligation:	$5,000,000
Expenditures to 7/92:	$3,136,571
Budget 7/92-9/95	$5,599,328
Projected Balance as of 7/92:	$1,849,328
Needed to Obligate for Extension Period:	$3,750,000
Off Set From Client Fees	($150,000)
Project Total:	$8,600,000

Table 4.3

PROJECT INCOME THROUGH 9/95	
FULL AUDITS (24)	Dh 1,200,000
SIMPLE AUDITS (40)	Dh 400,000
ELECTRICAL BILL ANALYSIS (120)	Dh 220,000
BOILER TUNE UP (85)	Dh 40,000
WORKSHOP PARTICIPANTS (220)	Dh 220,000
ON-SITE TRAINING (300)	Dh 200,000
EQUIPMENT LEASING	Dh 105,000
COST SHARED EQUIPMENT	Dh 250,000
TOTAL PROJECTED CLIENT FEE	Dh 2,635,000 (@8.8 Dh./$1) = $299,432 = $300,000

V PROJECT IMPLEMENTATION

5.1 AGREEMENT AND APPROACH

The Amendment to the Project Agreement will be signed with the Government of Morocco on or about mid-June, 1992. In addition to increasing the funding for the project by $3.6 million of which $2 million will be obligated in FY 1992, the Project Agreement will also extend the PACD from September 30, 1993 to September 30, 1995.

The approach to implementation will be the same as in the current PP. Project implementation will be handled by a US contractor. The contractor will be required to submit an Annual Workplan which will be reviewed by the Project Steering Committee. The Committee will continue to meet quarterly to compare progress of project implementation with results in the required contractor quarterly reports.

The Evaluation pointed out that there is a market for energy services in Morocco. It is just beginning to be tapped. Maximum flexibility will be allowed the contractor within A.I.D. rules and regulations in order to ensure that the contractor can react as a private sector entity to the market forces which determine investment patterns for commercial energy consumption. The Steering Committee will be required to act on any decisions taken at its meetings within one week of the meeting, unless compelling circumstances, as agreed upon at the given meeting, require longer time for action.

Before the "transition " period, the detailed transition phase plan will have been prepared by the contractor and approved by USAID (see Section 3.2). The implementation of the plan will be assisted and monitored by short-term technical assistance.

5.2 PROCUREMENT PLAN

5.2.1 Justification for Other Than Full and Open Competition

A contract amendment will be negotiated with the contractor in place in Morocco through a justification for Other Than Full and Open Competition.

5.2.2 Commodity Purchases

During the project extension, two all terrain vehicles will be purchased from the United States. They will be ordered by the contractor as soon as the Project Agreement Amendment is signed and once in country they will serve as project vehicles. They will be fitted out with basic energy efficiency equipment (such as audit, electrical, and boiler measurement equipment). This equipment will be ordered and purchased by the contractor. Demonstration projects will be implemented as described in Section 3.3. This will require the contractor to develop the specifications of the equipment, and, using its contacts in the United States, assist in identification of suppliers for energy efficiency equipment. This represents a potential development of a market for specialized products in which the US has the comparative advantage, such as in energy efficient electric motors. Other equipment to be purchased by the contractor includes computer equipment and software, office equipment, reference materials and, other energy efficiency, audit, and monitoring equipment, as necessary. Office equipment will be the only equipment purchased under 608 source, and, to the extent possible, it will be 000 origin.

The duties and responsibilities of the GOM, USAID, the contractor, and, the Steering Committee remain essentially the same as in the Project Paper, with a few minor changes.

5.3 ROLES OF USAID, MEM, AND CONTRACTOR

The roles of the three implementing agencies remain the same as in the original Project Agreement. Briefly, the roles are:

5.3.1 GOM

- provides the GOM's EDM Project Manager;
- participates in Project Steering Committee meetings;
- monitors contractor activities and performance;
- facilitates work of contractor;
- provides space for Documentation and Information Center;
- where appropriate, assures coordination with other ministries and the private sector regarding the EDM project;
- contributes additional services as mutually agreed upon by USAID and the GOM.

5.3.2 USAID

- participates in Project Steering Committee meetings;
- monitors contractor activities and performance;
- assists in placement of qualified candidates in U.S. training courses and internships;
- prepares final evaluation terms of reference;
- manages final project audit.

5.3.3 Technical Assistance Contractor

- manages day-to-day project implementation;
- develops and ensures accomplishment of Annual Workplan;
- prepares annual training and procurement plan;
- prepares terms of reference and carries out special project policy analyses and in-depth studies;
- manages and evaluates subcontractors' work;
- monitors energy savings;
- prepares quarterly reports;
- reports on project activities to Steering Committee;
- identifies and analyses policy issues critical to project success.

5.3.4 Steering Committee

- acts as a conduit for decisions taken by contractor to promote EDM in Morocco;
- reviews all project documents, such as, contractor quarterly reports and annual workplans, and proposes follow-up activities;
- monitors contractor's activities and performance;
- discusses contract direction being provided to contractor by USAID.

5.4 GRAY AMENDMENT CONSIDERATIONS IN PROCUREMENT

The current project contractor has a subcontract with a Gray Amendment firm. The project extension will continue this relationship. The Gray amendment firm provides the expatriate EDM specialist, three Moroccan engineers, and, the US training. Approximately 20% of the funds provided by this PP Supplement will be passed on to this Gray Amendment subcontractor.

5.5 IMPLEMENTATION SCHEDULE

The Implementation and Commodity Purchase Schedules follow.

Table 5.1

IMPLEMENTATION SCHEDULE

EDM PROJECT EXTENSION (606-0193)

	MONTH							QUARTER						YEAR
	4/92	5/92	6/92	3rd	4th	1st/93	2nd/93	3rd/93	4th/93	1st/94	2nd/94	3rd/94	4th/94	1995
Sign PROAG Amend with MEM		*****												
Sign Contract Amendment			*****											
Hire new expat engineer				*****										
Order all-terrain vehicles from US			*****											
Implement first demonstration project				*****										
Hire two new junior engineers				*****										
Sugar study tour					*****									
Cement kiln demonstration project							*****							

	4/92	5/92	6/92	3rd	4th	1st/93	2nd/93	3rd/93	4th/93	1st/94	2nd/94	3rd/94	4th/94	1995
electricity policy analysis					•••••									
Continue policy analyses						••••••••	••••••••	••••••••	••••••••	••••••••	••••••••	••••••••	••••••••	••••••••
Business Plan Submitted													•••••	
Seminars and Workshops	••••••••	••••••••	••••••••	••••••••••	••••••••	••••••••	••••••••	••••••••	•••••••••	••••••••	••••••••	••••••••	••••••••	••••••
Energy Manager's Assoc Established			•••••											
Management training									•••••••••	••••••••	••••••••	••••••••	••••••••	
U.S. Study Tours						••••••••	••••••••	••••••••	•••••••••	••••••••	••••••••	••••••••	••••••••	••••••
TDYs to assist new Moroccan firm														••••••

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Table 5.2

COMMODITY PURCHASE SCHEDULE

EDM PROJECT EXTENSION (606-0193)

(All commodity Purchases to be made by Contractor)

	Amount	Estimated Date	Source/Origin
All terrain vehicles (2)	50000	8/92	000/000
Computer Equipment	100000	10/92 1/93 6/93 2/94	000/000
Energy monitoring equipment	25000	10/92 10/93	000/000
Audit equipment	25000	10/92 10/93	000/000
Demonstration Projects:			
Kiln regulator	75000	4/93	000/000
Other	250000	93 and 94	
Publications:			
Info Brochure	5000	1/93	606/606
GEM-O-GRAMME	50000	Quarterly	
New office equipment	10000	8/92, 10/92	606/606 or 606/000
Journals and reference materials	50000	10/92, 6/93,	935/935

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VI MONITORING AND EVALUATION

6.1 Monitoring

Monitoring of the project will continue as it is now. The contractor will prepare Annual Reports with activities and expected accomplishments. The Annual Report will be the subject of the first Steering Committee meeting of each calendar year of project implementation.

After approval of the Annual Workplan, the contractor will continue to submit monthly and Quarterly reports to USAID and to the Ministry of Energy and Mines. These reports will be compared to the Annual Workplan. Tasks in the Annual Workplan can be changed through the discussion and approval of the Steering Committee.

The USAID EDM Project Officer is the USAID officer primarily responsible for monitoring the project using this system. The Project Officer will also make field trips to observe audits, and other energy services being implemented by the project, and, will attend training seminars from time to time. Non-propretary information gathered on participating firms will be fed into the USAID private sector monitoring system (PSMS) and will become a part of the Mission's database on private sector assistance.

6.2 Evaluation

There will be a final project evaluation conducted in the fourth quarter of 1994. This evaluation will require the presence of the contractor's Chief of Party in order to assure the historical perspective of project development from the private sector point of view.

The evaluation will:

- provide a history of the project from inception,
- investigate decision-making processes (particularly the functioning of the Steering Committee and how it affected project directions),
- analyze implementation methodology,
- assess the overall competence of the contractor, and,
- assess the overall economic and environmental impact of the project.

Given the experimental nature of this project, the final evaluation will devote a significant amount of effort to an investigation of lessons learned from the implementation of the project. It will also address the issue of replicability for Morocco and for other countries, particularly with respect to the focus on the private sector and demand driven development projects. Another area that will be investigated will be the overall economic impact of the project and the effect it has had on US exports. The evaluation will recommend ways in which the firms left providing energy services can be successful. Finally, the evaluation will look at the whole area of USAID/GOM relations regarding decision-making during the project, principally with the objective of determining if the GOM was comfortable with the private sector focus.

The Steering Committee will play an active role in determining the Scope of Work for this evaluation. Although the above items will be addressed, it is expected that with a further three years of implementation, and, further involvement of the GOM, more areas/issues will be addressed at the time of the evaluation.

6.3 Audit

An audit will be funded by USAID in the fourth quarter of CY 1993. This audit will assess contractor fiscal responsibility, systems used by the contractor and USAID, determine corrective actions if necessary, and, provide an economic analysis of the project's impact.

The evaluation and audit will be funded by USAID, and will not be a part of the contract.

UPDATE TECHNICAL ANALYSES

7.1 ECONOMIC ANALYSIS (REVISED)

7.1.1 Basic Assumptions

This economic analysis was carried out using data taken from the midterm evaluation. Because this data was not disaggregated by year but was cumulative, the yearly benefits of the project were estimated while totals were actuals. In order to stay consistent with the original economic analysis (Annex K of the original PP, and Worksheet 1), assumptions with respect to the following were not changed for this analysis:

- sectors in the project,
- total number of firms touched by the project,
- savings potential of those firms (small and large),
- number of direct and indirect beneficiaries,
- specific investment cost per ton oil equivalent (toe),
- time of benefit accrual for the firms (10 years),
- discount rate (15%),
- price of oil (1988),
- assumptions of an oil price increase (0% to 4% per year).

7.1.2 What Changed

The length of project is to be extended by two years, and the amount of additional funds is to be $3.8 million. Thus, the model used for the original economic analysis was replicated with the following changes, (Worksheet 2, Revised Economic Analysis):

- direct expenditures ($8.65 million instead of $5 million),
- actual energy saved in 1990 and 1991 (projections for 1992 and after were kept unchanged),
- time of benefit accruals for the project were extended by two years (from 2003 to 2005).

7.1.3 Results

The results show that for an increase of 47.8% of the discounted cost, the discounted value of oil saved would increase by 18% if the oil price stays constant. The net benefit would increase by about 6% in this case, while it would increase about 8% if the oil price would increase by 4%. The internal rate of return would slightly decrease by about 1.5 points (to a maximum of 2.1 points in the 3% price increase scenario), which by all accounts would be considered as largely affordable (see Revised Economic Analysis Worksheet #3 for a comparison of actuals vs. planned economic benefits of the project).

The economic analysis undertaken here cannot account for all the potential benefits accruing from the extension of the project, which go beyond what was originally planned and which would add considerably to the economic profitability of the project. Additional beneficiaries would be expected from the extension of this project which would in turn increase benefits.

7.2 ENVIRONMENTAL ANALYSIS

The original EDM Project requested and received a categorical exclusion from Agency environmental review requirements due both to the type of the activities being implemented under the project, e.g., technical assistance, training, limited commodity support, etc., and the significant positive environmental affects anticipated from an energy conservation project of this nature.

Project implementation experience to date has largely corroborated this positive initial environmental examination, with environmentally significant project achievements including: a greatly increased awareness of and appreciation for the potential benefits of energy conservation principles and practices among Moroccan private and public sector participants; a substantial commercial market demand for quality energy conservation services; and, significant net energy (and financial) savings to participating private sector firms, and to the country's national energy import bill and its environment.

This EDM Project amendment will largely provide additional funds and time to continue, intensify and extend this same successful project initiative. All other aspects of the original project remain unchanged. Accordingly, the original categorical exclusion from Agency environmental review requirements remains valid for this project amendment; and, pursuant to Section 216.3(a)(9) of the Agency's Environmental Regulations (22 CFR 216), no additional environmental examination is required for this project as a result of this amendment.

As a result of its environmentally beneficial nature, this revised EDM Project will continue to occupy a prominent position within the Mission's environmental portfolio, focussing on increased efficiency in using economically critical, limited and, in this case, environmentally significant resources.

7.3 TECHNICAL ANALYSIS

The technical background for the project remains the same as in the Project paper. Using the criteria mentioned in the Technical Analysis, the project will now actively look for opportunities in sectors besides hotels, agro-industry, and construction. According to the original technical analyses, these sectors include: other industry, including textile and leather, pulp and paper, mining, and others, and transport. Given that the contractor has developed a solid understanding of the energy situation in the country, the project will open up to other sectors, based on ability of the contractor to provide high quality services, and, on recommendations from the USAID Project Officer, and the MEM Project Manager. The reasons for this are that engineers must learn how to respond to market demand in all industrial sectors, and, moving into other sectors will increase over all awareness of energy demand management practices in the country. The major limiting factor for expansion into other sectors will be financial and human resource limitations on the part of the contractor.

7.4 INSTITUTIONAL ANALYSIS

The Institutional Analysis in the Project Paper provides an overview of the organizations that are somewhat related to the project. Experience with project implementation has shown that the primary organizations affected by the project are in the private sector, and, they include firms in the three sectors, and, firms that have sent technicians and engineers to training seminars. One of the objectives of the extension will be to involve the private sector in the project from a policy point of view. This will mean the establishment of an Energy Managers' Association. Membership could likely come from the Confederation Generale Economique Marocaine (CGEM), which is mentioned in the original analyses.

From the public sector, the Ministry of Energy and Mines has been supportive of the Project, and, provides guidance from its representation on the Steering Committee. The National School of Engineering and Mines (ENIM) has worked with the project, and, has developed a sixth year energy major. Other higher educational schools will participate in the project during the extension. Because of its focus on the private sector, the project has not worked closely with other Ministries, as envisaged in the original Project Paper.

Professional organizations have provided services and have benefitted from the project through subcontracting with the contractor. Work with the contractor has exposed engineers from these firms to high quality, international standard services, and, this will help them compete themselves in the Moroccan market.

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7.5 SOCIAL SOUNDNESS ANALYSIS

The Social Scundness Analysis still is valid for the project. A crucial element for the extension will be to consider investment attitudes and how they affect the potential for growth of energy services in the country.

The project has shown that Moroccan business is willing to invest in energy efficient equipment and services. The extension will provide funds for discrete studies, as agreed upon by USAID and the Steering Committee, on investment attitudes relative to energy demand management practices. An example of such a study would be to investigate the impact of the tax structure that has been oriented towards production and export. Results of any related studies would provide the GOM with background for decision-making in the field.

7.5.1 Women in Development Considerations

Project activities will continue to be targeted at industry. To the extent that women are employed by targeted industry, they will benefit from project activities. The contractor will make every effort to hire a woman as a junior engineer to be trained in energy efficiency techniques. Also, as is currently the case, subcontractors will be encouraged to use women staff members in the implementation of subcontracting activities. Higher educational institutions receiving assistanco from the project also have women engineers (for example, approximately 20% of the graduate level engineering students at ENIM are women) and, to the extent possible, women will continue to be encouraged to pursue careers in energy demand management.

ANNEX A

ENERGY DEMAND MANAGEMENT 608-0193
PROJECT EXTENSION LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: Save foreign exchange & increased productivity by reducing energy waste and by improving efficiency of energy use.	Measures of Goal Achievement: - Energy savings of 5-10% in target sectors (60,000 toe saved). - Improved energy intensity index in target sectors (5% from 1988 base).	World Bank figures Oil price indicators Industry records	- Energy prices do not drop below $12 per barrel - GOM maintains positive growth policies
Project Purpose: To develop and implement the core of a national energy demand management program	End of Project Status: - Sustainable provision of energy conservation services remaining in-country after PACD - Total EDM investments reach $20 million. - GOM policy to encourage EDM in place.	Independent review Investment records Project evaluation	- GOM is willing and able to provide adequate incentives. - That sufficient demand for energy audits and investments can be generated to support private energy auditing and engineering business. - Pay back period on EDM investments reasonable and acceptable. - Technology available and transferable
Outputs: Information and Awareness of Energy Demand Managment concepts and techniques. Technical support and tech transfer to identify firm specific EDM actions and applications. Training on energy managers, energy auditors, engineers, technician, students, and faculty. Policy analysis and advice to GOM on EDM issues	Magnitude of Outputs: - 6 information packages - Technical Publication (16) - Annual energy consumption survey (7) - 3 Information Centers established - International Exchanges (30 participants) - Energy Manager Assn. established - Energy Audits performed (76) - Feasibility studies (145) - 20 Technical applications - Curriculum upgraded at 3 engineering institutions - 30 p/m U.S. short courses and internships (30 participants). - 62 p/m in-country EDM (560 parts) - 120 p/m in-country hands on (400 parts) - 10 studies completed	Public record Company (sector) records Financial Records	GOM decides internal coordination of policies is important and practicable. Users amenable to audits, demonstration projects, and special project. Auditing and engineering skills provide sufficient payoff.
- Technical Assistance, Training, Audits, Studies, Commodities, Engineering, Technology transfer - Counterparts, Facilities, Airfares, Equipment	Inputs: USAID 3,600 GOM 1,123 Private Sector 3,214 Total 12,937 USAID Illustrative Budget: TA: 6,162,000 Commodities: 880,000 Training: 670,000 Policy Analysis: 500,000 Evaluation/Audit: 194,000 Contingency: 194,000	Project Agreement Contracts	Approval of project by GOM/AID. Appropriate TA and training available.

ANNEX 3

ECONOMIC COST-BENEFIT ANALYSIS

BASIC OIL PRICE(88): 16.5 $/BBL 120.945 $/TOE
DISCOUNT RATE: 15%

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
CONSTRUCTION MATERIAL SECTOR:															
ENERGY SAVINGS	0	480	3,907	7,333	12,147	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280	15,280
SPECIFIC INVESTMENT		196,800	1,405,070	1,404,660	1,973,740	1,284,530	0	0	0	0	0	0	0	0	0
AGRO-INDUSTRY:															
ENERGY SAVINGS	0	5[illegible]	1,810	4,370	6,800	8,858	10,720	11,200	11,800	13,000	13,000	13,000	13,000	13,000	13,000
SPECIFIC INVESTMENT		300,000	786,000	1,536,000	1,458,000	1,234,800	1,117,200	288,000	360,000	720,000	0	0	0	0	0
HOTEL SECTOR:															
ENERGY SAVINGS	0	500	1,000	3,000	10,000	20,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
SPECIFIC INVESTMENT		200,000	200,000	800,000	2,800,000	4,000,000	4,000,000	0	0	0	0	0	0	0	0
SECTOR COMBINED:															
ENERGY SAVINGS	0	1,480	6,717	14,703	28,947	44,138	56,000	56,480	57,080	58,280	58,280	58,280	58,280	58,280	58,280
SPECIFIC INVESTMENT		696,800	2,391,070	3,740,660	6,231,740	6,519,330	5,117,200	288,000	360,000	720,000	0	0	0	0	0
DIRECT EXPENDITURE	800,750	1,329,800	1,254,600	956,300	658,550										
DISCOUNTED (1988): 3,400,927															
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 0%)															
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS		-517,801	-1,578,682	-1,962,406	-2,730,745	-1,181,060	1,655,720	6,542,974	6,543,541	6,328,675	7,048,675	7,048,675	7,048,675	7,048,675	7,048,675
DISCOUNTED (1988): 7,606,512															
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-800,750	-1,847,601	-2,833,282	-2,918,706	-3,389,295	-1,181,060	1,655,720	6,542,974	6,543,541	6,328,675	7,048,675	7,048,675	7,048,675	7,048,675	7,048,675
NET BENEFIT: 4,205,584															
ESTIMATED IRR: 22.22%															
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 1%)															
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS		-514,204	-1,554,066	-1,890,201	-2,552,159	-852,648	2,144,287	7,108,966	7,190,301	7,066,122	7,863,983	7,942,623	8,022,049	8,102,270	8,183,292
DISCOUNTED (1988): 9,421,172															
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-800,750	-1,844,004	-2,808,666	-2,846,501	-3,210,709	-852,648	2,144,287	7,108,966	7,190,301	7,066,122	7,863,983	7,942,623	8,022,049	8,102,270	8,183,292
NET BENEFIT: 6,020,245															
ESTIMATED IRR: 24.91%															

TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 2%)

VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):11,403,482		-510,570	-1,528,958	-1,815,820	-2,366,359	-507,570	2,662,756	7,715,574	7,890,370	7,872,295	8,764,141	8,939,424	9,118,212	9,300,576	9,486,588
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-800,750	-1,840,370	-2,783,558	-2,772,120	-3,024,909	-507,570	2,662,756	7,715,574	7,890,370	7,872,295	8,764,141	8,939,424	9,118,212	9,300,576	9,486,588
NET BENEFIT:	8,002,554														
ESTIMATED IRR:	27.63%														

TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 3%)

VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):13,569,078		-506,900	-1,503,352	-1,739,219	-2,173,127	-145,156	3,212,637	8,365,273	8,647,555	8,752,829	9,757,014	10,049,725	10,351,216	10,661,753	10,981,605
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-800,750	-1,836,700	-2,757,952	-2,695,519	-2,831,677	-145,156	3,212,637	8,365,273	8,647,555	8,752,829	9,757,014	10,049,725	10,351,216	10,661,753	10,981,605
NET BENEFIT:	10,168,151														
ESTIMATED IRR:	30.38%														

TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 4%)

VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):15,935,043		-503,195	-1,477,244	-1,660,354	-1,972,244	235,285	3,795,501	9,060,659	9,465,891	9,713,760	10,851,111	11,285,155	11,736,561	12,206,024	12,694,265
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-800,750	-1,832,995	-2,731,844	-2,616,654	-2,630,794	235,285	3,795,501	9,060,659	9,465,891	9,713,760	10,851,111	11,285,155	11,736,561	12,206,024	12,694,265
NET BENEFIT:	12,534,115														
ESTIMATED IRR:	32.32%														

ECONOMIC COST-BENEFIT ANALYSIS (REVISED)

BASIC OIL PRICE 88 — 16.5 $/BBL; 120.945 $/TOE — DISCOUNT RATE: 15%

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999-2005
CONSTRUCTION MATERIAL SECTOR:											
ENERGY SAVINGS	0	2,061	2,061	7,333	12,147	15,280	15,280	15,280	15,280	15,280	15,280
SPECIFIC INVESTMENT		196,800	1,405,070	1,404,660	1,973,740	1,284,530	0	0	0	0	0
AGRO-INDUSTRY:											
ENERGY SAVINGS	0	924	1,044	4,370	6,800	8,858	10,720	11,200	11,800	13,000	13,000
SPECIFIC INVESTMENT		300,000	786,000	1,536,000	1,458,000	1,234,800	1,117,200	288,000	360,000	720,000	0
HOTEL SECTOR:											
ENERGY SAVINGS	0	117	1,226	3,000	10,000	20,000	30,000	30,000	30,000	30,000	30,000
SPECIFIC INVESTMENT		200,000	200,000	800,000	2,800,000	4,000,000	4,000,000	0	0	0	0
SECTOR COMBINED:											
ENERGY SAVINGS	0	3,102	4,331	14,703	28,947	44,138	56,000	56,480	57,080	58,280	58,280
SPECIFIC INVESTMENT		696,800	2,391,070	3,740,660	6,231,740	6,519,330	5,117,200	288,000	360,000	720,000	0
DIRECT EXPENDITURE	155,000	1,527,000	1,063,000	2,200,000	2,100,000	1,375,000	380,000				
DISCOUNTED (1988): 5,027,589											
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 0%)											
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988): 8,973,363		-321,629	-1,867,257	-1,962,406	-2,730,745	-1,181,060	1,655,720	6,542,974	6,543,541	6,328,675	7,048,675
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-155,000	-1,848,629	-2,930,257	-4,162,406	-4,830,745	-2,556,060	1,275,720	6,542,974	6,543,541	6,328,675	7,048,675
NET BENEFIT: 3,945,775 — ESTIMATED IRR: 20.75%											
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 1%)											
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):11,035,972		-314,088	-1,851,385	-1,890,201	-2,552,159	-852,648	2,144,287	7,108,966	7,190,301	7,066,122	7,863,983 *
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-155,000	-1,841,088	-2,914,385	-4,090,201	-4,652,159	-2,227,648	1,764,287	7,108,966	7,190,301	7,066,122	7,863,983 *
NET BENEFIT: 6,008,384 — ESTIMATED IRR: 23.40%											

* In fact, the value of oil saved changes when it is assumed that oil price varies but, due to the lack of space, it does not appear here.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999-2005
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 2%)											
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):13,307,675		-306,472	-1,835,196	-1,815,820	-2,366,359	-507,570	2,662,756	7,715,574	7,890,370	7,872,295	8,764,141 *
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-155,000	-1,833,472	-2,898,196	-4,015,820	-4,466,359	-1,882,570	2,282,756	7,715,574	7,890,370	7,872,295	8,764,141 *
NET BENEFIT: 8,280,086			ESTIMATED IRR:	26.09%							
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 3%)											
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):15,810,485		-298,781	-1,818,686	-1,739,219	-2,173,127	-145,156	3,212,637	8,365,273	8,647,555	8,752,829	9,757,014 *
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-155,000	-1,825,781	-2,881,686	-3,939,219	-4,273,127	-1,520,156	2,832,637	8,365,273	8,647,555	8,752,829	9,757,014 *
NET BENEFIT: 10,782,897			ESTIMATED IRR:	28.28%							
TOTAL PROJECT BENEFITS (ASSUME OIL PRICE INCREASE= 4%)											
VALUE OF OIL SAVED NET OF SPECIFIC INVESTMENTS DISCOUNTED (1988):18,568,763		-291,015	-1,801,852	-1,660,354	-1,972,244	235,285	3,795,501	9,060,659	9,465,891	9,713,760	10,851,111 *
CASH-FLOW AFTER DEDUCTING PROJECT COSTS	-155,000	-1,818,015	-2,864,852	-3,860,354	-4,072,244	-1,139,715	3,415,501	9,060,659	9,465,891	9,713,760	10,851,111 *
NET BENEFIT: 13,541,174			ESTIMATED IRR:	30.40%							

* In fact, the value of oil saved changes when it is assumed that oil price varies but, due to the lack of space, it does not appear here.

COMPARISON BETWEEN ORIGINAL AND REVISED ECONOMIC ANALYSES RESULTS

	ORIGINAL	REVISED	CHANGE
A. DISCOUNTED COST	3,400,927	5,027,589	47.8%
B. DISCOUNTED VALUE OF OIL SAVED			
1. PRICE INC.=0%	7,606,512	8,973,363	18.0%
2. PRICE INC.=1%	9,421,172	11,035,972	17.1%
3. PRICE INC.=2%	11,403,482	13,307,675	16.7%
4. PRICE INC.=3%	13,569,078	15,810,485	16.5%
5. PRICE INC.=4%	15,935,043	18,568,763	16.5%
C. NET BENEFIT			
1. PRICE INC.=0%	4,205,584	3,945,775	-6.2%
2. PRICE INC.=1%	6,020,245	6,008,384	-0.2%
3. PRICE INC.=2%	8,002,554	8,280,086	3.5%
4. PRICE INC.=3%	10,168,151	10,782,897	6.0%
5. PRICE INC.=4%	12,534,115	13,541,174	8.0%
D. ESTIMATED IRR			
1. PRICE INC.=0%	22.22	20.75	-1.47
2. PRICE INC.=1%	24.91	23.40	-1.51
3. PRICE INC.=2%	27.63	26.09	-1.54
4. PRICE INC.=3%	30.38	28.28	-2.10
5. PRICE INC.=4%	32.32	30.40	-1.92

ANNEX C

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to the eligibility of countries to receive the following categories of assistance: (A) both Development Assistance and Economic Support Funds; (B) Development Assistance funds only; or (C) Economic Support Funds only.

A. COUNTRY ELIGIBILITY CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUND ASSISTANCE

1. Narcotics

a. **Negative certification** (FY 1991 Appropriations Act Sec. 559(b)): Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?

There has been no such Presidential certification as to Morocco.

b. **Positive certification** (FAA Sec. 481(h)). (This provision applies to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government):

(1) does the country have in place a bilateral narcotics agreement with the United States, or a multilateral narcotics agreement? — Yes

(2) has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (a) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (b) the vital national interests of the United States require the provision of such assistance? — Yes

c. Government Policy (1986 Anti-Drug Abuse Act of 1986 Sec. 2013(b)). (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to Congress — No listing such country as one: (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

2. **Indebtedness to U.S. citizens** (FAA Sec. 620(c)): If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity? No

3. **Seizure of U.S. Property** (FAA Sec. 620(e)(1)): If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

4. **Communist countries** (FAA Secs. 620(a), 620(f), 620D; FY 1991 Appropriations Act Secs. 512, 545): Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by No

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the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

5. Mob Action (FAA Sec. 620(j)): Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? — No

6. OPIC Investment Guaranty (FAA Sec. 620(l)): Has the country failed to enter into an investment guaranty agreement with OPIC? — No

7. Seizure of U.S. Fishing Vessels (FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5): (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made? — No

8. Loan Default (FAA Sec. 620(q); FY 1991 Appropriations Act Sec. 518 (Brooke Amendment)): (a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriations Act appropriates funds? — No

9. **Military Equipment** (FAA Sec. 620(s)): If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

Yes, the Administrator has approved the country's OYB which takes into account amount of FX or other resources spent on military equipment.

10. **Diplomatic Relations with U.S.** (FAA Sec. 620(t)): Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No

11. **U.N. Obligations** (FAA Sec. 620(u)): What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking Into Consideration" memo.)

The country carries no U.N. arrearages.

12. **International Terrorism**

a. **Sanctuary and support** (FY 1991 Appropriations Act Sec. 556; FAA Sec. 620A): Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons?

No

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b. Airport Security (ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

No

13. Discrimination (FAA Sec. 666(b)): Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No

14. Nuclear Technology (FAA Secs. 669, 670): Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

No

15. Algiers Meeting (ISDCA of 1981, Sec. 720): Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.)

Morocco was represented at the meeting and did dissociate itself from the community.

16. Military Coup (FY 1991 Appropriations Act Sec. 513): Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance? No

17. Refugee Cooperation (FY 1991 Appropriations Act Sec. 539): Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin? Yes

18. Exploitation of Children (FY 1991 Appropriations Act Sec. 599D, amending FAA Sec. 116): Does the recipient government fail to take appropriate and adequate measures, within its means, to protect children from exploitation, abuse or forced conscription into military or paramilitary services? No

B. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO DEVELOPMENT ASSISTANCE ("DA")

1. Human Rights Violations (FAA Sec. 116): Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? No

2. Abortions (FY 1991 Appropriations Act Sec. 535): Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary No

sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

C. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO ECONOMIC SUPPORT FUNDS ("ESF")

Human Rights Violations (FAA Sec. 502B): Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest? No

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE? **YES**

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. **Host Country Development Efforts** (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

a) Yes, trade will be encouraged through purchase of project equipment in U.S.
b) Yes, private initiative and competition will be fostered by decreasing cost of doing business through energy savings;
c) No, project will not work with cooperatives, credit union or savings and loan associations;
d) Yes, by fostering competition, project will discourage monopolistic practices;
e) Yes, technical assistance will assist Moroccan private sector become more technically efficient,
f) No, project will not work with free labor unions.

2. **U.S. Private Trade and Investment** (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

The project provides long-term U.S. technical assistance. The project will purchase commodities from the U.S. thus stimulating commercial exchanges.

3. **Congressional Notification**

a. **General requirement** (FY 1992 Continuing Resolution; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)?

Congressional Notification will be prepared once final obligation requirement for FY92 is determined.

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b. **Notice of new account obligation** (FY 1992 Continuing Resolution): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?	N/A
c. **Cash transfers and nonproject sector assistance** (FY 1992 Continuing Resolution): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?	N/A
4. **Engineering and Financial Plans** (FAA Sec. 611(a)): Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?	Yes
5. **Legislative Action** (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?	N/A
6. **Water Resources** (FAA Sec. 611(b); FY 1992 Continuing Resolution): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)	N/A
7. **Cash Transfer and Sector Assistance** (FY 1992 Continuing Resolution): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?	N/A
8. **Capital Assistance** (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?	N/A

9. **Local Currencies**

a. **Recipient Contributions** (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

The GOM will pay int'l travel costs, project manager salary, provide office space, per diem for local training. The Moroccan private sector will pay a fee for project commodities, services, training and workshops, and int'l air fairs for training

b. **U.S.-Owned Currency** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

c. **Separate Account** (FY 1992 Continuing Resolution). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

10. **Trade Restrictions**

a. **Surplus Commodities** (FY 1992 Continuing Resolution): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

N/A

b. **Textiles (Lautenberg Amendment)** (FY 1992 Continuing Resolution): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

No

11. **Tropical Forests** (FY 1992 Continuing Resolution): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

a) No
b) No

12. **PVO Assistance**

a. **Auditing and registration** (FY 1992 Continuing Resolution): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. **Funding sources** (FY 1992 Continuing Resolution, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

N/A

13. **Project Agreement Documentation** (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

Case-Zablocki Act will be complied with.

14. **Metric System** (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

Yes

15. **Women in Development** (FY 1992 Continuing Resolution, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

To the extent possible women will be selected to participate in training programs sponsored by project.

16. **Regional and Multilateral Assistance** (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

No

17. **Abortions** (FY 1992 Continuing Resolution, Title II, under heading "Population, DA," and Sec. 525):

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No

b. Will any funds be used to lobby for abortion?

No

18. **Cooperatives** (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

No

19. **U.S.-Owned Foreign Currencies**

a. **Use of currencies** (FAA Secs. 612(b), 636(h); FY 1992 Continuing Resolution): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

U.S. does not own any foreign currency in Morocco.

b. **Release of currencies** (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

20. **Procurement**

a. **Small business** (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

Yes

b. **U.S. procurement** (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?

Yes

c. **Marine insurance** (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

Morocco does not discriminate against any marine insurance companies.

d. **Non-U.S. agricultural procurement** (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

N/A

e. **Construction or engineering services** (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

No

f. **Cargo preference shipping** (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

No

g. **Technical assistance**
(FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Yes. Use of other Federal Agencies is not contemplated.

h. **U.S. air carriers**
(International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

Yes

i. **Termination for convenience of U.S. Government** (FY 1992 Continuing Resolution): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

Yes

j. **Consulting services** (FY 1992 Continuing Resolution): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?	Yes
k. **Competitive Selection Procedures** (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes
21. **Construction**	
a. **Capital project** (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?	N/A
b. **Construction contract** (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?	N/A
c. **Large projects, Congressional approval** (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress?	N/A
22. **U.S. Audit Rights** (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?	N/A
23. **Communist Assistance** (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?	Yes

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24. **Narcotics**

a. **Cash reimbursements** (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes

b. **Assistance to narcotics traffickers** (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance? 1) Yes 2) Yes

25. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes

26. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

27. **CIA Activities** (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Yes

28. **Motor Vehicles** (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

29. **Military Personnel** (FY 1992 Continuing Resolution): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

30. **Payment of U.N. Assessments** (FY 1992 Continuing Resolution): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes

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31. **Multilateral Organization Lending** (FY 1992 Continuing Resolution): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? — Yes.

32. **Export of Nuclear Resources** (FY 1992 Continuing Resolution): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? — Yes

33. **Repression of Population** (FY 1992 Continuing Resolution): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? — Yes

34. **Publicity or Propaganda** (FY 1992 Continuing Resolution): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? — No

35. **Marine Insurance** (FY 1992 Continuing Resolution): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? — Yes

36. **Exchange for Prohibited Act** (FY 1992 Continuing Resolution): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law? — No

B. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. **Economic and Political Stability** (FAA Sec. 531(a)): Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

Yes.

Yes, by increasing competitiveness, by helping environment, will increase quality of life.

2. **Military Purposes** (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

No

3. **Commodity Grants/Separate Accounts** (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? (For FY 1992, this provision is superseded by the separate account requirements of FY 1992 Continuing Resolution, see Sec. 575(a)(5).)

N/A

4. **Generation and Use of Local Currencies** (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1991, this provision is superseded by the separate account requirements of FY 1992 Continuing Resolution Sec. 575(a), see Sec. 575(a)(5).)

No

5. **Cash Transfer Requirements** (FY 1992 Continuing Resolution, Title II, under heading "Economic Support Fund," and Sec. 575(b)). If assistance is in the form of a cash transfer:

N/A

a. **Separate account:** Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

b. **Local currencies:** Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

c. **U.S. Government use of local currencies:** Will all such local currencies also be used in accordance with FAA Section 609, which requires such local currencies to be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, and which requires the remainder to be used for programs agreed to by the U.S. Government to carry out the purposes for which new funds authorized by the FAA would themselves be available?

d. **Congressional notice:** Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

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