

XD-

XD-AAN-856 ~~17~~
ISN=33434

creative associates

INDUSTRIAL AND COMMERCIAL JOB TRAINING FOR WOMEN 608-0147

FINAL EVALUATION

CONDUCTED AT THE REQUEST OF
**USAID
MOROCCO**

by

Joseph W.B. Bredie
Team Leader

Frank K. Abou-Sayf

Jane E. Wilber
of

Creative Associates, Inc. 1341

and

Taibi Belmaachi
Interface, Consulting Firm

May 27, 1983

XD-AAN-856
ien=33434

INDUSTRIAL AND COMMERCIAL
JOB TRAINING FOR WOMEN

608-0147

I N A L E V A L U A T I O N

CONDUCTED AT THE

REQUEST OF

USAID
MOROCCO

BY

JOSEPH W.B. BREDIE
TEAM LEADER

FRANK K. ABOU-SAYF

JANE E. WILBER

OF
CREATIVE ASSOCIATES, INC. 1341

AND

TAIBI BELMAACHI
INTERFACE, Consulting Firm

MAY 27, 1983

✓

TABLE OF CONTENTS

	<u>Page No.</u>
I. <u>EXECUTIVE SUMMARY</u>	1
II. <u>INTRODUCTION</u>	4
1. The Problem	4
2. Host Country Contract	4
3. Project Goal	5
4. Project Purpose	5
5. Project Design	5
6. Inputs	6
7. Outputs	6
8. Beneficiaries	7
9. External Factors	7
10. Evaluation Purpose and Methodology	9
III. <u>VOCATIONAL TRAINING MECHANISM</u>	13
1. Student Selection Procedures	13
2. Pilot Skill Programs	14
3. Curricula	15
4. Equipment and Materials	16
5. Teacher Training	18
6. Conclusions and Recommendations	19
IV. <u>PLACEMENT AND FOLLOW-UP</u>	21
1. Description of Activities	21
2. Attainment of Objectives	23
3. Conclusions and Recommendations	23
V. <u>THE TWO TECHNICAL REPORTS</u>	25
1. The Economic Report	25
2. The Socio-Cultural Report	29
3. Conclusions and Recommendations	31
VI. <u>PARTICIPANT TRAINING</u>	32
1. Description of Activities	32
2. Achievement of Objectives	34
3. Discussion	35
4. Conclusions and Recommendations	40

TABLE OF CONTENTS (CONT'd)

	<u>Page No.</u>
VII. <u>COST</u>	42
1. Local Training	43
2. Participant Training	44
3. Research	45
VIII. <u>OTHER ISSUES</u>	47
1. Differences Among and Weaknesses in Project Documents	47
2. Project Activities at the Fez Center	48
3. Conclusions and Recommendations	50
IX. <u>PERFORMANCE OF PARTIES</u>	51
1. USAID	51
2. OFPPT	53
3. AMIDEAST	56
Conclusions and Recommendations	65
X. <u>OVERALL IMPACT</u>	66
1. Female Trainees	67
2. Female Teachers	68
3. Female Graduates Who are Employed	68
4. Female OFPPT Staff Members	68
Discussion	68
XI. <u>CONCLUSION</u>	70
1. Unplanned Effects	70
2. Lessons Learned	70
3. Considerations for Future Projects	73
4. Conclusion	75

BIBLIOGRAPHY

APPENDIXES

I. EXECUTIVE SUMMARY

Following the completion of a Project Grant Agreement between the Government of Morocco's Office of Technical Training and Job Development (OFPPT) and USAID, a host-country contract was signed in September 1979 between OFPPT and the U.S. firm of AMIDEAST to implement a project to integrate women into industrial and commercial training and assist them in job placement.

The project was designed to address all aspects of training and placement. In regard to selection of students for training its influence was small. The elaborate admission and orientation mechanism it helped set up for female candidates is to be discontinued at the end of the project and the same placement procedures that are used for male graduates will be used for females. The skills selected for the pilot centers were appropriate, and female graduates had no real difficulty finding relevant employment after their training. These skills were, however, not periodically reviewed for possible change as originally planned.

The curricula for the pilot skills were reviewed in the course of this project and the improvements introduced were beneficial to females as well as males. The equipment purchased also helped in improving the training.

The teacher training part of this project was done for the most part on an informal on-the-job basis, with the contractor's training experts demonstrating new teaching techniques and the use of the new equipment whenever appropriate.

A less successful component of the project was the structuring of a formal placement and follow-up mechanism. Although the rate of employment of women trained in the pilot centers was around 70 percent, this success was more the result

of the efforts of some individuals than the existence of a systematic procedure. Similarly, little activity is taking place in the follow-up of these employees.

Twenty-three participant trainees were sent to the U.S. as part of this project. Although almost all have successfully completed their training (with the exception of 3 participants who have recently begun studies), only one of the 6 original Master's candidates has returned to work at OFPPT. The ten one-year technical trainees returned to Morocco near the end of the evaluation.

Another part of this project was the production of two technical reports intended to investigate the social and cultural constraints in employing female technicians and to identify the employment possibilities for them in industry. After a considerably long time in preparing these reports, at a relatively high cost, the benefits derived from them are limited and questionable.

The overall impact of the project has been positive; female trainees and trainers are in the OFPPT system, and more trained women are working in industry. An analysis of the performance of the three parties involved in the project indicated that AID's and OFPPT's responsibilities were performed satisfactorily, whereas the contractor's performance left room for improvement.

A number of recommendations were made to strengthen the project impact. These are summarized as follows:

1. the improvement and administration of a battery of entrance exams including achievement and aptitude for all candidates;
2. the establishment of systematic services in job placement and guidance, follow-up, and counseling of OFPPT graduates;

3. the distribution of a revised and condensed version of the Economic report to employers;
4. the periodic assessment of OFPPT programs to assure the relevance of training to industry needs and work opportunities;
5. the continuation of efforts to integrate women in all aspects of technical training.

II. INTRODUCTION

1. The Problem

In Morocco, the lack of sufficiently trained manpower is often cited as a major constraint to the country's economic development. Concurrent with this situation is a high level of unemployment among a population which by and large lacks the necessary skills to respond to actual manpower requirements of Moroccan industry. Research conducted during the late 1970s in this area of manpower development in Morocco (see PID, USAID's Interim Report, Youssef's report and the Feasibility Study) indicated that women were particularly disadvantaged, specifically in terms of access to and participation in job training opportunities. Furthermore, the range of skill areas in which females were receiving training was extremely limited and mainly concentrated in commercial subjects. Other factors which were felt to affect adversely the participation of females in skills training were the lack of dormitory facilities at training centers combined with limited attention to job placement of female graduates of these centers. Recognizing these problems, the Ministry of Labor's Office of Technical Training and Job Development (OFPPT) requested USAID's collaboration which led to the Industrial and Commercial Job Training for Women project.

The chronological flow of the major project events is presented in Appendix 1.

2. Host Country Contract

In September 1979, OFPPT signed an AID-financed host-country contract with America-Mideast Educational and Training Services Inc. (AMIDEAST), Washington, D.C., which had been selected by OFPPT to participate in the implementation of the project. The contract duration was 42 months (September 1979 to March 1983) at an initial cost of U.S. \$2,250,537. Four subsequent contract

amendments extended the project termination date to September 30, 1984 and increased the contract cost to \$3,200,000. At the time of the project's final evaluation, negotiations for a fifth project amendment were being held. This amendment would reduce the life of the contract by one year to September 30, 1983. The contract cost would be reduced to an estimated \$3,000,000.

3. Project Goal

The project goal, as stated in to assist Moroccan women to participate in the economic development of their country both as contributors and as beneficiaries.

4. Project Purpose

The purpose of the project (referred to as the Project Objective in the contract) was to integrate women trainees into the Labor Ministry's industrial and commercial training centers, to enable them to acquire the appropriate professional qualifications, and to assist them in job placement corresponding to their training.

5. Project Design

In June 1978, approval was secured for the project paper. The three major components of the project design were technical assistance, U.S. participant training, and the provision of equipment.

While some modifications were made in responsibilities and the specific project activities to be undertaken, the following broad categories of tasks were integral parts of the project design:

- 5.1. Recruiting, training, counseling, and assisting women to secure employment;

- 5.2. Improving and/or developing curricula;
- 5.3. Training instructors to strengthen teaching techniques and subject knowledge;
- 5.4. Strengthening institutional capacities of OFPPT through staff development;
- 5.5. Studying economic, social, and cultural issues which impact on women's skills training and employment; and
- 5.6. Providing equipment for technical training.

6. Inputs

Based on the Project Grant Agreement (ProAg), OFPPT was responsible for the following inputs:

- a) buildings, furniture, and equipment;
- b) salaries of local instructors;
- c) all administrative/managerial expenses;
- d) dormitory space for some women students; and
- e) international travel for participant training..

In the same document, AID's responsibility for inputs was delineated as:

- a) contract services of an educator/administrator, a job development expert, a counselor, and vocational training experts, all for 3 1/2 years;
- b) participant training for six Moroccans to study social psychology, human resources economics, and vocational education for a three-year period;
- c) necessary technical training equipment and supplies; and
- d) one project vehicle.

7. Outputs

In the Project Grant Agreement, the following were given

as a summary of intended project outputs:

- a) two pilot centers at OFPPT will provide job training for women in industrial and commercial skills;
- b) a system of job placement and performance evaluation will be functioning; and
- c) women professionals will be included on the central headquarters staff of OFPPT.

The Logical Framework included these outputs, but also added:

- d) job placement, counseling and follow-up services for women operational; and
- e) training program in key industrial and commercial fields that meet employers' need for personnel with practical skills as well as formal training.

8. Beneficiaries

The targeted beneficiaries of this project were:

- a) 450 Moroccan women who were to be recruited, trained in commercial and industrial skills, and placed in appropriate jobs (according to the Project Paper);
- b) 6 participants who were to complete graduate degrees at U.S. academic institutions; and
- c) trainers in drafting, electricity, electronics, commercial accounting, and secretarial skills, working at OFPPT and who were to be exposed to new techniques and curricula.

Subsequent contract amendments led to changes in the original number of beneficiaries, decreasing the number of locally trained women to 435 and increasing the number of participant trainees to 26. Ultimately 23 participants went to the U.S. for studies.

9. External Factors

A number of external factors have impacted on the implemen-

tation of the project:

- 9.1. Delay in project start-up. This was due to a withdrawal of the Request for Proposal by USAID, then the publication later of a revised version. In addition, contract negotiations and signing required about three months longer than expected. As a consequence, a delay in contractor team and equipment arrival to Morocco was experienced, leading to a delay in training start-up.
- 9.2. The turnover in AMIDEAST team. Whether due to illness, injury, resignation, individual contract expiration or AMIDEAST contract revisions, this turnover resulted in periods of time where some contractor responsibilities were not performed. Examples are the period of six months when the original Social Psychologist was in Morocco but unable to work due to her injury, and the gap of ten months between the departure of the original Electricity/Electronics expert and the arrival of his successor. This turnover was a factor which impacted upon the project only at the beginning of the project.
- 9.3. The delayed return to Morocco of all but one of the original six long-term participants. This has prevented the planned overlap of these participants with their counterparts on the AMIDEAST team. It has also prevented determining at this point which specific functions they will effectively be assigned within OFPPT. It should be noted that one participant trainee, upon her return to Morocco, was granted a waiver by OFPPT and AID to return to the U.S. to pursue her Ph.D., which she is currently doing.

10. Evaluation Purpose and Methodology

This final project evaluation was undertaken by a team of independent consultants at the request of AID/Rabat. The evaluation team included three consultants recruited by Creative Associates, Inc., Washington, D.C. -- Dr. Joseph Bredie, Dr. Frank Abou-Sayf, and Ms. Jane E. Wilber, as well as a Moroccan expert recruited by AID/Rabat, Mr. Taïbi Belmaachi.

The statement of work given by AID for the evaluation team indicated the results of this evaluation are intended to be used in the following manner:

- a) by the contracting agency (OFPPT) to strengthen its program of vocational training for women;
- b) by the contractor (AMIDEAST) to improve upon their design of future vocational education projects for women;
- c) by USAID to define lessons learned for use by others with similar problems in the design and review of nonformal vocational education programs for women;
- d) by USAID and OFPPT to evaluate the performance of the contractor in implementing this project;
- e) by USAID and OFPPT to measure success in meeting project goals and objectives; and
- f) by USAID and OFPPT to identify unexpected or unplanned effects of the project.

The scope of work for this evaluation as defined by AID/Rabat included the following tasks:

- a) Examine the vocational training program established by OFPPT and the contractor, including an assessment of the following:
 - i) adequacy and effectiveness of OFPPT's student selection procedures and criteria;
 - ii) effectiveness of the skills taught by AMIDEAST;
 - iii) adequacy of the teaching equipment purchased

- under the contract;
- iv) adequacy of teacher preparation and curriculum developed by AMIDEAST.
- b) Examine the results of a follow-up survey of graduates of the pilot training program conducted by OFPPT. Based on the results, determine if OFPPT's job placement system and recruitment practices need strengthening. If so, provide specific recommendations on how this should be done.
 - c) Assess the appropriateness of participant training vis-a-vis the relevance of training towards achieving project goals and objectives, including the utilization of the participant trainees upon their return to Morocco.
 - d) Examine the methodology, data collected, and conclusions of the Economic Report and Analysis of Women's Employment Situation in the Industrial and Commercial Sectors Report produced by AMIDEAST team members. These reports required almost three years to complete, and their value and accuracy need to be determined.
 - e) Determine the overall per-beneficiary cost of the project, including participant trainees and graduates of the vocational skills program.
 - f) Determine the overall impact of the project on the OFPPT training system, including a comparison of the following:
 - (i) number of females enrolled in the system at the start and end of the project;
 - (ii) number of female OFPPT teachers/staff at the start and end of the project;
 - (iii) increase in females employed in the commercial and industrial sector as a direct result of the project.

The various activities conducted during this evaluation were:

- a) Study and analysis of documents: legal documents, correspondence, meeting minutes, technical documents, etc.
- b) Meetings with various parties involved in the project: representatives and officials from AID/Rabat and AID/Washington, OFPPT, and AMIDEAST, local trainers and trainees, the one returning participant trainee, owners of industries that are recipients of OFPPT graduates, and employed OFPPT graduates.
- c) Visits to OFPPT centers and institutes, classrooms, labs, and workshops in Ain Borja, Hay Mohammedi, Maarif, and Fez.
- d) Visits to Moroccan industries employing OFPPT graduates in the Casablanca and Fez areas; and observations of working areas and conditions.

The schedule for performing these tasks was:

- a) Data collection, analysis and preparation of draft document, from May 5 to May 23, 1983, where most of the activities described above were conducted.
- b) Discussion of preliminary results at a roundtable with representatives of all parties involved in the project on May 24-25, 1983. Comments and verification of factual information in the draft version of the report were solicited by the evaluation team and discussed with the parties concerned.
- c) Project document finalization. Comments by all parties were noted and the final form of the evaluation report was prepared and submitted on May 28, 1983.

A list of representatives and officials met and interviewed is provided in Appendix 2, and the interview forms used are presented in Appendixes 3 and 4.

The major constraint of this evaluation was the absence of many people who played important roles in the project. Only one of the AMIDEAST team members was in Morocco at the time of the evaluation. Further, the AMIDEAST Project Coordinator, who was available for interviews, was not the same person who was with the project from the beginning. Similarly, the person who served as the AID/Rabat Project Monitor during the implementation phase was no longer in Morocco. Finally, only one of the OFPPT graduate level students had returned to Morocco. This constraint imposed a limitation on the findings of this report, namely the fact that a great number of the persons involved in the project were not available to advance their impressions and points of view.

13

III. VOCATIONAL TRAINING MECHANISM

1. Student Selection Procedures

In 1979, for the first time, OFPPT's enrollment advertisements invited young women as well as young men to join its skilled worker-level industrial training programs, although a small number of women were already enrolled in building construction and mechanics.

In addition to the usually high demand for commercial skills on the part of women (primarily secretarial with a few in accounting), an unexpectedly large number of women applied for training in electricity, electronics, and drafting. Entrance requirements were either four or seven years of secondary schooling, the former leading to the diploma of skilled worker (ouvrier qualifié), and the latter leading to the diploma of technician.

The selection mechanism was as follows. Women were given a battery of five to seven performance, language, and aptitude tests, depending on their entry level and whether they applied for commercial or industrial training. A detailed list of each battery is provided in Appendix 5. In addition, each candidate was asked to state her preference. The combined score of each woman on this battery was then calculated, and those whose scores fell below a minimum level were eliminated. The profile of each woman with a score at or above the minimum level was then examined for orientation towards the skill that fit best her stated preference. If this preference matched the tendency indicated by the profile, she would be admitted to the skill program of her choice. If not, she would be advised about the discrepancy and encouraged to join the program where her abilities fit best. In some cases, women refusing the advice were dropped from the program.

13

After the skilled worker level program was discontinued, except in electricity and industrial design, women are no longer subjected to this special entrance requirement. Now they are required to take the same set of classical entrance exams given to their male counterparts, namely Math, French, and Arabic. The reason provided by OFPPT for this shift is that, within the spirit of the project, the integration of boys and girls in all training phases should follow the pilot stage, and that to apply such intensive testing procedures annually to the approximately 15,000 candidates would be too burdensome. The experimental entrance battery is, however, maintained for the technician level programs.

Overall, the selection procedure is adequate. The high rate of success in all pilot skills may also be an indication of an effective selection procedure. The test validation procedures are, however, not satisfactory. It is hoped that local validation and test revision will be conducted shortly with the help of the new computer.

2. Pilot Skill Programs

The four industrial skill programs (electricity, electronics, industrial and architectural drafting) and the commercial skill programs (secretarial and accounting) were chosen because of their assumed appropriateness for women, existing demand, and acceptance by employers of women trained in these skills. Although the appropriateness of some of these skills can be questioned (the difficult working conditions for maintenance electricians, for example), recent evidence provided by OFPPT (Appendix 6) seems to indicate that demand for these skills exists and that they benefit from employers' acceptance. These placement data indicate that between 1979 and 1981, over 200 women (71 percent) trained in pilot skills secured employment.

The momentum of the project has apparently led to a carryover

effect whereby women are now more frequently seeking admission to other skill-training areas, such as woodworking and mechanics.

3. Curricula

OFPPT's Office of Programs (Service Programmes) edits and issues curricula prepared by technical committees. The program and course materials are standard for each trade in all OFPPT training centers, and are made available in book form to teachers and students.

The project contributed significantly to curriculum development. Three new curricula were produced, of which two are used experimentally and one is awaiting finalization. In collaboration with his counterpart, the drafting specialist (successor to the original one) produced a new curriculum, which is awaiting review, editing, and finalization. This specialist also developed a program outline in pedagogy and teaching methodology for an in-service teacher training course.

The original electronics/electricity specialist produced, between October 1979 and April 1980, the first part of a highly detailed and useful curriculum for a skilled worker level program containing objectives, theory, and practice, materials, and tests, specifically integrating the new equipment purchased under the project. The curriculum was, however, only used informally by a few instructors and never officially adopted. While no satisfactory answer was given as to why the curriculum was not adopted, OFPPT indicated that they intend to insert parts of it into their existing program.

The electricity/electronics specialist who arrived in February 1981 produced two versions of a new curriculum for technician level courses in electronics, almost single-handedly installed the electronics laboratory, and conducted informal on-the-job counterpart training both in Casablanca and Fez. At OFPPT's request, he prepared a new curriculum which combines the

program in radio and television and the industrial electronics program into one polyvalent program.

The business education specialist entirely revamped the secretarial program. He introduced an invaluable practical approach by setting up a receptionist, telephone operation, language laboratory, and stenography lab, in addition to training instructors in these areas and in business English. Program objectives, learning activities, and exercises were developed by this specialist in addition to training instructors and students in the proper use of project equipment.

Curriculum and program development activities of the three specialists have greatly contributed to the effectiveness of OFPPT's training. Employers interviewed were generally satisfied with the skill levels and technical knowledge of the women trained in the pilot project.

4. Equipment and Materials

The project team was to provide lists of training equipment, purchase and install such equipment in the training centers in Casablanca and Fez. The recall of the RFP and consequent delay in signing the contract resulted in considerable delays in the installation of equipment. However, the first shipment arrived in February 1980. The first group of women in the drafting program started late (February 1980 instead of September 1979) and without any equipment. USAID signed a waiver to allow for the local purchase of some urgently needed equipment.

The equipment for the drafting classes consisted mainly of drafting tables equipped with drafting machines and supplies such as templates and technical pens as well as audio-visual equipment. This equipment is satisfactory, in good condition and poses no maintenance or repair problems.

Two electricity laboratories were fitted out with modular

student training equipment. This type of didactic equipment is new to the Moroccan instructors and consequently is not always fully and appropriately used. The electricity/electronics specialist has periodically demonstrated and discussed the use of this equipment with the instructors in Casablanca and, whenever possible, in Fez. Demands on his time for other activities have, however, prevented up to now a thorough familiarization, and the equipment is not fully exploited. The accompanying student manuals were incorrectly ordered in English and returned to the supplier, and the French versions were received in the spring of 1981. Instructor manuals are, however, only available in English.

As was mentioned earlier, the electricity/electronics specialist planned the electronics laboratory, and he personally uncrated and installed the equipment and developed an inventory control system. Students and teachers fully utilize the electronics equipment and closely follow the experiments in the accompanying manuals. This equipment is well selected and utilized and contributes enormously to the training in industrial electronics and radio/television.

The commercial training equipment includes typewriters, telephone switchboard system, dictaphones, and calculating machines. Familiarization and use of this equipment has been well planned and developed by the business education specialist. Small repair and maintenance problems occurred with the dictaphones, but have been resolved and the equipment is fully operational.

Audiovisual equipment including video recorders, overhead and slide projectors, copiers, and duplicating machines were ordered and have been distributed among the training centers. This equipment is operational although the lamps of the photocopiers have been replaced several times and the stock of spare parts is running low.

Project funds which became available when the business education expert resigned were partly used to purchase an IBM 34 computer. OFPPT is currently mechanizing its payroll procedures and personnel files and also plans to use the computer for scoring its admission tests. A significant piece of equipment, the vehicle, purchased for the project, broke down and could not be repaired for months due to the lack of spare parts. Because of that, additional costs are being incurred to store this vehicle and to rent another one for project travel.

The equipment, as mentioned several times by OFPPT, is one of the most important contributions of this project. Except possibly for the underutilization of the electricity equipment, the equipment has been found to be properly and fully used, well maintained, and adding significantly to the training of women and men in the project.

5. Teacher Training

Teacher training in the project was limited to on-the-job training. The technical specialists have not been formally involved in preservice training of teacher trainees. In conformity with the contractor's responsibility as stated in the contract, in-service training has been limited to the teachers working next to the technical experts in the pilot centers in the selected skill areas. Demonstration of appropriate teaching techniques and teaching model units were done regularly as required. As was noted earlier, the drafting expert developed a useful program outline in pedagogy and teaching methods which he used for in-service training of his counterpart.

Seven women have been trained as teachers of industrial and building construction programs and assigned to the pilot centers. It should be noted that even before the project started OFPPT employed a small number of women teachers, approximately 38 in commercial and tailoring classes. In addition, the ten one-year

technical trainees sent to the U.S. will return to teach at OFPPT institutes (see Chapter VI).

The impact of the project on teacher training has been small, although this area was singled out in the ProAg as weak and in need of improvement. This may be, however, due to the absence of more responsibilities assigned to the contractor in the contract and the priorities set by OFPPT regarding the tasks of the technical specialists.

6. Conclusions and Recommendations

The impact of the project was significant on curriculum development, the provision of equipment and the appropriate selection of the pilot skills. Elaborate selection procedures were initiated and benefited women in the pilot classes. The contribution to teacher training remained within the narrow limits agreed to in the contract.

Once the computerization of its testing procedures has been completed and the entrance test battery properly validated, OFPPT should administer entrance tests to all applicants and not only to those applying for the technician level program. Such entrance tests should not only be used to determine if applicants meet entry-level requirements but also to assist applicants in the selection of skill programs.

Although a sizeable number of teachers have received on-the-job training and ten have participated in one year programs in the U.S., pre-service training of teachers remains weak. OFPPT should consider extending its five to six week pre-service pedagogy and teaching method course and also arrange for a six- to eight-month stage for its teacher trainees in industry.

The utilization and maintenance of the project equipment is satisfactory except for the electricity equipment. OFPPT could use the electricity instructor, one of the ten one-year technical trainees, upon his return to complete the training of

instructors in the use of this equipment..

The curricula developed by the technical specialists in collaboration with their counterparts have improved training in the pilot skills. The performance of these specialists in this area of curriculum improvement, equipment selection and installation and counterpart training was very good and contributed significantly to training in this project.

21

IV. JOB PLACEMENT AND FOLLOW-UP

1. Description of Activities

1.1. Job Placement

Graduates from OFPPT's training centers usually find employment through their own efforts, although assistance is often sought from instructors and center directors to secure the first job. OFPPT cannot and does not guarantee jobs for its graduates. It does, however, assist in job placement by discussing employment needs with industrialists during the Advisory Council (conseil de perfectionnement) meetings, and sending out letters similar to those found in Appendixes 7 and 8. Students are also placed in industry for short internships with the help of instructors and center directors.

The first group of female graduates depended more than their male counterparts on the personal efforts of instructors to secure jobs. Some project team members, particularly the technical specialists, contacted employers, went along for job interviews, and made a strong effort to find jobs for the women of AID-sponsored classes. The project Psychologist assisted by organizing job-searching seminars in writing résumés and application letters, job interview skills, analyzing employment ads, and discussing conditions of employment.

OFPPT operates a placement unit in its Research and Development Office (Service Etudes et Développement). This unit, created in 1980 on the initiative of the Human Resources Economist, analyzes employment ads and employment information collected during internships and advisory council meetings. It also coordinates the placement of students in the Casablanca area with training center directors. Some students obtain permanent employment in the establishment where they took their internship.

1.2. Follow-Up

Two follow-up surveys were conducted by OFPPT and the project Psychologist to determine the extent and status of employment of female graduates. These surveys were conducted in September 1981 and in February 1982. The results suggested that it was difficult for female graduates to find employment (only 42 out of 76 and 32 out of 59 graduates were employed in 1981 and 1982 respectively) and recommended the development of a formal placement system. No other surveys were conducted since then.

In addition, all three technical specialists visited their female graduates during early months of employment, although this task was contractually assigned to the drafting specialist only.

1.3. Evaluation of On-the-Job Performance

A system was to be initiated and developed in collaboration with OFPPT to evaluate the on-the-job performance of female graduates. The three technical specialists did occasionally visit employed graduates and discussed their performance with employers. Although some of this information was fed back into program development and led to changes in entry-level requirements, program adjustments and revision, this important activity was not systematic, did not occur often enough, and was not formalized.

1.4. Guidance and Counseling

The project Psychologist was assigned the task to assist OFPPT in the guidance and counseling of employed graduates. The study she undertook, described in as the Socio-Cultural report, aimed at addressing this and determining what could be and needed to be done in this area. The recommendations and suggestions in this study did however not lead to systematic guidance and counseling procedures, and no other activities were undertaken in this area.

2. Attainment of Objectives

As outlined above, there are four distinct areas to this component where assistance could have been provided to OFPPT: the employment of female graduates, the follow-up of employed female graduates, the evaluation of the performance of employed female graduates on their jobs, and the provision of guidance and counseling services to these females. Partly because this distinction was never made clear anywhere during the project, and partly because a number of advisers were not able to attend sufficiently to these activities, this component has not been successful. More precisely, the employment of female graduates still depends to a great extent on individual initiative rather than on a well-established procedure. Although the placement rate of women graduates is approximately 70 percent at the end of the project, these efforts have not yet led to a systematic placement activity. Follow-up data were collected on two occasions and pointed to the need for a placement unit; the data collection on employment conditions of graduates was however discontinued after 1982. On-the-job evaluation was conducted on an individual periodic basis as was the case with guidance and counseling.

3. Conclusions and Recommendations

Taking into consideration that women face serious difficulties in finding employment, the efforts in job placement, follow-up, evaluation, and counseling need to be strengthened and systematized. It is recommended that OFPPT develop a systematic job placement service. This service should assist both male and female students in finding employment. In addition, women should continue to be trained in job-hunting and related skills, and periodic counseling should be provided to employed graduates.

Follow-up data collection should again be taken up and tracer

studies developed to determine how the training affects the career and earning potential of women. It is also essential that data be collected systematically on graduates' on-the-job performance to keep the training job-oriented.

Returning participants should be assigned to these tasks to assist OFPPT graduates in their integration in the economy. The computer purchased under this project should be used not only to systematize placement efforts as OFPPT is planning to do but also to keep track of the careers of graduates.

V. THE TWO TECHNICAL REPORTS

The bulk of the Human Resources Economist's time and a significant portion of the Social Psychologist's time have been devoted to the work described in the two technical reports: "Investigation of the Vocational Training Needs of Female Personnel" (Enquête sur les besoins en formation professionnelle du personnel féminin, referred to as the "Economic Report"), and "An Analysis of the Status of Employed Women in the Commercial and Industrial Sectors in Casablanca: Vocational Training to Meet the Demands of the Market Employment Needs" (Analyse de la situation des femmes employées dans les secteurs commercial et industriel à Casablanca: Formation professionnelle face aux exigences du marché de l'emploi, referred to as the "Socio-Cultural Report"). The results of a careful examination of these two voluminous documents (350 pages for two versions of one report and 133 pages for the other report) and their assessment are summarized below.

1. The Economic Report

1.1. Description of Activities

The purpose of this investigation, which took place at the national level at OFPPT's request and the other parties' concurrence, was to constitute an important data base on employment possibilities, particularly for Moroccan women in the commercial and industrial sectors.

The project was ambitious, requiring the preparation and printing of an official, colored questionnaire, mailing it to over 7,500 employers, compiling exhaustive lists of industrial establishments, conducting large-scale follow-ups and carrying out elaborate data analysis and interpretation tasks. These activities lasted 37 months (October 1979 - October 1982) during which time other activities came practically to a halt for periods of time, for example, while waiting for a special typewriter for statistical tables. (This typewriter was in any

case superfluous since all the tables produced in the report could have been typed on a regular typewriter and then reduced on a photocopy machine.) The preparation phase of the investigation lasted eight months (22% of the time), the data collection phase lasted six months (16%), and the analysis phase lasted 23 months (62%). The proportion of the Human Resources Economist's time used for this project was considerable, estimated at about 90% of his total time.

The methodology consisted of identifying the population of industrial establishments that employed ten persons or more, which initially totalled 7,541 establishments, and mailing each a questionnaire that attempted to measure the characteristics described below. After two reminders were mailed to the non-respondents, a total of 2,734 responses was collected. Correlational techniques were then used to test whether the nonrespondents differed significantly from the respondents. The data were then analyzed, and a number of conclusions and recommendations were drawn.

1.2. Attainment of Objectives

The major objectives of the investigation can be grouped into three categories, which are presented and discussed below.

- a) Obtain the number of employees in industry by sex, profession, economic activity, and vacancies.

This objective has been attained only theoretically since the calculations were for the period up to May 1980. To be useful, the findings need to be updated, and no provision for such activity was outlined in the report.

- b) Estimate present and future needs in industry for qualified female workers. The figures calculated to this end are rather simplistically

obtained, on the basis of a linear growth rate of 18.5% based on data interpolated from 1978 to 1980 only, rather than directly from the investigation results (page 23 of the report submitted by the AMIDEAST Economist, and page 70 of the official OFPPT version).

c) Assess the experiences and attitudes of employers regarding the employment of female personnel.

Although this aspect is more socio-psychological than economic, the analysis provided sheds light on some general issues that may interest OFPPT.

1.3. Discussion

The fact that the entire population of 7,524 establishments was used for the investigation rather than only a representative sample has proven to be a nightmare for the investigators. This is almost always the case, even with smaller populations, and the experienced investigator would refrain from using entire populations. In this case, a representative sample of about 1,000 would have been sufficient and would have permitted great gains in time.

After the population was carefully reviewed in retrospect, the proportion of nonrespondents was found to be 48%. This is relatively high, considering the fact that the questionnaire was official, compulsory, and that two reminders had been mailed to arrive at this figure. Since it is generally accepted that nonrespondents may differ substantially from respondents on the traits being measured by a questionnaire, it follows that the data provided by the respondents cannot be generalized to the entire population unless an estimate of the data from the nonrespondents is included. The statistical arguments advanced in the report to test for the similarity between data from respondents and data from nonrespondents were based on intercorrelation techniques.

These techniques have been improperly used for this purpose and contradict each other not only within this table (Table 4, p. 11), but also within all intercorrelation tables provided throughout the report (Table 10, p. 32 and Table 43, p. 128). In fact, the results of the investigation would have to be considered very doubtful because of this discrepancy alone, since no concrete evidence is provided to suggest that the data provided by the respondents are representative of the entire population. Fortunately, and perhaps almost by coincidence, 86% of the respondents were large-scale industries that employ 90.2% of the national work force. This situation, then, allows the results to be generalizable to large-scale enterprises only, with a certain margin of error; they are, however, not representative of small enterprises.

Furthermore, a careful checking of other data revealed a mistake in the distribution of jobs and vacancies throughout the report. This mistake is detailed in Appendix 9.

In summary, the dimensions chosen for this investigation were over-ambitious, and have weakened rather than strengthened its value. Because of the obsolescence of the data and the inaccuracies found in the analysis, its uses for OFPPT are limited and are certainly not worth the investment (see Chapter VII for the cost of this document and for the document discussed below). The attitudinal part of the investigation suffers less from these two deficiencies than does the employment investigation part, and may, therefore, be of some use. It must be kept in mind, however, that the results of this part of the investigation are applicable to large-scale enterprises only and not to small ones as the report claims.

It has been reported that OFPPT has decided to make this document available for a ministry-level study on the trilogy: Education-Training-Employment. A careful cross-validation of the results is advisable before such action is to be taken. It

may also be fruitful to OFPPT to disseminate a revised and condensed version of this report - perhaps the attitudinal part only - to the various enterprises, clearly pointing out its limitations. Such feedback will encourage additional participation in similar activities and will increase the employers' awareness of the employment of Moroccan women.

2. The Socio-Cultural Report

2.1. Description of Activities

This report describes an investigation based on interviews that took place during three weeks in the summer of 1981. The final report was submitted to OFPPT in February 1983, after a delay of 15 months that may have been in part due to the difficulty of finding a research assistant and a typist.

With the help of college girls who were being trained at OFPPT, 122 copies of a long and poorly written interview form were administered to collect information from employed women and their husbands on working conditions for these women and the impact of their employment on their household. The interview form was neither pretested nor constructed in a way to facilitate the quantification of the responses. Furthermore, more than one question bore the same number, so that the data tabulated on the basis of question numbers cannot be interpreted correctly.

2.2. Attainment of Objectives

The objective of the study was to investigate the social, cultural, and economic constraints affecting the employment of women graduated from OFPPT centers. The interest of OFPPT for such investigation is evident. To achieve this objective, answers were to be solicited for a number of questions, including:

- a) Why don't you work? and
- b) Why do you (or don't you) want to work?

Hence, to answer these questions the population should have encompassed non-working but trained women, employed women, and even employers. Instead, the investigator chose only employed women for the interview and ended up seeking answers to only one of the questions that should have been addressed, namely: What are the difficulties encountered by a woman already employed?

2.3. Discussion

As outlined above, the objectives of the investigation were not correctly defined, with the result that an incorrect population was targeted and insufficient data was gathered.

Another important weakness in the investigation was the sample size. In contrast to the previous report discussed, the sample size in this case was rather small to start with, that is 122. The major problem, however, related to the characteristics of this sample. The investigator describes the targeted population (p. 3) as women having received the same type of training as OFPPT trainees and having positions similar to those that an OFPPT graduate would have. Instead, her sample of 122 had the following characteristics:

- a) 50% of the sample was made up of women having ten or more years of work experience;
- b) 57% of the sample received their training in private institutions;
- c) 51% of the sample was made up of women working in the commercial sector; and
- d) only 5 out of 13 professions practiced by the women interviewed are among those that constitute OFPPT's program.

Based on these characteristics, the sample used is not representative of the target population. Consequently, the

results of the investigation cannot be generalized to those women trained at OFPPT, and therefore are of very little use to help improve the integration of female graduates in industry.

3. Conclusions and Recommendations

There is a remarkable similarity between the actual (though not necessarily the intended) objectives of the two investigations discussed above. In fact, a number of questions asked in the Socio-Cultural investigation have either been directly answered in the Economic investigation, though by a different audience, or could have been easily inserted. One cannot help but wonder why no cooperation took place between the investigators in charge of the two research activities, when such cooperation might have distributed the workload more equitably and probably resulted in a better final product.

The time consumed by these two investigations is also inexplicable and unjustifiable. The responsibility for this poor performance lies on all the parties involved: on the principal investigators in charge, on the contractor's team leader who failed to supervise and control their activities, on OFPPT who was not prompt in demanding the contractor's performance or taking early remedial measures, and on AID/Rabat who did not intercede effectively to remedy the situation.

VI. PARTICIPANT TRAINING

1. Description of Activities

The participant training component of the project was greatly expanded from the originally planned six Master's degree candidates to a total of 23 participants. This increase was made late in 1981 when contract funds were redistributed to reflect decreases made in AMIDEAST's labor line items.

Details of participants' training and status follow:

NUMBER OF PARTICIPANTS	LEVEL OF TRAINING	DATE OF DEPARTURE TO U.S.	ANTICIPATED LENGTH OF TRAINING	CONCENTRATION
2	Master's	Jan 80	3 years	Economics
2	Master's	Jan 80	3 years	Psychology/ Counseling
2	Master's	Jan 80	3 years	Vocational Education
1	Master's	Jan 83	3 years	Computer Sciences
1	Master's	Jan 83	3 years	Electrical Engineering
1	Master's	Mar 83	3 years	Civil Engineering
3	non degree	May 82	1 year	Electricity
4	non degree	May 82	1 year	Electronics
2	non degree	May 82	1 year	Architectural Drafting
1	non degree	May 82	1 year	Technical Drafting
4	non degree	Aug 82	5 weeks	Vocational Program Planning and Evaluation/Teacher Training

The current status of each of the training participants is

presented below:

a) The six original Master's level participants:

- (i) One completed a Master's in Economics. She returned to Morocco following completion of her Master's, was granted a waiver by OFPPT and USAID to return to the U.S. to pursue her Ph.D., and is currently in the U.S. at her own expense.
- (ii) One has not yet completed her Master's in Economics. Her academic standing is unclear though she hopes to complete the degree by June 1983 when her visa will expire. Her maintenance allowance and insurance were discontinued in January 1983.
- (iii) One has completed her Master's in Psychology. She has married a U.S. citizen and does not plan to return to Morocco at the present time. She is currently petitioning for permanent residency status in the U.S. Her maintenance allowance and insurance were discontinued in January 1983.
- (iv) One has completed her Master's in Social Psychology/Counseling and is due to complete an M.B.A. degree in summer of 1983. Her visa has expired and her maintenance allowance and insurance were discontinued in January 1983.
- (v) One has completed her Master's in Vocational Education, returned to Morocco, and is currently working at OFPPT.
- (vi) One has completed her Master's in Vocational Education and is due to complete a Master's in Management Technology in spring of 1983. Her visa

has expired and her maintenance allowance and insurance were discontinued in January 1983.

- b) The three additional Master's level participants are all currently studying intensive English in the U.S. They are scheduled to begin their academic classes during the summer of 1983.
- c) The ten one-year technical trainees have all completed their non-degree programs. They were all due to return to Morocco by the end of May 1983.
- d) The four OFPPT administrative staff trainees have all completed their five-week training programs and have returned to their positions at OFPPT.

2. Achievement of Objectives

The following were the objectives for each participant trainee:

- a) to complete the planned program of study/training;
- b) to return to Morocco in accordance with a given schedule;
and
- c) to work in a relevant position at OFPPT.

Of the six original Master's level participants, only two completed degree requirements and returned to Morocco according to schedule. One returned in time to overlap with the AMIDEAST team and is currently working in the OFPPT division of Research and Development. The second remained in Morocco only a short while, before returning to the U.S. to study for a Ph.D., and did not assume job responsibilities at OFPPT. Two others have completed their originally planned degrees, are nearing completion of additional degrees, and apparently plan to return to Morocco within the next six months. One has not finished her degree and one refuses to return following completion of her program. At present, with the exception of the one participant who is still

working on her first M.A., none have had visas renewed and maintenance allowances have been discontinued.

In regard to the additional three Master's level students, their participation in the project did not begin until 1983 and as such they have not yet accomplished any of the three objectives.

All ten of the one-year technical trainees (all of whom were either graduates of or instructors at OFPPT institutes) completed their planned programs and are due to return to Morocco by the end of May 1983. They are all supposed to instruct at OFPPT institutes.

All four OFPPT administrative staff completed their five-week programs and returned to Morocco where they continue in their regular positions.

3. Discussion

3.1. The Six Original Master's Level Participants

3.1.1. The selection of the participants was made by OFPPT. One participant was already employed by OFPPT and the remaining five were recruited following the issuance of an announcement soliciting candidates with undergraduate degrees. All six of the participants had educational backgrounds in economics. The lack of previous experience in psychology and vocational education on the part of the four who were to major in these areas was a disadvantage to them and necessitated that they take some additional basic courses.

3.1.2. Formal job descriptions delineating specific tasks to be undertaken by participants upon their return to Morocco were not provided to

the participants prior to their departure for the U.S. Rather, participants were to be placed in relevant divisions of OFPPT upon completing their academic programs, where they and the division heads would identify work responsibilities. However, OFPPT has included salaries for all six participants in its current budget and upon request by the final evaluation team, provided formal job descriptions (Appendix 10).

The summer internships in Morocco following their first year of study gave participants an opportunity to become more familiar with the work of OFPPT and to have an idea of their possible functions. It also provided them with some exposure to the project; its objectives, activities and the relationship of their studies to the project.

- 3.1.3. OFPPT, AMIDEAST and USAID are all concerned that most of the original six participants, due to return to Morocco upon completion of their first degree by December 1982, have not yet returned. Actions have been initiated to expedite their return: AMIDEAST and OFPPT have written to the participants and AMIDEAST has referred the matter to the Immigration and Naturalization Service (INS). However, the tendency of graduate-level students to prolong their stays in order to complete degree requirements or to pursue additional degrees appears to be generally accepted as a normal (albeit unfortunate) occurrence. The consensus among OFPPT and AMIDEAST staff is that most

of the participants will eventually return to Morocco, will fulfill their 8-year work obligation with OFPPT and will make significant contributions to OFPPT as a result of their U.S. education. In fact, OFPPT senior personnel feel that even if the participants shifted from OFPPT jobs to private industry which is not likely given the 8 year contractual commitment to work for OFPPT, their expertise would benefit Morocco as a whole.

- 3.1.4. As OFPPT had not developed specific plans and schedules for new activities or expanded efforts to be undertaken specifically by the six participants, the impact of their delayed return has not been felt in terms of critical work not being done. In fact, one has the impression that the participants are viewed more in terms of being a future resource than a present gap.
- 3.1.5. OFPPT is satisfied with the participants' academic performance. In spite of their having remained in the U.S. for longer periods than planned, and in spite of academic difficulties of one participant, by and large the women have been successful in their academic programs. The fact that several are completing more than one graduate degree indicates acceptable levels of academic motivation and achievement.

3.2. The Three Additional Master's Level Participants

- 3.2.1. The areas of concentration for two of these participants (civil engineering and computer sciences) are new subject areas in which

OFPPPT plans to offer training, and these two participants are expected to serve as instructors in these areas at the institutes. The third participant, who is majoring in Electrical Engineering, is expected to continue the work of the AMIDEAST Electricity/Electronics expert.

- 3.2.2. There was a lack of adequate planning and preparation on the part of AID to assure sustained support and supervision of these participants through the entire duration of their academic programs, which extends beyond the AMIDEAST contract completion date. Amendment Five, which was being negotiated at the time of the project final evaluation, is intended to address this issue.

3.3. The Ten One-Year Technical Trainees

- 3.3.1. In general, it was easier to recruit qualified participants for junior college-level or undergraduate-level technical training than to find qualified individuals at the graduate level.
- 3.3.2. The course content of technical training at U.S. academic institutions does not always correspond directly to the training needs of participants or industrial needs in Morocco. For example, the electricity students were unable to study the winding of motors because the repair of certain types of equipment is no longer commonly done in the U.S. Further, it is difficult to know at this point how much of the education/training which was completed

by the participants will be transferred to the Moroccan setting, as the timing of the project final evaluation (May 9-28) coincided with their return (May 24-25).

3.3.3. The technical trainees would have liked to have had more hands-on experience as part of their programs. However, difficulties were encountered in trying to locate industries willing to provide this type of opportunity to individuals who will not be able to remain at work with these companies.

3.4. The Four OFPPT Administrative Staff Trainees

- 3.4.1. Because of the limited period of time spent at Ohio State University, the amount of skills' improvement and/or development which could be achieved was severely limited. Rather than receive comprehensive training in areas which were covered (performance-based teacher education, cost/benefit analysis, evaluation methodologies), the program served more as an introduction to techniques and an exposure to the application of those techniques.
- 3.4.2. As this project is the first under which OFPPT staff are being trained in the U.S., and as American educational methodologies are in many ways different from those in Morocco, this brief visit provided OFPPT administrative staff with an introduction to some of the new ideas and approaches that long-term participants have encountered. The purchase of \$500-\$600 of educational materials which has been made will permit the OFPPT staff to further increase their knowledge in the areas in which they

received their training.

4. Conclusions and Recommendations

To summarize, a meaningful determination of the effectiveness of participant training will be possible only if and when participants return, assume relevant positions in OFPPT, and work in areas that further progress toward the overall goals of the project and/or OFPPT. Certainly, the delay in the return of five original participants has been detrimental as these trainees were destined to replace the contractor's experts.

Upon their return, the original six Master's level participants should be placed in positions which allow them to strengthen project components which have been identified as being weak or requiring additional input. Building upon the work of the AMIDEAST Psychologist, one could assist trainees to gain critical skills needed to seek employment, for example interview skills, job application writing skills. Another could undertake more systematic follow-up of graduates, including a salary study to determine if OFPPT training is a factor in salary level. A third might examine ways of strengthening job placement procedures.

The fact that five of six Master's candidates have not returned to Morocco to work for OFPPT as they contractually agreed to do is alarming. In spite of increasingly urgent and strong communications from AMIDEAST, letters from OFPPT, curtailment of maintenance allowances, and reporting of the problem to INS, three participants are still in the U.S. pursuing unauthorized degrees. Although OFPPT and AMIDEAST staff feel that all participants will return to fulfill their obligations to OFPPT, the current situation described above is serious, provides enough reason to bring into question the participants' commitment to OFPPT and intentions to return to work for the Office for eight years. It appears that all parties have done as much as possible to expedite the return of these participants, although perhaps

another formal letter of warning from OFPPT would help. In selecting future participants, however, serious consideration should be given to selecting people with greater commitment and willingness to accept OFPPT schedules.

42

VII. COST

The purpose of this section is to arrive at an overall financial assessment of the project, including an approximation of the unit cost per trainee and the relative proportions of AID contract funds used for each main category of activity. Allocations as shown in the original contract budget and amendments were examined for this purpose. The following cost-related tables may be found in the appendixes:

- Appendix 11: Summary of Costs-AID Allocations to Contract
- Appendix 12: Allocation of Costs
- Appendix 13: Cost Calculation for Local Training
- Appendix 14: OFPPT Costs of Local Trainees
- Appendix 15: Methodology for Participant Training Cost Computation
- Appendix 16: Participant Training Costs by Category of Participant
- Appendix 17: Cost Calculation for the Two Technical Reports.

An examination of the final allocation (Amendment IV) of the contract budget shows the following distribution amounts and percentages:

	AMOUNT	PERCENTAGE
AMIDEAST personnel, travel and per diem, communications	1,407,752	44
U.S. training (including OFPPT travel)	549,877	17
Equipment	885,771	28
Overhead	356,600	11
TOTAL	3,200,000	100

Overall Budget Changes. Examination of AMIDEAST data show that during the implementation of the project, allocations relative to various types of project activities were significantly modified. The most notable budgetary changes are in the following categories:

- a) AMIDEAST team labor, travel, and allowances (Schedule C) which represented 50.38% (36.46% + 13.92%) in the original budget was cut down to 32.44% (22.08% + 10.36%) in the final budget, and became \$1,038,029. This allocation does not include the labor, travel and overhead cost of AMIDEAST home office. Amendment Two increased AMIDEAST's allowable overhead from 16% to 22%.
- b) U.S. participant training (Schedule E) increased from \$241,641 (10.74%) in the original budget to \$532,717 (16.65%) in the final budget.
- c) Equipment (Schedule F) increased from 17.50% in the original budget to 27.68% (\$885,771) in the final budget. The amount of this increase was \$491,871 of which approximately \$70,000 represents the computer cost. The balance of this increase was spent primarily on technical equipment for the training laboratories.

The cost calculation was computed for three categories of activities within the project: local trainees, participant trainees, and research studies (basically the two technical reports and the computer), with the distribution of costs shown below:

	AMOUNT	PERCENTAGE
1. Local training	1,985,447	62.06
2. Participant training	896,368	28.02
3. The two technical reports	247,188	7.73
4. Computer	70,000	2.19
TOTAL CONTRACT COST	3,199,003	100

1. Local Training

The calculation of the cost of project-sponsored local trainees

takes into account the following major categories: training equipment, project staff, contractor home office and team overheads. The assumptions for the calculations and the proportional allocations for each category are shown in Appendix 13.

The number of women trained locally over the life of the contract is 562, including half of the 176 women who are in their first academic year (1982-1983).

The contract cost of women trained is \$3,533 per student if the cost of the equipment is taken over the life of the project. This cost per capita becomes \$2,304 if the cost of the equipment is amortized over a 20-year period. When the per-capita cost incurred by OFPPT (Appendix 14) that is, \$834, is included, these figures are \$4,367 and \$3,138 respectively.

2. Participant Training

The calculations of the cost for each group of participant trainees included estimated proportional amounts of all budget line items which were considered to be directly related to this activity. The total contract cost per participant in each group was:

\$71,996/participant	6 original Master's candidates for 3 years.
\$73,691/participant	3 additional Master's candidates for 3 years.
\$23,465/participant	10 technical trainees for one year.
\$ 2,167/participant	4 OFPPT administrative staff for 5 weeks.

When travel costs which are borne by OFPPT are included, the per participant costs increase by approximately \$2,000.

An examination of data and calculations related to participant training costs shows that:

- a) The total cost of participant training was \$896,368. Labor and overhead costs for the AMIDEAST home office to support the participants was \$344,792 which represents nearly 40% of the total cost.
- b) The cost per year per participant was essentially the same for the original 6 Master's level students and the 10 one-year technical trainees, respectively about \$23,999 and \$23,465 per year per participant.

3. Research

As mentioned earlier, the cost of research will consist of the cost of the two technical reports and the computer cost.

3.1. The Economic Report

The calculation of the cost for the Economic report is detailed in Appendix 17 and includes labor cost, travel and per diem, overhead, and the cost of the special typewriter. On this basis, the cost of the Economic report is estimated at \$178,617.

3.2. The Socio-Cultural Report

The same basis for cost calculation was used for the Socio-Cultural report (excluding the typewriter). The cost for this report was found to be \$68,571.

3.3. The Computer

The computer price was \$65,000 - \$70,000.

The table which follows summarizes these project costs, showing per-participant costs of training as well as costs for the research reports and the computer.

ITEM	COST, \$
Original Master's candidate (travel cost included)	73,996
Later Master's candidate	75,691
One-year technical trainee	25,465
Five-week administrative staff	4,167
Local trainee - project-life amorti- zaTion (OFPPT cost included)	4,367
Local trainee - 20-yr. amortization (OFPPT cost included)	3,138
Economic Report	178,617
Socio-Cultural Report	68,571
Computer	67,500

VIII. OTHER ISSUE

1. Differences Among and Weaknesses in Project Documents

This section will compare and contrast three basic documents: PP, ProAg, and contract; the basic assumption underlying this discussion is that these three documents must be clear, unambiguous and consistent as far as the project description and implementation goes. A number of such ambiguities and differences have been identified, the most important being pointed out below.

- 1.1. The statement of work contained in the contract is ambiguous in terms of who is responsible for various tasks, and hence outputs. The list of tasks begins with "AMIDEAST will assist the OFPPT to ..." which legally binds the contractor for very little direct responsibility for performance.
- 1.2. No clear and sufficient description of the project was provided in the contract. Except for clause 2.F. in the first page, describing the project as defined in the ProAg, explicit and necessary description (of the kind provided in Annex 1 of the ProAg, for instance), is not available.
- 1.3. Both PP (p. 9) and ProAg (Annex 1, p. 2) included as an integral part of the project an annual review of pilot skills taught and the possibility of substituting them with other areas in which there are immediate needs for trained women. The approach and description of this review are explained in detail, this aspect being described as a point of strength in the project because of the flexibility it lends it. This component was unfortunately dropped from the contract, except for one short statement under the job description of the Human Resources Economist (pages are not numbered

in this document), which assigns to him the responsibility to "... indicate desirable program adjustments ...". This statement, within the context of the contract, is of little value. Consequently, this important aspect of the project has not been implemented.

- 1.4. In the ProAg and its annex, the tasks of the Human Resources Economist included the placement as well as the evaluation of on-the-job performance of female graduates. In the contract, none of these responsibilities were assigned either to this team member or to any other team member. This is not, however, because these activities were no longer part of the project, since they figure clearly among the contractor's responsibilities delineated on the contract first page. The other related observation is that follow-up activities were assigned to only one team member, the drafting expert, and to no other one. These inconsistencies and weaknesses can only be explained on the basis of a lack of attention and insufficient thought in the preparation of the project documents.

2. Project Activities at the Fez Center

The Fez center was originally selected as being the only one that was representative of a rapidly expanding industrial area, hence its unique importance within the project. In addition to business education, the two non-traditional skills for which women were to be recruited as part of this project were drafting and electricity. After the first class selection in 1980, the number of female candidates dropped to the extent that OFPPT suggested to AID to discontinue project activities in Fez, but agreed to make another attempt to revive them. The new Center Director indicated that the current procedure followed for

drafting classes is to admit alternatively classes of female students then classes of male students in these two skills. So in 1980-81 and 1982-83, only males were admitted, whereas in 1981-82 only females were admitted. The reasons for such arrangement are, however, not clear.

The reasons for the deemphasis of the project activities in this center have not been thoroughly investigated. A number of speculations can be made, however:

- 2.1. The lack of dormitory space for females. This reason may have influenced the enrollment of some women living in the area surrounding Fez, but has not been directly connected with the low interest in applying on the part of females.
- 2.2. The lack of publicity to enroll females in particular. The current Center Director speculated that there was insufficient publicity to recruit women in this center. OFPPT contends, however, that the same promotional activities were used in Fez as in other centers.
- 2.3. Remoteness from the center of the city. The Fez center is not conveniently located so that this factor may have discouraged some female candidates from applying.
- 2.4. Logistical difficulties for the team. The remoteness of the city of Fez from Casablanca posed some logistical difficulties to the contractor team. Based in Casablanca, it was difficult for the team to give sufficient attention to both centers in spite of the availability of a vehicle (whether the project vehicle or the rented one).
- 2.5. Socio-economic reasons. The relatively high socio-cultural standard that many Moroccans feel Fez enjoys may have led to a less favorable outlook towards such "blue-collar" trade and/or simultaneously limited

the number of people of low socio-economic status, the most likely clients for such training. The Center Director, however, does not consider this to be an important factor, and believes there are enough such clients in the area.

3. Conclusions and Recommendations

The presence of inconsistencies among the project documents is AID's responsibility, being the party under whose auspices a project is conceived and developed, and being also the party in charge of approving contracts and changes. More careful attention must be given to this aspect by AID.

The ambiguities and vaguenesses that abound especially throughout the contract have deprived the project of some important activities, and at the same time allowed the contractor to satisfy legal obligations by performing very little in some activities. Examples of such situations are illustrated throughout this report. Mainly to blame for these ambiguities is AID, although some blame can be put on OFPPT. If these parties aim at improving the overall project performance and desire to obtain more quantifiable measures of the performance of parties in charge of the project, much greater precision in the project documents is imperative.

Finally, the difficulty to manage centers that are geographically distant can be alleviated by the permanent presence of at least one team member in each major locality that encompasses one or more centers.

IX. PERFORMANCE OF PARTIES

It is interesting to note that the project was USAID/Rabat's and OFPPT's first experience with host-country contracting, as well as AMIDEAST's first experience not only in this mode of contracting but also in undertaking a program effort involving placement and support of a long-term technical team overseas. In fact, a review of related correspondence revealed that OFPPT expressed concerns in 1978 about the appropriateness of choosing the host-country contract mode as far as they were concerned. They cited a number of reasons, including their lack of expertise in dealing with U.S. entities, limited staff resources, constraining bureaucratic procedures, and possible inadequate payment mechanisms, as being serious enough to discourage this type of contractual agreement. Eventually, however, it was this type that was selected.

An evaluation of the performance of each of three parties involved in this project follows:

1. USAID

The responsibilities of AID as stated in the ProAg, and a rating of AID's performance on each one are presented below.*

AID RESPONSIBILITIES BASED ON PROJECT GRANT AGREEMENT

TASK	PERFORMANCE	REMARKS
1. Grant a dollar amount to finance project	●	
2. Finance services of 3 advisors and 3 experts	●	Through contractor
3. Finance participant trainees in the U.S.	●	Through contractor

* Throughout this section the following symbols will be used to represent the performance rating:

○ not performed
 ◐ unsatisfactory performance
 ● satisfactory performance

This table shows that AID's performance was satisfactory on the specific responsibilities listed in the ProAg. However, as the financing agency for the project, AID assumes a variety of other important responsibilities, as detailed in AID Handbook 3. A list of some of these responsibilities and a rating of AID's performance on them is presented below.

AID RESPONSIBILITIES BASED ON HANDBOOK 3

TASK	PERFORMANCE	REMARKS
1. Approve contracts	●	Contract poorly written and not consistent with ProAg and PP
2. Approve changes in the scope of the project	●	Although sufficient written notification was not requested
3. Constant monitoring	●	Allowed significant and unjustifiable delays and unsatisfactory performance
4. Constant contact with parties involved	●	
5. Provides waivers for U.S. visas	●	Allowed one returning participant to depart again
6. Provides waivers for commodities	●	

This list indicates that AID's performance was not always satisfactory. AID's withdrawal of the original RFP and the subsequent publication of the revised version have contributed to the delay experienced in female training start-up and in the procurement of equipment. By overlooking differences between project documents (discussed in detail in the previous chapter), AID has deprived the project of important components, such as the periodic review of skills. It has also failed to remedy some substantial delays in the performance of the

research studies. The granting of a waiver for the first returning participant trainee, thereby allowing her to depart again, is detrimental to the project and was unwarranted.

2. OFPPT

OFPPT was bound by two legal agreements in this project. ProAg with AID and the contract with AMIDEAST. Its responsibilities as stated in the ProAg are presented and discussed below.

OFPPT PERFORMANCE BASED ON PROJECT GRANT AGREEMENT

TASK	PERFORMANCE	REMARKS
1. Prepare adequate classrooms and dormitories	◐	Adequate classrooms but no dorms
2. Provide technical staff	●	
3. Participate in establishing an evaluation program	○	Sporadic assessments, no structured activities
4. Provide timely financial commitment	●	
5. Consult periodically with AID	●	
6. Take necessary measures to expand project in case of success	◐	No sufficient studies on local work opportunities prior to expansion
7. Employ returning participant trainees in appropriate positions	●	Judgment not final since only 1 long-term participant trainee has returned and remained in Morocco to date.

The responsibility of providing adequate dormitories, unequivocally rejected by OFPPT, is a clear breach of the ProAg. It may be that OFPPT has strong and valid motives for this position. Perhaps additional thought on this matter prior

to signing the ProAg would have prevented this change of position. The other weak area in OFPPT's performance was the neglect of the establishment of any serious and on-going evaluation activity to monitor the project and the performance of the parties involved (even the mid-point evaluation report seemed more like minutes of a meeting). Also no studies were undertaken prior to attempting to expand the project in other centers. Especially after the experience of the center in Fez, evidence of outlets in the labor market should have been sought (as outlined in Appendix 1 of ProAg), taking into consideration the socio-cultural particularities of the geographic area in which a center is located.

OFPPT's responsibilities as stated in the contract are presented and discussed below.

OFPPT PERFORMANCE BASED ON CONTRACT AND 4 AMENDMENTS

TASK	PERFORMANCE	REMARKS
1. Provide liaison between AMIDEAST and GOM	●	
2. Facilitate AMIDEAST access to the training centers	●	
3. Provide AMIDEAST with office space	●	
4. Finalize selection and local admission of women candidates for 1981-1982	●	
5. Appoint an analysis and evaluation team	○	Evaluators stipulated in contract not available any longer
6. Train 10 short-term (one year) and 3 long-term (two years) participants in English locally for 4 months prior to their departure	◐	Training not intensive enough

Here again, the evaluation study that was to be performed

prior to the end of the project has not been done. One reason could be that the evaluation team was described in the contract as being made up, in part, of the contractor's team members, most of whom had already left the country (before the end of the project.)

Another set of indices to measure OFPPT's performance can be derived from the ten major responsibilities assigned to AMIDEAST in the contract. Since the contract states that AMIDEAST is to assist OFPPT in performing these tasks, some responsibility on the part of OFPPT is implied, though smaller than that of the contractor. A reasonable interpretation of the document has led to the selection of the following tasks as requiring input from OFPPT

OFPPT PERFORMANCE BASED ON TASKS AS PER CONTRACT

TASK	PERFORMANCE	REMARKS
1. Increase the number of women trainees graduating from OFPPT Centers	●	
2. Carry out a program which will increase the admission of women students to OFPPT Centers	●	
3. Provide counseling and orientation to female students during		
a. training	●	
b. early months of employment	◐	Not frequently enough
4. Increase the awareness of the need for employed women with		
a. trainers	◐	
b. employers	●	
5. Increase the efficiency of placement services for women students who are graduates of these Centers	◐	

On this set, OFPPT's performance is, on the whole, satisfactory, with the exception of areas dealing with placement and follow-up, where, although appreciable efforts are being made, no system has been established to optimize these efforts.

Finally, OFPPT's granting of a waiver to the first returning participant trainee has been detrimental to the project.

3. AMIDEAST

The contractor is, not surprisingly, the party charged with the greatest number of responsibilities in this project. These responsibilities, based on the general tasks stated in the contract, are listed and discussed below.

AMIDEAST PERFORMANCE BASED ON TASKS AS PER CONTRACT

TASK	PERFORMANCE	REMARKS
1. Increase the number of women trainees graduating from OFPPT Centers	●	
2. Carry out a program which will increase the admission of women students to OFPPT Centers	●	
3. Provide counseling and orientation to female students during		
a. training	●	
b. early months of employment	◐	Not frequently enough
4. Increase the awareness of the need for employed women with		
a. trainers	●	
b. employers	●	
5. Increase the efficiency of placement services for women students who are graduates of these Centers	◐	

TASK	PERFORMANCE	REMARKS
6. Initiate a system to evaluate on-the-job performance of women graduates	○	
7. Improve teaching techniques and subject knowledge of trainers in a. drafting b. electricity c. electronics d. commercial accounting e. secretarial skills	● ● ● ● ●	
8. Provide an initial list of training equipment	●	
9. Purchase, ship, and install materials and supplies required to implement the project	●	
10. Organize and manage the training of U. S. participants	●	

Whereas the contractor performed most of these tasks in a satisfactory manner, it neglected somewhat the aspects of job placement, follow-up, and job counseling, as well as the systematization of evaluation of the on-the-job performance of female graduates.

Another set of indexes that can be used to measure the contractor's performance is provided below, based on the Work Plan in the contract.

AMIDEAST PERFORMANCE BASED ON WORK PLAN

AS PER CONTRACT AND 4 AMENDMENTS

TASK	DATE PLANNED	DATE ACHIEVED	PERFORM- ANCE	REMARKS
Finalize contracts with team members	Oct- Nov 79	Oct 79	●	
Orientation and housing arrangements	"	"	●	
Provide list of equipment	"	"	●	
Order project equipment	"	"	●	
Arrival of team in Morocco	Nov 79- Mar 80	Oct 79	●	
Coordinate and install equipment	"	Feb 80- Dec 80	●	
Study baseline data for economic analysis	"	Feb 80	●	
Start participant training program in U. S.	"	Jan 80	●	
Start adapting curricula and teaching methodologies	"	Dec 79.	●	
Submit economic report	Apr- Sept 80	Nov 82	◐	
Submit first year evaluation report	"	Oct 80	●	Annual report submitted, not evaluation report
Supervise 4-week summer o.j.t. for graduating students	"	"	●	

TASK	DATE PLANNED	DATE ACHIEVED	PERFORMANCE	REMARKS
Finalize 2nd-year plan	Apr-Sept 80	---	○	
Supervise study and training for 2 Moroccan officials in U. S.	"	Jul 80	●	Only OFPPT Director General traveled
Submit report to improve training	Oct 80-Mar 81	---	○	
Supervise 4-week summer o.j.t. course	Apr-Sept 81		●	
Submit second annual evaluation report	"	Oct 81	●	Annual report submitted, not evaluation report
Submit written reports on progress of participant trainees	"		●	
Participate in midpoint evaluation	"		●	
Assist women graduates in job placement	"		●	
Follow-up counseling of employed women	"		○	
Submit follow-up study on working graduates	Oct 81-Mar 82	---	●	
Participate in developing plan to replicate pilot program in other Moroccan centers	"	---	○	
Assist in improving job placement mechanism	"		◐	Team active in placement but no impact on <u>mechanism</u>
Assist in improving counseling for graduates	"	---	○	

TASK	DATE PLANNED	DATE ACHIEVED	PERFORMANCE	REMARKS
Supervise a 4-week summer o.j.t.	Apr-Sept 82		●	
Arrange return of participant trainees to Morocco	"		●	
Submit detailed report on participant trainees	"	Oct 82	●	
Assist in selecting new trainees	"		●	Assistance not technical, yet fulfills vague contractual statement
Supervise a U.S. study and business trip for two Moroccan officials	"	Aug 82	●	Only OFFPPT Director General traveled

The contractor's performance on this set of tasks was mixed, being satisfactory in some areas and not satisfactory in others. The contractor performed well on all aspects of participant training. Neglected or unsatisfactorily performed components dealt with research studies: the economic study, a study to improve training, a study to replicate the project, and the second year plan. Another neglected area was the counseling of female graduates.

To measure the extent to which the contractor has fulfilled its contractual commitment to "... provide a team of highly qualified and competent professionals ..." (contract, second page), a comparison of each team member's contractual job description with actual performance was carried out, and is presented in the following table.

AMIDEAST PERFORMANCE BASED ON JOB DESCRIPTIONS AND
INDIVIDUAL RESPONSIBILITIES AS PER CONTRACT

Team Leader

<u>CONTRACTUAL RESPONSIBILITIES</u>	<u>PERFORMANCE</u>	<u>REMARKS</u>
1. Liaison between OFPPT and team	●	
2. Work with center directors in developing implementation in Casa & Fes	●	Not enough personal involvement in centers
3. Oversee work of all other team members	●	Was not able to do so with at least 1 team member
4. Establish evaluation system to monitor project progress	○	
5. Serve as liaison to USAID Morocco for team	●	
6. Oversee equipment list preparation	●	
7. Oversee equipment installation on time	●	

Economist

<u>CONTRACTUAL RESPONSIBILITIES</u>	<u>PERFORMANCE</u>	<u>REMARKS</u>
1. Participate in analyzing employment market for women graduates	●	
2. Participate in analyzing placement possibilities for women graduates	○	
3. Participate in developing methods to evaluate future work requirements	○	
4. Establish ties with employers	○	
5. Establish a program to help employers give feedback on needs	○	

Economist (cont.)

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
6. Analyze training needs	●	
7. Indicate desirable program adjustments	○	
8. Train Moroccan counterparts following their return from U. S.	●	Worked with one participant, the others being still overseas

Social Psychologist

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Study constraints affecting employment of Moroccan women	●	Survey study poorly conducted
2. Use results to work as counselor in this area	●	
3. Provide advice to OFPPT in this area	●	
4. Act as guidance counselor for trainees	●	
5. Act as guidance counselor for graduates	○	
6. Develop recommendations for program adjustment	●	
7. Help transfer responsibilities to participant trainees upon their return	○	Participants had not returned

Drafting Expert

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Participate in curriculum analysis	●	
2. Regularly advise and assist trainers	●	
3. Establish contact with employers and workers	●	
4. Follow up employment graduates	●	

Electricity/Electronics Expert

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Participate in curriculum analysis	●	
2. Regularly advise and assist trainers	●	
3. Establish contact with employers and workers	●	
4. Provide technical advice and recommendations	●	

Business Education Expert

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Participate in curriculum analysis	●	
2. Regularly advise and assist trainers	●	
3. Establish contact with employers and workers	●	
4. Provide technical advice and recommendations	●	

Project Director

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Maintain contact with AID Washington	●	
2. Collect all available data for team members	●	
3. Organize travel arrangements	●	
4. Accompany team leader to Morocco	●	
5. Supervise equipment procurement and shipping	●	

Project Director (cont.)

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
6. Supervise participant trainees	●	
7. Be involved in handling formal evaluation process	○	
8. Be responsible for submitting regular progress reports	●	

AMIDEAST Director in Morocco

CONTRACTUAL RESPONSIBILITIES	PERFORMANCE	REMARKS
1. Conduct in-country orientation for team	●	
2. Arrange for predeparture orientation of participant trainees	●	

This information indicates that the three technical experts performed their tasks very well. The three advisors' performance was, however, unacceptable, most notably the Team Leader and the Human Resources Economist. These members as well as one technical expert who left subsequently proved to be not "... highly qualified and competent ...".

One additional problem with the contractor's performance was the high turnover rate of the team members, especially at the earlier stages of the project, whether because of illness, injury, poor performance, or sheer dissatisfaction. This information is provided in Appendix 18.

The contractor's performance, as analyzed above, may be due to a number of reasons. First, the delay in signing the contract has reportedly resulted in a loss of certain team members originally selected by the contractor for the project, one of whom was the team leader. Another reason may be that the dynamics of the team were in some instances far from conducive to work: deteriorating interpersonal relationships, both at the professional and personal levels, leading to mistrust, loss of authority, and absence of cooperation among some team members (e.g. in conducting research), and even to some loss of credibility for their output on the part of OFPPT.

It should be mentioned, however, that the contractor's overall performance was rather highly rated by the AID/Rabat and Washington Project Officers when compared to projects in the same AID division in Morocco, but with the acknowledgement of some of the contractor's shortcomings. OFPPT's rating of AMIDEAST was also satisfactory on the whole. This favorable evaluation of the contractor is an achievement in and of itself.

Conclusions and Recommendations

The detailed analysis presented above attempted to evaluate all indices related to the performance of the three parties. It is clear that each party involved conducted a substantial number of tasks in a satisfactory manner. Weak aspects in performance have been assessed to help strengthen future projects as well as extend the impact of OFPPT activities. In general, the three parties involved performed their duties in a satisfactory manner. The contractor's performance was, however, less satisfactory than the other two parties. A system that allows more time for the contractor to select its personnel would be of great benefit to all parties involved.

X. OVERALL IMPACT

The basic indices that can be used to measure the overall impact of the project can be constructed on the basis of the project objectives and purpose.

- a) Has the quality of training improved as a result of this project (including curriculum, teacher preparation, orientation, and job placement procedures)?
- b) Have the participant trainees returned and occupied positions that allow them to contribute in enhancing the opportunity of Moroccan women to secure employment as skilled workers in the industrial and commercial sectors?
- c) Have there been more female Moroccans enrolled as trainees, administrators, and trainers and employed in the industrial and commercial sectors as a result of this project?

The answer to the first question is discussed in depth in Chapters III and IV of this report, which indicate that the new technical training programs and the equipment purchased under the project led to a significant positive improvement in OFPPT training. Project activities in selection and job placement, on the other hand, have not improved the system presently used. Although a greater number of female graduates secured jobs during the lifetime of this project, this was due to a great extent to individual efforts of OFPPT and consultant team members.

A definitive answer to the second question cannot be obtained now, since only one out of 19 participant trainees (excluding the 5-week trainees) had returned and remained in Morocco at the time of the evaluation. The discussion in

Chapter VI examines these issues and provides a series of observations on training content, delivery, and logistics. The third question will be addressed below.

One positive impact of the project is the fact that the concept of including females in industrial sectors that were traditionally reserved for males, though only directed toward drafting, electricity, and electronics under the auspices of this project, has had a carryover effect in other industrial sectors as well. Increases in female enrollment were reported in other non project-sponsored skills. Recruitment is taking place for women in almost all OFPPT centers. It follows that accurate indices to measure such impact should be based on the number of females (trainees, trainers, employees) in all industrial sectors rather than only in the three industrial sectors that this project addresses.

1. Female Trainees

Data provided by OFPPT and presented in appendices 6, 19, and 20 show that not only had 650 women been trained in industrial building construction and commercial skills between 1979 and 1983 but also that over 4000 had been trained in all OFPPT centers over the same period. By 1982/83 almost 5500 women had received training in all sectors compared to about 800 in 1979/80. Another indication of success in this area is that in 1979/80, only 7.3 percent of the trainees were women, whereas by 1982/83 this percentage had risen by 5 percent to 12.3. As regards the project-sponsored women alone, the number of graduates until the academic year 1982-83 was 295, with 99 women expected to graduate at the end of this academic year, that is, a total of 394 women (or 455 if we include those who did not graduate).

2. Female Teachers

The total number of female teachers employed at OFPPT in 1978-79 was 38. By 1982-83, this figure had increased to 74 trainers, that is, an increase of 95%. Again, these data are based on the same skills mentioned above.

3. Female Graduates who are Employed

The number of project-sponsored female graduates who were gainfully employed between the years 1979 and 1982 was reported as being 207 as compared to a total number of 295 graduates, that is, a proportion of 70%.

4. Female OFPPT Staff Members

The only long-term participant trainee who has returned to Morocco after her graduation is employed as a staff member at OFPPT. On the other hand, the one participant who had been employed by OFPPT prior to U.S. training is still in the U.S. and does not plan to return in the near future.

Discussion

The consistent increase in the proportion of females in most of the categories mentioned above is an important indicator for the attainment of the project objectives. Overall, the impact is positive, with the greatest increase being in the number of female trainees. By the end of the current academic year the number of project sponsored women trained should well exceed the projected number of 435 (ProAg, Annex 1, page 2). A significant gain was also registered with female teachers who have nearly doubled in number since the inception of the project. The rate of employment is also satisfactory, perhaps as a result of the efforts invested in this area.

It is, however, assumed for this that the girls were employed in relevant jobs.

Conclusions and Recommendations

To summarize, the data available from OFPPT indicate that the overall impact of the project is, today, as positive as could be hoped for. It will, however, remain this way in the future only if the effort to integrate women is sustained at the least with the same intensity. This effort could include the use of mass media to publicize industrial training possibilities for women in both urban and rural areas, and conducting periodic studies to identify new skill areas with proven employment opportunities for women (agrotechnology, information technology,.....).

XI. CONCLUSION

1. Unplanned Effects

A positive effect of the project which may have been hoped for, though not entirely anticipated when the project was designed, has been the increase in the number of females seeking admission to other OFPPT industrial training classes, including carpentry and masonry.

What may be a negative effect which was not anticipated relates to the positions that women occupy following their graduation. In some cases, electronics for example, program graduates working at the skilled-worker level are in positions identical to those filled by untrained women at the same salary levels. There is, however, a tendency to promote the trained women more rapidly.

2. Lessons Learned

Lessons learned and recommendations which relate specifically to this project are included at the end of the appropriate chapters. The following discussion is on lessons learned which are more general and that should be considered when planning future projects of a similar nature.

- 2.1. Projects such as this one dealing with education/training institutions require extra attention in planning and timing of project start-up and project inputs to avoid disrupting teaching schedules. Educational/training institutions must adhere to well-determined timetables.

The arrival of the project staff in October, one month after the start of the fall semester, and the subsequent arrival of the equipment caused serious delays and disruption in the operation of the training centers. These delays reduced the fall semester of the pilot classes by several months.

- 2.2. AID should assure that all project documents are consistent and that all activities of the project are accurately included. In this project, a number of important project elements described in the Project Paper were not included in the contract. It was then difficult to hold the various parties responsible for the proper implementation of the project. Also, the ambiguity surrounding actual responsibilities of parties created difficulty in evaluating their performance.
- 2.3. Pilot projects with more than one pilot location face logistical problems. In this project, it became clear that the team was not able to divide its time and efforts between Casablanca and Fez. The permanent presence of a project staff in each major locality would minimize such logistical problems.

- 2.4. The overall capacities of the host country institutions, including previous experience in negotiating contracts, implementing projects and managing programs, should be considered before selecting the contracting mechanism. A number of weaknesses in this project might be attributed to the selecting of a host-country contract.
- 2.5. AID should not allow participants to depart for U.S. training unless and until clear provisions have been made to support and supervise them for the entire duration of their training. Since the period of training of these participants often extends past the contract duration, such provisions should be taken at the outset of the project.
- 2.6. Given the cost and length of time needed to complete academic degrees in the U.S., careful participant selection is essential. This is needed to ensure that participants are capable of completing degree requirements on schedule and that they are committed to returning to work for the sponsoring institution.
- 2.7. The host-country institution which sponsors participants should be required to identify positions and define job descriptions for participants prior to selecting them and sending them for U.S. studies, in order to:

- help participants make appropriate choices of field of study and courses;
- help the host-country institution to place them in relevant positions upon their return; and
- increase the participants' understanding of the project under which auspices they are sponsored as well as their sense of having an important role within the institution.

2.8. In this project, equipment costs represented 28% of the total budget. Because of the high procurement costs incurred, AID should consider contracting a special procurement company when equipment is a major line item in the budget of a project.

3. Considerations for Future Projects in Morocco

This project confirms a trend common in many education/training development projects which is the tendency to raise entrance requirements. In this project, the entrance requirements for candidates in electronics and industrial drafting have been raised from four to seven years of secondary school. This change excludes a large group of women from developing a career in these areas. This fact, combined with the decision not to provide dormitory facilities for women, essentially excludes rural women with little education -- those who have the greatest need for such services.

Future projects should also cater to the needs of rural women. Given the low population density in rural areas, it is suggested that a pilot project be considered which would utilize mobile training units and specially trained local teachers for the purpose of training rural women in agricultural and agrotechnical skills as well as in literacy. These units could be equipped with extendable shades to create outdoor classrooms (providing shelter from sun and rain), carry light collapsible classroom furniture, and portable equipment for welding, multipurpose wood and/or metal working machines, besides the permanently installed heavier equipment. In this context, OFPPT's past experience with these units should be studied carefully.

The results of this evaluation suggest that OFPPT could benefit from technical assistance in the following areas:

- the development and establishment of systematic placement and follow-up procedures for OFPPT graduates;
- the improvement and computerization of entrance tests;
- the development and implementation of evaluation procedures to monitor training and programs and to assess performance;
- the development and delivery of pre- and in-service teacher training; and
- the examination of actual market needs and employment opportunities to determine additional skill areas to offer trainees.

4. Conclusion

As the project is nearing its end, it is clear that it has been, overall, successful, and that a great portion of its objectives have been successfully attained: the integration of women as trainers and trainees in the industrial skills, the relatively high degree of success in finding employment for these trained women, and the improvement in training curricula. The establishment of a structured job placement and follow-up procedure is the area where the least improvement has been achieved under the project. In the area of participant training the delayed return of several long-term participants is disturbing; the timing of the return of others makes an evaluation of the impact of training impossible at this point.

BIBLIOGRAPHY

Feasibility Study for Pilot Projects to Increase and Improve Vocational Training In Morocco, November 15, 1977, Transworld Management Corporation.

Interim Report Project 608-0147, Industrial and Commercial Job Training for Women, USAID-Morocco, March 7, 1978.

Report on Exploratory Discussion regarding AID Assistance to Nonformal Educational Programs for Women in Morocco, prepared by Nadia H. Youssef, Ph.D., June, 1977.

Contract between - The Office of Technical Training and Job Development, Ministry of Labor and Technical Training, Casablanca. and - America-Mideast Education and Training Services, Inc., Washington, D.C., U.S.A.

Mid-Point Evaluation. Industrial and Commercial Job Training for Women. 608-0147. March 15, 1982.

Project Paper. Industrial and Commercial Job Training for Women. 608-0147. Morocco. 16 June 1978.

Project Grant Agreement between the Kingdom of Morocco and the United States of America for Industrial and Commercial Job Training for Women including Annex 1 and 2. August 14, 1978.

Industrial and Commercial Job Training for Women in Morocco. Number 0147.

First Quarterly Report . February 1980
 Second " " . April 1980
 Third " " . July 1980

Fourth Quarterly Report . January 1981
 Fifth " " . April 1981
 Sixth " " . July 1981
 Seventh " " . January 1982
 Eighth " " . April 1982
 Ninth " " . July 1982
 Tenth " " . January 1983
 Eleventh " " . April 1983

America-Mideast Educational and Training Services, Inc.
 Industrial and Commercial Job Training for Women in Morocco.
 Number O147.

First Annual Progress Report . October 1980
 Second " " " . October 1981
 Third " " " . October 1982

America-Mideast Educational & Training Services, Inc.
 Programme de Dessin Industriel pour les Femmes Marocaines
 par Nolan Callahan. USAID/AMIDEAST/OFPPT

Analyse de la Situation des Femmes Employées dans les Secteurs
 Commercial et Industriel à Casablanca: Formation Profession-
 nelle Face aux Exigences du Marché de l'Emploi. Judith Graeff.
 Ministère du Plan et de la Formation des Cadres. OFPPT.
 7 Février 1983.

Enquete sur les Besoins en Formation Professionnelle du Personnel
 Feminin. Gomez.

Enquete sur les Besoins en Formation Professionnelle du Personnel
 Feminin. OFPPT.

APPENDIX 1
CHRONOLOGY OF THE INDUSTRIAL AND COMMERCIAL JOB
 TRAINING FOR WOMEN PROJECT

<u>DATE</u>	<u>INDICATIVE EVENTS</u>
September 76	PID "Non-Formal Education for Women"
1 December 76	Moroccan Government requests AID to evaluate the <u>Foyers Feminins</u> and the <u>Ouvroirs</u> (Youssef, Sadka, and Murphy, 1976)
January 77	AID Report "An Evaluation of Non-Formal Educational Programs for Women in Morocco"
March 77	Peace Corps Report "Programmatic Initiatives for Women in Development"
June 77	Youssef report on exploratory discussions regarding AID assistance to nonformal education programs for women in Morocco
15 November 77	Feasibility Study for Pilot Project to Increase and Improve Vocational Training in Morocco (Trans World Management Corp.)
7 March 78	Interim Report on Project 608-0147, Industrial and Commercial Job Training for Women
16 June 78	Project Paper signed
14 August 78	Project Grant Agreement signed between Ministry of Labor, <u>Office de la Formation Professionnelle et de la Promotion du Travail</u> (OFPPPT), and USAID/Rabat
March 1979	Issue of Request for Proposal (RFP)

APPENDIX 1 (cont.)

DATE	INDICATIVE EVENTS
March 79	RFP withdrawn by AID
April 79	<u>Second</u> issuance of Request for Proposal
April 79	Submission of Proposals.
20 June 79	Government of Morocco selects AMIDEAST to negotiate a contract with OFPPT to implement and manage the project
8 July 79	AMIDEAST negotiators arrive in Morocco
o/a 10 August 79	OFPPT and AMIDEAST agree on draft contract
o/a 15 August 79	AID/Washington lawyer arrives to review contract
August 79	330 females responded to the OFPPT advertisement for the 145 places available at Casablanca/Fes; 202 took entry test
28 September 79	Host country contract signed between OFPPT and AMIDEAST
October 79	Team arrives in Morocco. Dr. Fisher, team leader; Dr. Nassif, project psychologist; Mr. Gomez, economist; Mr. Comeaux, drafting specialist; Mr. Banville, business educator; Mr. Arzrouni, electronics specialist
October 79	Dr. Nassif encounters an accident
29 November 79	Contract Amendment I
January 80	Mr. Comeaux departed from Morocco following resignation

APPENDIX 1 (cont.)

DATE	INDICATIVE EVENTS
January 80	6 women participant-trainees arrived in the U. S.
January 80	Delayed admission of 177 trainees (41 in Construction and Industrial Design; 29 in Business Education; 44 in Electricity and Electronics)
15 February 80	Girls start drafting courses (no equipment, no instructor)
15 February 80	First shipment of equipment sent
February 80	Economist commenced working on the questionnaire
15 March 80	Mr. Nolan Callahan, drafting expert, arrived to replace James Comeaux
15 March 80	Dr. Graeff, project psychologist, arrived to replace Dr. Nassif (until Dec 82)
March 80	OFPPT defines objectives and mandate of economic survey
March 80	Second and third shipments of equipment sent
16 May 80	OFPPT letter requesting termination of contract of Mr. Arzrouni (electricity/electronics expert)
May 80	Visas obtained from Ministry of Planning and Statistics to launch survey
7 June 80	Questionnaires mailed to 7,541 establishments employing 10 people or more

APPENDIX 1 (cont.)

DATE	INDICATIVE EVENTS
27 June 80	Fourth shipment of equipment sent
July 80	Collection of demographic data on girls enrolled in Casablanca
	Visit of Director General of OFPPT to the U. S.
5 August 80	Second reminder sent out
24 September 80	Contract Amendment II
September 80	Seventh shipment of equipment sent (electric/electronic)
	Amendment II signed
October 80	Visit by AMIDEAST project director
	Eighth shipment of equipment sent (business education and AV materials)
February 81	Mr. Coowar, industrial drafting specialist, arrived in Morocco
1 July 81	Mr. Banville, business education specialist, announces his resignation, effective 1 October 81.
September 81	Employment survey on women conducted by psychologist Mr. Banville left Casablanca

APPENDIX 1 (cont.)

DATE	INDICATIVE EVENTS
October 81	Contract Amendment III
February 82	Employment survey of women conducted by project psychologist Contract Amendment IV
3 August 82	Four OFPPT staff arrived in U. S. (Ohio State University) for a 4-week training course
17 August 82	Socio-Psychological Report submitted
21 August 82	Director General of OFPPT visit to U.S.
31 August 82	Terminate contract of Mr. Callahan, drafting specialist (Amnd. 3)
7 October 82	Dr. Anthony Fisher resigned his post
October 82	Report on Economic Survey submitted to OFPPT
31 December 82	Amendment III termination all AMIDEAST home office employees except Vice President and Rabat Director; appoints Education specialist to administer project from 1 Jan 82 until 30 Sept 84; terminates Team Leader, Psychologist, Economist, local secretary, and driver; and terminates drafting expert effective 31 Aug 82; and extends period of performance of Electricity/Electronics Expert to end of July 1983.
February 83	Report on Socio-Psychological Aspects of women submitted to OFPPT

APPENDIX 2

PEOPLE INTERVIEWED

1. AMIDEAST

Ms. Dorothy Laguardia, Vice President
Ms. Sue Buret, Director, Morocco Office
Ms. Diana Kamal, Project Coordinator
Mr. Feroze Coowar, Electricity/Electronics Expert

2. AID

Dr. Ann Domidion, Human Resources Officer, NE/TECH, Washington
Ms. Sherry Suggs, Acting Human Resources Officer, Rabat

3. OFPPT

Mr. Abderrahman Fassi Fihri, Director General
Mr. Allal Ouahab, Attaché to the Director
Mr. Mohamed Lahlali, Head of the Applied Psychology Division
Mr. Houcine Bensaber, Head of Management of Training Centers
Division
Mr. Brahim Bouraoui, Director of the Institute of Technical
Training, Aïn Borja
Mr. Miloudi El Mokharek, Director of the Institute of
Business Administration, Accounting,
and Secretarial Training
Mr. Benamar Seghrouchni, Director of the Institute of
Building Trades
Mr. Abdelaziz Wydadi, Director of the Fez Training Center
Mr. Ahmed Ibrahimi, Director of the Maarif Training Center
Mr. Mohamed Foulani, Director of the Hay Mohammadi Training
Center
Ms. Nadia Chihani, Research and Development Division; Master's
Level Participant Trainee in Vocational
Education

4. Business Owners

Mr. Bernard Goubet, SADA Electronics
Mr. Jean-François Moreau, Thomson-CSF (Radio electronics)
Mr. Raymond Pomares, TECHMATEL (Telecommunications)

APPENDIX 3
ICTJW INTERVIEW FORM

Institution _____ Personne Interviewee _____

	Changes during contract	Introduced by whom	Profitable or not
Adequacy and effectiveness of selection procedures			
Effectiveness of the skills selected and taught			
Adequacy of contract equipment			
Adequacy of teacher preparation			
Adequacy of the curriculum			

84

APPENDIX 4
ICTJW INTERVIEW FORM

Employer _____

Skill Areas _____

	EMPLOYER	EMPLOYEE
1. Who placed girls?		
2. Working in same location as stage?		
3. Use skills received?		
4. Salary? Comparable to men? Comparable to untrained girls?		
5. Satisfied with training (recommend to friends)? Suggestions on placement?		
6. Problems in social integration?		
7. Problems in Employment integration?		
8. Suggestions on <u>Conseil de Perfectionnement</u> ?		
9. Was your training stage beneficial?		
10. Have you been followed-up since graduation?		

Comments:

APPENDIX 5
ENTRANCE TEST BATTERIES FOR PILOT PROGRAMS

4TH YEAR ENTRY LEVEL

French
 Math
 Concrete Intelligence
 Spatial Ability
 Mechanical Aptitude

7TH YEAR ENTRY LEVEL	
Secretarial	French (Reading Comprehension) French (Spelling) Abstract Reasoning Verbal Intelligence Attention
Accounting	French (Reading Comprehension) French (Vocabulary) Abstract Quantitative Ability Quantitative Reasoning Abstract Reasoning
Drafting and Industrial	French Electricity Mechanics Math Abstract Reasoning Mechanical Aptitude Spatial Aptitude

Distribution of Trainees Placed - by Sector

Sector	1979 - 1980				1980 - 1981				1981 - 1982				TOTAL			
	*I	*A	*P	%	I	A	P	%	I	A	P	%	I	A	P	%
Industrial Drafting	-	-	-	-	80	78	60	77%	68	67	27	41%	148	145	87	60%
Architectural Drafting	20	18	18	100%	36	24	14	59%	47	31	20	65%	103	73	52	72%
Commercial	30	19	19	100%	30	18	18	100%	55	40	31	78%	115	77	68	89%
TOTAL	50	37	37	100%	146	120	92	77%	170	138	78	57%	366	295	207	71%

I - Applied
A - Admitted
P - Placed

69

REPARTITION DES STAGIAIRES PLACEES PAR SECTEUR

SECTEURS	1979 - 1980				1980 - 1981				1981 - 1982				TOTAL GENERAL			
	I	A	P	%	I	A	P	%	I	A	P	%	I	A	P	%
INDUSTRIEL	-	-	-	-	80	78	60	77%	68	67	27	41%	148	145	87	60%
BATIMENT	20	18	18	100%	36	24	14	59%	47	31	20	65%	103	73	52	72%
COMMERCIAL	30	19	19	100%	30	18	18	100%	55	40	31	78%	115	77	68	89%
TOTAL	50	37	37	100%	146	120	92	77%	170	138	78	57%	366	295	207	71%

LEGENDE :
I = Inscrites
A = Admises
P = Placées

9/6

Office of Technical Training and
Job Development (OFPPT)

Director
RUF MARCC STE.
22 Rue de Bethune
Casablanca

November 16, 1983

Dear Sir:

We are pleased to inform you that OFPPT has recently begun a special program to train young women in the industrial, commercial and building sectors (electricity, electronics, architectural drafting, industrial drafting, accounting and secretarial skills).

This program is aimed at integrating Moroccan women into new sectors of economic activity.

Training is being provided within the context of a project undertaken jointly by the Government of Morocco and the United States Agency for International Development (USAID).

All of the trainees in the above mentioned specialties participate in a one month practical, on-the-job training experience. This provides them with exposure to the world of work and allows them to discover how their training relates to the actual practices in industry. As a result of this useful experience, some of the young women have been hired by the companies where they did their practical training.

In order to contribute to the success of this project, to the extent which you can would you kindly examine your personnel needs to determine if you can hire some students of this program.

Counting on your understanding and collaboration please accept our regards.

The Director General

Signed: Abderrahmane FASSI-FIHRI

89

Office de la Formation
Professionnelle
et de la Promotion du Travail

DIRECTION GÉNÉRALE

Réf. : OFP/DG/N° 647

Casablanca, le 16 novembre 1981.....الدار البيضاء

Monsieur le Directeur
RUF MAROC STE.
22, rue de Bethune
Casablanca

Monsieur le Directeur,

Nous avons le plaisir de vous informer que l'OFPPT a mis sur pied un programme spécifique de formation pour jeunes filles dans les secteurs industriel, commercial et du bâtiment (Electricité, Electronique, Dessin de Bâtiment, Dessin Industriel, Comptabilité et Secrétariat).

Ce programme vise l'intégration de la femme Marocaine dans de nouveaux secteurs de l'activité économique.

Cette action rentre dans le cadre d'un projet mené conjointement par le Gouvernement Marocain et l'Agence Américaine pour le Développement International (US/AID).

Toutes les stagiaires des spécialités sus-visées ont bénéficié d'un stage pratique d'une durée de un mois, ce qui leur a permis la découverte du monde du travail et la confrontation de la formation reçue avec les pratiques en vigueur au sein des entreprises. A l'issue de cette expérience, qui s'est avérée fructueuse, plusieurs filles ont été embauchées par les sociétés qui ont accepté de les prendre en stage.

Afin de contribuer à la réussite de ce projet et dans la mesure de vos possibilités, nous vous prions de bien vouloir examiner la possibilité d'embaucher quelques lauréates dans votre établissement.

Comptant sur votre compréhension et votre collaboration, nous vous prions d'agréer, Monsieur le Directeur, l'expression de nos sentiments distingués.

Le Directeur Général

Signé: Abderrachmane EL KHALIL

Office of Technical Training
and Job Development

Center _____ Date _____

or Institute _____

Address _____

RE: Placement of Trainees in practical, on-the-job internships

In order to link professional training to the actual demands of the employment market, OFPPT tries to supplement the classroom training given to students by organizing a practical, on-the-job training component.

Objectives of this on-the-job training are:

- to introduce students to the world of employment (structures, organization, constraints, etc.;
- to compare methods and skills being taught with actual practice within enterprises;
- to establish closer ties between training centers and the business community in order to determine how best to adapt training to the needs of the employment market.

To this end we would like to ask you to accept students for on-the-job training for a specific period of time. If you are able to accept trainees, would you kindly indicate the name of the person we should contact to determine the number of trainees, etc...

It goes without saying that our trainees will follow the regulations in effect in your enterprise. In addition, OFPPT will provide insurance coverage for any work accidents during the training period.

Enclosed is a list of the different specialties taught in our centers.

Please accept our regards.

The Director

Signed:

APPENDIX 8

OFFICE DE LA FORMATION PROFESSIONNELLE
ET DE LA PROMOTION DU TRAVAIL

Centre
ou Institut

....., le

(T-)

M.....
.....
.....

.....

OBJET / Stages en entreprises.

M.....,

Dans le cadre de la politique d'adaptation de la formation professionnelle aux exigences du marché de l'emploi, l'O.F.P.P.T. s'efforce chaque année de compléter la formation dispensée dans ses établissements, en organisant, pour ses élèves, des stages en entreprises.

Ces stages ont pour objectifs :

- la découverte du monde du travail par les stagiaires (structures, organisation, contraintes etc...);
- la confrontation des méthodes et techniques enseignées avec les pratiques en vigueur au sein de l'entreprise;
- l'établissement de relations plus étroites entre les centres et leur environnement économique, en vue de rechercher la meilleure adaptation entre la formation et les besoins du marché de l'emploi.

C'est dans cet esprit que nous vous demandons de bien vouloir admettre des élèves de notre en stage pour une durée déterminée. Dans le cas d'un accord de votre part, nous vous saurions gré de bien vouloir nous désigner la personne à contacter pour déterminer, le nombre des stagiaires etc...

Il va sans dire que nos stagiaires seront soumis à la réglementation en vigueur dans votre entreprise, d'une part, et que, d'autre part, l'O.F.P.P.T. les assure contre tout risque d'accident de travail durant la période de stage.

Nous vous adressons en annexe la liste des différentes spécialités enseignées dans notre

Veillez agréer, M....., l'expression de nos sentiments distingués.

qV

APPENDIX 9
DISTRIBUTION OF JOBS AND VACANCIES BY CATEGORY
IN THE ECONOMIC REPORT

CATEGORY	ACTUAL NO. OF EMPLOYEES
1. High-level personnel	9,807
2. Middle-level personnel	14,527
3. Supervisors (production workers)	19,817
4. Supervisors (administrative)	12,226
5. Technical personnel	15,946
6. Administrative support personnel	64,910
7. Skilled workers	103,897
8. Semi-skilled workers	100,462
9. Non-skilled workers	117,903
TOTAL NUMBER OF EMPLOYEES (ACTUAL)	459,495
TOTAL NUMBER OF EMPLOYEES USED IN THE ECONOMIC REPORT	519,495
DIFFERENCE BETWEEN THE SUM OF EMPLOYEES AND TOTAL USED IN THE REPORT (This error represents 11.5% of the actual number of employees)	<u>60,000</u>

93

Office of Technical Training and
Job Development

Translated from the French
original

Applied Psychology Division

The Project Grant Agreement between OFPPT and AID includes long term training for six young Moroccan women: 2 in Industrial Psychology, 2 in Human Resources Economics, and 2 in Vocational Education. These women were selected by the Applied Psychology Division and are currently pursuing studies in the U.S.A.

Following are the tasks which they will be assigned upon completion of their studies:

I. THE INDUSTRIAL PSYCHOLOGISTS

- Participate in selection procedures organized by the division, particularly selection and orientation of applicants;
- Participate in testing and adaptation of tests used by or developed by the division (achievement and aptitude tests for females, and eventual modifications...);
- Monitor (psycho-pedagogical) the trainees, particularly female trainees;
- Conduct seminars in their area of expertise as part of long-term training, and management of this training;
- Participate in the training of trainers (courses in psychology, statistical applications in psychology, and pedagogy...);
- Strengthen the research unit of the Applied Psychology Division by undertaking demographic and psycho-social studies of program participants;
- Participate as appropriate in all other activities of the Division.

II. THE HUMAN RESOURCE ECONOMISTS

The tasks which will be assigned to the Human Resource Economists may be grouped into 4 principal types of activities:

1) Placement and follow-up of program graduates:

- Establish lists of job openings which correspond to the levels of training offered by OFPPT;
- Establish lists of trainees by level, specialty by region or province;
- Maintain an ongoing dialogue with enterprises in order to know employment possibilities and the requirements of employers and professional associations;
- Follow-up program graduates to know about their professional undertakings;

94

2) Studies:

Planning, organization and implementation of any studies OFPPT might undertake. For example:

- Sectoral, national or regional studies of trained manpower needs;
- Tracer studies of program graduates;
- Evaluations of the results of professional training;
- Feasibility studies related to the offering new types of training or opening new training centers;
- Studies of the cost of providing training.

3) Documentation and Information:

- Annual production of a brochure on OFPPT;
- Production of small brochures and prospectus on OFPPT, its activities, services, etc.;
- Publication of statistics on hiring, training...

4) Planning:

- On the basis of results and data from market analyses and observable trends, make recommendations related to the planning and implementation of training activities that OFPPT may undertake.
- Collaborate in the design of training projects that respond to national plans for economic and social development.

III. THE VOCATIONAL EDUCATION SPECIALISTS

The vocational education specialists will assume 3 main categories of tasks:

1) Preliminary studies related to the development and adaptation of training programs:

- Study quantitative and qualitative aspects in collaboration with the various specialized divisions within OFPPT.
- Study the possibility of introducing new areas for training on the basis of local or national needs.

2) Planning and implementation of programs:

- Improve methods and techniques of instruction in terms of technical content;
- Improve instruction to incorporate a balance of theory and practical work;

95

- Conduct employment studies to determine job openings and the requirements of employers;
- Interpret data from studies on job openings;
- Develop training program content;
- Conduct seminars about the application of programs.

2) Testing and follow-up of programs:

- Assist trainers responsible for the testing of programs;
- Examine end-of-training reports;
- Evaluate results of training;
- Readjust programs on the basis of tests.

SERVICE PSYCHOLOGIE APPLIQUEE

L'accord O.F.P.P.T./A.I.D. prévoit la formation de six filles marocaines en Psychologie Industrielle (2), en économie des ressources humaines (2), et en formation professionnelle (2). Ces filles ont été sélectionnées par le S.P.A. et poursuivent actuellement une formation aux U.S.A.

Les tâches qui leur seront confiées à l'issue de leur formation sont les suivantes :

I. LES PSYCHOLOGUES INDUSTRIELS :

- Participation aux opérations de sélection organisées par le S.P.A. Seront concernées, particulièrement, par les opérations de sélection ~~et de sélection~~ et d'orientation des candidats à une formation I.T.A.
- Participation aux expérimentations et aux adaptations des tests utilisés ou conçus par le S.P.A. (étalonnages, études pronostiques des batteries ^{en ce qui concerne} ~~par rapport~~ des filles et adaptations éventuelles...)
- Suivi psychopédagogique des stagiaires des I.T.A. et particulièrement des stagiaires filles.
- Animation de séminaires, dans leur sphère de compétence, dans le cadre de la formation permanente, et gestion de cette formation.
- Participation à la formation des formateurs (cours de psychologie, de statistiques appliquées à la psychologie et la pédagogie...).
- Promouvoir la cellule recherche du S.P.A. par la production d'études démographiques et psycho-sociologiques des populations stagiaires des I.T.A.
- Participer à toutes autres actions ponctuelles menées par le S.P.A.

II. LES DIPLOMÉES EN ÉCONOMIE DES RESSOURCES HUMAINES :

Les tâches qui seront confiées aux diplômées en économie des ressources humaines peuvent être regroupées en 4 activités principales :

1) Placement et suivi des stagiaires formés en :

- Établissant des fiches d'emplois vacants correspondant aux niveaux de formation existants à l'O.F.P.P.T.
- Établissant des fiches des stagiaires par niveau, par spécialité par région ou province...
- Nouant un dialogue constant avec les entreprises pour connaître les possibilités d'embauche et les exigences des employeurs et des associations professionnelles ;
- Assurant le suivi des stagiaires placés pour connaître leur devenir professionnel.

2) Études :

Conception, organisation et réalisation de toutes les études que l'O.F.P.P.T. pourrait entreprendre. On peut citer :

- études sectorielles, nationales ou régionales sur les besoins du marché du travail en personnel qualifié.
- études sur le devenir professionnel des stagiaires.
- études d'évaluation des résultats de la F. P.
- études de fiabilité lors de la création de nouvelles sections ou de nouveaux centres.
- études sur les coûts de la F. P.

3) Documentation et information :

- réalisation de brochure annuelle de l'O.F.P.P.T.
- réalisation de petites brochures et de prospectus concernant l'O.F.P.P.T., ses activités et ses services etc...
- édition de statistiques ^{sur} l'embauche, la formation...

4) Planification :

- en fonction des résultats et données qui seraient tirées des études de marché, des tendances générales qui seraient dégagées,

faire des recommandations quant au planning et à l'exécution d'actions de formation que l'O.F.P.P.T. pourrait envisager.

- collaborer activement et efficacement à l'élaboration des projets de formation qui seraient proposés lors de la préparation des plans nationaux de développement économique et social.
- susciter des projets et proposer des études ou des réalisations.

III. Diplômées en formation professionnelle :

Les diplômées en F.P. auront à assumer 3 tâches principales :

1) Etudes préliminaires en vue de l'élaboration et de l'adaptation des programmes de formation :

- Etude des besoins quantitatifs et qualitatifs en collaboration avec les services spécialisés de l'O.F.P.P.T.
- études sur l'introduction de nouvelles formations en fonction des besoins locaux ou nationaux.

2) Conception et réalisation des programmes :

- Amélioration des méthodes et procédés généraux de programmation en fonction de l'évolution technique.
- amélioration des méthodes d'enseignement en vue d'une harmonisation des cours théoriques et pratiques.
- réalisation des études de poste de travail en vue de connaître les possibilités d'embauche et les exigences des employeurs.
- interprétation des études de postes
- élaboration des contenus des programmes de formation
- animation de séminaires relatifs à l'application des programmes.

3) Expérimentation et suivi des programmes :

- Assistance aux formateurs chargé de l'expérimentation des programmes.
- exploitation des rapports de fin de formation.
- évaluation des résultats de formation
- réajustement des programmes expérimentés.

APPENDIX 11

SUMMARY OF COSTS-AID ALLOCATIONS TO CONTRACT

CATEGORY	ORIGINAL ALLOCATION (CONTRACT)	ORIGINAL PERCENTAGE OF TOTAL BUDGET (CONTRACT)	FINAL ALLOCATION (AMENDMENT IV)	FINAL PERCENTAGE OF TOTAL RUDGET (AMEND. IV)	INCREASE/ DECREASE IN ALLOCATION
<u>DIRECT COSTS:</u>					
Home Office Labor (Schedule B)	206,684	9.18%	274,207	8.57%	+ 67,523
Project Team Labor (Schedule C)	820,644	36.46	706,446	22.08	-114,198
Project Team Travel/ Allowances (Sched. C)	313,311	13.92	331,583	10.36	+18,272
Project Travel/Per Diem Home Office (Schedule D)	21,005	.93	22,634	.71	+ 1,629
Project Travel/Per Diem Team (Sched.D)	40,039	1.78	57,799	1.81	+17,760
Project Travel/Per Diem OFPPT (Sched.D)	10,277	.46	17,160	.54	+ 6,883
US Training (Schedule E)	241,641	10.74	532,717	16.65	+291,076
Equipment (Schedule F)	393,900	17.50	885,771	27.68	+491,871
Communication (Schedule G)	---	0.00	15,083	.47	+ 15,083
<u>INDIRECT COSTS:</u>					
Contribution to Overhead (Sched.A)	203,036	9.03	356,600	11.13	+153,564
<u>GRAND TOTAL</u>	2,250,537		3,200,000		+949,463

APPENDIX 12: ALLOCATION OF COSTS

Home Office Labor and Morocco Representative:	Local Trainees	50%
	Participant Trainees	50%
Team Leader:	Local Trainees	100%
Technical Experts:	Local Trainees	100%
Economist:	Research	90%
	Local Trainees	5%
	Participant Trainees	5%
Psychologist:	Local Trainees	55%
	Research	35%
	Participant Trainees	10%
Home Office Travel and Communications:	Local Trainees	50%
	Participant Trainees	50%

APPENDIX 13

COST CALCULATION FOR LOCAL TRAINING

A. EQUIPMENT COST AMORTIZED OVER THE LIFE OF THE PROJECT

1. Cost of training equipment (excluding the computer and special typewriter)	885,771 - (70,000 + 2,292) =	\$812,479
2. Labor cost for the project team members plus team travel and allowances minus (95% of the labor cost of the human resource economist and 45% of the labor cost for the project psychologist)	(331,583 + 706,446) - (186,121 + 88,161) =	\$763,747
3. AMIDEAST home office labor for local training: 50 percent	274,207 x 0.50 =	\$137,104
4. Home office travel cost: 50 percent	22,634 x 0.50 =	\$11,317
5. Team and OFPPT travel expenses: 100 percent	57,799 + 17,160 =	\$74,959
6. Communications and other expenses: 50 percent	(15,083 + 356,600) x 0.50 =	\$185,841
<hr/>		
TOTAL OF CATEGORIES 1 through 6		\$1,985,447

NUMBER OF LOCAL TRAINEES:

Enrolled by 7/82-----	366 women
7/83-----	108 women
7/84-----	88 (only half of 176 included)
	<u>562 TOTAL</u>

COST PER CAPITA	$\frac{1,985,447}{562} =$	\$3,533
<hr/>		
COST PER TRAINEE FOR OFPPT (Appendix 14):		\$834
TOTAL COST PER LOCAL TRAINEE:		\$4,367

APPENDIX 13
(continued)

B. EQUIPMENT COST AMORTIZED OVER 20 YEARS

Cost amortized over 20 years:

$$812,479 - \frac{(812,479 \times 3)}{20} = \$690,607$$

Cost per capita: $\frac{1,985,447 - 690,607}{562} =$ \$2,304

Cost per trainee for OFPPT (Appendix 14): \$834

TOTAL COST PER LOCAL TRAINEE

$$2,060 = 834 = \$3,138$$

Office of Technical Training
and Job Development

Applied Psychology Division

Cost Calculation for Local Training

Cost Per Trainee for OFPPT

An examination of the cost per participant trained by OFPPT was undertaken in December 1982. Data upon which the calculation was based are from the training cycle 1980-1981. Separate calculations are given for cost based on actual operating costs only and overall cost including operating costs plus equipment.

I. Cost per trainee for OFPPT: Operating Costs.

CATEGORY OF EXPENSE	COST	PERCENT OF TOTAL
PERSONNEL	24 936 649 , 34	63 , 83
DIRECT TRAINING COSTS	10 652 354 , 40	26 , 79
OPERATING COSTS	4 125 470 , 24	10 , 38
T O T A L :	39 764 473 , 98	100 , 00
COST PER YEAR/GROUP (19 TRAINEES)	102 750 , 58	
COST PER DAY/GROUP	456 , 67	
COST PER HOUR/GROUP	57 , 09	
COST PER HOUR/TRAINEE	3 , 01	
COST PER YEAR/TRAINEE	5 418 , 00	

II. Cost Per Trainee For OFPPT: Operating Costs Plus Equipment.

CATEGORY OF EXPENSE	COST	PERCENT OF TOTAL
PERSONNEL	24 986 649 , 34	40 , 29
DIRECT TRAINING COSTS	10 652 354 , 40	17 , 18
OPERATING COSTS	4 125 470 , 24	6 , 65
RENTAL OF TRAINING FACILITIES AND CENTRAL OFFICES	5 429 140 , 00	8 , 75
EQUIPMENT AMORTIZATION	16 828 251 , 73	27 , 13
T O T A L :	62 021 865 , 71	100 , 00
COST PER YEAR/GROUP	160 263 , 22	
COST PER DAY/GROUP	712 , 29	
COST PER HOUR/GROUP	89 , 04	
COST PER HOUR/TRAINEE	4 , 69	
COST PER YEAR/TRAINEE	8 442 , 00	

105

SERVICE PSYCHOLOGIE APPLIQUEE

APPENDIX 14

EVALUATION DU COUT DU STAGIAIRE

FORME A L'O. F. P. P. T.

Une évaluation du coût du stagiaire formé à l'O.F.P.P.T. a été réalisée en Décembre 1982. Les données prises en considération pour l'évaluation de ce coût concernent l'année de formation 1980 - 1981. Une distinction est faite entre le coût basé sur les dépenses de fonctionnement et le coût global. (fonctionnement et équipement).

I. Prix de revient d'un stagiaire formé à l'O.F.P.P.T. :
Dépenses de fonctionnement.

<u>CHARGES</u>	<u>TOTAL</u>	<u>POURCENTAGE</u>
- FRAIS DE PERSONNEL	24 986 649 , 34	62 , 83
- FRAIS SPECIFIQUES DE FORMATION	10 652 354 , 40	26 , 79
- FRAIS GENERAUX DE FONCTIONNEMENT	4 125 470 , 24	10 , 38
T O T A L :	39 764 473 , 98	100 , 00
- COUT DE L'ANNEE / GROUPE 19 STAGIAIRES	102 750 , 58	
- COUT D'UN JOUR / GROUPE	456 , 67	
- COUT D'UNE HEURE / GROUPE	57 , 09	
- COUT D'UNE HEURE / STAGIAIRE	3 , 01	
- COUT D'UNE ANNEE / STAGIAIRE	5 418 , 00	

APPENDIX 14 (cont.)

II. PRIX DE REVIENT DU STAGIAIRE FORME A L'O.F.P.P.T. : FRAIS DE FONCTIONNEMENT ET FRAIS D'AMORTISSEMENT.

<u>CHARGES</u>	<u>TOTAL</u>	<u>POURCENTAGE</u>
- FRAIS DE PERSONNEL	24 986 649 , 34	40 , 29
- FRAIS SPECIFIQUES DE FORMATION	10 652 354 , 40	17 , 18
- FRAIS GENERAUX DE FONCTIONNEMENT	4 125 470 , 24	6 , 65
- LOCATION DES ETABLISSEMENT DE FORMATION ET SERVICES CENTRAUX	5 429 140 , 00	8 , 75
- AMORTISSEMENT DES EQUIPEMENTS	16 828 251 , 73	27 , 13
<u>T O T A L</u>	62 021 865 , 71	100 , 00
- COÛT DE L'ANNEE / GROUPE	160 263 , 22	
- COÛT D'UN JOUR / GROUPE	712 , 29	
- COÛT D'UNE HEURE / GROUPE	89 , 04	
- COÛT D'UNE HEURE / STAGIAIRE	4 , 69	
- COÛt de l'ANNEE / STAGIAIRE	8 442 , 00	

APPENDIX 15

METHODOLOGY FOR PARTICIPANT TRAINING

COST COMPUTATION

The calculation of per capita participant training costs is based on the following assumptions:

1. The total amount of contract funds to be spent per participant is the same as the total amount which was allocated (according to Amendment Four).
2. Unless stated otherwise contract costs which were charged to participant training are distributed among the 4 categories of participant trainees on the basis of person months of training as shown below.

CALCULATION OF THE DISTRIBUTION OF TOTAL NUMBER OF PERSON MONTHS OF PARTICIPANT TRAINING AS SHOWN BELOW

	Person Months of Training	Percentage of Total
6 original master's candidates 3 years x 12 months x 6	216	48%
3 additional participants 3 years x 12 months x 3	108	24%
10 one-year technical trainees 10 x 12 months	120	27%
4 administrative staff 5 weeks x 4 = 20 weeks 20 weeks = 5 months	5	1%
TOTALS	499	100%

108

CALCULATION OF PARTICIPANT TRAINING COSTS

REGORY OF EXPENSE	AMIDEAST BUDGET TOTAL	AMOUNT CHARGEABLE TO PARTICIPANT TRAINING		48% ORIGINAL 6 MASTER'S DEGREE CANDIDATES	24% ADDITIONAL 3 MASTER'S DEGREE CANDIDATES	27% 10 ONE-YEAR TECH- NICAL TRAINEES	1% 4 OFPPT ADMIN- ISTRATIVE STAFF
		%	actual				
S. Training	532,717	100	532,717	255,704	127,852	143,834	5,327
me Office Labor	274,207	50	137,104	65,810	32,905	37,018	1,371
me Office Travel	22,634	50	11,317	6,111	1,698	3,395	113
mmunications	15,083	50	7,542	4,073	1,131	2,263	75
ychologist cost	195,917	10	19,592*	9,796	9,796	-	-
onomist cost	195,917	5	9,796**	4,898	4,898	-	-
erhead	356,600	50	178,300	85,584	42,792	48,141	1,783
TOTAL COST			896,368	431,976	221,072	234,651	8,669
ST PER PARTICIPANT				71,996	73,691	23,465	2,167

The proportion of the AMIDEAST team psychologist's labor, travel, and housing expense which can be charged to participant training is taken at approximately 10%, with this sum distributed as follows: half for the original 6 Master's candidates; half for the additional 3 Master's candidates.

The proportion of the AMIDEAST team economist's labor, travel, and housing expenses which can be charged to participant training is taken at approximately 5%, with this sum distributed as follows; half for the original 6 Master's candidates; half for the additional 3 Master's candidates.

109

APPENDIX 17

COST CALCULATION FOR THE TWO TECHNICAL REPORTS

The Economic Report

Assumptions:

1. The Human Resources Economist spent 90% of his time for the preparation of this report.
2. Added to the direct labor cost is twenty-two percent to cover overhead cost.
3. One sixth of the travel and per-diem cost allocated in the budget for team are added to this item.
4. The cost of the special typewriter is also included.

$$\left[\underset{(2)}{(115,290 \times 1.22)} + \underset{(3)}{\frac{331,583}{6}} \right] \underset{(1)}{\times 0.90} + \underset{(4)}{(2,292)} = \$178,617$$

The Socio-Cultural Report

Assumptions:

1. The project Psychologist spent 35% of her time on the preparation of this report.
2. Twenty-two percent of her salary is added to that to cover overhead cost.
3. One sixth of the travel and per-diem costs allocated in the budget for the team are added to this item.

$$\left[\underset{(2)}{(115,290 \times 1.22)} + \underset{(3)}{\frac{331,583}{6}} \right] \underset{(1)}{\times 0.35} = \$68,571$$

APPENDIX 18

TURNOVER INFORMATION ON CONTRACTOR'S TEAM

POSITION	REASON FOR DEPARTURE	REMARKS
Team Leader	Resignation	Almost 3 months ahead of time-Not replaced-Personality conflicts with one or more team members
Economist	Contract expiration	Unsatisfactory performance as judged by all parties
Social Psychologist	Injury	6 months idle in Morocco, departs thereafter, substitute arrives a month later
Drafting Expert	Contract expiration	
Electricity/ Electronics Expert	Terminated	Departs April 1980-Substitute arrives 10 months later. Original member not satisfactory, substitute very satisfactory
Project Director	Resignation	Education Specialist appointed instead in January 1983

INCREASE IN THE NUMBER OF FEMALE
PARTICIPANTS IN TRAINING CENTERS
BY SECTOR

U.F.P.P.T.

--

S.P.A.

--

SECTOR	1979 - 1980			1980 - 1981			1981 - 1982			1982 - 1983			OBSERVATION
	Total	Females	% Female	Total	Females	% Female	Total	Females	% Female	Total	Females	% Female	
	Industrial Drafting	3026	49	1,62	3594	120	3,34	4491	291	6,40	7400	513	
Architecture	5031	38	0,65	4696	45	0,96	5396	50	0,93	7407	137	1,85	
Commercial	825	460	55,76	988	611	61,84	1252	812	64,86	1577	1103	69,94	
Tailoring	1042	235	22,55	1169	260	22,24	1230	343	27,89	1337	425	31,79	
TOTAL	10724	702	7,29	10447	1036	9,92	12369	1496	12,09	17721	2170	12,29	

APPENDIX 19
Translated from the
French Original

112

D.F.P.P.T.

S.P.A.

EVOLUTION DES EFFECTIFS DES STAGIAIRES FILLESPAR SECTEUR DANS LES ETABLISSEMENTS DE FORMATION PROFESSIONNELLE

SECTEURS	1979 - 1980			1980 - 1981			1981 - 1982			1982 - 1983			OBSERVATION
	EFFECTIFS			EFFECTIFS			EFFECTIFS			EFFECTIFS			
	Total	Filles	% Filles										
Industriel	3026	49	1,62	3594	120	3,34	4491	291	6,48	7400	513	6,93	
Bâtiment	5831	38	0,65	4696	45	0,96	5396	50	0,93	7407	137	1,85	
Commercial	825	460	55,76	988	611	61,84	1252	812	64,86	1577	1103	69,94	
Tailleur	1042	235	22,55	1169	260	22,24	1230	343	27,89	1337	425	31,79	
TOTAL GENERAL	10724	782	7,29	10447	1036	9,92	12369	1496	12,09	17721	2178	12,29	

OFPPT

SPA

NUMBER OF FEMALES TRAINED BY THE
AID PROJECT COMPARED TO TOTAL NUMBER
OF FEMALE PARTICIPANTS AT TRAINING CENTERS

SECTOR	1979 - 1980			1980 - 1981			1981 - 1982			1982 - 1983			GRAND TOTAL			OBSERVATION
	Total	AID	%	Total	AID	%	Total	AID	%	Total	AID	%	Total	AID	%	
Industrial Drafting	49	-	-	120	80	66,67	291	60	23,37	513	99	19,30	973	247	25,39	Translated from the French original
Architecture	33	20	52,63	45	36	80	50	47	94	137	51	29,93	270	154	57,04	
Commercial	460	30	6,52	611	30	4,91	812	55	6,77	1103	144	13,06	2986	259	8,67	
Tailoring	235	-	-	260	-	-	343	-	-	425	-	-	1263	-	-	
TOTAL	782	50	6,39	1036	146	14,09	1496	170	11,36	2178	294	13,04	5492	650	11,84	

N.B.

1) For the year 1982-83 the breakdown of the number of females in their first year of training within the AID project is as follows: 60 in industrial drafting; 26 in architectural drafting; 90 in commercial subjects, for a total of 176 trainees, with 108 in their second year of training

2) In June 1983 the number of females trained via the AID project will be 474

114

EFFECTIFS DES STAGIAIRES FILLES FORMÉES

DANS LE CADRE DU PROJET A. I. D.

PAR RAPPORT AUX FILLES INSCRITES DANS LES

ETABLISSEMENTS DE FORMATION

OFPPT

SIA

SECTEURS	1979 - 1980			1980 - 1981			1981 - 1982			1982 - 1983			Total Général			OBSERVATION
	Total	AID	%	Total	AID	%	Total	AID	%	Total	AID	%	Total	AID	%	
INDUSTRIEL	49	-	-	120	80	66,67	291	60	23,37	513	99	19,30	973	247	25,39	
BATIMENT	33	20	52,63	45	36	80	50	47	94	137	51	29,93	270	154	57,04	
COMMERCIAL	460	30	6,52	611	30	4,91	812	55	6,77	1103	144	13,04	2986	259	8,67	
TAILLEUR	235	-	-	260	-	-	343	-	-	425	-	-	1263	-	-	
TOTAL	782	50	6,39	1036	146	14,09	1496	170	11,36	2178	294	13,04	5492	650	11,84	

N.B. : 1) Pour l'année 1982-83, il est tenu compte des effectifs inscrits en 1ère année dans le cadre du Projet A.I.D. Ces effectifs se répartissent comme suit : Industriel : 60 ; Bâtiment : 26 ; Commercial : 90 ; soit un total de 176 stagiaires en 1ère Année et 100 en 2ème Année.

2) En Juin 83, le nombre de stagiaires filles formées dans le cadre du projet sera de 474.

112