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THE INDUSTRIAL AND COMMERCIAL JOB TRAINING FOR WOMEN PROJECT IN MOROCCO

by

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SUMMARY

This review of the Morocco Industrial and Commercial Job Skills for Women project is part of the second phase of the Bureau for Program and Policy Coordination, Center for Development Information and Evaluation study of AID's women-in-development efforts in projects implemented between 1974 and 1984. The purpose of the project, initiated in 1979 and completed in 1984, was to provide increased opportunity for Moroccan women to secure employment as skilled workers in the industrial and commercial sectors of the economy. To accomplish this, young women with at least 9 years of schooling were recruited for training in existing Government industrial and commercial skills training centers operated by the Office of Technical Training and Job Development (OFPPT) of the Ministry of Labor. Special efforts were made to inform women about the examination required of candidates for training and to encourage them to apply. For example, the usual OFPPT announcements were rewritten to specifically state that women could apply. The notification was published in French and Arabic newspapers, and all secondary schools with female students were informed. The OFPPT continued to use the state-owned radio and television to announce the entrance examination, but the announcement was revised to indicate clearly that women were eligible. However, channels of information distribution specific to women, such as women's organizations, were not used.

In addition to the national exam, women who applied were given a battery of five to seven performance, language, and aptitude tests, as well as special counseling on the areas of training available and potential career opportunities. It was anticipated that, for the most part, these young women would be of lower-middle income families, 18-25 years old, facing employment difficulties, and thus willing to embark on vocational training oriented to nontraditional areas of employment for women such as industrial drafting and electronics. The initial areas of specialized industrial training for women with 9 years of formal schooling were drafting, electricity, and electronics. Commercial courses in accounting and secretarial skills were offered to women who had completed 12 years of schooling.

Improving women's access to and control over economic resources as individuals was not, per se, a goal of the project; rather, the goals reflected urban Morocco's context, where both young men and women contribute to their families' incomes until marriage and where, increasingly, women continue to work and contribute to household income after marriage. Interviews with those involved in the early stages of the project indicated recognition that even though many of the female trainees might drop out of the labor force to raise families, they were likely to reenter the labor force at a later date because of divorce, widowhood, or the need to contribute to the family income.

The project was seen as a way to improve women's employment opportunities, and thus their economic condition, and to contribute to the development of Morocco's economy through the provision of skilled labor. Thus both equity and efficiency goals motivated project design.

The project provided three trainers with practical experience and professional expertise in electricity/electronics, drafting, and accounting/secretarial skills. In addition, the contractor provided the services of three advisers in educational administration (team leader), student counseling (social psychologist), and job development (human resources economist). Two technical reports were eventually prepared by this team: "Investigation of the Vocational Training Needs of Female Personnel," written by the human resources economist and "An Analysis of the Status of Employed Women in the Commercial and Industrial Sectors in Casablanca: Vocational Training To Meet the Demands of Market Employment Needs," written by the social psychologist. The project also provided long-term university training in the United States for six Moroccans who were to have supervisory activities after the project.

Both midterm and final evaluations of the project noted the overall positive impact of the project and that all the major objectives had been met. Several aspects of the project were considered less than successful, however. Evaluators found, for

example, that by the end of the project the special entrance requirements for women had been dropped and that women were being given the same set of traditional entrance exams as men, that is, math, French, and Arabic. Dormitory space for women at the Fes center had never been provided. In addition, the evaluators noted that no formal job placement and followup mechanisms had been developed, although informal placement efforts were quite successful. Finally, the evaluators found the two technical reports commissioned by the project to be inadequate.

Although the project failed to attain some shorter term objectives, it accomplished precisely what a pilot project should, that is, the initiation of beneficial changes that continue and even deepen after the completion of the pilot effort. During the course of the project, 660 women were enrolled in industrial, construction, and commercial courses.

More revealing, however, is the level of female enrollments in <u>all</u> OFPPT training courses since the initiation of the project. The overall proportion of women enrolled in industrial courses doubled between the academic years 1979 and 1980, and nearly doubled again during 1981/1982. The proportion in construction courses increased by nearly 50 percent between 1979 and 1980 and almost doubled between 1981 and 1982. Steady increases have continued. Instructors at all centers are convinced that dropout rates are similar for boys and girls and that dropouts are not usually due to inability to cope with course requirements,

because entrance requirements and orientation procedures are well-suited to training curricula.

At all centers visited for this evaluation, the staff were quite enthusiastic about women's participation in their training programs. Although all training fields are open to women, in some centers priority is given to female applicants for certain specialties because it is recognized that they will not easily find employment in fields such as automechanics and, therefore, should be given more opportunities in fields such as electronics.

At the time of the final project evaluation in 1983, 70 percent of the women graduates from pilot centers had been placed in jobs. Given Morocco's economic deterioration in recent years, this figure has probably dropped, but because of the lack of monitoring by OFPPT, current data are unavailable. However, there is a consensus among graduates, trainers, and employers that the employment rate for OFPPT graduates is much higher than for women with the same levels of formal education but no vocational skills training.

All the women graduates interviewed for this evaluation were quite comfortable in their positions and had good working relationships with fellow employees. They all earned substantially more than they might have in the public sector because of Morocco's strict system of salary scales based on years of formal education and attainment of the baccalaureate diploma at the end of secondary schooling. None of the interviewees had passed the

baccalaureate exams, but they were earning about as much or more than those who had. All said that their training was completely relevant to their jobs, and they felt confident of their skills. They were respected by their families as contributors to household income, but none felt compelled to contribute to household support. Like their siblings, both male and female, they contributed according to their particular family context.

The cost per local trainee at OFPPT centers varies according to whether the training equipment provided under the project is amortized over 20 years or over the life of the project. Given that 562 women benefited from local training during the life of the project, the cost is relatively low, using either method ($3,138-$4,367). In this case, however, it might be said that every woman trained in industrial skills at OFPPT centers since the inception of the project has benefited because no women were previously trained in these areas. Accordingly, the cost per local trainee will diminish with every graduating class. Such a calculation is not particularly useful for financial analysis, but it clearly points to the multiple effects from this one pilot effort.

The lack of reliable data on dropout rates, job placement, and salaries of graduates indicates a shortfall in monitoring and evaluation. Funds that were devoted to technical reports not critical to project success might have been better used to pro-

vide competent technical assistance in design, equipment, and staffing of a monitoring system for the project.

The Industrial and Commercial Job Training for Women project has been quite successful. It has significantly improved women's access to a productive resource (training), improved the labor productivity of women, enhanced their employment opportunities, and ensured good remuneration for their labor.

Future projects might use a streamlined version of this project design as a prototype for achieving great impact through relatively simple, yet significant change.

PROJECT DATA SHEET

1. Country: Morocco

2. Project Title: Industrial and Commercial Job Training for Women

3. Project Number: 608-0147

4. Project Period:

   a. Initial: September 1979 - March 1983
   b. Extension: September 1979 - September 1984

5. Project Funding:

   a. Initial Funding: $2,250,537
   b. Total Funding: $3,200,000

6. Purpose:

   To provide increased opportunity for Moroccan women to secure employment as skilled workers in the industrial and commercial sectors of the economy.

7. Implementing Agency:

   Office of Technical Training and Job Development (OFPPT), then located in the Ministry of Labor, now located in the Ministry of Equipment.

GLOSSARY

baccalaureate diploma	- Diploma awarded upon successful completion of exams administered nationwide to those who have completed the final year of secondary schooling.
bachot level	- The group or level of people who have completed secondary schooling but have not passed the exam required to receive the baccalaureate diploma.
OFPPT	- Office of Technical Training and Job Development
ouvriers qualifiés	- Fully qualified workers
ouvriers spécialisés	- Semi-skilled workers

1. INTRODUCTION

The Morocco Industrial and Commercial Job Training for Women project was chosen for field study because it has received a good deal of publicity as an innovative attempt to train women in non-traditional industrial skills in the context of a fairly traditional society. However, since the project's inception, there have also been conflicting informal reports about its effectiveness. This field study examined the project's effectiveness from the broad perspective of whether and how the project has affected women generally rather than from the narrower context of whether immediate project goals have been met. It was hoped that lessons could be drawn from this study for use in improving future training efforts directed at nontraditional employment and income generation.

The Morocco Industrial and Commercial Job Training for Women project was a women-specific effort because it focused on integrating women into training programs from which they had previously been excluded. However, the training included both men and women, and both were to benefit from instructional equipment and better trained instructors provided through the project. The project was specific to women in development because its sole focus was women; on the other hand, by attempting to improve women's access to integrated training, it had clear integrationist goals.

The project grew out of the Mission's efforts during 1976-1978 to establish a basis for incorporating women-in-development features into its project portfolio. These efforts included a review of nonformal education programs for women in Morocco and a broader study of women's training needs and resources.[1] Both of these studies pointed to women's lack of participation in post-secondary school vocational training. Training available to women was limited to commercial skills--typing, shorthand, bookkeeping, and accounting. In fact, only women received commercial skills training, except for accounting, which was heavily dominated by men. The Industrial and Commercial Job Training Project was a pilot effort to open up opportunities for women in nontraditional skills training and thus improve their situation in the labor market. Several other USAID women-in-development-oriented projects that were developed during the same period reflected USAID/Morocco's growing interest in women's issues as important not only for equity but also for efficient development.

The Government of Morocco was fairly receptive to the project concept, although it had some reservations about its citizens' potential reactions to the project in the more traditional parts of Morocco, such as Fes. The Ministry of Labor stated that

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[1]Nadia Youssef, Nancy Sadka, and Ernest Murphy, An Evaluation of Non-Formal Educational Programs for Women in Morocco, (Washington, D.C.: AID Office of Women in Development, 1976); and Nadia Youssef, Women and Their Professional Future (Washington, D.C., AID Bureau for the Near East, June 1978).

the Government training programs did not purposefully exclude women but that women were reluctant to seek admission to industrial training courses. In principle, the Government supported integration of the sexes in the training program and also in the labor market. Nevertheless, the Ministry of Labor recognized problems in recruiting and training women and requested that USAID collaborate with the Ministry's Office of Technical Training and Job Development (OFPPT) to establish a pilot program to train women in industry-related areas and to serve as a model in the promotion of industrial training and employment for women. The pilot program was intended for replication throughout the OFPPT system.

2. PROJECT SETTING

The purpose of the Industrial and Commercial Job Training for Women project was to increase opportunities for Moroccan women to secure employment as skilled workers in the industrial and commercial sectors of the economy. This was to be accomplished through a program of targeted skills training and concentrated job development activities by OFPPT. When the project was designed, OFPPT was providing high-level vocational training for men in areas related to the industrial and commercial sectors. Entry was by competition, and candidates who had attained the fourth year of secondary education (approximately 9 years of

schooling) were eligible for admission. Technical and vocational training had been, and still is, accorded high priority by the Moroccan Government; it was given highest priority in the third (1977-1983) Five Year Plan, which was in effect when the project was initiated.

In 1976 there were 33 OFPPT training centers in Morocco. Begun under the direction of the Chamber of Commerce, the centers were later coordinated by the Ministry of Labor. Curriculum content and areas of specialization are consonant with labor market demands and with the structure of production in the public and private sectors.

In the industrial field, specialized training is provided in 25 areas. Admission is competitive, and the equivalent of 4 years of secondary schooling is required. The training period varies from 6 to 22 months. Semiskilled workers (ouvriers spécialisés) graduate after 1 year. About one-third of the best trainees are retained for a second year to become fully qualified workers (ouvriers qualifiés). In construction, the training period varies from 1 to 2 years according to the area of specialization; the minimum requirement for admission is 4 years of secondary education. Tailoring is taught in a variety of courses; the minimum educational requirement for admission is completion of primary education. Commercial training is given in a 1-year typing and bookkeeping course; a minimum of 4 years of

secondary education is required. A higher level of commercial specialization is provided in a 2-year training course in shorthand, typing, and accounting; a minimum of 7 years secondary schooling is required. In addition, the Office de la Promotion du Travail conducts short courses and seminars for workshop supervisory and technical staff, courses for upgrading semi-skilled workers, special pedagogical courses for industrial instructors, and evening courses for apprentices. Instructor training is given residentially in the training centers in Casablanca. The course lasts 2 years and includes both skills training and teaching techniques. Table 1 shows the number of students enrolled in these centers during 1975-1976.

Table 1. Students Enrolled in Training Centers During 1975-1976

Type of Training	Number of Centers	Number of Students
Industrial	19	2,400
Commercial	7	470
Construction	2	250
Clothing, Tailoring	10	859
Total		3,979

Until 1979 the OFPPT centers had restricted the training of women to commercial sector training, that is, to shorthand, typing, bookkeeping, and accounting. Except for accounting, only women received commercial training. Although accounting was open

to both men and women, it was heavily dominated by men. Limiting women's access only to commercial training courses was particularly disadvantageous given socioeconomic conditions at the time the project was being developed. According to the 1971 census, for example, the literacy rate for Moroccan women was only 13 percent, compared with 25 percent for the population as a whole; illiteracy rates for rural women were estimated to be as high as 98 percent. Thirty-seven percent of school-age boys were attending school compared with only 19 percent of school-age girls.

Several factors contributed to these male/female education differentials. The opportunity costs of educating children from low-income rural families are high, as are the actual monetary costs of books and clothing; and although the education of sons is seen as an economic investment by the family, traditionally it has not been viewed as such for girls.

Despite their limited preparation for participation in the labor force, however, women in Morocco were increasingly expected to provide economic support for themselves and their families. Between 1960 and 1971, the number of economically active women had risen by a phenomenal 75 percent; in urban areas, the number of women in the labor force had approximately doubled.

In 1978, women constituted 30 percent of new entrants into the urban labor force, and the proportion of female workers was continuing to rise. The majority of new female laborers were

continuing to rise. The majority of new female laborers were under 25 or over 45 years of age and typically divorced or widowed. Given the high divorce rate (approximately 50 percent), considerable male unemployment, and emigration of men to work abroad, estimates of the proportion of households headed by women in 1978 ranged from 25 to 33 percent. Because households headed by women tend to be larger than those headed by men, the economic burden on women working to maintain their families is usually greater. Sixty percent of working women are members of households where total income for five or six people is less than US$45 per month.

Thus, women's increasing participation in the Moroccan labor force is primarily a result of economic necessity; more women work now than ever before because more women are now responsible to some degree for the economic support of Moroccan households. On the other hand, unemployment rates for women were and still are quite high, especially in the age groups in which new labor force entrants are concentrated. In 1971, 18.8 percent of women aged 40-64 who wanted to work were unemployed; 20.2 percent of economically active women aged 20-24 were unable to find employment. In urban areas, those who manage to find employment in the private sector are concentrated in service jobs (maids) and textile and ready-made clothing industries where wages are low and mobility limited. Since 1960 there has been a 13-percent rise of employment in these areas and a decrease in wages.

Along with high unemployment rates for both men and women, Morocco, like many other developing countries, has a history of shortages of trained technicians and skilled industrial workers. This is largely a result of the traditional and highly formal French education system that accords far greater prestige to academically oriented education than vocational training skills. Yet only 24 percent of girls and 37 percent of boys who begin secondary school complete the final year. Of these, only about one-half pass the grueling exams necessary for the baccalaureate diploma. Those who do not achieve the diploma (the bachot level) are in a very difficult situation. Although they have completed up to 12 years of formal education, in the public sector they are typically hired only as typists and chauffeurs because of inflexible rules that tie salary and job responsibilities to educational attainment. Upward mobility, even after long years of service, is extremely limited for them.

In the private sector, promotion is more dependent on work performance, but hiring practices commonly reflect the same correspondence between educational attainment and occupational category. Thus, lacking technical or vocational skills, the young men and women of the bachot level have very limited employment possibilities, despite the fact that in a country with a literacy rate of 25 percent, the resources devoted to their education have been relatively substantial.

By 1978, there was consensus among Moroccan Government officials and educators that this very vulnerable group should be given priority in specialized training to enhance their employment opportunities and to salvage from the educational system workers who could provide the technical skills that Morocco required to compete in an increasingly industrialized world economy. Moreover, given women's increasing economic responsibilities, especially in urban areas, the Government was willing to provide training to young women in order to develop a previously underutilized human resource.

The Commercial and Industrial Job Training for Women project was thus designed to provide skills training for young women aged 18-25. Typically, they were from lower middle income families in urban areas, had 12 years of formal schooling, and were facing employment difficulties and would thus be interested in vocational training oriented to nontraditional areas of employment, such as industrial drafting and electronics. Improving women's access to and control over economic resources as individuals was not, per se, a goal of the project. Rather, the project reflected the urban Moroccan context where both young men and women contribute to their families' incomes until marriage and where, increasingly, women may continue to work and contribute to household income after marriage. Those involved in the early stages of the project recognized that even though many female trainees would probably drop out of the labor force to raise families, they would

be likely to reenter the labor force later because of divorce, widowhood, or the need to contribute to family income.

Because the project was seen as a way to improve the employment of women, and thus their economic condition, and to contribute to the development of Morocco's economy through the provision of skilled labor, both equity and efficiency goals motivated project design.

3. PROJECT DESCRIPTION

In September 1979 a $2.25 million grant was made to the Government of Morocco to undertake the Industrial and Commercial Job Training for Women project through the OFPPT. The OFPPT training center at Casablanca was selected as one of the sites for the pilot program because 70 percent of Moroccan industry is located near Casablanca, as are the major architectural and construction firms. Fes, a newly industrializing province, was the second site of the pilot activity.

Each center was to have both men and women students, although a separate dormitory was planned for women students at Fes (a development that never occurred). The selection criteria for women students were to be the same as for men, including competition on a national examination given each July. Special efforts were made to inform women of the examination and to encourage

them to apply. For example, the usual OFPPT announcements were altered to specifically state that women could apply. The notification was published in French and Arabic newspapers, and all secondary schools with women students were informed. The OFPPT had previously used the state-owned radio and television to announce the entrance examination; under the project, the announcements clearly indicated the eligibility of women candidates. However, channels of information distribution specific to women, such as women's organizations, were not used.

In addition to the national exam, women who applied 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. Women whose scores fell below the minimum level were eliminated. The profile of each woman at or above the minimum score was then examined to evaluate her abilities in relation to her stated training preference. If the tendency indicated by the profile matched her preference, she would be admitted to the skill program of her choice. If not, she would be informed of the discrepancy and encouraged to join the program that better fit her abilities. In some cases, women who refused the advice were not admitted for training.

The areas of specialized industrial training for women with 9 years of formal schooling were drafting, electricity, and

electronics. Commercial courses in accounting and secretarial skills were offered to women who had completed 12 years of schooling.

Between September 1979 and September 1984, the project provided three expatriate trainers who had practical experience and professional expertise in electricity/electronics, drafting, and accounting/secretarial skills. These technicians were to introduce a more practical, experience-oriented approach to the training program and were to transmit these methods to the Moroccan teaching staff. In collaboration with the staff of the two pilot centers and the teacher training institutes, these technicians were to demonstrate appropriate teaching techniques, teach model units using such techniques, assist in the preparation of teaching plans and instructional materials, review curricula in the areas specified above, supplement curriculum contents, where necessary, to match the skills required for employment, and devise and implement plans for in-service training in the new methods and concepts aimed at improving the quality of instruction at the pilot centers. The contractor (AMIDEAST) was also to provide training equipment needed in the three fields of specialization.

In addition to the three training experts, the contractor provided the services of three advisers in educational administration (team leader), student counseling (social psychologist),

and job development (human resources economist). Two technical reports were eventually prepared by this team: "Investigation of the Vocational Training Needs of Female Personnel," written by the human resources economist (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 Market Employment Needs," written by the social psychologist (referred to as the sociocultural report).

The project also provided long-term university training in the United States for six Moroccans who would supervise staff activities once the project had been completed. Two candidates with bachelor's degrees in economics were to study human resources economics at the graduate level. Upon their return, they were to work closely with the councils in the various regions to analyze the labor market as it affects women workers, to promote job opportunities for women, and to assist in job placement. Two women, after pursuing master's degrees in counseling in the United States, were to replace the project social psychologist in counseling women trainees and workers. Two other candidates with master's work in vocational education, one in industrial skills training and the other in business skills training, would later serve on the central staff of OFPPT.

These six participants were to spend 3 years in the United States, including 5 months of English language training, and were

to return in time to work with the project team for 6 months. Later in the project, three additional master's-level participants were also sent for training in civil engineering and computer sciences, new subject areas in which OFPPT plans to offer training.

Ten 1-year technical trainees were given junior college or undergraduate-level technical training in the United States and were to return to OFPPT training centers as instructors. Four OFPPT administrative staff trainees were given short-term training in performance-based teacher education and evaluation methodologies at Ohio State University.

Under the Project Grant Agreement, OFPPT was to include women professionals on its headquarters staff, to provide industrial and commercial skills training for women at two pilot centers, and to develop a system of job placement and performance evaluation.

Discussions with AMIDEAST and OFPPT officials indicated that project implementation proceeded fairly smoothly. AMIDEAST staff reported that despite some problems in finding appropriate training experts and advisers, the project was generally successful and its effects were positive. The OFPPT staff were enthusiastic about most aspects of project implementation and believed that there has been little or no difficulty in incorporating women's training into their programs. Over the life of the project, 660 women were enrolled in project-sponsored classes.

Both midterm and final project evaluations noted that all the major objectives of the project had been met and that overall impact was positive. Several aspects of the project were considered less than successful, however. For example, by the end of the project, the special aptitude testing for women had been dropped and women were being given the same set of classic entrance exams as men, that is, math, French, and Arabic. The OFPPT staff explained that this shift was made in the spirit of the project: the integration of women into all training phases following the pilot stage. Moreover, OFPPT judged that applying more intensive testing procedures annually to approximately 15,000 candidates was too burdensome. Despite these changes evaluators concluded that selection procedures were adequate.

Evaluators were also concerned that dormitory space for women at the Fes center had never been provided; they did not specify whether lack of a dormitory inhibited women's participation in the project. In addition, they noted that no formal job placement and followup mechanisms had been developed. Despite pledges by the trainees to return from the United States and work for OFPPT for a period of 8 years, only one of the six original long-term participant trainees had done so.

Finally, the evaluators found the two technical reports inadequate. The economic report, which was to constitute an important data base on employment possibilities for women, took 37

months to complete. When it was finally produced in October 1982, its usefulness was extremely limited. The report calculations covered only the period up to May 1980, and they were based on a statistically biased set of responses to a questionnaire on numbers of employees and vacancies in industry. The socio-cultural report, which was to investigate social, cultural, and economic constraints affecting the employment of women graduates from OFPPT centers, was based on an inappropriate target population and a sample size that was too small. The results could not be generalized to women trained at OFPPT, and it too was of little use in helping to integrate women graduates into industry.

The project was concluded in September 1984. Since that time, however, OFPPT has continued to train women in industrial skills.

4. PROJECT ANALYSIS

4.1 Design

The design of the Commercial and Industrial Job Training project contained several important assumptions. First, it was assumed that young Moroccan women, their families, and employers would accept the fairly innovative concept that young women could and should be trained as industrial technicians and would make good employees in their fields. Second, it was at least impli-

citly assumed that only limited special efforts would have to be made to recruit and retain female trainees; that is, that a simple change in advertising language, coupled with word-of-mouth information dissemination, would yield significant returns.

These assumptions are based, perhaps, on a deeper and more overriding belief that a project designed around the intersection of equity and efficiency principles would be successful; that is, improving young women's access to training would lead to the development of human resources important for the Moroccan economy. These assumptions seem to have been correct.

4.2 Project Implementation and Outcomes

When the project was initiated in September 1979, no women were being trained in the OFPPT's industrial job skills courses. The purpose of the project was to integrate women into three areas of industrial skills--electricity, electronics, and drafting--and to improve their training in commercial skills. Recruitment and orientation of women focused on these specialties, as did the provision of training equipment and assistance with curriculum development and teaching techniques.

4.2.1 Training

Table 2 on the enrollment of women in project-sponsored classes over the life of the project indicates that a total of 660 women were enrolled.

Table 2. Female Enrollments in Project-Sponsored Classes

Sector	1979-1980	1980-1981	1981-1982	1982-1983	Total
Industrial	-	80	68	99	247
Construction	20	36	47	51	154
Commercial	30	30	55	144	259
Total	50	146	170	294	660

Source: OFPPT.

More revealing, however, is a look at female enrollments in all OFPPT training sectors since the initiation of the project (see Table 3). The overall proportion of women enrolled in industrial- and construction-sector courses is still much lower than that of men, mostly because courses in automechanics, heavy machinery, masonry, and plumbing still do not attract large numbers of women. However, substantial numbers of women do enroll

Table 3. Percentage of Women Trainees in OFPPT, 1979-1984

Sector	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		Overall Total	
	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)
Industrial	3,026	1.62	3,594	3.34	4,491	6.48	7,400	6.93	9,415	7.25	27,926	5.93
Construction	5,831	0.65	4,696	0.96	5,396	0.93	7,407	1.85	7,971	2.11	31,301	1.40
Commercial	825	55.76	988	61.84	1,252	64.86	1,577	69.94	1,805	79.61	6,447	68.61
Tailoring	1,042	22.55	1,169	22.24	1,230	27.89	1,337	31.79	1,429	30.09	6,207	27.28
Total	10,724	7.29	10,447	9.92	12,369	12.09	17,721	12.29	20,620	13.18	71,881	11.42

Source: OFPPT.

in courses in electronics and electricity, industrial drafting, construction drafting, automation, office machinery repair, and refrigeration and cooling. The relative increases in women's participation in vocational skills training have been quite impressive since the first year of the project (see Table 4).

Table 4. Rate of Increase in Proportion of Female Enrollments

Sector	1979/1980-1980/1981	1980/1981-1981/1982	1981/1982-1982/1983	1982/1983-1983/1984
Industrial	106.0	94.0	6.9	4.6
Construction	47.6	9.0	98.9	14.0
Commercial	10.9	4.9	7.8	13.8
Tailoring	0	25.0	13.9	0

Source: Calculations based on information provided by OFPPT for Table 3.

OFPPT has attracted women trainees by specifically advertising its programs for both young men and young women, a simple but extremely effective approach introduced through the project and continued since its completion. In addition, the office maintains a counseling program based on a two-pronged strategy of working with female applicants to encourage them to choose industrial training and working with employers to encourage them to hire women trainees.

It was difficult to determine dropout rates for women in the OFPPT programs. Figures had been compiled at only one of the four training centers visited for this study, and they cover only 1981 and 1982 graduating classes. These figures indicate that 18 percent of women recruited in 1979-1980 failed to graduate in 1981, and 27 percent of those recruited in 1980-1981 failed to graduate in 1982. Instructors at all the centers were convinced, however, that dropout rates are similar for men and women and that dropouts are not usually due to the inability to cope with course requirements, because entrance requirements and orientation procedures are well suited to training curricula.

Staff at each center visited were, without exception, enthusiastic about women's participation in their training programs. In some centers female applicants are given priority for certain specialties in recognition of the fact that they cannot easily find employment in jobs such as automechanics; therefore, they are favored in specialties that offer more likely employment, such as electronics.

The project has had a great impact on the participation of women in Morocco's overall vocational training programs. Moreover, women's increased and expanded participation can be directly and fully attributed to the pilot project because, prior to the project, there were no advertisements for women trainees, nor were any women accepted into training programs other than in commercial skills areas.

This project has directly improved and significantly expanded women's access to resources. Because OFPPT fully intends to continue and to expand its recruitment of women, the number of women affected by the pilot project will increase with every class of trainees.

4.2.2 Employment

At the time of the final project evaluation in 1983, 70 percent of women graduates of the pilot centers had been placed in jobs. Given Morocco's recent economic deterioration, this figure has probably dropped, but because of the lack of monitoring by OFPPT, data are unavailable to update this figure. There is a consensus among graduates, trainers, and employers, however, that the employment rate for OFPPT graduates is much higher than for women with the same levels of formal education, but no vocational skills training. Staff make consistent efforts to recommend women trainees to employers. Sometimes they even discriminate in favor of women because of the positive feedback from employers of women graduates.

The informal OFPPT placement strategy is usually to convince an employer to accept a woman during her mandatory 2-month apprenticeship, which costs the employer nothing. Typically, employers are so pleased with trainees during this period--because they are well trained and responsible--that they offer

them permanent jobs and often ask the training centers for more apprentices the following year.

Fifteen employed women graduates were interviewed for this evaluation--five of them in depth. Several are the only women in their firms because they are industrial drafters for heavy machinery, which is produced by male factory workers. They all said, however, that they were quite comfortable in their positions and had good working relationships with fellow employees. They all earned substantially more than they might have in the public sector, where salary scales are based strictly on years of formal education and whether the baccalaureate exams have been passed. None of the interviewees had passed these exams, yet they were earning about as much and sometimes more than those who had. All said that their training was completely relevant to their jobs and that they felt confident of their skills. Most said that they would not now aggressively pursue better jobs because of the difficult employment situation in Morocco. They were all pleased to have been trained and to be employed where they were.

Judging from women trainees' employment rates and wage levels, the project has helped improve the labor productivity of women, increase their employment, and ensure good remuneration for their labor.

Employed female trainees were also questioned about control over their salaries and how they used their income. Although

they were respected within their families as contributors to household income, none felt compelled to contribute to household support. Like their siblings, both male and female, they contributed what was appropriate, given their particular family context. Several young women said that they would be pleased to contribute more to the household, but that their parents wanted them to save or spend their earnings as they wished. In Morocco, parents commonly support both sons and daughters until marriage. Most of the young women interviewed were spending part of their salaries on clothing and recreation and saving the rest.

4.3 Cost Effectiveness

The final evaluation of the project, undertaken by Creative Associates, Inc., details the costs of the project. Table 5 lists these costs.

Table 5. Costs of the Industrial and Commercial Job Training for Women Project

Item	Cost per Participant or Item (U.S. $)	Number of Participants
Original Master's Candidates (travel cost included)	73,996	6
Later Master's Candidates	75,691	3
One-Year Technical Trainees	25,465	10
Five-Week Administrative Staff	4,167	4
Local Trainees, Project-Life Amortization (OFPPT cost included)	4,367	562
Local Trainees, 20-Year Amortization (OFPPT cost included)	3,138	562
Economic Report	178,617	
Sociocultural Report	68,571	
Computer	67,500	

The cost of the two technical reports is high, particularly that of the economic report, which generally is regarded as poor and of little use to the project.

The cost per trainee of the 1-year technical training program seems reasonable given the success and usefulness of the program. Costs for master's candidates were high, but given U.S.

costs for travel, room and board, tuition, books, and so on there may have been no way to lower them. The cost does make it imperative, however, that master's trainees be given the opportunity to fully exploit their training, whether in OFPPT or elsewhere in the Government or private sector of Morocco. All of the technical trainees are currently teaching and developing curricula in OFPPT training centers; their training seems to have been well suited to their current positions, and they are readily able to pass on their skills to their students. All the master's trainees are currently fulfilling their obligation to work for the Government of Morocco for 8 years. However, they are working in program and policy areas in OFPPT or its parent ministry; thus they are involved in a variety of assignments, not all of which are directly related to vocational education. Their credentials, however, will be quite useful in the Government, where responsibility and promotion are almost exclusively based on formal educational attainment.

The cost per local trainee at OFPPT centers varies according to whether the training equipment provided is amortized over 20 years or over the life of the project; 562 women benefited from local training during the project. Using either method, the cost per trainee is relatively low ($3,138 to $4,367). In this case, however, it might be said that every woman trained in industrial skills at OFPPT centers is a beneficiary because no women were trained in these areas prior to the project. Thus, the cost per

local trainee will diminish with every graduating class. The approach is not useful for financial analysis, but it clearly points to the broader benefits stemming from this one pilot effort.

4.4 Overall Impact

Although the project may have failed to attain some shorter term objectives, it is clear that it accomplished precisely what a pilot project should accomplish, that is, the initiation of beneficial changes that continue and even deepen after the completion of the pilot effort.

As the final evaluation notes, the technical reports prepared under the project proved of little value. Since the evaluation, however, four of the six long-term participant trainees have returned to work for OFPPT or its parent ministry (now the Ministry of Equipment). All of the shorter term trainees are working in OFPPT training centers; both they and their students have obviously benefited substantially from their training in the United States. Failure to establish a formal placement system, due in part to OFPPT's hesitance to perform functions that are the specific mandate of the Ministry of Labor, has been offset by informal placement efforts that appear to be quite successful, given the Moroccan economic context. Finally, although elaborate admission procedures for women have been discontinued, screening

and orientation efforts continue. The growth in numbers of female trainees and their low dropout rates indicate a fairly successful approach to admissions and student counseling. The present system is, in fact, based much more firmly on an integrated approach to women and employment.

More important, as can be seen from the above discussion of project outcomes, the central question of whether the project significantly and positively affected the situation of women and the development efforts of the Government of Morocco can be answered with a resounding affirmative.

4.5 Monitoring and Evaluation

The availability of specific, reliable data on dropout rates, job placement, and salaries of graduates indicates that the project has fallen short in monitoring and evaluation. Funds devoted to technical reports that were not critical to project success might have been better used to provide competent technical assistance to design, equip, and staff a system for monitoring the integration of women into vocational skills training.

4.6 Other Issues

The following three issues should also be noted with regard to this project:

1. Job Placement. As the Creative Associates evaluation noted, there is no formal job placement mechanism at OFPPT. Such a mechanism might be beneficial for both male and female OFPPT graduates given the increasingly difficult economic situation in Morocco. On the other hand, it might make job placement overly bureaucratic. Currently, the training centers establish good relationships with employers and place women (and men) without the tedious paperwork that can discourage employers. It may be more cost effective to simply provide good training and informal placement assistance, and then let the market work.

2. Emphasis on certain specialties. Although the priority given to women in certain specialties such as electronics or drafting is done with good intentions, the effects on women's wages, should women come to dominate the field, are unclear. Will their wages fall or fail to increase as rapidly as when men dominated these professions? This kind of wage depression has occurred in the United States when women have moved into previously male-dominated fields. There is no danger of this in Morocco at present because the percentage of women in technical occupations is still low, but it may be a long-term consideration.

3. Supply of skilled workers. The Government of Morocco is giving new priority to vocational training and is almost doubling the numbers of trainees in all its skills training programs. This will increase the supply of skilled workers and may result in greater difficulty in finding employment and in lower wages, and so on. It will be important, therefore, to adapt training to real industrial needs.

5. LESSONS LEARNED/RECOMMENDATIONS

1. The Industrial and Commercial Job Training for Women project has been quite successful. It has significantly improved women's access to a productive resource (training), improved the labor productivity of women, enhanced their employment opportunities, and ensured good remuneration for their labor. Future projects might refer to this project design as a prototype for achieving significant impact through relatively simple change.

2. Given that preproject studies indicated a general demand for skilled workers, there was no real need for the technical reports commissioned under the project, and they were completed too late to be useful. In the future, it might be more cost-effective to forego such studies.

3. Future projects of this sort might be designed on the basis of shorter term participant training and provision of

equipment in return for relatively costless efforts to recruit women trainees. In this project, short-term, specific participant training delivered major beneficial results at low cost. Longer term training may contribute to the development of a country's human resources but may not be necessary when reasonably well-staffed host country institutions are operating prior to project implementation.

4. Future projects might put more emphasis on job placement components; however, they should also provide the requisite technical assistance, equipment, and staff to ensure that a simple and effective system is developed.

5. Finally, monitoring mechanisms should not be overlooked in future projects. These mechanisms allow for fine-tuning of project components during implementation and provide the basis for evaluating project success and the desirability of replication.