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CLASSIFICATION  
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-44

1. PROJECT TITLE  Vocational Training			2. PROJECT NUMBER 278-0238	3. MISSION/AID/W OFFICE USAID/JORDAN
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>PES 85-6</u>	
A. First PRO-AG or Equivalent FY <u>79</u>	B. Final Obligation Expected FY <u>80</u>	C. Final Input Delivery FY <u>83</u>	<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION 7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>9/80</u> To (month/yr.) <u>9/85</u> Date of Evaluation Review <u>9/85</u>	
8. ESTIMATED PROJECT FUNDING				
A. Total \$ <u>3.025 M</u>				
B. U.S. \$ <u>2.125 M</u>				

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

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., program, SPAR, PIC, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>final project evaluation. No follow-on projects anticipated or planned.</p>		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan & B. CPI Network	<input type="checkbox"/> Other (Specify) _____	A. <input type="checkbox"/> Continue Project Without Change		
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIOT	<input type="checkbox"/> Other (Specify) _____	B. <input type="checkbox"/> Change Project Design and/or		
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIU/C		<input type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIC/P		C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Name and Title)		12. Mission/AID/W Office Director Approval	
<p><i>Abdullah Ahmad</i> Abdullah Ahmad, Project Officer USAID</p>		<p>Signature <i>Gerald F. Gower</i> Typed Name Gerald F. Gower Director</p>	
		<p>Date <u>3 February 1986</u></p>	

**NEAR EAST EVALUATION ABSTRACT**

PROJECT TITLE(S) AND NUMBER(S) Vocational Training, 278-0238		MISSION/ACR/FFPC USAID/Jordan	
PROJECT DESCRIPTION Purpose: To increase skills of the work force; economic opportunities for youth from lower income families; and the understanding of constraints & opportunities to expand women's participation in the labor force. Key AID Inputs: Technical assistance to & training for the GOJ Vocational Training Corporation (VTC) & financing construction and equipment for a trade training center near Amman.			
AUTHORIZATION DATE AND U.S. LOP FUNDING AMOUNT FY 79 \$2,125 million	PES NUMBER 85-6	PES DATE 1/12/86	PES TYPE <input type="checkbox"/> Regular <input type="checkbox"/> Other (Specify)
ABSTRACT PREPARED BY, DATE Nancy C. Hardy Evaluation Officer 1/12/86	ABSTRACT CLEARED BY, DATE AAhmad, ENG LDonnelly, ENG RBrown, PRM		<input type="checkbox"/> Special <input checked="" type="checkbox"/> Terminal
<p>The primary objective of this project was to increase the number and productivity of trainees at the skilled labor level by addressing an immediate problem of limited physical facilities for vocational training and assisting the VTC in further developing its vocational training programs. The project consisted of 5 elements: (1) construction and equipping of the Yajouz Trade Training Center; (2) establishing a sister-school relationship between VTC and an appropriate U.S. institution; (3) training; (4) conducting a study of women's employment opportunities and (5) conducting in-country training seminars for VTC staff on modular unit training.</p> <p>The initial PACD for this project was June 30, 1981, and was extended several times, primarily due to delays concerning construction of the trade training center and equipping the center with AID-financed commodities in conformance with project specifications. Final PACD was October 31, 1983. Final project evaluation was undertaken in FY 1985 in order to assess the quantity and quality of vocational training provided by the VTC, particularly that provided by the project financed center which became operational shortly before the final PACD.</p> <p>The project evaluation revealed that the Vocational Training project achieved its purpose. The Yajouz Training Center has an enrollement of 900 students annually (300 more than planned) and has attracted both younger students interested in learning vocational skills as well as older skilled workers desiring to improve their capabilities. According to VTC records the majority of its trainees are from lower income families, and many students at the Yajouz Center work in their spare time to help support their families. The project-funded study of women's employment opportunities provided the VTC with a basis for planning and implementing vocational programs in traditional and non-traditional skills at its six training centers for women. The training and technical assistance inputs provided by the contractor, Ohio State University, were well-received by the VTC staff, and although a strong sister-school relationship did not last after project completion, the two institutions maintain correspondence and continue to exchange information.</p> <p><b>LESSONS LEARNED:</b></p> <ol style="list-style-type: none"> <li>1. It is important to set realistic implementation target dates during project design. Original LOP for this project was only 21 months, due to the urgent need of VTC for a new training facility. The 28-month extension of the project might have been avoided had better data been available and more realistic goals for contracting and construction been set.</li> </ol>			

2. Project design included the host country contracting of a U.S. procurement agent to assist the VTC in the procurement and delivery of approximately \$800,000 worth of commodities (300 line items) for the Yajouz center. It was anticipated that the agent would reduce the workload in commodity procurement. However, VTC received some commodities which were not in compliance with source and origin requirements and in a few cases, project specifications. In future projects with sizeable commodity procurement, USAID should consider all options including direct procurement by host government agencies. If the procurement service agent mode is selected, careful attention should be given to early availability of specifications for commodities to be procured, PSA previous experience and most importantly, accountability of the PSA.

A. List of abbreviations to identify Government of Jordan and other project-related agencies and institutions.

GOJ	Government of Jordan
VTC	Vocational Training Corporation
MOL	Ministry of Labor
MOE	Ministry of Education
MPW	Ministry of Public Works
ILO	International Labor Organization
OSU	Ohio State University, National Center for Research In Vocational Education
TTC	Trade Training Center

B. List of persons contacted during evaluation (excluding trainees, graduates and employers).

1. Mr. Munther Masri, Director, VTC
2. Mr. Yousef Qara'een, Financial and Administration Manager, VTC
3. Ms. Riyad Sughayer, Training Guidance Officer, VTC
4. Engineer Mohammed Waleed, Workshop Manager, Jordan-Syrian Transport Company
5. Engineer Bassam Saleh, Principal, Sahab TTC
6. Mr. Ahmed Khateeb, Chief Trainer, Sahab TTC
7. Engineer Saleh Harb, Principal Yajouz TTC

13. SUMMARY:

The Vocational Training Project Grant Agreement was signed on September 29, 1979. The first Amendment to complete full AID funding for the project in the total amount of \$2,125,000 was executed on January 30, 1980. The total project cost was estimated at \$3,025,000. The GOJ contributed approximately \$900,000, about 30 percent of total project cost.

This project was designed to increase: skills of the work force; economic opportunities for youth from lower income families; and, the understanding of constraints and opportunities to expand women's participation in the labor force. The primary objective was to increase the number and productivity of trainees at the skilled labor level by addressing an immediate problem of training capacity at the vocational level and alleviating the constraint, i.e. limited physical facilities, by providing for the construction and equipping of the Yajouz Trade Training Center near Amman. The Vocational Training Corporation (VTC) was the Government of Jordan's (GOJ) implementing agency for this Project.

Project activities consisted of five (5) basic elements:

1. The construction, furnishing and equipping of the Trade Training Center (TTC):

AID's contribution to this component was \$1,910,000 of which \$850,000 was allocated for commodities and \$1,060,000 for design, construction and construction supervision under host country contracts.

Construction of the project-financed Yajouz TTC included several training facilities totaling in area about 4500 m2. These facilities consisted of various workshops for: plant maintenance, industrial electricity, heating & cooling (climatization), automotive, woodwork and basic training. They also included administrative offices, classrooms, staff rooms, a cafeteria, general storerooms, a playground and a home residence for the TTC principal. A modified Fixed Amount Reimbursement system (FAR) for construction of the TTC was used. Payment was based on a percentage of the total completed in four successive stages. Equipment for the TTC consisted of over 300 line items (commodities) ranging from heavy machines to small hand tools. A Procurement Services Agent was contracted by the VTC to assist in the procurement of commodities. This activity was successfully completed in October 1983, despite problems concerning construction delays and receipt of ineligible commodities.

### C. Sister School Relationship:

The establishment of a sister school relationship between the VTC and an appropriate U.S. institution to provide technical assistance was planned to provide the VTC with a continuing flow of new techniques and ideas needed to improve the VTC's management of vocational training and hopefully, to establish a longer-term relationship between the VTC and the contractor. It was also anticipated that the sister school would assist the VTC in equipment procurement to the extent that the sister school had qualified professional staff available for this purpose. (However, procurement assistance was contracted out to a procurement agent.) The Project Agreement provided funds for financing this project element in the amount of \$ 60,000.

The sister school, modular training and some of the participant training (see below) project inputs were combined into one AID contract with Ohio State University (OSU).

OSU provided technical assistance in how to achieve measures of quality in skills training, and how to establish training levies, vocational guidance and follow-up. Activities carried out through the AID-OSU contract were timely, well received and generally appropriate. A positive aspect of this project element was the firm foundation established for a future sister-school relationship. A formal relationship between VTC and OSU did not continue after project completion, but informal ties are maintained, largely consisting of information exchanges.

### 3. Training:

Training for the VTC was funded by both GOJ and AID. The project agreement provided funds for partially financing up to four (4) out-of-country short-term training trips to observe training, institution/industry/employer linkages and vocational training programs or systems using the modular unit instructional approach. \$8,000 and \$ 7,000 were allocated by AID and GOJ, respectively, for financing this project element.

During project implementation, additional training was provided under the OSU contract and USAID's Development Administration Training II project. Project training inputs were increased from 4 to 11 programs (all out-of-country short term training trips) at the request of the VTC and were completed as scheduled and on time.

4. Women's Employment Opportunities:

A study of women's employment opportunities and participation in the labor force was funded jointly by AID and GOJ. For financing this element, the Project Agreement provided \$ 75,000 and \$ 12,000 allocated by AID and GOJ, respectively. The study was conducted in conjunction with the Women's Department of the Ministry of Labor (MOL) and the VTC. It was based on face-to-face interviews with approximately 150 employers and 150 ninth-grade school girls.

The objective of the study, carried out in April-November 1981, was to provide the VTC with ideas on how to utilize a planned training center for women at Marka, northeast of Amman. The Marka center which became operational in 1983, offers training courses in traditional and non-traditional skills, and its program, as well as those of 5 other smaller centers in Amman, was determined on the basis of the study's findings.

5. Modular training seminars:

To increase the VTC's institutional capabilities, AID assisted the VTC in carrying out in-country training seminars for VTC staff on applications of modular unit training. The sister school through project funding, provided twenty (20) person-weeks of technical services primarily in the areas of management techniques, training program design, and application of modular unit instruction. The technical services provided five U.S. advisors. Approximately fifteen (15) weeks of the technical assistance time were in-country while five (5) weeks were used for pre-seminar planning, post-seminar activities, and materials preparation in the U.S. The VTC provided local support for the seminars, including facilities.

With the exception of not having met the original Project Assistance Completion Date (PACD), the project was successfully completed prior to October 31, 1983 which was the final PACD. The original PACD was June 30, 1981. Due to the urgent need for the VTC to have its own training facilities, a stringent PACD of 21 months was set in the project design. Based on USAID experience with implementing infrastructure-type projects in Jordan, and due to the slow rate of the TTC implementation, it was concluded that this was impractical to achieve and too ambitious. On December 24, 1980, the PACD was extended to June 30, 1982, then on May 17, 1982, it was extended to June 30, 1983. However, this extension was not enough to allow for the project completion. Therefore, on June 21, 1983, the PACD was finally extended to October 31, 1983.

Delays were primarily associated with the complexities of host country contracting for construction and construction supervision and the slowness of the construction contractor. Host country contracting for commodity procurement and delivery was also behind schedule and contributed to the PACD extensions. The project generally proceeded according to the revised plan with excellent support and coordination by the implementing agency. Indications, more fully described in other portions of this evaluation, are that project objectives have been successfully accomplished.

14. EVALUATION METHODOLOGY:

The Project Paper called for a preliminary and a final evaluation of the project on or about January 1 and September 30, 1981, respectively, under the assumption that the project would be completed by June 30, 1981, the original PACD. A preliminary evaluation was made in September 1981 at that time, and a final evaluation was planned for March 1983 on the assumption that the TTC would be operational by July 1982. However, the TTC was completed during October 1983, and final evaluation was delayed until FY 1985 in order to assess the quantity and quality of vocational training provided by the VTC, particularly that provided at the project-financed TTC at Yajouz. Another purpose of this evaluation is to examine the effect of VTC training on meeting employer needs and the participation of women and/or lower income groups in vocational training programs.

This evaluation is based on close monitoring by USAID and VTC personnel during the project and after completion on October 31, 1983 (PACD) and the Terminal Date for Disbursement July 31, 1984. Methodology consists of review of project documentation, progress reports for each of the five basic project elements, and information obtained from interviews with random samples of VTC/Yajouz TTC graduates and graduates' employers, and interviews with Yajouz TTC trainers and trainees. (Annexes A, B and C exhibit interview questionnaires.) Additionally, the project officer conducted interviews with high-ranking, knowledgeable VTC officials who were involved in the project.

15. EXTERNAL FACTORS: None

16. PROJECT INPUTS:

Project inputs at the levels planned were adequate to achieve the project's objectives.

A. Yajouz TTC Construction: Three host country contracts for design, construction supervision and construction were awarded to local firms on February 16, 1980, June 30, 1980 and August 17, 1980, respectively. The TTC design contract was awarded to Mohammad A.R. Jardaneh Engineering Office at a cost of \$60,000. The construction supervision contract was awarded to Mohammad A.R. Jardaneh Engineering office at a monthly lump sum rate of JD 1650, on condition that the total amount payable under this contract should not exceed JD 23,100. This contract period was 14 months. The construction contract was awarded to Badran and Partners Engineering and Contracting Co. for JD 367,064. The completion date stipulated in this contract was November, 1981.

Although design of the TTC was completed on time, actual construction was excessively delayed and was not completed until the end of October 1983. Reasons for this excessive delay were attributed to the contractor's financial difficulties and poor management. Badran and Partners could not complete construction of the TTC despite receiving an advance of JD 50,000 from VTC during the construction period in order to ease its financial difficulties. Other arrangements were also made by the VTC in hope of helping the contractor to complete construction. However, it finally became evident to the VTC that it would be impossible for the contractor to meet his contractual

obligations, and the VTC decided to terminate the construction contract through Jordanian legal channels. Before obtaining a court action in this regard, both the parties agreed to award the remaining work to another contractor in June 1983. Subsequently, the remaining work was awarded to Yousef Abu-Ayyash who completed the project. All extra construction costs were borne by the first contractor and not by the VTC. Construction of the TTC was partially financed by AID under the Modified FAR method.

B. Commodities:

A major input of the AID funded vocational training project at Yajouz was the procurement of over 300 line items of commodities to outfit the various TTC workshops. USAID/Jordan allocated \$850,000 for financing the purchase and delivery of these commodities. Commencement of this input was behind schedule. At first, the VTC was not convinced that the services of a procurement agent were required and insisted that it would be able to procure the project commodities without the assistance of a procurement agent. On May 12, 1982 the VTC finally let a contract to a procurement agent, American Export Group International Services Inc. (AEGIS). AEGIS' fees stipulated in this contract were \$39,750. AEGIS placed orders, based on competitive bidding and VTC instruction, for the supply and delivery of all required commodities with 20 U.S. suppliers. USAID/Jordan approved these orders on August 26, 1982. Accordingly, the total cost of commodities including insurance, freight and procurement agent fees was about \$ 858,530.

Based on AEGIS requests through the VTC, USAID/Jordan issued two waivers on February 7, 1983 and April 19, 1983, waiving the authorized geographic code requirement (000 and Jordan) for the origin of 18 line items comprised of 7 lathe machines and other equipment. However, as equipment arrived beginning in early 1983, other items of non authorized geographic code origin arrived from 11 suppliers. The VTC reported these to AEGIS on May 14, 1983. The procurement agent subsequently replied that nothing could be done since these suppliers had already been paid; when informed by VTC of these events, USAID reported the violations to the AID Inspector General who referred it to a U.S. court. Eventually, the VTC received financial compensation of \$ 2800 when the court case was settled.

All commodities were delivered by October 1983 and installed in the Yajouz TTC. During evaluation it was revealed that a minor amount of electrical equipment was not in compliance with project specifications and VTC had itself taken measures to correct the deficiencies.

C. Sister School and Modular Training Seminars:

The sister school relationship was designed to provide a flow of technical assistance to the VTC to enhance both qualitative and quantitative aspects of their training programs. Another expectation in this relationship was that a longer-term working arrangement between the "sister school" and the VTC would be established and in effect after the project was completed. The sister school, modular training and some of the participant training project inputs were combined into one AID Contract (NEB-0238-C-00-1001-00) with the National Center for Research in Vocational Education, Ohio State University (OSU). This contract amounted to \$ 158,789.

Four exchange visits by key VTC staff to OSU were completed in July 1981. The modular training seminars were successfully held and completed in May 1981. These seminars were:

(a) The Management of In-plant Training seminar which was aimed at acquainting key personnel from the VTC, industry training departments, and Ministry of Education with selected industry training methodologies applicable to Jordanian setting. Fifteen persons participated in this two-week seminar; and

(b) The Modular System of Training Seminar which centered upon the VTC's interest to more fully introduce the modular approach to its training programs. Seminar activities emphasized close adherence to current VTC training program curricula, and provided for participants to apply modular theory and principles to actual examples.

Technical assistance was provided for assisting the VTC in how to achieve measures of quality in skills levels training and competence of VTC graduates. Also, additional short term technical assistance was provided under the OSU contract to help establish training levies, vocational guidance and follow-up.

This project element provided VTC staff with an exposure to a variety of external ideas. The extent to which these ideas led to a sustained improved program has been assessed and is encouraging.

Indicators at this time are positive if not conclusive. The VTC staff exhibits much competence and professional commitment to the development of vocational training programs. The activities carried out through the OSU contract were timely and well-received. Although

the interactions were brief, they were generally appropriate. A most positive aspect of this project element was the firm foundation established for a sister-school relationship. However, this formal relationship did not continue after project completion, due to non-availability of VTC funds for travel or technical assistance. However, the VTC still maintains informal ties with OSU largely consisting of information exchanges. Further AID funding should be considered for reinforcing the sister-school relationship, particularly to provide additional training and technical books from OSU to the VTC.

**D. Participant Training:**

Eleven (11) U.S., short-term study/observation programs have been completed, consisting of approximately twelve (12) person months. This input was greater than the original amount planned in the project design, which called for four (4) short-term programs. As the project developed, additional training was provided through the USAID Development Administration Training II grant (three participant programs), and the technical assistance contract with OSU (four programs). Project training inputs were increased at the request of the VTC because of successful programs completed for the first four trainees and the need to provide greater numbers of VTC staff with similar training. Training inputs were completed as scheduled and on time.

E. Study of Women's Employment Opportunities:

This component was delayed due to problems in AID contracting for a U.S. consultant. Subsequently, it was agreed that the VTC, the Ministry of Labor (MOL), and the Working Women's Department of the MOL would conduct the study using Jordanian staff. More than 150 ninth grade, compulsory cycle girls were surveyed to assess their knowledge and understanding of women's employment opportunities, and more than 150 employers were surveyed to provide data on employment potential and the demand for women in the labor force. The study began in April 1981, and the final report was completed in November 1981. The objective of this study was to provide the VTC with ideas on how to utilize a planned training center for women by focusing on the following:

- 1) Employment opportunities for women in Jordan, mainly at skilled and craft-person levels.
- 2) Data and information for programs to increase economic opportunities for women, especially for those from lower income families.
- 3) Attitudes regarding participation of women in the labor force. (The study attempted to define those attitudes which may serve as constraints and/or positive factors in increasing the participation rate and increasing the range of "acceptable" employment.)
- 4) Priority skills areas needed for potential employment and develop training programs to effect employment in these areas.

5) Relevant information and data needed to achieve all of the above; and, more specifically, as basis for the VTC, the MDL and other agencies to offer increased training and employment opportunities for women.

Findings of the study were:

1) Employers were adequately satisfied with the performance of female employees when compared with that of men.

2) The overwhelming majority of establishments surveyed including those that had not employed women intended to employ women in the future.

3) Generally, economic considerations made some establishments refrain from hiring women and made others unwilling to employ them in the future. In a few cases, deep rooted social attitudes and values were the reasons for not hiring women.

4) Women held and wanted to hold jobs that run across the whole spectrum of various levels of qualification; there were no jobs which were the exclusive domain of men.

5) What might constitute stumbling blocks in the way of the expansion of female employment was not generally the attitudes of employers, but other reasons such as the belief of employers that the nature of

the work required was unsuitable for women. Other reasons related to the absence of those employment terms and conditions which are necessary to attract and keep female, particularly married employees. However, some establishments expressed their readiness to provide some of the lacking facilities and services, indicating a positive attitude towards employment of women which should be followed up diligently by the Ministry of Labour.

6) Marriage has an adverse effect on female employment as it either makes some female employees quit work or look for other jobs. This contributed to the rise of a phenomenon which was strongly resented by employers, namely, a high turnover among female employees. The study recommended that this phenomenon be studied and thereafter properly tackled.

7) Most of non-Jordanian female employees are technicians. If these are to be substituted by female Jordanians, national apprenticeship programs should be undertaken through collaboration among concerned governmental bodies (the Ministry of Labour, the Ministry of Education, VTC, etc.) in order to train participants for other technical jobs which do not come under the jurisdiction of VTC. Where establishments said they were not satisfied with women's performance, skills upgrading programs for female employees should be introduced.

Encouraged by this study, the VTC established programs for the training of women and opened a trade training center for women at Marka, northeast of Amman. This center was put in operation in 1983

with 200 places for training in traditional and non-traditional skills such as: cutting, sewing, radio - television assembly and repair, maintenance of office equipment, typing and secretarial courses. In this academic year (1985-1986) the VTC will introduce to this center two additional training programs, marketing and child care. As a part of its urban development programs, the VTC has five small centers with 200 combined places for short-term training of women in various skills such as: typing, sewing, cutting and knitting. It is anticipated that maintenance of household equipment will be taught in these centers in the future.

F. GOJ Inputs:

These have been timely and adequate with sufficient financial (\$ 900,000) and qualified human resources provided to carry out the project.

G. Inputs Summary:

Actual project implementation and provision of project inputs were excessively delayed and much slower than anticipated in the project implementation plan, which called for a PACD of June 30, 1981. Delays were experienced in awarding contracts for construction, a procurement services agent, establishing a sister-school relationship with Ohio State University and in undertaking a study of women's employment opportunities. There were also problems with the origin of some of the commodities procured. Construction of the TTC facilities required 38 months instead of 14 months. Accordingly, the PACD was extended thrice, lastly to October 31, 1983, by which time all inputs were delivered and the Yajouz TTC was furnished, equipped and operational.

17. Project Outputs:

A. Project TTC providing increased training capacity.

The Yajouz TTC was completed in October 1983, and has been in operation ever since that time. Since this center was put in use, it has annually increased the training capacity of the VTC by at least 900 places (550 skilled level plus 350 limited-skilled level and upgrading programs) in various applicable fields of training. The planned training capacity of the project TTC was 600 places (300 skilled level plus 300 limited-skilled level). Excessive industrial demand led to an increase of 300 places above the planned level. The Yajouz TTC has been able to expand the number of places in a cost effective manner without undermining the quality of training.

B. Commodities delivered and installed.

Over 300 line items of commodities for the Yajouz TTC have been procured from the U.S., delivered on a staggered basis beginning in early 1983 and ending in October 1983, and installed at the project site.

As stated above, there were problems in commodity procurement regarding non authorized geographic code origin. In addition, it was revealed during evaluation that a minor amount of electrical equipment was not in compliance with project specification. However, the VTC had itself already taken measures to correct these deficiencies, such as, conversion of electric motors from 60 to 50 cycles.

C. Increase in number of skilled labor.

Since October 1983, the Yajouz TTC had been providing new facilities to increase the number of skilled graduates from VTC programs by about 550 per year and the number of in-service graduates by about 350.

Rapid expansion of other VTC facilities and programs were planned in the VTC Five-Year Plan (1978-1982). Although not a direct result of this project, the VTC had achieved a training program for about 7245 at the end of its last Five-Year Plan, which is 118 percent of the planned training for this period. Table 1 shows the planned and the actual training for the period 1978 - 1982.

D. Staffed facility:

The VTC has steadily increased its staff from 8 in 1977 to 576 in 1985 (Table 2 shows development of the VTC staff from 1977-1985). These increases will continue as VTC continues to expand its training facilities and programs. At present, the staff of Yajouz TTC is 54 (Table 3 shows the qualifications of the TTC staff). This staff includes five mechanical engineers (specialized in climatization, heating, power and production), one electrical engineer and one psychologist. It also includes 32 polytechnic graduates who are specialized in their teaching fields. The quantity and quality of the Yajouz TTC staff compares favorably with that of other centers. Although the PP called for 60 qualified staff and administrators employed by the project TTC, the present number and qualifications of Yajouz staff indicate that this project output has been achieved.

E. Improved VTC/Planning Management Capability.

Since its inception in 1976, the VTC has maintained a smooth training operation under a relatively complex arrangement of utilizing borrowed facilities. As a new organization, it has gained considerable management/planning experience during the past ten years which has acted to strengthen their capabilities in these areas. Management of In-Plant Training and Modular Unit Seminars, attended by the key VTC staff, and financed under the OSU contract addressed management and planning concerns. Other project technical assistance provided under the OSU contract also addressed these concerns. The project has also facilitated improved planning/management capabilities through the provision of eleven participant training programs in the U.S. for VTC staff with administrators of several outstanding U.S. vocational/technical training institutes, combined with observations of administrative practices and procedures. While not quantitatively measured, it can be safely concluded that the VTC personnel who participated in this training did learn from experience and have made efforts to apply observed management/planning concepts which are relevant to VTC operations. From observation of USAID staff in contact with the VTC, indications are that the VTC is well-managed.

F. Improved and Expanded Modular Training Programs.

Two seminars in the Management of In-Plant Training and Modular Training Programs were held in April and May 1981. Technical assistance for the organization and conducting these seminars was provided for under the OSU contract. Approximately, 35 participants representing the VTC, MOE, MOL, and other private firms and organizations that cooperate with VTC training programs attended.

These intensive learning experiences facilitated by highly qualified experts in the modular training field, have helped the VTC to continue to build its capabilities in uses of modular training concepts, methods and content. Therefore, this project output was achieved.

G. Key staff members trained.

Eight (8) project financed, short-term non-academic training programs have been completed. Participants included the VTC Director General and his Deputy, the proposed Director of the project TTC, the Director of Guidance, the Director of Training, and six other VTC staff members. The additional participants completed programs financed from the DAT II training project.

H. Draft program for improving women's employment opportunities.

This is part of the basic study of women's employment opportunities which was completed in November 1981. Based on the results of this and other complementary studies, the VTC assembled a reference base for planning programs to train more women for participation in the labor force. The analysis of study results enabled the VTC to apply data and more effectively plan for the increased training of women. The VTC has moved ahead and will train more women based on study results, past experience, demand, and known employment needs. In 1983 the VTC opened a TTC for women in Marka, northeast of Amman with 200 places for training in traditional and non-traditional skills such as: cutting, sewing, radio - television assembly and repair, maintenance of office equipment, typing and secretarial skills. In this academic

year (1985 -- 1986) the VTC will introduce two additional courses in marketing and child care. It also has five small centers with 200 combined places for short-term training of women in various skills. Currently, the number of female applicants for training exceeds the capacity of VTC facilities for the training of women.

I. Approved plan for improved vocational guidance.

A contract, short-term consultant arrived in September 1981 and assisted the VTC in this effort. The principal VTC vocational guidance person participated in a short-term training program and her experiences in this program enhanced achievement of this output.

J. Training levy program.

The VTC's current budget is subsidized by GOJ and other assistance. (Table-5 shows 1985 VTC's budget). However, the VTC believes it is desirable and feasible to ultimately shift major costs of training skilled workers to employers and industry. This is a new concept in Jordan and is based on ILO experiences in other countries. The VTC is moving into this area gradually and has worked out arrangements with a few on-the-site training institutions cooperating in the apprenticeship programs to shoulder the costs of training for their specific needs. The OSU contract provided technical assistance to further assist the VTC in refining applicable training levy concepts and developing a strategy for their application. Accordingly, the VTC has formulated a law pertinent to charging vocational training levies from industries/employers benefiting from its training. This rule is being reviewed for approval by various GOJ establishments prior to its enactment.

## 18. Purpose

The project purpose is to: a) increase the skill level of the work force; b) increase economic opportunities of youth from lower income families; and, c) increase the understanding of constraints and opportunities to expand women's participation in the labor force.

### EOPS Indicators:

Graduates are employed in the fields for which they have been trained; graduates are receiving skilled level wages; and employers judge VTC graduates based on performance as skilled workers.

#### A. Increase the skill level of the work force

Since beginning operations, the VTC has trained approximately 11,640 skilled workers from its apprentice type, three year training programs and more than 9,838 workers from various short-term, in service, skills upgrading courses (Table 4 supports these figures). The graduates from the apprentice training programs are almost universally employed in their fields of training and receive skilled worker wages. During the third year of the skill training course, the employee (trainee) completes an intensive on-the-job work experience with full cooperation of the employer. Generally, both workers and employers prefer to continue the working relationship after the final year of training. Employment records indicate that trainees' performance as skilled workers is recognized and is acceptable to the vast majority of employers. One employer revealed that he advertised for skilled workers and in response to his advertisement, 12 workers applied and were examined. The only worker who met the employer's requirements was a VTC graduate.

Based on interviews conducted with a random sample of employers, this evaluation revealed that the VTC training meets the requirement of various industries in Jordan. In addition these interviews revealed that some VTC graduates are self-employed, and attended short-term upgrading courses provided by the VTC after 15-20 years of experience in their industrial fields in order to improve their capabilities. VTC training has had impact on Jordanian industry because:

1. The VTC has attracted older skilled workers for training who were well established in their own businesses.
2. Young VTC graduates have applied successfully for employment and were accepted.
3. The requirement of the employer's consent for workers to attend VTC training shows the appropriateness of the training and an indication of its value to employers and trainees.
4. VTC graduates are employed in jobs in both small and large businesses.
5. The Yajouz TTC, fully equipped, staffed, and operational, has attracted 900 students a year.

8. VTC trainees are from lower income groups.

Since beginning operations, the VTC has trained approximately 21,478 workers (about 11,640 skilled workers from the three year training programs and about 9,838 workers from various short-term, in-service skill upgrading courses). Table 4 shows the number of VTC trainees during the period 1977-1985.

VTC records show that the majority of these trained workers are from lower income families. The social worker (students affair officer) on the VTC staff reported that most students come from day laborer or unskilled background with income per family estimated at less than 1000 to 1500 JD per year range. The project officer interviewed a random sample of 19 VTC graduates/students. All 19 indicated that they came from lower income households. This sample included 5 graduates (short-term programs) and 8 students (three year-course) from the Yajouz TTC. Additionally, the Yajouz TTC student relations officer indicated that many students at the center are working in their spare time to help their parents financially.

C. Increase the understanding of constraints and opportunities to expand women's participation in the labor force.

Draft Women's employment survey recommendations have been accepted and applied. Based on the recommendations of this study, the VTC has moved ahead with improvements in plans for the training of women. It is currently operating six centers with 400 places for training of women in traditional and non-traditional skills. One of these centers with a capacity of 200 places is a direct result of this study.

19. Goal

The Project goal is to contribute to an increase in domestic product, to increase labor force productivity, and to increase economic opportunities for lower income groups.

A. Since the outputs given above were achieved, gross domestic product should have increased under the assumptions of the project. As a result of VTC training (including Yajouz TTC), there are many car repair workshops which are owned and operated by VTC graduates; also the VTC centers repair private and public cars. VTC services and products can be purchased from all VTC centers.

B. This project is increasing the skilled labor force by providing training for about 900 students annually. The various industries/employers who are cooperating with the VTC have acknowledged that the VTC quality of training is excellent and meets their requirements. This type of excellent training is bound to increase labor productivity.

C. A random sample of Yajouz TTC graduates (short-term course) who came from lower income groups, indicated that the VTC training is helping them to improve their earnings. This is bolstered by the fact that some of these graduates were university undergraduates or graduates prior to receiving training by the VTC. The same situation has been reported by a random sample of VTC graduates who are working for the Jordan Electric Company.

## 20. Beneficiaries

The direct beneficiaries of this Project include:

- 1) The Yajouz TTC graduates and students (skills - level and apprenticeship trainees) and their families who benefit from their improved earning.
- 2) The 11 VTC staff who have been trained in the U.S. under this project and the DAT II project;

- 3) The 35 VTC staff and others who have participated in the modular training seminars;
- 4) The VTC staff and instructors who have benefited from the TA provided under the OSU contract;
- 5) The families and the apprenticeship trainees of the VTC training centers for women, especially the center which was opened as a result of the study of women's employment opportunities; and
- 6) The industries/employers (about 1800) who are cooperating with the VTC training programs and those who are employing VTC graduates.

The indirect beneficiaries of this project include:

- 1) The trainees from other VTC training centers whose programs have been improved as a result of the training and the technical assistance provided under this project; and
- 2) The economy of Jordan has benefited from the highly skilled labor force, which gradually increases by the VTC training.

## 22. LESSONS LEARNED

1. It is important to set implementation dates and targets in project design which can be reasonably met despite pressure to the contrary. Due to the urgent need for the VTC to acquire their training facilities, project design called for a PACD date of June 1981. At the time, it was realized that this was a very tight time schedule, but it was accepted as a target. The 28-month extension might have been avoided had better data been available and more realistic goals for contracting and construction been set.

2. The project was designed to provide the VTC with the services of a procurement agent who would assist the VTC in the procurement and delivery of project commodities in time for installation. It was anticipated that the procurement agent would also reduce the workload involved in monitoring these commodities by USAID. On the contrary, the VTC received some commodities that were not in compliance with the source and origin requirements and were of substandard quality. Also, the workload of monitoring the commodities by USAID was excessively increased. Therefore, in any future projects which contain commodity procurement similar to this project, USAID should carefully consider all options including direct procurement by host government agency. If a procurement service agent mode is selected, careful attention should be given to early availability of specifications for commodities to be procured, PSA previous experience and most importantly, accountability of PSA.

REMARKS:

1. An outcome of this project was the opening of a TTC (Marka Center) with 200 places for training of women in traditional and non-traditional skills. The Marka Center is successfully operational but the demand for training by women is greater than the VTC training capacity. Therefore, there is still an urgent need for additional women training centers to enable women to participate in the labor force.

2. Further AID funding should be considered to enhance the sister school relationship and provide additional training and technical books to the VTC.

TABLE - 1  
NUMBER OF TRAINEES  
PLANNED AND ACTUAL  
GOJ TRAINING PLAN 1981-1985  
VOCATIONAL TRAINING CORPORATION

<u>NO. OF TRAINEES</u>				
<u>THREE YEARS COURSE      SHORT-TERM UPGRADING</u>				
<u>YEAR</u>	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PLANNED</u>	<u>ACTUAL</u>
1981	800	832	800	1004
1982	1200	1529	1000	882
1983	1600	1980	1200	1524
1984	2000	2776	1400	1808
1985	2400	2800	1600	2800
TOTAL	8000	9917	6000	8018

TABLE -- 2  
NUMBERS OF VTC STAFF  
1977-1985

<u>YEAR</u>	<u>NO. OF STAFF</u>	<u>REMARKS</u>
1977	8	
1978	27	
1979	42	
1980	60	
1981	102	
1982	154	
1983	276	40 ARE ADMINISTRATORS
1984	380	60 ARE ADMINISTRATORS
1985	576	

TABLE - 3

YAJOUZ ITC STAFF (1985)

<u>NUMBER</u>	<u>QUALIFICATION</u>
7	University Graduates
32	Polytechnique Graduates
9	Industrial Secondary School Graduates plus minimum 5 years experience.
<u>6</u>	Industrial Certificate Holders
54	Total

TABLE - 4

DEVELOPMENT OF VTC TRAINING CAPACITY

1977-1985

<u>YEAR</u>	<u>NUMBER OF STUDENTS</u>	<u>NO. OF STUDENTS</u>
	<u>THREE_YEARS COURSE</u>	<u>SHORT-TERM UPGRADING COURSE</u>
1977	156	155
1978	438	704
1979	450	284
1980	679	677
1981	832	1004
1982	1529	882
1983	1980	1524
1984	2776	1808
1985	<u>2800</u>	<u>2800</u>
TOTAL	11640	9838

TABLE -- 5

VTC BUDGET IN JORDANIAN DINARS

1985

TOTAL BUDGET:	3,000,025
GOJ CONTRIBUTION:	1,350,000
VTC EARNING AND GRANTS:	1,340,000
DEFICIT*	310,000

The VTC will try to cover its budget deficit through GOJ assistance.

QUESTIONNAIRE FORMAT - ANNEX-A  
ASKED DURING INTERVIEWS WITH EMPLOYERS.

QUESTION NO.	TYPE OF QUESTION
1.	What is the name of Industry/Employer?
2.	What is the type of Industry?
3.	Do you employ VTC Graduates?
4.	Does the VTC use your facilities for training?
5.	How much do you pay a VTC Trainee who is being trained at your facilities?
6.	Does the VTC Training meet your need?

QUESTIONNAIRE FORMAT - ANNEX-B  
ASKED DURING INTERVIEWS WITH  
YAJOUZ TIC TRAINEES

<u>QUESTION</u>	<u>TYPE OF QUESTION</u>
1.	How do you classify your family income? Is your family rich, middle class or poor?
2	What course of Training are you doing?
3	How do you classify the quality of training that you are receiving? Is it excellent, good or poor?

QUESTIONNAIRE FORMAT - ANNEX - C  
ASKED DURING INTERVIEWS WITH  
VTC/YAJOUZ TTC GRADUATES

<u>QUESTION</u>	<u>TYPE OF QUESTION</u>
1	How do you classify your family income? Is your family rich, middle class or poor?
2	Has the VTC/TTC Training improved your income?
3	What course of Training have you done?
4	How do you classify the quality of training which you have received? Is it excellent, good or poor?