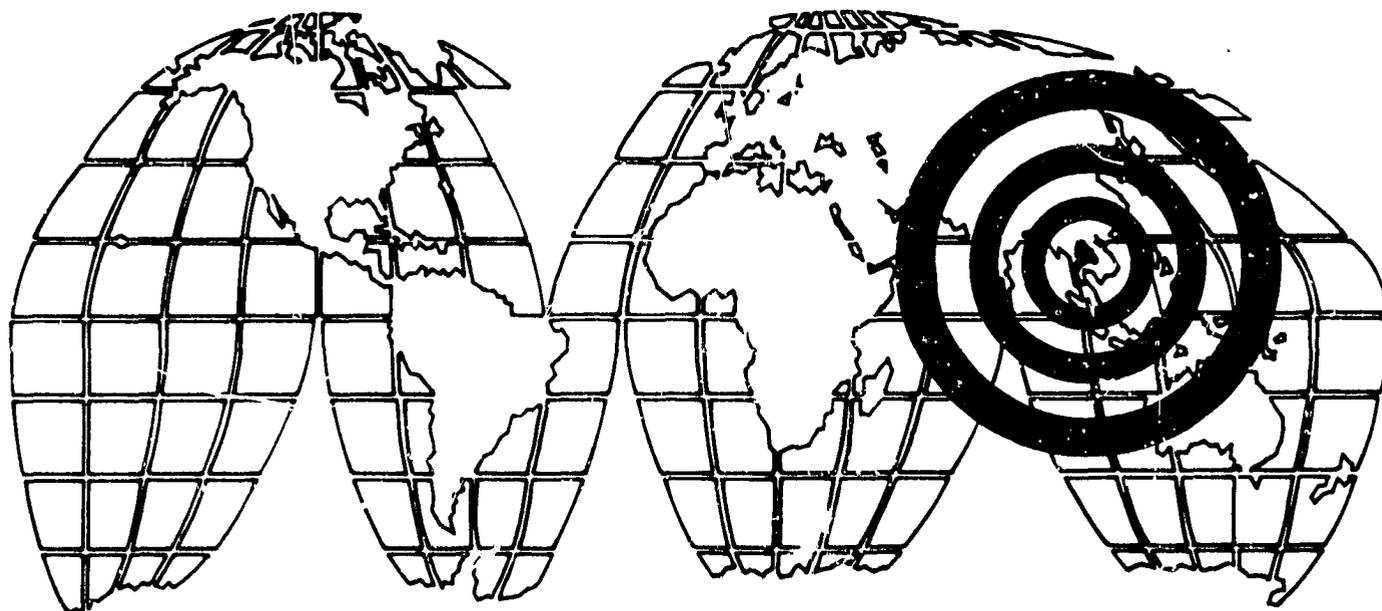


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A.I.D. Project Impact Evaluation Report No. 25

Thailand: Rural Nonformal Education The Mobile Trade Training School



October 1981

U.S. Agency for International Development (AID)

PN-AAJ-171

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- No. 2: New Directions Rural Roads (March 1979) PN-AGG-670
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- No. 4: Policy Directions for Rural Water Supply in Developing Countries (April 1979) PN-AAG-691
- No. 5: Study of Family Planning Program Effectiveness (April 1979) PN-AAG-672
- No. 6: The Sociology of Pastoralism and African Livestock Development (May 1979) PN-AAG-922
- No. 7: Socio-Economic and Environmental Impacts of Low-Volume Rural Roads -- A Review of the Literature (February 1980) PN-AAJ-135
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- No. 9: The Impact of Irrigation on Development: Issues for a Comprehensive Evaluation Study (October 1980)
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THAILAND: RURAL NONFORMAL EDUCATION -
THE MOBILE TRADE TRAINING SCHOOLS

PROJECT IMPACT EVALUATION NO. 25

by

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Agency for International Development

October 1981

The views and interpretations expressed in this report are those of the authors and should not be attributed to the Agency for International Development.

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FOREWORD

In October 1979, the Administrator of the Agency for International Development initiated an Agency-wide ex-post evaluation system focusing on the impact of AID-funded projects. These impact evaluations are concentrated in particular substantive areas as determined by A.I.D.'s most senior executives. The evaluations are to be performed largely by Agency personnel and result in a series of studies which, by virtue of their comparability in scope, will ensure cumulative findings of use to the Agency and the larger development community. This study of the impact of A.I.D. (Thailand: Rural Nonformal Education - The Mobile Trade Training Schools) was conducted in November 1980 as part of this effort. A final evaluation report will summarize and analyze the results of all the studies in this sector and relate them to program, policy and design requirements.

ACKNOWLEDGEMENTS

The impact evaluation team gratefully acknowledges the special contributions of the following persons:

USAID/Bangkok

Dr. Preecha Kuwinpant, Anthropologist, who helped conceptualize the design of the impact evaluation and participated in all field activities, from interviews to report writing;

Mr. Jack Williamson, Assistant Program Officer, who arranged the team's working environment and provided wise counsel; and

Mr. Kosit Vachnabuka, Assistant Project Officer, who accompanied the team during field visits in Chiangmai and Chiangrai and served as liaison with the Ministry of Education.

Ministry of Education, Bangkok, Thailand:

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We wish to acknowledge also the numerous administrators, teachers, students, parents, and employers of MTTS graduates who cheerfully and conscientiously cooperated in interviews during the team's field visits.

AID/Washington

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The team also gratefully acknowledges the services of Mr. Thomas Liston, a retired former USAID/Bangkok education advisor, who reviewed the draft report and made a number of valuable suggestions.

EXECUTIVE SUMMARY

Between 1964 and 1975 the U.S. Government assisted the Royal Thai Government in a comprehensive attempt to improve formal and nonformal education programs, with special attention to the rural population. Among the areas covered were primary, secondary, and adult education; activities included administrative and curricular reform, teacher training, materials production, and facility and equipment improvement.

This impact evaluation study focuses on a significant rural non-formal education project, the "Mobile Trade Training Schools" (MTTS), which was one of the major sub-projects under this assistance effort. Started in 1960 by the Thai government as a means of providing short-term occupational skill training courses at the entry-skill level for out-of-school rural youth and adults, the courses were based in provincial level "polytechnic" schools and local district level primary schools. Mobility was originally provided by the use of portable tools; trade instructors could arrive almost anywhere and set up shop classes. Later, equipment was purchased for units that could be transferred from one site to another after local demands had been met. In most cases, however, these units became permanent due to the constant recurrent demand for services by local residents. To a more limited extent, courses were offered to more remote rural populations by mobile vans, but this feature was never a major factor in the project.

U. S. assistance to the MTTS project, which started in 1966 and ended in 1972, covered three main items: provision of U. S. technical assistance for project design, management, and evaluation (one advisor); training of key Thai educators in advanced programs in U. S. universities (31 participants) and provision of commodities (vehicles, equipment, tools, teaching aids, and expendable materials).

The original objective of the MTTS project was to provide pre-employment training, but the objectives were soon modified to include skill "upgrading" for employed persons and skill acquisition for personal use. Three principal outputs were planned: (1) a system of 54 MTTSs were to be spread nationwide, but concentrated primarily in the North and Northeast (where the majority of the rural population was centered); (2) five regional polytechnic schools were to be strengthened; and (3) the Bangkok Polytechnic School was to be improved.

MTTS courses, in great demand by the rural populace, ranged from the traditional offerings of dressmaking, cosmetology, tailoring, barbering, cooking, baking, typing, and building trades, to the newer areas of radio and television repair, air-conditioning and refrigeration, small engine repair, and operation of modern office equipment. Courses originally ran for an average of 300 hours, over a five-month period, but recently have been shortened to approximately 150 hours due to curriculum changes and administrative requirements.

Significant and lasting results of the MTTs project were achieved, and its impact has been felt by both the educational institutions of Thailand and the rural population it was intended to benefit. Forty-five of the 54 targeted MTTs were in operation by 1972, with 32 located in the North and Northeast. While only one of the five regional polytechnic schools was strengthened significantly, the other four received equipment, tools, and materials originally purchased for the seven MTTs that were not established. The Bangkok Polytechnic School was provided considerable assistance. From a modest beginning of five regional polytechnic schools, the system added eleven more schools after 1972. Five more are now under construction and future plans call for 54 additional schools; each of the 72 provinces in the nation will eventually have at least one regional polytechnic school.

Between 1966 and 1972, approximately 80,000 persons enrolled in the MTTs program, and 56,000 graduated. The Ministry of Education estimates that most of the "dropouts" left before graduation because they had acquired sufficient skills to secure employment and that completion rates should be viewed with this qualification. Currently, the MTTs program trains approximately 30,000 persons annually. In general, administrative and teaching staffs are highly qualified and highly motivated. Of the 31 Thai professionals trained abroad, 30 are still employed by the Ministry of Education--nine years after training--mostly in high-level jobs in adult non-formal education.

Other major findings of the evaluation study indicate that:

- Participants in the program are of both sexes, predominantly young rural poor with minimal education;
- The MTTs program is consistent with existing social values and practices and has strengthened and diversified these norms;
- The MTTs program provides an alternative to the traditional apprenticeship system; and
- The MTTs system has contributed significantly to the creation of a more comprehensive nonformal education system in Thailand, the "Lifelong Education Centers." Approximately 50,000 Thais annually receive services from the programs of the MTTs and LEC.

GLOSSARY

<u>baht</u>	The Thai unit of currency worth U.S. \$.05
LEC	Lifelong Education Center
MOE	Ministry of Education
MTTS	Mobile Trade Training School
RTG	Royal Thai Government
USOM	United States Operations Mission

PROJECT DATA SHEET

1. Country: Thailand
2. Project Title: Mobile Trade Training Units
3. Project Number: 493-11-640-162
4. Project Implementation:
 - Start: 1966
 - Completion: 1972
5. Project Funding:
 - AID: \$7,296,000
6. Purpose: To provide short-term occupational skills training to people with a minimum of four years of formal education, and little or no opportunity to continue in formal education.
7. Accomplishments:
 - a) 54 mobile trade training units started
 - b) 5 regional polytechnic schools started
 - c) 80,000 students enrolled during life of project
 - d) MTTS system has evolved to a more comprehensive nonformal education system now serving approximately 45,000 students annually in all major geographic regions of Thailand. Over 50 percent of facilities are located in the North and Northeast, where the highest concentrations of the rural poor live.

I. PROJECT SETTING

A. Background

To the casual observer, rural Thailand in the mid-1960s seemed serene, picturesque, and prosperous. Dressed in a blend of modern Western and traditional Thai attire, these polite people moved about their business in a cheerful, disciplined, and energetic manner. In the larger towns, signs of prosperity were evident: sprawling central markets and neighborhood stands heaped with a variety of food, burgeoning businesses, emerging commercial centers, and numerous, although modest, motor vehicles. In the more remote rural areas, the landscape was dotted with small family-owned farms, where families toiled together in the rice fields surrounded by charming natural beauty. The rural family everywhere was close-knit, working and playing together and sharing many of the traditional values of their ancestors.

To the discriminating observer, however, the scene was far less than ideal. The larger towns were becoming crowded with peasants who had left their small plots either to seek employment in the off-farming season or to migrate permanently. Business activity was limping. Social infrastructure and government services were limited, causing concern to the central government that political unrest would grow unless more services of direct benefit to the rural populace were provided.

A review of economic and social characteristics of the rural population in 1960 indicates the general state of development of rural Thailand:^{1/}

- The rural population represented 87 percent of the total population, then estimated at approximately 28 million persons, with over 40 percent falling in the 15-and-under age bracket. The average annual population growth rate for the 1960s was estimated at 3 percent.
- Agriculture was the principal means of livelihood. The distribution of the Gross Domestic Product in 1960 showed that agriculture accounted for 40 percent; services, 41 percent; industry, 19 percent; and manufacturing, 13 percent.
- The Gross National Product per capita in 1960 was approximately \$100 (\$225 in 1978 dollars).

^{1/}All figures come from World Development Report: 1980 (Washington, D.C.: The World Bank, 1980).

- Eighty-four percent of the labor force worked in agriculture, 4 percent in industry, and 12 percent in services. By 1978 these figures were 77 percent in agriculture, 8 percent in industry, and 15 percent in services.

- Educational attainment in rural areas was low. Although 83 percent of children of eligible age was enrolled in primary schools for the nation as a whole, only 13 percent of those eligible was enrolled in secondary school, and only 2 percent of the age group 20-24 years was enrolled in higher education. Although specific breakdowns for the rural area are not available, informed sources at the Ministry of Education (MOE) indicate that while initial enrollments are high, most rural students end their formal education with the completion of the fourth grade. The adult literacy rate for Thailand in 1960 was listed as 68 percent, but estimates by the MOE rated rural literacy around 30 percent. Since many pupils end their formal schooling at fourth grade, it is reasonable to assume that many lapse into illiteracy in later years through disuse of their literacy skills.

The quality of education likewise suffered. Vestiges of traditional Thai curricular models and teaching methodologies remained strongly entrenched. In the 1960s changes began to be made in the system, with access extended to young females, the institution of a lengthened primary system of six years and curriculum revision undertaken to include more practical knowledge and skills. But the changes were slow and the scarce rational educational resources continued to favor the urban population.

Several national Five Year Development Plans (starting in 1960) officially stated the Royal Thai Government's (RTG) determination to make education more available and more oriented to the growing economic, social, and personal needs of the largely rural population, but actual priorities (some of which were caused by factors beyond the control of the RTG) continued to favor the urban areas, especially in the Central Plains area (around Bangkok). Only a trickle of RTG national resources was reaching the rural areas by the later 1950s.

B. RTG Rural Education Activities

In the early 1960s, however, a modest but noticeable change began to occur in rural education. A comprehensive attack on the multiple problems of formal education was launched. Underlying the RTG's rural education effort was the firm belief that Thai peasants valued education highly, were interested in practical training, and would demonstrate initiative and dedication in obtaining and using knowledge and skills to improve their personal lives.

1. Formal Education

In primary education, the program was strengthened to extend

facilities and services through the sixth grade, and secondary education was lengthened from the tenth to the twelfth grade. Curricula revision quickened, with emphasis on practical education. The training of administrators, specialists, and teachers accelerated, with emphasis on understanding and "learning-by-doing" rather than on rote memorization and recitation. Educational materials were revised, produced in large numbers, and distributed to more pupils - especially to the remote rural areas. Also, formal vocational education at the high school and post-high school levels was initiated. Attention began to be directed toward helping school dropouts and nonattendees to pursue a "second chance" at formal primary education through accelerated adult primary education programs, usually held in regular schools during off-hours.

2. Nonformal Education

Nonformal education to meet the needs of the rural group, the out-of-school youth and young adults, received attention as well. Planners knew that this relatively mature and restless group had to be incorporated educationally into the mainstream of rural life. They chose to attack this problem through an innovative and appealing way by offering short-term occupational skills training courses at the entry skill level, via courses in provincial level "polytechnic" schools and local district level primary schools. A novel approach was also added in remote areas in the early 1960s when "mobile trade training units" were attached to larger towns but roamed the countryside.

C. USAID/MOE Rural Education Projects (1964-1972)

In the early 1960s, this rural education setting became the stage for the entry of the U.S. Government into a cooperative project with the RTG. In 1964, the U.S. Operation Mission (USOM) and the MOE undertook a project to provide much-needed textbooks and teaching materials for rural primary schools. In 1966, a Mobile Trade Training School (MTTS) component was added, followed shortly thereafter by four additional components: 1) Elementary and Adult Education, 2) Secondary Education, 3) Administration, and 4) Rural Elementary Education.

During the entire life of the project (fiscal years 1964-1975), approximately \$8 million was obligated for these six project components.

D. Impact Evaluation Report Focus

This Impact Evaluation report will be limited to an examination of the MTTS component. The reasons for this choice are the following:

- The project contained relatively large AID-financed inputs, amounting to about \$3.3 million in project assistance (adding excess property donations, the figure is approximately \$7 million);
- The component is a manageable unit for study and analysis,

in view of the time and resource constraints of the impact evaluation team;

- The component was a significant priority of the RTG in its rural development strategy of providing short-term practical skills training to large numbers of rural out-of-school youth and adults; and
- The MTTs is an example of a significant nonformal education activity in a developing country--an increasing priority for AID/W as it seeks an agency-wide policy in educational assistance to the developing world. Lessons learned from this project can contribute to the formulation of AID's future policy and strategy.

II. PROJECT DESCRIPTION

A. Project Objectives

The initial stages of implementation of the MTTs project focused on providing rural out-of-school youth and adults skills at a level sufficiently advanced to enable them to get jobs. As the project was implemented and the needs of the rural population became more apparent to the RTG and USOM, this purpose was modified to focus not only on job training but also on skills upgrading and skills acquisition for personal use. The only requirements for entry into the training program were the completion of fourth grade, payment of a 100 baht (\$5.00) fee, and a minimum age of 15 years.

To achieve these ends, the RTG and USOM sought three principal outputs: (1) the creation of a system of 54 MTTs spread throughout Thailand, although concentrated in the north and northeast sections of the country; (2) the upgrading of five regional polytechnic schools (in Ubon, Udorn, Songkhla, Chonburi, and Lampang); and (3) the strengthening of the Bangkok Polytechnic School. Efforts to establish these schools and units took place from 1966 to 1972.

B. Project Strategy

To enable the MOE to deliver skills training to the people of rural Thailand through creation of the MTTs system and polytechnic schools, AID agreed to provide three principal inputs. Commodities, the largest single input, were seen as essential to project success, and included such items as vehicles, shop equipment, typewriters, and sewing machines. Thirty-one participants were to be sent abroad for study or observation of vocational education--ten for Master's degree training and the rest for certificate training or observation/study tours. USOM was also to provide a direct-hire technical advisor specializing in vocational education to assist the RTG with project implementation. The RTG was to finance the operational expenses of the MOE including salaries, per diem, materials and supplies.

C. Project History

A substantial portion of the project outputs were achieved during the life-of-project. The evaluation team judged that the shortfall did not seriously affect the outcome of the project or its viability in subsequent years (see Section III, A).

Forty-five of the 54 MTTs targeted for operation were functional by 1972. While short of the target by seven, wide geographic coverage was achieved, including 32 MTTs in the Northeast and North--the poorest regions--eight in the Center, and seven in the South. To expand the impact of these schools in rural areas, the MTTs operated complementary mobile units which traveled to distant and remote areas under purview of the MTTs.

The MTTs course offerings ranged from the traditional subjects of auto mechanics, dressmaking, and hairdressing, to newer subjects such as refrigeration and air-conditioning, printing, and radio and television repair. Initially, each course lasted 300 hours (three hours daily over five months), but later some courses were reduced to between 150 and 200 hours, owing to curricula revisions and administrative requirements.

Between 1966 and 1972 approximately 80,000 people enrolled in the program and an estimated 56,000 graduated from the courses. Interviews with school directors and instructors suggest that about 60 percent of these trainees either found jobs in the field in which they received training or upgraded their skills for their present job. A large portion of those who dropped out apparently did so because the training they had already received was sufficient to obtain work. Evaluation team interviews suggest that 15-30 percent of these drop-outs are likely to have gotten jobs as a result of their training.

Of the five regional polytechnic schools targeted for strengthening, only the school in Udorn received the assistance intended under the project. These schools were intended to provide skills training to people living in the more urbanized areas and to function as regional back-up centers for the MTTs, including, inter alia, assisting in the training of instructors for the MTTs and the repair and maintenance of MTTs tools, equipment, and vehicles. This shortfall was apparently the result of a USOM decision in 1970 to focus more attention on higher education. This did not affect the provision of assistance to the Central Bangkok Polytechnic School, which was strengthened during the early phase of the project. However, equipment, tools, and materials purchased for the seven uncompleted MTTs were used to assist the rest of the polytechnic schools.

In developing these outputs, approximately \$7.0 million was spent on commodities--about \$4.0 million in excess property and about \$3.00 million in project funds for new equipment. In addition, about

\$191,000 was expended in carrying out the participant training activities under the project. Although records which would have allowed the evaluation team to describe definitively the training accomplished were unavailable, it is clear from interviews that a substantial number of the 31 participants targeted for training or observation trips overseas were indeed sent abroad, primarily to the U.S. (Subsequent to the field evaluation, the original USOM vocational education advisor informed the team that all 31 were trained.) During interviews, the team was able to identify 13 people who received certificate training at Oklahoma State University and nine who received Master's level training at other U.S. universities. All but one of these people are still with the MOE in the area of vocational education -- most with high-level jobs in the adult, nonformal education area -- some nine years after receiving training from AID. Lastly, about \$105,000 was provided by USOM to bring on board a technical advisor in vocational skills training, who provided services until the project was terminated. The RTG appears to have spent on the order of \$5.0 million for project operational costs.

III. PROJECT IMPACTS: FINDINGS AND ANALYSIS

A. Summary

The MTTs project has had sustained effects both on the educational institutions of Thailand and on the rural population it was intended to benefit. To analyze the project's impact, the evaluation team considered both the continuing viability of the MTTs and polytechnic schools themselves and their institutionalization within Thailand's education system and the appropriateness of the project's inputs to the Thai social context and the popular acceptance accorded the training offered.

The major impact findings of the MTTs system are as follows:

- The system is still functioning in the principal geographic regions of Thailand, either as originally conceived or by being "absorbed" into a larger rural nonformal education system;
- The present MTTs program trains approximately 30,000 students annually (see Table 1);
- The administrative and teaching staffs are adequate;
- The current program, in great demand by the rural populace, is only marginally adequate to sustain present levels of activity and needs more budgetary support in the near future to remain viable;
- The Regional Polytechnic Schools, part of the MTTs system, have grown from five to 16 schools and will grow eventually to 75, serving all provinces in Thailand;
- Participants in the program are of both sexes, predominantly

young rural poor with minimal education;

- The MTTS program is consistent with several existing social values and practices and has strengthened and diversified these norms;
- The MTTS program provides an alternative to the traditional apprenticeship system; and
- The MTTS system has contributed significantly to the creation of a more comprehensive nonformal education system in Thailand, the Lifelong Education Centers (LEC). Approximately 50,000 Thais annually are receiving services from the programs of the MTTS and LEC.

B. The MTTS System

In many locations throughout the country, the MTTS system is still functioning, drawing and successfully training large numbers of students. MOE policy changes since AID's withdrawal from the project have hampered its operation by altering the form of some schools and leaving others inadequately equipped. As a result of a MOE policy shift in the mid-1970s, the number of schools in the MTTS system operating as originally envisioned under the project has been reduced from 47 to 26. The other 25 MTTSs, created either under the project or shortly after its termination, have been "absorbed" by the relatively new Life-Long Education Centers (for details, see Section III, C). Despite reduced physical resources, student and staff morale seem good.

1. Students

The existing MTTS system is training large numbers of students who are either finding jobs, upgrading their existing skills or seeking to improve their domestic economic situation. Since 1972, when AID's financial support of the project terminated, the MTTS system has enrolled over 180,000 people, equivalent to an average annual enrollment of approximately 22,700. In 1979 the MTTS system alone offered 1,754 courses, employed 625 teachers, and enrolled nearly 29,000 students. Adding LEC graduates to the last figure, the MOE is estimated to be training 40,000-45,000 students in a number of occupational skills areas, equaling the target originally set for the MTTS system. It is estimated that in 1980 over 30,000 people will receive training through the MTTS system, not including approximately 30 percent of those enrolled got jobs, 30 percent upgraded their skills in an existing job, and 40 percent used their skills at home or on the farm to enhance their domestic or farm environment (e.g., by undertaking equipment maintenance and repairs on-farm rather than going to a shop for service, or by making clothes for family and friends at home, rather than purchasing more expensive ready-made clothes). Fairly consistent responses were received from MTTS administrators, teachers, students and graduates interviewed, which tended to corroborate these estimates.

Of those who found jobs, entry salaries were found to be somewhat above the per capita income figure for Thailand of \$490 in 1978. For example, dressmakers, auto mechanics and hairdressers were found to have earned between \$630 and \$690 annually when in-kind income (room and board) was given a dollar value and added to their cash income. Furthermore, several of the students interviewed who graduated some years ago are now owner/operators of their own shops and are earning considerably more than the entry level salaries mentioned. For example, an auto mechanic in Chiangrai, who graduated from the MTTs in 1971, now owns his own garage where he employs three mechanics. His first job after graduation paid \$15 per month plus room and board, but he now earns a minimum of \$300 a month from his enterprise! While he is not the typical graduate of the program, neither is he an isolated example. Other mechanics, dressmakers, and hairdressers were found to be similarly successful in terms of business ownership and income.

2. Staff

The current administrative and teaching staffs are adequate in quantity and quality to sustain the program at existing levels of operation. In general, most administrators are well-educated and have sufficient trade and teaching experience with the MTTs system to serve effectively as administrators. The team observed the interaction of administrators with teachers and students and concluded that a democratic, rather than authoritarian, style of leadership seems to prevail. Mutual respect and affection marked the interpersonal relations observed.

Teachers in the MTTs system operating in the stationary schools are well-qualified. Many have completed secondary school (twelfth grade), five additional years of vocational school and one year of teacher training before entering the MTTs system. Some also have had experience in private industry, either heading firms themselves or working for others; this experience adds a useful dimension to their teaching. Teachers in the MTTs mobile units located in the rural villages tend to have less formal schooling and experience in industry, but appear capable. Although most teachers are assigned to the schools by the central MOE office in Bangkok, strong efforts are made to recruit local teachers. Teachers appeared to have good relations with their students; the impact team's observations were supported by interviews with both students and graduates.

While mobility of administrators and teachers is characteristic of the MTTs program, the general standardization of the administrative and course system seems to lend an air of stability and continuity to the entire program. Local teachers who have left for further education and training elsewhere generally seem to return to live and work in their original geographic areas.

Administrators and teachers generally voiced overall satisfaction with their career status. However, while recognizing that their

pay and fringe benefits were relatively good with respect to rural living, most believed that they were underpaid compared to other persons of their social status (e.g., private enterprise owners, professionals). Overall, however, the team concluded that morale was good.

3. Physical Facilities

Current MTTs facilities, equipment and materials are barely adequate to sustain the program at the present level of activity and cannot accommodate any expansion of the program. The system may not be viable in the near future without the provision of more budgetary support for maintenance and operations. The present physical facilities including buildings, classrooms and workshops can accommodate the number and kinds of students being served, but with each passing year maintenance is becoming a more serious problem. Electrical, plumbing and construction elements wear out and must be replaced or repaired.

Equipment replacement and repair is becoming an increasingly serious problem as well. Much of the current equipment was provided by USAID between 1966 and 1972 and has since been in constant use. Despite regular maintenance, much of it is wearing out. Some equipment (e.g., large gasoline engines for generators and trucks) has been removed from service due to the nonavailability of spare parts and rising fuel costs. In many classrooms and workshops a shortage of tools and equipment means that students do not have sufficient access to these items in class and they are not receiving enough practice time essential to honing their skills. In some schools the available equipment is inappropriate for training students in skills currently needed in the immediate area. For example, the team found students studying auto mechanics in areas where large motor vehicles are not common but small motor repairmen are in demand.

The RTG has steadily maintained a policy of providing budgetary support on the basis of 100 baht (\$5.00) per student per year from 1966 to the present. With rising inflation, the individual MTTs programs are having difficulty providing an adequate level of support for facilities, equipment and expendable materials. Prohibited from raising individual course fees, local administrators have had to resort to the practice of reducing course length, having more students share each piece of equipment and set of tools and/or reducing practice time to conserve expendable materials. Although the schools continue to provide some expendable materials, students are required to furnish supplementary materials from their own resources. Teaching and learning aids, such as wall charts, models, textbooks and reference materials, are also in short supply.

C. The Regional Polytechnic School Systems

The system of regional polytechnic schools, which received some assistance under the MTTs project, has expanded considerably since 1972.

The schools now operate in a number of locations throughout the country, offering courses primarily to students from the provincial centers. The MITS project originally planned to assist a system of five regional polytechnic schools; in fact only one received direct assistance. Since the termination of the project the RTG has developed 11 additional polytechnic schools, has five more presently under development, and has plans for expanding the system by an additional 54 schools. Once all are completed, all but one of the 72 provinces in the country will have at least one regional polytechnic school.

The existing system of polytechnic schools is providing skills training equivalent in nearly all respects to that provided by the MITS. One major departure is that the polytechnics offer intensive courses of 1,350 hours in certain skill areas in addition to the 225-hour courses now offered at the MITS. In addition, the polytechnic schools can offer a larger array of training courses during each training cycle. For example, the Chiangmai Polytechnic school offered different courses for the training cycle October 1, 1980 - January 20, 1981, including several not traditionally offered by MITS: building construction, plumbing, painting, and knitting. The MOE estimates that the existing system of polytechnic schools has an enrollment of approximately 29,000 students, of which about 60 percent graduate, if the Chiangmai Polytechnic statistics are indicative of the system as a whole. Although this suggests a "dropout" rate of about 40 percent, many of those who do not graduate apparently leave for good reasons including getting a job prior to graduation, taking the course for "enrichment" and not for certification, and taking it for secondary school credit, which does not require graduation from the polytechnic school. The real dropout rate, therefore, is likely to be considerably lower than 40 percent.

Thus, a substantially larger system of polytechnic schools is now in place than existed at the time of the MITS project. The polytechnic schools are supportive of the MITS system, attend the needs of substantial numbers of rural people--especially in the larger towns--and show evidence of continuing to provide services for the nation as a whole as the system expands and diversifies.

D. Social Aspects

- Tseo enrolled in a tailoring course so she could expand her dressmaking business to include men's clothing. She now makes men's clothing as well as her husband's and son's clothes thus saving on her income. She now wishes to take another course to learn to make hats and caps in demand among fellow villagers.

- Once owner of a dressmaking shop, Siriporn believes the dressmaking course she took improved her life. With money earned from her dressmaking business, she acquired farmland

for which she employs workers to cultivate. Her niece, with her encouragement, is now enrolled in a course in hair-dressing.

- Charin believes the course he took in electrician skills not only got him his job as custodian at a local school, but improved his matrimonial prospects before he married.
- Sakorn is enrolled in a typing course. Sansit is enrolled in engine mechanics. Both help harvest their families' rice crops while attending their local training centers. Both wish to remain close to home, and hope their coursework will lead to jobs that will provide additional income for their families.

As indicated by these personal accounts (abstracted from Appendix D), much of the continuing strength of the MTSS system and its offshoots must be credited to the way it has been adapted to the demands of rural Thai life and social organization as well as to economic needs in the countryside. The program offerings have succeeded in drawing students from families with few socioeconomic resources and in preparing them to increase their earning abilities in a way that is compatible with existing familial value systems and the economic well-being of the family. The courses have also provided an alternative to traditional skills training under the old apprentice system. MTTSS program design seems as much influenced by Thai social realities as it was by the plans of its originators. It is instructive to study the dynamic interplay between this well-received program and its social context.

1. Recruitment: The rural poor and youth, men and women

Participation in the MTTSS program came predominantly from segments of the population which were rural in origin, minimally educated, of lower socio-economic standing, and young males and females. About 90 percent of those who took and continue to take the training courses are between the ages of 15 and 30; roughly 65 percent of the participants took the training when they were between 17 and 24 years of age. Between 80 and 85 percent were single at the time of training. One survey, conducted by the National Research Council in Thailand in the early 1970s, showed that about 60 percent of the trainees they sampled were women.

The level of formal schooling for most participants was relatively low. Approximately 50 to 60 percent had completed between one and four years of schooling, and only about five to six percent of the participants had finished more than ten years of formal education. Indeed, one of the purposes of the training program was to reach people with little formal education, and the program appears to have been successful in doing so.

The program also reached lower-income participants, as intended. Families with higher incomes tend to send their children through as much of the formal education system as possible, including university level schooling, rather than to vocational schools. Since trade skills are usually not as prestigious nor as lucrative as entering a profession or business, basic skill training is less attractive to children of families of higher socio-economic status. Some persons from the better-off families did participate in the program, however, but they tended to be older than the average student and took the course for personal use, rather than for employment. Interviews with graduates of training courses and with currently enrolled students confirm that students from poorer families are the principal participants in the MTTS program. Most of those contacted had had to drop out of formal schooling to help at home with the family's various income-generating activities.

Participants in the program were also mainly of rural origin. The data indicate that the maximum service area for an MTTS unit, once stationary, was a radius of approximately 25 to 30 kilometers. In fact, many of the students came from an area much smaller than that-- a radius of about five kilometers (although instances were common of persons coming from long distances). MTTS units were located in small, primarily agricultural villages and in rural towns, making it convenient for residents to take training courses. Thus through selective placement of MTTS units, the program was able to reach a predominantly rural population.

2. Family Responsibilities, Work Patterns, and the MTTS Program

In rural Thai society, the primary socio-economic unit was and remains the family or extended family with its network of kin ties and mutual assistance bonds. Individuals of various ages contribute their services to the family, and the family in turn offers services and opportunities to the individual. The economic well-being of the family depends on the inputs of all family members. Sometimes the contribution an individual makes is direct, such as the mother operating a small business in the home, selling sweets to other villagers. At other times the contribution is indirect, such as an older sister looking after younger children so that her mother can sell sweets.

For a Thai child, the responsibility to contribute to the resources of the family can come early. It is quite common for children eight or nine years of age to begin contributing significantly. In a farming family, for example, girls assist the mother and keep the water jars full and boys tend the water buffalo or help keep the family's ducks. The age at which a person begins to contribute to the family's resources depends, to a large degree, on the family's relative economic status. Generally, the wealthier the family, the older a person is before he or she is obliged to contribute significantly.

Approximately 40 to 60 percent of the participants in the MTTTS program had abandoned the formal education system to take up their responsibilities as a contributing family member when they turned ten or eleven years old, after most of them had completed the fourth year of formal schooling, despite the generally high social value placed on education. By the time these individuals reach the age of 17 or 18, their responsibilities for contributing to the family had changed (often due to the increasing contributions made by other siblings) so that they again could pursue various opportunities outside the household or family. Prior to the MTTTS program, these external opportunities did not include returning to the formal educational system. The formal educational system had, in effect, passed them by. The MTTTS program offered a new opportunity for these lower-income youths to re-enter the educational system on a nonformal basis.

The contributions expected of members of lower-income families have not changed substantially from the traditional patterns and the MTTTS program has not interfered with these patterns. Rather, the program provides a service consonant with them; this service can be used by individuals ready to expand their family obligations by earning money outside the household.

Thai family values and norms not only affected the demand for the MTTTS program, they also affected what people did after graduating from training courses. A major means by which graduates of training courses obtained employment was by using family connections as a placement service. Graduates often secured positions in enterprises run by relatives--not always where they used the skills they learned, incidentally. Graduates whose goal was not to secure employment or to upgrade existing skills usually exercised their new skills within the family unit, making a new contribution to the family economy. In a sense, this latter group of graduates became informal "employees" of the family. The instances of individuals being formally employed by relatives and of individuals contributing skills to the welfare of the family unit are both old social patterns. The MTTTS program provided no employment counseling or placement services itself; existing traditional patterns for job placement took over this function for most MTTTS graduates.

3. Impact on Women

Through the MTTTS program, women acquired skills which (1) embellished traditional women's roles and (2) could lead them to employment opportunities away from their homes. As in several other Southeast Asian societies, women in rural Thailand traditionally participated in many aspects of economic and social life. Women have long been accepted in business and, in some respects, women are believed to have a "better business sense" than men and to be quite shrewd about the handling of money or securing the "best price" for items. It is quite common, for example, for women to handle the sale of

farm produce in an agricultural family. Women also usually manage the day-to-day finances of a household, a task made more difficult by the practice of various family members making contributions in cash or kind to the family's resources. Women's full participation in the educational system has also been a prevalent pattern in Thailand for some time.

In their traditional child-rearing and general household management roles, women have tended to be somewhat tied to the home. Even so, women have often participated in a variety of income-generating activities for the family unit. For example, married women regularly grew vegetables for sale, helped with the planting and harvesting of crops, wove cloth both for sale and for the family's own use, and raised animals for sale.

The MTTTS program provided additional support to this heritage of very diverse and active roles for women who managed homes. Many women used the program to acquire skills which they could apply in concert with their existing roles as household managers, such as dressmaking. Likewise, skills newly acquired through the MTTTS were applied to operating a business out of the home such as a dress-making business or hairdressing service. Some women even took training courses simply because it gave them something to do in their free time. The course represented an opportunity to increase the individual's knowledge, a socially valued end in itself.

It is also quite acceptable for women to work outside the home. Some women used the MTTTS training courses to acquire the necessary skills to find employment outside. It is difficult to say which of the two types of application of new skills (inside or outside the home) to existing women's roles was more prevalent. Observations and interviews suggest that more women used their MTTTS training to enhance their roles relative to the household or as a contributing member of the family unit.

4. Impact on Male Farmers

Men acquired skills which allowed them to expand their opportunities to secure temporary and permanent off-farm employment. A strategy of economic generalism typifies many of the lower-income families involved with agriculture. The major feature of this strategy is the pursuit of multiple income-generating activities by members of the family unit, men and women alike. Men of farm families frequently seek temporary off-farm employment, usually during the period between the end of the rice harvest and the beginning of the rice planting season. In the past, men often tried to obtain jobs as unskilled laborers in such areas as road repair or building construction. These temporary and seasonal jobs can be found in the vicinity of one's home village but have become more and more difficult to get, due in part to the increasing numbers of people searching for them. As a result, it is common for men from farm families to travel to Bangkok

to find temporary jobs as unskilled laborers. This has proven successful for many, but being away from one's home area and family has its disadvantages.

Continuing to follow the pattern of seasonal off-farm employment, some men used the skills they acquired through the MTTTS program to enhance the kinds of temporary or part-time employment they could obtain away from the farm. They no longer had to rely solely on jobs for unskilled laborers and secured skilled jobs with higher incomes. Interviews also indicated that some men with newly acquired skills no longer went to Bangkok during the off-season to earn needed supplementary income. A skilled worker might also work part-time during the growing season while continuing to devote time to farming.

Changing conditions in the rural areas appear to be creating new incentives for men to participate in the MTTTS program. Increasing population pressures have begun to meet the limits of the income-supporting capacity of farmland. Despite the growth in the importance of rice production in the national economy, opportunities for young men to secure a living through agriculture are limited. Recognizing this, some young men, usually single, acquired skills from the MTTTS program in the hopes of finding permanent off-farm employment. Some of them did find off-farm work after graduation. Others used the MTTTS program as an introduction to further specialized training.

5. The MTTTS Program and the Traditional Apprenticeship System

The MTTTS program provided a practical alternative to the traditional apprenticeship system through which an individual could acquire work skills. In the rural areas of Thailand, where there was no formal vocational or trade-training school system, an apprenticeship was the primary way of acquiring a skill. The only alternative to the apprentice system had been to travel to some distant place (perhaps Bangkok) to attend a trade school.

Entry into a traditional apprenticeship was restricted to those who had contacts, often through their families, with persons who held the desired skill. In return for the privilege of learning and to compensate the skilled teacher for his time, apprentices usually made a substantial contribution to the holder of the skill, often in the form of donated labor and/or a cash fee which today can easily run around 2,000 baht (\$100).

An apprenticeship may last well over a year in such vocational areas as auto mechanics, dressmaking and tailoring. It does not offer skills training for persons with part-time, seasonal, or personal needs.

The establishment of the MTTTS program provided an alternative to the apprenticeship system. It gave many more people access to skills

training than the apprenticeship system could handle. Furthermore, the MTTTS program was less expensive and less time-consuming, while offering modern training with newer equipment.

The sustained demand for MTTTS courses by women, male farmers and out-of-school youths from lower-income families nearly a decade after AID's support for the programs ended testifies to the success of the program's plan for meeting the needs of those it was meant to help by offering training that enhances their abilities to meet their traditional family responsibilities and economic obligations.

E. Spread Effects

The MTTTS system has contributed significantly to the creation of a more comprehensive nonformal education system in Thailand: the Lifelong Education Centers. It is in these centers, rather than in the MTTTS schools themselves, that the spread effects of the project can be traced.

Perhaps one of the most dramatic and lasting impacts spawned by the MTTTS system was its role in the development of a more comprehensive system of nonformal education designed to reach larger numbers of rural people with long and short-term training programs. Aware that the MTTTS system was playing a necessary but limited role in addressing the multiple development needs of the rural populace, the MOE initiated a more comprehensive program, a new system called Lifelong Education Centers (LECs).

Like the MTTTS, LECs are located throughout the country with nine located in the Northeast, seven in the North, five in the Center and four in the South. Thus, over 50 percent of the MOE's MTTTS and LEC skills training facilities are located in the north and northeast regions of the country, where the greatest numbers of the rural poor live. These facilities offer a wide range of courses, similar to those offered under the original MTTTS project, although the number of hours of instruction given per course has been reduced from 300 to the 150-225 hour range--the amount depending on the nature of the material to be covered.

LECs retain as their top priority the provision of vocational skills training, modeled upon the MTTTS system, and use experienced MTTTS teachers. Emphasis in the 200-225 hour courses remains in Industrial Arts (large and small engine mechanics, construction, radio repair, electricity, and welding), Home Economics (dressmaking, hairdressing, tailoring, barbering, and cooking) and Business Skills (typing, bookkeeping and secretarial arts). Facilities are quite modern having been provided largely under a World Bank project over the past five years and programs operate now in 31 centers around the nation.

In addition to occupational skills training which the MTTs eventually absorbed, these centers offered a wide range of other educational services as well. Each LEC seeks to provide the following services:

- Functional Literacy Courses - Six-month courses (200 hours) in a variety of school and non-school locations;
- Adult Continuing Education Courses - "Second Chance" accelerated programs at the primary, lower and upper secondary levels, leading to certificates;
- Permanent Library Centers and Mobile Libraries - Designed to maintain literacy and to inform and entertain rural people via newspapers and books;
- Mobile Film Services and Open Radio Broadcasting - Special programs, especially for more isolated rural communities; and
- Adult Interest Groups - Special short-term courses for at least 15 persons, lasting no more than 30 hours, in subjects selected by local groups themselves for economic or hobby reasons (chicken-raising, bee-keeping, vegetable-growing, fish-farming, food preservation, flower-growing, Thai classical dances or music).

While the impact of these Lifelong Education Centers was not examined in detail (it was technically outside the scope of work of the Impact Evaluation Team), it is believed that some credit for their existence and operating policies and procedures can be attributed to the pioneering work in rural nonformal education developed by the MTTs system. LECs are an extension and expansion of the MTTs concept and the team believes that they are a direct impact stemming from the earlier MTTs program. The team further believes that the LECs are providing a significant service to rural people throughout Thailand and represent one of the most beneficial means to meet the personal and societal needs of rural people.

IV. LESSONS LEARNED AND POLICY IMPLICATIONS

Based upon the impact evaluation study of this project, the following generalizations emerge which may be useful to AID/W, USAID and LDC education program planners:

A. Lessons Learned

1. Nonformal education projects can contribute positively to rural development efforts of the LDCs by providing short-term occupational skills training to large numbers of marginally educated poor people.

The formal education system in most LDCs has generally proven to be unresponsive in providing occupational skills training within its established programs, especially in rural areas. Philosophical and economic reasons undergird this situation, and LDCs have generally

opted for some kind of an apprenticeship system to prepare out-of-school youth and young adults for entry into non-farm employment. A system of secondary and post-secondary vocational schools is operating in many LDCs, but these generally are directed toward students in urban areas and do not meet the quantitative and qualitative needs of rural people. To help fill this gap, the LDCs are increasingly turning to nonformal education programs administered by either government agencies or private and semi-private organizations. The MTTs system in Thailand is an example of one approach that seems to be successful in furthering rural development through short-term occupational skills training.

2. Nonformal education activities like the MTTs project in Thailand contribute to creating national unity.

The MTTs program demonstrates to the rural populace that the central government is in fact concerned about its welfare and prepared to provide resources to meet the economic and personal needs of the poor majority. This is especially true in the more remote rural areas where the provision of centralized government services is likely to be scarce, infrequent and uncoordinated. In Thailand, the provision of MTTs services in the rural areas, especially along the borders of Cambodia, Laos, and Burma had the additional effect of countering insurgency activities of hostile forces by "showing the flag" to the populace and demonstrating that the government was interested in all citizens of Thailand.

3. Projects conceived to serve a limited, specific purpose can sometimes serve as a catalyst to spur broader educational development efforts.

The MTTs program was originally designed to meet the needs of rural out-of-school youth and adults for occupational skills training, but its success encouraged the Ministry of Education to undertake a more comprehensive program of nonformal education resulting in the creation of the Lifelong Education Centers. In addition to preserving the MTTs concept of occupational training, the LECs now provide functional literacy training, accelerated adult formal education at the upper primary and secondary levels, short-term specialized vocational and hobby courses, and library, open radio and film services to meet a wider range of rural needs and interests.

4. Projects which appeal to the perceived needs of the intended beneficiaries can succeed despite the lack of active involvement of the beneficiaries in designing the project.

The MTTs is a classic case of a centrally conceived, funded, and administered program that has enjoyed wide acceptance by the target group, the rural poor. Its sustained popularity, despite apparent weaknesses in some areas (e.g., lack of employment analysis, job placement and follow-up services, and involvement of the private sector in operating and planning the program) may be attributable more to the characteristics and value system of the beneficiaries than to the quality of planning and execution of the project.

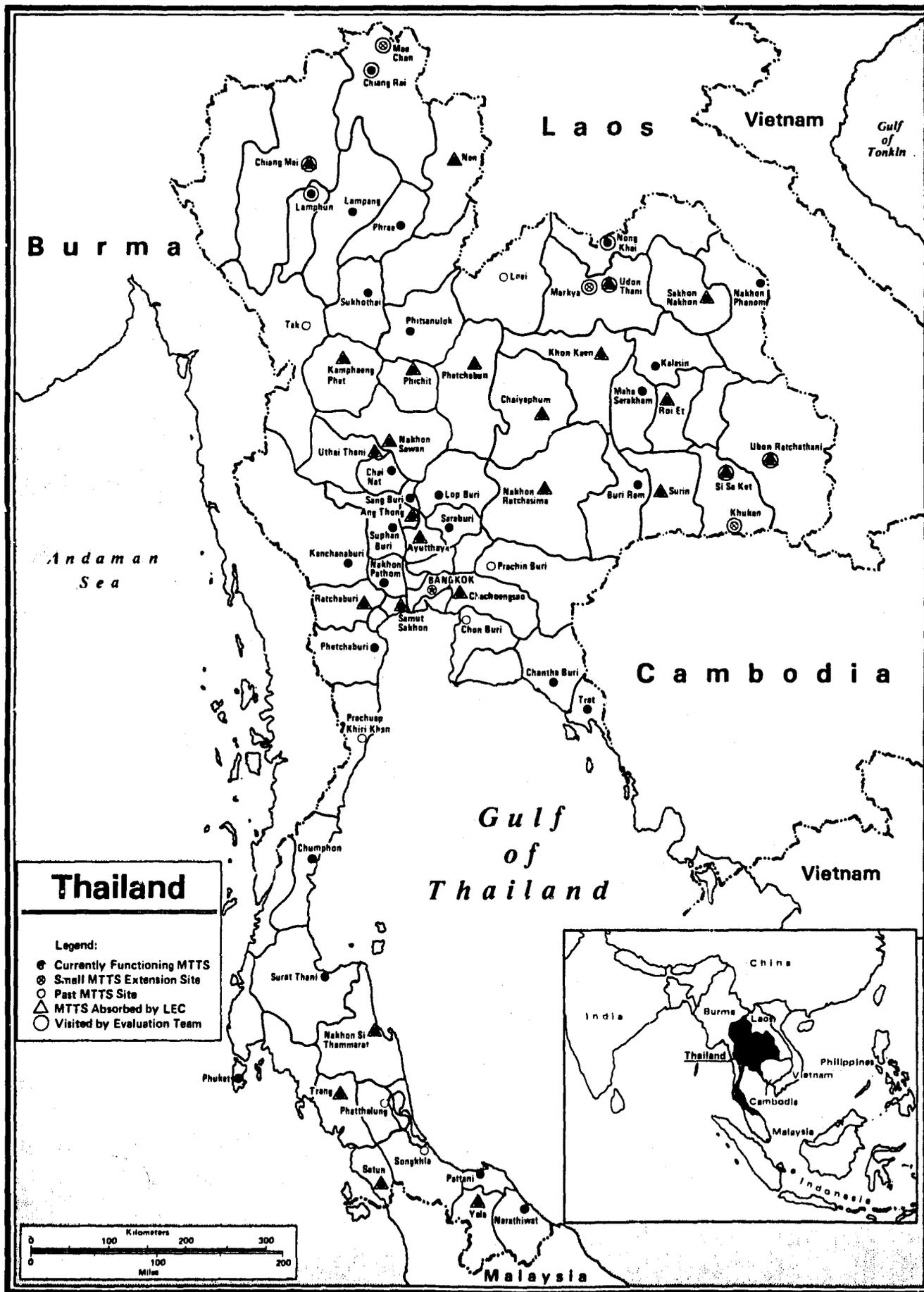
B. Policy Implications

Numerous aspects of the MTS program seem to run counter to the conventional wisdom regarding the planning, administration and sustained acceptance of such programs. Conventional wisdom, for example, states that unless the intended beneficiaries participate actively in designing projects, they will not long support such programs. This does not seem to be the case in Thailand. The central government took the initiative in designing and launching the program, with little involvement of government officials (other than the Ministry of Education), local leaders, the private sector, and the intended beneficiaries in the rural communities. Course offerings, location, duration, and content were determined by the central government. No employment analysis, little personal counseling, and no active job placement and follow-up services have ever been done during the years the program has been running. Yet enrollments continue to rise each year and undoubtedly would be even greater if more training opportunities were provided.

Thai education officials reported to the evaluation team that job placement and follow-up services would be a desirable feature of the program, but that its relative priority was low because of two factors: the high cost of maintaining such services and the principle of fostering individual initiative and responsibility for self-improvement. Thai officials stated that providing training opportunities was the responsibility of the Ministry of Education, but that the successful completion of training and the securing of suitable employment were mainly the responsibility of the trainee. The evaluation team noted that in almost all cases the students shared this belief and did not seem distressed that job placement and follow-up services were lacking in the program. As indicated by the enrollment and completion statistics associated with this project, it would appear that rural Thai persons are highly motivated to engage in and complete the training courses offered.

APPENDIX A

MAP OF THAILAND



B-1
APPENDIX B

RECONSTRUCTED LOGICAL FRAMEWORK

AID Project No. 493-11-640-162 "Mobile Trade Training Units"
Component C

GOAL: To improve the educational status of the peasants living in the rural areas of the country and thereby improve their standard of living.

PURPOSE:

To provide skills training to people with a minimum of 4 years of formal education and little or no opportunity to continue in formal education (to enable them to obtain employment, upgrade their employment capabilities, or improve their domestic situation).

END OF PROJECT STATUS (EOPS):

1. Adequate local budgetary support and capable of operating w/o outside financial assistance.
2. Sufficient trained supervisory staff to administer program
3. Capability of training teachers to staff program.
4. Viable MTUs capable of training about 43,000 persons annually of whom 50% will obtain or upgrade their employment
5. Five Polytechnic schools capable of training approximately 11,000 persons annually of whom 75% are able to obtain or upgrade their employment.

OUTPUTS:

	Magnitude of Project Outputs					TOTAL
	1966	1967	1968	1969	1970	
1. 52 additional MTUs	5	11	9	18	9	52
2. 5 Regional Polytechnic Schools			2	2	1	5
3. Expand Facilities at Bangkok Polytechnic			1			1

INPUTS

	Budget: Total all years (1966-72)		
	AID	RTG	TOTAL
1. Commodities	7,000,000	-	7.0
a. Project Assist	(3,000,000)	-	(3.0)
b. "608" Excess Property +	(2,000,000)	-	(2.0)
c. "Situs" Excess Property +	(2,000,000)	-	(2.0)
2. Participants	191,000		.191
3. Technical Advisors	105,000		.105
4. Operational Expenses		5,000,000	5.0
	<u>7,296,000</u>	<u>5,000,000</u>	<u>12,296,000</u>

APPENDIX C

METHODOLOGY1. Division of Sources of Information:

After careful review of the project design and its intended beneficiary population, the team divided the potential respondent and informant population into four groups:

A. Students and graduates of the MTIS program

- (1) This group of informants were interviewed to elicit information on the impact of the program on individual participants.
- (2) Using a type of case study approach, findings were based in part on the sum of the series of interviews with individuals who participated in the program.
- (3) Originally, the team hoped to concentrate upon early graduates to try to assess impact on their lives over time.
- (4) Difficulties developed in finding such graduates, so the team was forced to gather the bulk of its information from current students or recent graduates of training classes in the continuing program funded by the RTG.

B. Parents of students and graduates

- (1) This category of individuals was added to the groups from whom information was to be solicited to gain a relative time depth. Information from parents helped to compensate for some of the diachronic perspective lost when old graduates proved nearly impossible to locate.
- (2) Questions for this group of informants focused upon changes in the perceived educational opportunities for family members over time.
- (3) The team was also interested in trying to assess motivating forces and expectations of family members with respect to an individual's participation in the training program.
- (4) In addition, assessment of parental perceptions of changes in socio-economic status of children as a result of training was sought.

C. Teachers and administrators of the program

- (1) It was felt that teachers and administrators could provide information about the progress and effects of the program as perceived from within the program itself.

D. Employers of skilled and semi-skilled workers

- (1) Employers were questioned to provide us information about how employment opportunities arise and how persons are hired.
- (2) They offered an insight to the linkage between the program and employment realization.

II. Site selection for information collection

A. The team selected two of the three regions in which the program operated: The North and the Northeast.

B. Within these two regions three general sampling areas were chosen:

- (1) Ubon and (2) Udorn (in the Northeast) and
- (3) Chiangmai (in the North)

C. Two of these sampling areas are in the Northeast because the Northeast received relatively more concentrated effort during the program's life.

D. Within each sampling area, information was collected from one of the large regional centers and from small, more remote sites -- to note if proximity to centers seemed to affect program impact. Thus, in the Northeast two more urban sites (Ubon and Udorn) and their more rural neighbors (Sisaket and Nongkhal) were chosen, and in the North one urban side (Chiangmai) and its more rural neighbor (Chiangrai) were chosen.

III. Interviewing and Instruments

A. Interpreters were used in conducting interviews.

B. A conscious effort was made to interview both men and women in each of the respondent groups.

C. Sometimes respondents represented more than one of the respondent groups.

D. The team interviewed five categories of respondents:

- (1) Students currently enrolled
- (2) Graduates of training courses
- (3) Parents of students currently enrolled
- (4) Employers
- (5) Teachers/administrators

The instruments themselves contained several open-ended questions, by design. We were interested to solicit, as much as possible, the perceptions of our informants and to avoid biasing the types of data gathered by the construction of the instrument. After some initial field testing, our instruments were refined. Some questions were discarded and others added as a result of these field tests. Interviews were often lengthy and case-specific information was also pursued, to better reflect the individual's experience (even if the subject area did not appear on the standardized instrument).

IV. Quantitative data from the Ministry of Education was sought by the team to provide national-level information for the program.

V. After completing the evaluation, the team concluded that the methodology employed had been sound and produced information very conducive to an evaluation in which social and human variables could be measured. The methods are definitely worth using again in the context of other evaluations.

APPENDIX D

SAMPLE PROFILES OF SIX PROGRAM PARTICIPANTS

During the course of data collection efforts in the northern and northeastern portions of Thailand interviews were conducted with twenty-five persons who were participating or who had participated in the MITS program. Whenever possible, the data about the participants in the program were augmented with information collected from the parents or other close relatives of the participants.

This appendix contains synopses of the information collected about six of the twenty-five participants interviewed. Each synopsis presents the data in narrative form for ease of reading and to stress the human dimension of the data. After all, each person participating in the program experienced varying family conditions, motivations about continuing education, socio-economic circumstances and expectations of the program. Although the six synopses provide insight into the participants as people and individuals, they also typify or illustrate patterns the team found in the data collected about other participants and about the program in general. These six profiles of participants, in fact, were selected because they illustrate patterns and trends in the style of popular participation in the program. They also add an individual dimension for assessing the overall results of such a program.

The names of the individuals appearing in the profiles have been changed somewhat and part of the information about their place of residence was obscured to help preserve their anonymity. Nevertheless, the events and circumstances portrayed in each profile are true.

Taeo

Taeo is a 37 year-old woman who lives in a small village not far from the northeastern town of Nongkhai. She was born in the same province that includes the village in which she now resides. Taeo is married and has four children: a girl 16 years old; a boy 9; a girl 6; and another girl 3. She married her husband when she was 20 years old and he was 24. By the time she married, Taeo had completed six years of formal education and her husband four years.

She and her husband live in a wooden house of average size when compared to other homes in her village. Like the homes nearby, the house has no electricity. Although her husband earns an income as a farmer, part of their house is devoted to Taeo's dressmaking and hair-dressing business. Taeo's husband tends a small vegetable field next to the house (the size of both the land her house sits on and the vegetable field next to it is about 4 rai, 1.6 acres; they own no other land). The vegetable garden earns the family about 500-600 baht (\$25-30) per month and Taeo's small business brings in an average of

600 baht per month. Tseo's eldest daughter, who has had four years of schooling, helps with her vegetable garden and Tseo's small business, and looks after the younger girls. Her eldest daughter has not been able to continue her schooling because her help is required in the family enterprises.

Although she has operated her hairdressing and dressmaking business for several years now, Tseo decided about a year ago to enroll in a tailoring course from the training center in Nongkhai. She had known about the center for sometime as she frequently passed by it when business took her to Nongkhai and heard that a 300-hour course in tailoring was to be given. She already was skilled in making women's clothes, but she had not attempted to make clothes for men. Aside from the opportunity to increase her sewing skills, Tseo's husband encouraged her to take the course so that her dressmaking business could be expanded to offer clothing for men as well. He also thought it worthwhile for her to be able to make clothes for him and their son.

Tseo thought the quality of the training course was fairly good. Her teacher was interested in the students and helped in explaining tailoring techniques. Much of the equipment, however, was old and did not work very well. Tseo would have liked the course to have been longer in order to improve her newly-learned skills.

Since completing the course, Tseo has begun making clothes for men through her shop and makes clothes for her husband and son. The income she earns now in her business is about the same as it was when she made only women's clothes and did hairdressing. The reason for this, Tseo thinks, is that there are more dressmaking shops now in the area and people have more places to choose from. Still, she believes the skill she learned in the training course has helped her maintain her previous level of income. She does not have to buy as many clothes for her husband and son now, either.

Recently, Tseo has been thinking about taking another sewing course from the training center, just to sharpen and improve the skills she already has. She would like to take a course in cap and hat making if the center offered one. Since there is a demand for such headgear among her fellow villagers, she thinks she could make some additional money producing them.

Tseo said that some of her friends are interested in taking courses from the training center now, although many of them may not have the time to devote to the course work.

Sakorn

Currently enrolled in a typing course at a training center, Sakorn lives in a village about three kilometers from Ubon Ratchathani, a

town in northeastern Thailand. She is 20 years old and single. In a wooden house which the family owns, Sakorn lives with her parents, two younger brothers, three younger sisters, and grandfather. Her parents are farmers on the land that Sakorn's grandfather still owns. Nearly all of the family members help with farming. Sakorn's father has some carpentry skills as well and sometimes works as a carpenter in the interim period between harvest and planting. In the past, her father traveled to Bangkok to work seasonally as a carpenter; but does no longer because he worried too much about his family in his absence. Sakorn's father also sometimes works as a laborer on construction sites.

Sakorn completed six years of formal schooling. She enjoyed school and learning new things, but she had to discontinue her schooling to help the family with their farm. Her parents explained that the family could support only a few of the children in school at a time and that it was time for her younger brothers and sisters to begin school. Sakorn's father recently told her that as her brother had finished with his years of schooling, she could resume her education. Shortly afterward, she heard over the radio about the training center which offered vocational training and a chance to continue her formal education (under the new Lifelong Learning program from the Ministry of Education).

When she expressed an interest in attending the training center, Sakorn's father encouraged her to go and receive more education and skills training. He told her that with more education and skills, she would be more likely to get a better job. Sakorn offered to try to get a part-time job to continue contributing to the family's income while she attended the training center, but her father discouraged her from doing so. He wanted her to devote as much time as possible to the training and continuing her education.

So, about a year ago, Sakorn enrolled at the training center and took a 90-hour typing course. The typing course in which she is currently enrolled lasts for 150 class hours. She thinks the quality of the typing course is good, although some of the typewriters in the course are old and it could be better if newer typewriters were available. When Sakorn completes the 150-hour course, she hopes to get a job as a typist. She said there were several businesses around the town that were interested in hiring people with typing skills. Nevertheless, Sakorn said she will not look for a job when she finishes the course. She wants to continue taking courses and studying at the center to upgrade her formal education. She believes the longer she can study, the more she will learn and any knowledge she acquires will be helpful to her outside of the classroom. Her father recommended that she remain enrolled in the continuing education program at the center until she completes the equivalent of grade eleven. Then he said Sakorn should begin looking for a job.

When she finally does seek a job (outside of farming), Sakorn plans to remain at home and share her income with her parents and siblings. Her younger sisters have expressed an interest in enrolling at the center when they get a bit older but Sakorn's father reminded them that the resources of the family are limited and the issue of attendance would have to be dealt with on a case-by-case basis when the time comes. In the meantime, Sakorn continues to help the family with farm work. At the time of our interview, it was the rice harvest season and during the morning, Sakorn had been assisting in the harvest of the family's rice crop. Her current class schedule allows her to work at home in the morning and attend classes in the afternoon or evening.

In closing the interview, we asked Sakorn if she had any plans for marriage soon. She replied that she did not and added that anyone she would marry would have to respect her responsibilities to assist her family and be generous to them.

Sansit

Sansit, a young man of 20 years, was born in a village about 16 kilometers from the small northeastern town of Sisaket. When we interviewed him, Sansit was enrolled in 100-hour training course in engine mechanics. The course was being given at the training center at Sisaket. As he is single, Sansit resides part of the week in one of the small, newly constructed dormitories on the training center grounds. Normally, however, he lives in his native village with his parents, three brothers and two sisters.

Both his parents are living and continue to farm on the 30 rai (12 acres) of land they own. Since finishing his four years of formal schooling, Sansit has been helping his family with the farm. Even while in the training course, he helps with the rice harvest and tends the vegetable garden. He and his father also work as laborers during the period between harvest and planting times. For this seasonal work, Sansit and his father usually travel to Bangkok to work on various construction sites in the city, where they could earn 50-60 baht a day (\$2.50-3.00). Much of what he earns from this seasonal work Sansit gives to his parents to help support the household. Last year, for example, he contributed about 2,000-3,000 baht to the family's welfare from his seasonal work in Bangkok.

Nevertheless, Sansit does not like having to go to Bangkok during the off-season. He would rather stay close to his own village. So, when he heard on the radio that a course in engine mechanics was to be offered at the training center in Sisaket, he thought the training course might be a means to avoid having to go to Bangkok during the off-season. With some kind of skill, he believes he can earn extra money for his household close by his home. Without a skill, he feels

there are few job opportunities off the farm. Sansit's father also encouraged him to take the training course and gave him money to cover some of the expenses for the course, as well as some spending money for the part of the week he resides at the center.

When he finishes the course on engine mechanics, Sansit plans to enroll in an electricians course. He believes that some knowledge of both skills will increase his opportunities to find work near his village. At the present, Sansit expects to augment his farming-related contributions to his family's income by earning money seasonally or part-time, off-farm job for him through the practice of one of his new skills, Sansit doesn't know.

Charin

Charin was born and still lives with his wife and mother in the northeastern town of Udorn. He is 30 years old; his wife 29. They have been married two years and have no children. Charin is a custodian for a primary school and his wife is a teacher at a primary school. In his job, he earns 1,500 baht a month and his wife earns 2,200 baht a month. Charin's father (now dead) was a small-scale merchant in the same town. His father had been a farmer before that, but sold his 80 rai (32 acres) of farmland to help finance the family's move to the city and to set up the small trading business. Charin inherited no land from his father and lives in a house owned by his mother. He and his wife own no land.

About seven years ago, Charin had completed nine years of formal schooling and was helping his parents with their business. It was then that he saw an advertisement announcing a training course in electrician's skills. He decided to enroll and took the course. After completing it, he returned to work in his parents' buying and selling business. Charin continued to work there until his father died and the business folded. With the family business no longer operating, he used his electrician's skills to obtain part-time work in order to supplement his other attempts to bring in an income. Then, a year and a half ago, he heard about the job of custodian at the primary school and applied.

One of the reasons Charin thinks he got the job at the school was because he had some skills as an electrician. He said he does use his skills on the job sometimes because periodically part of the school's electrical system fails and he must repair it. When asked if his electrician's skills have been helpful in other ways, Charin replied that he has been able to help repair electrical problems in the homes of some of his friends and neighbors. He smiled and said that the electrical skills also helped him be more acceptable to his wife's parents as a potential husband for their daughter. (His wife graduated from teacher's college and apparently comes from a family with a somewhat higher socio-economic standing in the community.)

Although he continues to use his electrician's skills, Charin's current plan is to become a schoolteacher like his wife. He has returned to the training center and has enrolled in the continuing education program at night to upgrade his formal schooling (he has already passed the tenth year equivalency exam). In addition, he is taking another trade/training course, this time in typing. Typing skills, he believes, will be useful when he becomes a teacher-- especially for typing examinations and course notes.

In closing, we asked Charin if he thought the electrician's skills he learned in the training course seven years ago had been helpful in his life. He replied that they had; the training helped him to find employment and even after he becomes a teacher, he will be glad he knows about electrical systems.

Sanan

A young man of 20 years, Sanan lives in a village on the outside of Chiangmai in northern Thailand. He is single and lives at home with his parents and elder sister. His parents own their house, made primarily of wood. Sanan attended the formal school system for four years and when we interviewed him, had been enrolled in a welding course for two weeks at a training center on the edge of Chiangmai.

Sanan's father is a part-time carpenter. His mother runs a small shop in their home in which she sells various sweets and a few sundry items. His sister helps his mother run the shop and Sanan, for the past month, has worked as part of a surveying team for a local road construction/road repair firm. At this job, Sanan can earn 40 baht per day. All of his earnings are given to his parents as a contribution to the household's subsistence. Whenever he has a need for cash, he asks his parents. Prior to his job with the road construction firm, Sanan did not have any work outside the household. His parents also own about 18 rai (7.2 acres) of farmland, but they do not cultivate it themselves. Some long-time family friends cultivate the land, and his parents receive a share of the harvest for the use of the land.

Recently Sanan became interested in upgrading his formal schooling and began a continuing education course at the training center. He wanted to upgrade his formal education because he felt that with more education ultimately it will be easier for him to get a better job. The teacher of the continuing education course told him about the trade/training program. Sanan decided to take the welding course since it would be a "good" skill to have. He also thinks that with the skill, he can get a job as a welder and perhaps regularly earn 40-50 baht per day. After he began the course, several of his friends have been talking about the courses at the center and becoming interested in them. Sanan's sister has also been talking about taking a course in dressmaking.

Sanan thinks the welding course is fairly good. The teacher explains the subject matter well and seems to be genuinely interested in the students. However, Sanan said there was not enough working c. fairly new equipment for all the students to use simultaneously.

After he finishes the welding course, Sanan plans to obtain some work around Chiangmai, hopefully as a welder. The work may only be temporary, however, because he has not served his military obligation and as he is 20, he should be called to do so soon. Ultimately, after he finishes his military obligation, Sanan would like to go to Bangkok and work. He said he already has some relatives (from his father's side of the family) living in Bangkok. Through them, perhaps he can get a place to live and find some sort of work. With a skill, he believes his life will be more secure.

Siriporn

Siriporn, a woman 34 years old, lives in the town of Udorn in Northeastern Thailand. She was born in the province of Udorn. Her parents are farmers with 50 rai (20 acres) of farmland and she is the second of seven children. Siriporn has been married for nearly 11 years. Her husband was married before and had a child from his first marriage. He married Siriporn when he was 31 years old. Her husband completed six years of formal schooling; Siriporn finished only four.

Siriporn has given birth to two children, a boy ten years old and a girl eight years old. She has six brothers and sisters, none of whom live with her now. Siriporn and her family live in the town of Udorn. Their house is made primarily of reinforced concrete. The front part of the house is devoted to Siriporn's cosmetology and skin care business. In her business, she is assisted by her sister and a niece (who lives with her). She earns about 2,500 baht per month from her business. Siriporn's husband also has a business of his own. He operates a transport and shipping business for agricultural produce and earns about 4,000-5,000 baht per month from this enterprise. In addition, her husband owns a truck which he rents. This truck rental operation yields the family about another 5,000 baht a month.

Before she was married, Siriporn had a small dressmaking shop set up in her home. She wanted to improve the skill she already had in dressmaking, so, when she heard about a dressmaking course to be given at an MTT unit, she took the course. That was nearly 14 years ago. After finishing the training course, Siriporn continued to operate her small dressmaking shop. She even went to Bangkok to get further advanced training in dressmaking. Siriporn kept working with her dressmaking business for about three years. She closed down the business when she married and began living with her husband.

Siriporn kept busy helping with her husband's business and soon had children. She made clothes for herself and her children. During this period of her life, she purchased about 60 rai (28 acres) of farmland from one of her relatives. Because the previous owner was a relative, Siriporn says she was able to buy the land at a reduced rate, less than the going market value. Before this land purchase, she owned no land. (The land is still owned by Siriporn. She hires people to cultivate the land for her.)

About three years ago, Siriporn became interested again in setting up a business. She thought about opening another dressmaking shop in her home, but decided against it. It was too difficult, she recalled, to get and keep trained, skillful staff. Besides, she had become interested in cosmetology and skin care and chose to open a cosmetology and skin care shop. She went to Bangkok to get as sophisticated a level of training as she could. When she returned from Bangkok, she opened her current skin care shop. One of the things she likes about her present business is that she can earn a similar income to that generated by a dressmaking shop while having to rely only upon herself as the main skilled employee (with some unskilled help from her sister and niece).

When asked if she thought her dressmaking training had been helpful to her, she replied quickly that it had. The training helped her improve her existing dressmaking business and she valued the chance to gain more knowledge about the skill. Siriporn has also encouraged her niece to take a training course at the center in Udorn when her niece expressed an interest in hairdressing. Her niece is presently enrolled in the hairdressing course. What her niece is learning, Siriporn believes, will also be useful in her shop. She thinks her niece can add hairdressing to the services Siriporn's business already offers.

Looking back, Siriporn thinks that obtaining skills through training courses has been important to her own life and can be for others in her family too. She does suggest, however, that the training center in her town should offer longer, more specialized courses and follow-up courses which could allow the student to advance and sharpen newly acquired skills. Siriporn felt she had to go to Bangkok to get the more advanced and specialized course she wanted.

APPENDIX E

TABLE 1

STATISTICS ON MTTs SYSTEM IN THAILAND

Chartree Axuvathara
 Research & Statistics Section
 Nonformal Education Department, Thailand

Year	No. of Units	No. of Courses	No. of Teachers	No. of Students
1965	2	97	32	2,078
1966	2	97	30	1,684
1967	7	229	70	4,046
1968	18	522	164	9,144
1969	27	626	259	11,061
1970	36	857	309	16,076
1971	45	1,105	408	18,183
1972	45	1,254	469	18,949
1973	45	1,227	465	17,479
1974	45	1,383	465	21,156
1975	45	1,490	411	20,439
1976	47	1,510	415	20,120
1977	47	1,050	326	21,339
1978	32	1,106	333	22,000
1979	36	1,754	625	28,908 (19,037)
1980	Not	Available	Yet	Est. 30,000
TOTAL				

(Estimate 40-45% dropouts)

Source: MOE, Adult Education Dev. 1965-77: thereafter MOE (1977-79),

Department of NFE

Complications, 12/1/80

TABLE 2

1977: ENROLLMENTS IN MTTs COURSES BY PERCENTAGE

60.99%	Home Skills (dressmaking, cooking/baking, hairdressing, tailoring, barbering)
32.67%	Industrial Skills (auto mechanics, electricity, welding, machine shop, radio repair, air-conditioning, construction)
6.34%	Business Skills (typing, in English and Thai; shorthand; bookkeeping)

100%

APPENDIX F

MTTS COURSE LISTING

The MTTs offered a wide range of courses, although no more than six to eight were taught during any one period. The courses offered included:

1. Auto Mechanics
2. Plumbing
3. Soldering
4. Painting
5. Refrigerator and Air-Conditioning Repair
6. Architectural Drawing
7. Food & Cake Preparation
8. Tailoring
9. Bookkeeping
10. Printing
11. Electrical Wiring and Installation
12. Welding
13. Machine Shop
14. Service Station Operation
15. Radio and TV Repair
16. Mechanical Drawing
17. Dressmaking
18. Hairdressing/Cosmetology
19. Typewriting
20. Carpentry

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