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TRAINING FOR EMPLOMENT

IN THAILAND

REPORT ONE

PRESENT TRAINING APPROACHES

CHAPTER II

NON-FORMAL TRAINING

ASIAN REGIONAL TEAM FOR EMPLOYMENT PROMOTION

Bangkok - May 1974

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CHAPTER II

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2. NON-FORMAL TRAINING

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2.1 Types of Training Projects

2.1.1 AGRICULTURAL EXTENSION SERVICE

2.1.1.1 Objectives

The official purpose of the Department of Agricultural Extension is to extend knowledge from the Agricultural Research Institute to the farmers, and to raise the standard of living of rural people. The secondary purpose is to foster individual projects in youth organisations such as 4-H Club and Boy Scout Troops; that the primary objective here also is economic is evidenced by the stress placed by the Department on determining which among such clubs are able through their projects to develop the highest income.

2.1.1.2 Organisation

The central organisation of the Department of Agricultural Extension has 216 permanent employees and 39 temporary staff, a total of 255. At the provincial level there are 427 permanent employees and 44 temporary staff, a total of 471 persons attempting to provide agricultural training to farmers throughout Thailand. Field extension workers report directly to the Amphur officer and are technically responsible to the Agricultural Extension Department in Bangkok. Some of the older agents are secondary school graduates who have additionally miscellaneous agricultural training courses, but persons presently assigned to the service are agricultural vocational school graduates. While it is the policy to give all extension agents 3 months of specialized in-service training, only 10% have received such training since the department was established in 1968.

2.1.1.3 Programme

As the programme is now organised, extension workers spend approximately half of their time in office work and half in field visits, during which they explain farm programmes to groups of farmers. At the present time there seems to be no practical training at the farm level in farming techniques.

The most effective training now being accomplished by agricultural extension agents is in connexion with the guidance provided by the Extension Department to 4-H Clubs and Boy Scout troops which have been established in many rural communities throughout Thailand. Since members of these clubs are farmers' sons and daughters who likely will remain in the farming community, the regular meetings at which programmes for the application of new agricultural practices are presented by extension officials are the main means by which rural youth is now being upgraded in modern farming techniques.

2.1.1.4 Training Results

While the programme has been in operation for over 5 years, the small size of the extension service in relation to the enormity of bringing effective training to farmers throughout Thailand makes an appraisal of that aspect of the programme premature and unfair. Experience has, however, clearly indicated the main constraints by which the programme is handicapped and suggests constructive remedial action which will be outlined in ensuing sections.

Without question, the programme has been highly successful in its work with in-school and out-of-school farming youth, providing training which should prove increasingly important as a factor in agricultural development as time goes on.

2.1.1.5 Constraints

While the most obvious constraint is the inadequacy of such a small number of agricultural extension field agents to accomplish the objectives of the department, the basic problem is considerably more complex. Unfortunately the training institutions which, under present regulations, must produce future extension agents are largely attended by the sons of officials and shopkeepers, and not by rural youth. This results in 2 major problems: Firstly, a high proportion of those attending agricultural vocational schools today have no interest in becoming farmers but aim to continue in the main academic stream. When they accept assignments with the Extension Department it is likely not to have been their first career choice, and there is a strong tendency to resist assignment to remote rural areas. Secondly, while there is a minority of outstanding exceptions, few individuals with non-farming backgrounds are able to communicate effectively with farmers. This situation is further complicated by the fact that effective communication with farmers, both socially and technically, is enhanced by a local farm background. As though these factors were not sufficiently constraining, 50% of extension agent time must now be spent in administrative work, allowing only half-time for effective contacts with farmers.

Training is not itself an essential of agricultural development but, like education, is an "accelerator" which cannot function in the absence of one or more of the following essentials: (a) markets for farm products, (b) constantly changing technology, (c) local availability of supplies and equipment, (d) productive incentives for farmers and (e) transportation.^{1/} In the absence of any of the factors required to

^{1/} Mosher, A.T., "Getting Agriculture Moving", New York, 1966.

put advanced techniques into practice, training is not only useless but brings the extension service into disrepute with farmers.

While many extension workers make every effort to visit local farmers and become acquainted with their problems, the present extension approach seems largely limited to meetings of such farmers as can be persuaded to attend. Most farmers are to be found on their farms rather than attending meetings, and the programme is not presently organised to accomplish the transfer of information into practice by individual farmers.

2.1.2 POLYTECHNIC SCHOOLS

2.1.2.1 Objectives

The Polytechnic programme, which has been in operation for 11 years, originally was aimed at producing semi-skilled workers, but now its official objective is turning out "skilled workers". The basic objective, making dropouts from the educational system more employable, has remained constant, the policy of upgrading training standards apparently being a reflection of the observation that levels of industrial skill employment in the Bangkok area have become more sophisticated. On the other hand, the direction of the Polytechnic programme is keenly aware that nobody seems to know what types of skills **actually** are needed by the Thai economy, or the level of those skills which is requisite from an employment standpoint. To this end the Polytechnics are interested in the trade standards being developed by the Department of Labour, and in determining the extent to which they meet actual employment standards in urban and rural industry. In short, the Polytechnic programme is in a state of flux, a factor which is the proper context for the observations which follow.

2.1.2.2 Schools

At present, there are 9 Polytechnic Schools in Thailand, 4 located in Bangkok and the others in the urban centres of Udorn Thani, Ubon, Chiangmai, Songkla and Cholburi. The administrative and nerve-centre of the system is the Bangkok Polytechnic School, whose Principal and Director is in-charge of all Polytechnic Schools in Thailand. In addition to the differences in plant, equipment, staff and training which characterize each of the original 5 schools,

there is a sharp distinction between those schools and the 4 converted MTTs schools which were transferred to the Polytechnic programme at the end of 1972. To date the conversion has been in name only, the schools operating with the same administration, the same equipment, the same curriculum and under the same budget as prior to the transfer.

2.1.2.3 Courses

The Polytechnic curriculum is divided into 4 basic sections, Industrial, Trades (machine-shop, welding), Graphic Arts (printing, photography), Crafts (dressmaking, cosmetology), and Business Courses (bookkeeping, typing, secretarial). While the full programme is not provided at all times by all schools, the programme everywhere provides the public with a wide choice of courses. The basic programme operates three 15 week terms per year, plus a 4 week summer school.

Standard 225 hour Polytechnic courses are considerably shorter than the standard Mobile Trade Training School courses of 300 hours (see section 2.1.3), and are further distinguished by a tendency in several Polytechnics to adjust course length to the requirements of course content, and to adjust that content to the requirements of the labour market. In Bangkok a former Typing course has become Secretarial, and a Draftsman course has been developed into Building Construction for the small contractor. While most Mechanical courses run for 15 weeks, one Auto-mechanic course is only 2 months in length, of which 1 month is spent in school and the second month is devoted to on-job training. This results from the efforts of the administration to create firmer ties with employment by increasing involvement in arranging on-job training, an effort which seems to have generated good response from larger companies, particularly those representing foreign investment and management. Similar adaptation in one of the provincial Polytechnics is indicated by the start of a course in the maintenance and repair of small motorcycles, pumps and generating sets.

The present Polytechnic curriculum features a quite varied and in many cases unusual mixture of non-commercial and semi-commercial training. Semi-commercial training is a natural development in Auto-shop courses where there is concern with graduate employment, because auto theory and the disassembly and reassembly of engines does not teach maintenance and repair under commercial garage conditions, which is the only entree to employment. In most Polytechnic this concern with practical training starts with repairs on vehicles owned by instructors, officials, and student families. Initially, the vehicle owner provides parts and the school does the repair gratis, but as times go on a more sophisticated procedure, duplicating that of commercial garages, is instituted, with work orders and time sheets and student-foreman responsibility for individual jobs. This usually generates some revenue for the under-financed training system. In those Polytechnics where auto-repair is not on a semi-commercial basis, the reason seems to be that the instructors either lack the incentive to organise training on a practical basis, or else are unqualified by experience to do so.

In the Polytechnic system, semi-commercial training is not confined to auto-repair, but characterizes the more successful training in tailoring, dressmaking, welding, sheet metal, radio assembly, and even cooking. Trainee application and training quality in all classes run on a semi-commercial basis is conspicuously high, a fact not entirely unrelated to the modest incentives this approach makes available to the institution, staff and trainees.

2.1.2.4. Students

The present Polytechnic system has a total enrollment of approximately 6,455, a figure necessarily calculated on a course basis which therefore is redundant with respect to persons enrolling in more than 1 course per year. Morning courses cater to ages 15 - 22, while

evening courses enroll persons from 15 - 60 and over, with educational backgrounds ranging from Grade IV to PhDs. It is noteworthy that age and educational differences present no particular training problem; since the Polytechnics stick to related theory rather than general theory, Grade IV trainees can absorb all the theoretical background necessary for such courses as radio and television repair. Those who enroll in day courses are largely unemployed or undertaking training in the off-farming seasons, while a high percentage of evening students are employed. Some of the latter seek to upgrade their skills in the present line of work, others are attempting to qualify themselves for a different type of occupation, and a large number attend the schools because subjects interest them and because the schools are social centres.^{1/}

2.1.2.5 Instructors

Most Polytechnic instructors, particularly those teaching during the day, are civil servants who are graduates of Vocational Training institutions, many of whom have had formal teacher training. Very few day instructors have had working experience, but many of the evening course instructors are temporary employees with some private working experience. There is, understandably, wide variation in the abilities and commitment of individual instructors, which has a more apparent effect on the quality of training than does the curriculum and material provisions.

2.1.2.6 Equipment and Materials

While the schools transferred from the MTTs programme seem to have been far better equipped than most MTTs units, their equipment suffers by comparison with that in established Polytechnic schools, which in

^{1/} ARTEP Survey results in this connexion are being issued under separate cover.

turn is in marked contrast to the lavishly equipped LIVE Financed Technical Schools. Equipment, however, does not seem a major factor in the overall quality of Polytechnic training, which is conspicuously high. This seems accounted for by the fact that Polytechnic schools generally make better use of the equipment they have, and routinely take far better care of equipment and tools.

Very little material is expended on shop exercises producing objects which are without utility. This perhaps is traceable to the historical restriction of the Polytechnic budget which have made traditional manual training exercises impossible and forced the Polytechnics to gear their training to repair and fabrication work of sufficient practical standard to induce the funding of materials costs outside of the budget. A variation of semi-commercial training in one school involves production orders from other Governmental Departments.

2.1.2.7 Training Results

During the past year there has been a conscious effort on ^{the} part of all Polytechnic principals to determine the extent to which their training has resulted in employment and precisely what happens to their graduates. Following the lead of Bangkok Polytechnic, some schools delay the presentation of diplomas (which are by individual course only) until 6 months after graduation so that the Director can determine what each graduate has been doing. Bangkok findings to date indicate that about 30% have dropped out of training courses, 20% have returned to their former occupations, and 50% have remained unemployed. One provincial school notes that only those who have either found work or want work come back for their diplomas, making it impossible to get a complete picture of training results. All principals agree that training results vary greatly between courses, and it is obvious that they also vary between schools in some of the same courses. This seems particularly true of auto-mechanics, where classes operating on

a semi-commercial basis report that 50% of their graduates have obtained related employment because of the practical repair shop approach. In courses such as dressmaking, where self-employment is a major factor, it is difficult to obtain a valid picture because many individuals who start making clothes for themselves end up running commercial shops, while some who had every intention of setting up shops take other lines of work in order to save sufficient funds for a sewing machine so they can start sewing commercially.

The main product of the recent drive to determine what happens to trainees has been an emphasis on contacts by school authorities with employers. This has resulted in an increase in on-job training arrangements, and success in this direction inevitably will become a determining influence in night course curricula. While a minority of Polytechnic principals seem content to let their schools run along in present ruts, accumulating whatever information is readily available on training results for transmittal to Bangkok, more aggressive principals are scheduling an increasing amount of their time for industrial and business contacts, and one provincial school not only is carrying out an industrial survey regarding graduate employment, but has an active placement and counselling office run by two instructors. Increasingly, principals are becoming aware that the requirements of shop owners and factories do not necessarily correspond to the nature, quality and quantity of training provided by their schools.

Contrasts in the requirements of actual employers have highlighted marked differences in the nature of training which is saleable in various regions. Principals seem to react to this situation in two ways: Those who have established themselves within the Polytechnic system and feel they have the personal support of its Direction tend to ignore the letter of restrictive regulations and improvise training which will satisfy local requirements. Understandably, principals of schools in areas where the economy is completely different from that of Bangkok

graduate employment. In some cases this problem might be solved by additional clerical help.

- d) In many instances training for which there is an employer as well as trainee demand cannot be scheduled for the lack of qualified teachers. The only visible solution seems to be recruiting more teachers on a temporary basis, which has yet to be seriously organised by the Polytechnic system. While it is true that such training is harder to organise and supervise, most Polytechnic principals seem to have the required capacity and adaptability.

- e) While principals tend to view training equipment as less important than the quality of instructors, many individual instructors feel they need more sophisticated equipment to carry on "modern" training. Those most concerned with getting new equipment tend to place a similar priority on the "upgrading" of the Polytechnic programme to ever increasingly higher levels of skill and, particularly, of theory. This tendency finds clearest expression in the demand of the same individuals for further personal educational opportunity and higher government service status. It may be that some of these individuals have been assigned to the wrong branch of the educational system.

2.1.3 MOBILE TRADE TRAINING SCHOOLS

(MTTS)

2.1.3.1 Objectives

In line with the Thai Government decision to extend skill training to out-of-school youth with a minimum of four years schooling but no opportunity to continue formal education, the Mobile Trade Training School programme was organised in 1960 by the Vocational Promotion Division of the Vocational Education Department, Ministry of Education. The programme underwent rapid expansion from 1966 to 1972, due largely to United States Operations Mission (USOM) assistance in equipment, technical advice and foreign training fellowships. The formal objectives are:

1. To set up mobile schools for the purpose of providing skill training to out-of-school youths and adults with only four years of compulsory schooling. Such training facilities are to be made available at the minimum possible expense and time to those who have had no previous skill training and to those who have some training but needed further upgrading.
2. To raise the standard of living of the less fortunate people living in rural areas and to help the individual to help himself.
3. To supplement the training programmes offered elsewhere in order to meet the ever-increasing demand for skilled and semi-skilled manpower in accordance with the national economic development plan and to prepare citizens for new job opportunities.

4. To bring the Ministry of Education activities to the rural people so that they might, in turn, understand and support government aims.^{1/}

Because of the influence of USOM's assistance the stated objectives of their project are the interest. As stated in 1968, the intent is even more specifically directed toward assisting persons in rural areas to obtain jobs:

The Mobile Trade Training Units are designed to provide trade training opportunities to out-of-school youth and adults in villages and towns primarily in Northeast Thailand. The objective is to provide 300 hours of skill training which is sufficiently advanced to enable them to get a job.^{2/}

By 1971, USOM's stated purpose had been broader, somewhat but was still primarily aimed at enabling trainees to obtain employment and upgrade employment capability:

To provide skill training to individuals with a minimum of four years of formal education and little or no opportunity to continue in the formal educational system, to enable them to obtain employment, upgrade their employment capability or improve their domestic situation.^{3/}

^{1/} The Vocational Promotion Division, Department of Vocational Education; Mobile Trade Training Schools and Polytechnic Schools, 1970 Report, Bangkok, 1971 (Paraphrased).

^{2/} Alton Straughan and James Murray, "An Evaluation of the Mobile Trade Training School Project", USOM/Thailand, Bangkok, April 1971.

^{3/} Ibid.

One of the technical objectives of the MTTs, made clear by their name, has been mobility. This stemmed from a desire to spread the training opportunity as widely as possible, coupled with the realization that financial constraints made it impossible to provide such training everywhere at once, and that in small villages the need for specific types of training would rapidly be exhausted, making a stationary school unnecessary.

2.1.3.2 Schools

Of the 54 Mobile Trade Training Schools listed as operational in 1972, 4 have been transferred to the Polytechnic system, 5 appeared to be inactive and 45 are in current operation. Most of these are located in provincial towns of considerable size, where they have established rather solid roots and have every apparent intention of remaining. In many instances this is rationalized by the principal on the basis of continued popular demand, which precludes moving until the local need for the programme is satisfied. In the instance of one "mobile" school located in the provincial capital since its inception six years ago, the principal has actively advocated moving the school to another location in keeping with the original plan, but without success. None of the units were found operating at the village level, but there seems to be a recent trend toward moving satellite units, operated under the administration of established MTTs units, every three to six months. This, however, affects only a small number of the schools, the bulk of which are to all intents and purposes immobile.

The location of MTTs seem to have been determined almost entirely on the basis of requests from Changwat officials and without reference to potential employers or the economic activities typical of the area. Most schools use previously unoccupied buildings, some of which are provided by local authorities or rented. While the buildings often are quite old, they are generally adequate and well maintained.

2.1.3.3 Courses

The MTTs programme provides a choice of 13 standard 300 hour courses, completed within a 4 to 5 month period. Usually the training is in two three-hour shifts per day, one in the morning and one in the evening, with two identical semesters scheduled per year.

In rough order of their popularity the 14 MTTs courses are dress-making, auto-mechanics, tailoring, radio repair, electric wiring and installation, cosmetics and hairdressing, food preparation, welding, typing, bookkeeping, barbering, and woodwork. Courses to be offered generally follow the requests of Changwat and Amphur officials, subject to the availability of teachers, enrollment being entirely a matter of student preference until classes are filled.

2.1.3.4 Students

The latest Adult Education Division figures indicate that there are 10,074 students currently enrolled in the MTTs programme, so approximately twice that number will have been in attendance during the year 1973. There is a wide variation in age of students, between 15 and 59, with the average around 23 years. According to the ARTEP survey^{1/}, approximately 60% of the students have had only 4 years of primary schooling, while 20% have had 7 years and 19% have finished MS3. As might be expected, the educational average increases with the size of the town or city in which the MTTs is located. Because assignment to courses is entirely in the hands of the trainees themselves, their job aspirations are pertinent: The survey disclosed that 82% wanted employment as "skilled workers" in the line of training undertaken, 8% wished to become supervisors, 6% wanted any kind of clerical job, and the remaining 4% had no idea how they wished to earn their livings.

^{1/} Issued under separate cover.

With reference to student expectations it is important to note that 90% of those interviewed were very optimistic regarding job opportunities. 63.5% expected jobs in their own hometown, 23% in larger towns nearby and only 8.5% considered Metropolitan Bangkok an attractive place of work.

The relatively high dropout rate of the MTTS programme, approximately 35%, is understandable in a programme which is scheduled without reference to local farm labour demand, and where individuals are likely to interrupt their training to accept any available work, even of a temporary nature. Of MTTS graduates during the 4 year period of 1969-72, 40% were employed, 50% unemployed, and 10% were students. It is worth noting that while the majority of students thought there were plenty of jobs available, the majority of graduates answered they could not find jobs^{1/}.

2.1.3.5 Instructors

As of September 1973, the MTTS programme had 449 teachers, each normally covering 2 courses per day. While the preferred qualification for instructors is graduation from a vocational teacher's college or from a postsecondary technical institute followed by a year of teacher training at Bangkok Technical School, the shortage of such persons available for the MTTS programme has resulted in an apparently increasing number of instructors who have come direct from vocational schools and vocational teacher courses. In any case, working experience is not a qualification for instructors and pay is based solely on education and tenure.

In spite of the standardization of the curriculum and teaching staff, there seems to be no apparent universal standard of achievement, formal testing programme or technical advice to teachers, other than

^{1/} Ibid

that which the individual MTTs principal is capable of providing. The criterion of course graduation is not achievement, but attendance until the end of the course.

2.1.3.6 Equipment and Materials

While there is considerable divergence in the standard of equipment and tools available in different MTTs units, much of which seems due to the difference of instructor interest and ability in maintenance and tool security, equipment generally is adequate for the standard of training being undertaken, but tools are in short supply and frequently in poor condition.

The availability of materials tends to be a major problem throughout the MTTs system. In subjects like dressmaking it usually is solved by students furnishing the materials for their own projects. In mechanical, electrical and electronics courses which operate within the MTTs materials budget, the practical aspects of the training are strictly limited, all obviously effective training being conducted on a semi-commercial basis.

2.1.3.7 Training Results

With reference to the formal objectives of the MTTs programme, given in Section 2.1.3.1 above, the results of the programme may be summarized as follows:

1. The programme achieves "the purpose of providing skill training to out-of-school youths and adults with only 4 years of compulsory schooling".

2. While many courses tend "to raise the standard of living" of the trainees, and some courses (notably dressmaking) certainly "help the individual to help himself", these benefits are not reaching "the less fortunate people living in rural areas" because the NMTS programme generally is not operating at the village level.
3. The success of the programme in meeting "the ever-increasing demand for skilled and semi-skilled manpower in accordance with the National Economic Development Plan" and preparing "citizens for new job opportunities" has been limited, and this success seems directly related to the extent to which the training, because of budgetary constraints, has been forced to operate on a semi-commercial basis. In the present circumstances greater success in meeting this particular objective can hardly be expected, because the basic curriculum is not geared to local demand for skilled and semi-skilled manpower, and it is difficult to prepare citizens for new job opportunities which do not exist.
4. The objective of bringing "the Ministry of Education activities to the rural people so that they might, in turn, understand and support government aims" seems, at least at the Amphur level, to have been eminently successful. Overall, the conspicuous value of the programme is social, and it would be difficult to overestimate the importance of the social opportunity being brought into the lives of students. From this standpoint, even the high dropout rate is of no reasonable concern because, while there is no available statistical data bearing on this point, it is obvious from a high number of personal interviews in many classes in all regions of Thailand that individuals who drop out to work on farms, accept temporary employment, or help out

in family emergencies frequently re-enroll and continue their training. In most courses comparatively few have definite employment ambitions toward which they are really applying themselves; the bulk are taking the training for something to do and a place to meet friends, with the entirely contingent possibility that the training may prove helpfully economically.

2.1.3.8 Constraints

In-depth interviews with MTTs principals in all sections of Thailand indicate the following consensus regarding constraints which impede the success of the programme:

- a. While a very few principals were satisfied with the curriculum being offered by their schools, the great majority, and particularly those with the longest experience as principals, were critical of their curriculum because it had not been designed to meet local needs and because the inflexibility of the entire programme made adaptations difficult. These constraints apply to skills training generally, and are particularly evident in areas like the south of Thailand, where the training has little relevance to surrounding economic activity and employment opportunity. A factor obviously influencing these constraints was the tenure and consequent feeling of security and support from superiors on the basis of which some principals have gone ahead with changes they felt were necessary to make their training programmes reasonably effective. Such innovations have largely taken some form of semi-commercial operation, which not only has solved the materials shortage problem but inevitably has forced the training into more practical lines in terms of local employment.

- b. A widely mentioned constraint was shortage in suitably qualified teaching staff. This seems particularly handicapping the further an MTTs operates from urban centres, due to the difficulty of persuading city bred and trained instructors to serve in the country. Many principals felt that there was a real need for a long range programme of developing selected rural youth into training instructors.
- c. Related to the foregoing, some of the more innovative principals said that in their efforts to increase the employability of trainees they were handicapped by the inflexibility of their teaching staff, and particularly by their lack of practical working experience.
- d. The lack of sufficient training materials was the most widely mentioned constraint, and even in those schools which had for a long period of time conserved operating funds and diverted them into a materials revolving fund, the size of these funds was insufficient. The lack of teaching materials such as are provided to the Polytechnic schools was also mentioned as a factor limiting effective training. In some instances instructors had personally duplicated such materials, but this seem beyond the capacity of most schools. Graduates of dressmaking courses who have gone into business point out that unless one has had an exceptional teacher who takes the trouble to develop her own collection of modern designs, standard patterns are employed which are quite out of date; some dressmaking instructors thought that the volume of dressmaking training fully justifies the centralized collection and dissemination each year of the latest trends in design.

- e. While many instructors were apologetic regarding their equipment and said it was the main handicap preventing more effective employment training, these same instructors seem to be the ones who also felt the great personal need for their institution and themselves to be upgraded academically. Few principals, on the other hand, were as concerned with their equipment as they were with their teaching staff, and the training appeared far more handicapped by the lack of adequate tools adequately maintained than by the lack of equipment.
- f. One subject rarely brought up by principals was their use of the portable generating sets and transport equipment which are basic part of units furnished by USOM. In rare instances, the generating sets are in daily use, but in most cases their use is limited to standby for central power failure. The excellent trailers on which they are mounted have, in most cases, been unnecessary. Most power wagons and trucks have seen little or no service in transporting equipment, but are used to transport supplies and personnel, which could be moved at less expense with smaller transport. In many instances personnel are transported over paved roads, by 4-wheel drive vehicles obviously intended for rural use. Understandably, most principals make what use they can of available equipment and are not concerned about its suitability or idle time.
- g. While most principals shared the view that by operating at the Amphur level they were already carrying out the purpose of the MTTTS programme to serve the rural population, or at least were as close to the rural level as they personally cared to be; a minority of principals, most of whom have

been with the programme a long time, were deeply concerned with the immobility of the Mobile Trade Training School programme and its failure to reach down into the villages where the bulk of the rural population lives. Such principals felt themselves powerless to take effective action, because of the structural and functional immobility which has been built into all aspects of the programme.

- h. Many principals of outlying schools complained of the lack of cooperation on the part of provincial officials and private industry. In most cases, such principals were young and lacked the experience which would enable them to deal with higher officials and preoccupied businessmen.

2.1.4 ADULT VOCATIONAL SCHOOLS

2.1.4.1 Objectives

The Adult Vocational School Programme, which was the pioneer out-of-school training programme within the Ministry of Education, was organised and has for 18 years been operating without external assistance. Its official purpose may be fairly summarized as making vocational courses, previously given only in major cities and towns, available to people living in rural areas throughout Thailand. As with vocational training courses generally, there is an implicit assumption that the courses given will enable trainees to earn a better livelihood, but in 1955, when the programme started, employment opportunity seems to have been more assumed and the demands on the Adult Vocational programme less specific and more in terms of general social benefit.

2.1.4.2 Schools

Unlike the MTTs programme, there is a clear distinction between the 177 stationary Adult Vocational Schools, with 484 classes, 603 teachers and 19,360 students, and mobile Adult Vocational Schools, of which there are 77 with 150 classrooms and teachers and 6,095 students. The stationary programme is basically an evening school, held out of hours in regular vocational school buildings. Strictly speaking, the transient units are movable rather than mobile, but they do move, remaining in one location for at least 3 months but not longer than six. All 77 movable units are operating at the village level, moves being controlled by a Changwat schedule.

2.1.4.3 Courses

The Adult Vocational curriculum consists of 3 basic subjects:

- a. Dressmaking courses tend to be somewhat less modern and less commercially oriented than those of the MTTs, but are similar in that the standard curriculum is of less importance than the ability of individual instructors when it comes to what is actually learned and the quality of work produced. The AVS programme is the same standard 300 hours, though generally provided 5 hours a day for 3 months instead of 3 hours a day for 5 months as in the case of the MTTs.
- b. Agriculture courses are divided between teaching within the school and practical instruction and experience on village farms. A good deal of the training involves school demonstrations to farmers on village farms.
- c. The Mechanics course is largely standard vocational training in automechanics, but there appears to be some tendency, on a very small scale, to include the maintenance and repair of pumps, small generators, compressors and scooters such as are used by the villagers.

There has been an apparent effort on the part of Adult Vocational School authorities to compromise between rigid standardization of course materials by Bangkok and local requirements, but in all cases observed there has been no adaptation of the standard curriculum except by occasional enterprising instructors. At the present time an official assessment of area training needs is being made, after which the plan is to establish separate curricula for major areas, such as the North, Northeast and South of Thailand. The resulting curricula are likely to be equally fixed, there being no present thought of building in adaptability to variations in local requirements, and to changes in these requirements.

2.1.4.4 Students

While the sample of students attending Adult Vocational Schools in the ARTEP survey was insufficient to reach conclusions regarding the age and educational background of students generally in this programme, more extensive personal visits conducted by the ARTEP mission and discussions with school officials indicate no basic differences from those attending Polytechnic and MTTs courses, except that the further removed the training is from centres of population, the lower average education levels tend to be. As in the other programmes, differences in age and education do not seem to affect the training process or results materially.

In all areas of Thailand, Adult Vocational students seem to place a greater emphasis on employment than does the programme, the majority expressing a desire to be employed in the field of training being undertaken. There is considerable interest in self-employment, particularly in the fields of dressmaking and hairdressing.

2.1.4.5 Instructors

Generally speaking, instructors are provided by each Changwat concerned, which calls for applications of local civil servants with some qualification along the lines of training. Where "qualified" persons are unavailable, local individuals qualified from the standpoint of experience are accepted. Teachers in the stationary schools are largely daytime civil servants, including school teachers from local comprehensive schools, police and military officers, with a sprinkling of shopowners. In the case of the movable schools, fixed term instructors are attached to each unit and receive salaries from that unit; such instructors tend to be from the general area in which training is being conducted.

While academic status still seems to be the leading criteria of teacher selection, necessity seems to force the acceptance of more practical standards of selection in individual cases.

2.1.4.6 Equipment and Materials

The basic equipment used by stationary Adult Vocational Schools is on loan from the comprehensive school of each district, an arrangement made possible because the AVS programme is at night. In the case of the movable schools, equipment is unitized and quite limited as compared to that of the MTTs programme. Since the materials budget for stationary schools is limited to Baht 50 per class, materials are largely provided by the students. Movable units have a budget of Baht 100 per class, which obviously still does not provide for the requirements of basic training, so additional materials come from the students or the community.

2.1.4.7 Training Results

Some Adult Vocational Officials report with apparent sincerity that after finishing their courses, all students of both stationary and movable AVS are able to find jobs in the field for which they were trained. However, field interviews with AVS principals and available graduates indicate that less than half are employed after training, and a very small sample of graduates the ARTEP survey was able to include tends toward the same conclusion. Actually, there has been no follow-up of graduates or dropouts from the programme, so it is impossible to arrive at definite conclusions regarding its effectiveness in terms of employment. There seems, however, no doubt that it has been successful in terms of social and political objectives, and even if one were to assume a minimum view of the resultant employment it would remain a considerable achievement with reference to the funds invested.

2.1.4.8 Constraints

The primary constraints most frequently mentioned by officials, principals and teachers is the shortage of equipment and materials. The stationary schools feel their lowly status as poor relatives of the comprehensive schools, and take the view that if the Ministry paid sufficient attention to the programme to elevate its status, the effectiveness of the programme would be enhanced. In the case of movable units, the basic materials furnished restrict the practical aspects of training, and in consequence there seems a tendency to prolong theoretical lectures. Without question it is the materials constraint rather than lack of equipment which is crippling, and in this connexion it is somewhat ironic that some AVS officials take pride in stating that their programme is entirely non-commercial, an alternative to the training materials constraint which is apparently considered somewhat dishonest, and certainly not associated in their minds with training which is more effective from an employment standpoint. On the other hand, most of the principals and instructors interviewed felt that their courses were too theoretical, they said they had little hope of their materials budget being raised sufficiently to achieve this objective, and they indicated that official regulations rather than training considerations prevented their operating partly on a semi-commercial basis.

Understandably, students tend to be more critical than teachers, who have been raised in a Vocational Educational system, of the lack of choice in courses and their rigidity, though many principals and teachers feel keenly that "while we are doing the best we can, a lot more could be done to make our programme more practical and more responsive to local needs".

2.1.5 DEPARTMENT OF INDUSTRIAL PROMOTION

2.1.5.1 Cottage Industries Division

The governmental agency which has been most active and successful in providing useful training in rural areas at the actual village level is the Cottage Industries Division of the Department of Industrial Promotion, Ministry of Industry. The focus of this programme has been providing things to villagers either in establishing new cottage industries or in upgrading existing cottage industries, mostly in the field of production technology and methods. Training in handloom weaving, dyeing, needlework, woodcarving, rattan furniture, mat-weaving, gem cutting, blacksmithing, pottery and basic rural engineering trades are given every year at different locations throughout Thailand.

The following table summarizes the training activities undertaken by the Cottage Industries Division during the Fiscal Year 1972:

<u>Types of Training</u>	<u>Number of Locations</u>	<u>Total Number of trainees</u>	<u>Total Trainee weeks</u>	<u>Total Expenditures (Baht)</u>
Dyeing	4	142	181	6,036
Needleworks	5	190	1216	52,167
Wood carving	1	13	130	6,519
Rattan furniture	2	13	140	9,733
Mat weaving	1	20	120	8,104
Bamboo Basketry	3	46	196	9,178
Gem cutting	2	61	954	20,857 ^{1/}
Blacksmithing	5	57	303	48,871
Construction of shuttle handloom	3	84	356	13,327
Pottery	4	31	240	56,924
Handloom weaving	8	92	1033	48,371
Engineering trades	1	38	456	32,920

^{1/} Does not represent total expenditure since the expenditure for one of the two training costs was borne by the Mobile Development Unit, Central Security Command, Ministry of Defense.

While this rural training is not publicized as "mobile", it has achieved far greater mobility than the non-formal mobile training programme of the Ministry of Education, and at conspicuously less expense. For example, in 1972 training courses in handloom weaving were given at 8 locations in the provinces of Nakorn Nayok in the Central Plain, at Khon Kaen, Kakorn Phanom and Thaiyathum in the North East, at Thumporn, Songkla and Narathivas in the South and Thinat in the North. In all, 92 persons were trained in handloom weaving during the year and a total training cost of 48,371 Baht, approximately 540 Baht per head. Considering the training time spent at each location, the cost of a trainee-week was approximately 45 Baht.

Some factors in the relative success of this programme are:

1. It provides training which is fully understood and can be fully used at the village level.
2. The curriculum is entirely practical and unencumbered with unnecessary "theory" (such as characterizes the standard 300-hour MES course in Barbering).
3. Instructors are qualified by experience rather than by academic standing.
4. Because training space is borrowed and there is no institutional structure in the way of buildings, and because the training is actually at the village level where the demand volume is limited, there is little opportunity for the programme to get bogged down indefinitely in one location, and mobility is the accepted norm.
5. Training activities of the Cottage Industries Division seem to be undertaken in unusually close cooperation with provincial agricultural officers, community development officers at the provincial, district and tambon levels, and with the local

representatives of the Rural Reconstruction Movement, a foundation discussed in Section 2.1.8 below.

On the other hand, there is considerable evidence that Cottage Industries training programmes have been handicapped by impractical and perhaps unnecessary regulations regarding the tenure of trainers. For example, training at the Thepa Land Settlement project has suffered because it no longer seems possible to employ the type of professional competence which is needed, pay and one-year contracts being the main obstacles. In programs intended to directly qualify trainees for specific types of employment, as is the clear intent of the Department of Social Welfare in arranging this training, most skills can better be taught by the temporary employment of artisans at perhaps higher pay than full-time civil servants but without "perks" and eliminating them from the payroll during non-training time. This usually results in a lower net instruction payroll.

2.1.5.2 Handicraft Promotion Division

The training activities of this division are directed toward an increase in the number of handicraft manufactures in Thailand who can meet the increasing export demand for various handicraft products of Thai design.

For example, the demand from European and American markets for artificial flowers made of Thai Silk is high, and in response the Division organized a two-week training course on the manufacture of artificial flowers which was attended by 54 persons. A similar course on the manufacture of children's toys made of cotton and silk fabrics was organized for about 50 participants.

Before the reorganization of the Department of Industrial Promotion, the Bangkok Handicraft Workshop, a production-cum-training

centre, organised 2 months training courses twice each year. These courses concentrated on the different handicrafts which could be made of various kinds of natural fibre, and on specialized needlework. Since the Workshop has become a component of the training section of the Handicraft Promotion Division, the focus has been redirected towards training vocational school teachers rather than training the public directly. Consequently, there is now only a one-month training course in needlework and the manufacture of handicraft products which is given once a year during the summer school vacation, so that teachers from various vocational schools can attend. During the 1973 sessions, 150 participants received training.

In an effort which parallels that of the Cottage Industries Division (section 2.1.5.1 above), the Handicraft Promotion Division has a 3 months training programme at the village level which was organised at the Thai-Israeli Project (Hupphapong near Amphur Choam, Petchaburi). The Division planned to expand this type of training activities into provincial areas throughout Thailand in the near future.

2.1.5.3 Industrial Service Institute

It is difficult to present a comprehensive and coherent picture of the Institute's programme because at the time the Institutes in Bangkok and Chiangmai were surveyed basic policy seemed in a state of flux and practices did not necessarily correspond to policy. Further, there was considerable difference in the interpretation of facts as seen through the eyes of various individual institute officials and foreign advisers.

The general plan is the establishment of regional institutes duplicating the mother institute in Bangkok; one of these has been established in Chiangmai. Each institute has 4 divisions: 1) Extension and training, 2) Economics and marketing, 3) Products design, and 4)

Workshop, which includes foundry, woodwork, silverware, ceramics and food processing sections.

The institute seeks to meet the need of small, medium and large-scale industry in a given region. For example, their Northern Branch at Chiangmai covers 16 northern provinces and surveys have been carried out in most of these provinces by ISI teams to determine what industries exist and to establish their need for assistance.

Because it is likely to be the model for the establishment of additional institutes, the ARTEP mission paid particular attention to the Northern Branch. In addition to the handicap of recent establishment (construction was still going on at the time of the survey), the following areas of concern were indicated by officials themselves and observed by team members:

1. From an industrial standpoint, the building can only be described as palatial. While this may be no handicap in carrying out the internal programmes of the institute, it is difficult to visualize these buildings as places where Thai industrialists of all sizes and kinds will feel free to come with their problems and contribute the industrial input which is so essential to the success of such an institute.
2. The institute appears well staffed with foreign advisers in all sections, but the programme cannot be effectively implemented without the development of first-class Thai instructors, and this seems presently handicapped by low counterparts salaries and a language barrier.
3. While the policy for the Workshop is said to be making equipment "a little bit more sophisticated than is available in the area", most Workshop equipment is a great deal more sophisticated than

is required by the programme and appears has been assembled more for purposes of display than for utility. A monumental example is the 3-storey foundry cupola which stood unused for 3 years in the Bangkok Institute before being moved to Chiangmai, where its size is even less appropriate.

At the time of the survey there seemed to be a growing realization on the part of Institute officials that, however impressive Institute facilities might be, they represented a great deal of tied up money, facilities not used to capacity and much idle time. For this reason plans were afoot to establish a Common Facilities Services Centre to which entrepreneurs can bring their own materials and the centre could assist in know-how, equipment and training to show them how to turn out new products or refine the production of existing products. This is an excellent idea, but it is here that the full absurdity of excessively sophisticated equipment comes into focus. For example, it was suggested that the Institute might help by turning out more sophisticated castings than were being made privately, but it is the know-how of pattern making, mold making and pouring which produces sophisticated castings and not the size of the furnace. Experimental and specialized foundry work can best be done with small cupolas, even where the castings are relatively large; it takes volume production to justify firing up a large cupola. The fact remains that such a services centre could become a valuable research and development arm, focusing on simplified methods of tool production and the development of relatively labour intensive machines using intermediate technologies.

Another way in which Industrial Services Institutes might be useful is in entrepreneurship development training, but unless such courses are confined to persons with existing projects or with viable project proposals backed by adequate financing, the programme should be tied in with the Small Industries Finance Organization in an effective entrepreneurship development package.

2.1.6 OTHER GOVERNMENT TRAINING PROGRAMMES

2.1.6.1 Accelerated Rural Development

In addition to the training given by the Departments of Vocational Education, Primary Education, Labour and Industrial Promotion, there is a bewildering number of ad hoc non-formal training programmes sponsored by other governmental departments. For example, the Department of Science has a three month training course in ceramics and pottery at its Ceramics Research and Training Centre.

The accelerated Rural Development Office of the Ministry of Interior has for some time been concerned with the improvement of rural life in sensitive areas. ARD's training activities are at two levels: one concerned with Changwat officials provides training in the use of construction equipment provided by USOM, while the other trains youth leaders at the village level. The Instruction/Equipment Training Programme presently covers 31 changwats, mainly in the field of public works. Originally, ARD recruited its mechanical personnel directly from vocational schools but, realizing the inadequate preparation of vocational graduates in technical skills and what has been termed "an individualistic attitude which made it difficult to fit them into operations in rural areas", made a cooperative arrangement with the Department of Vocational Education for Korat Technical College to provide special courses to those selected by various changwats under the ARD programme. Special equipment, material and foreign experts were provided from the ARD Programme.

Since 1965 about 6,000 persons have been trained in 25 skills such as surveyors, draftsman, construction foremen, mechanics, store-keepers, drivers and administrators. Entrance requirements and the

duration of training vary according to skills, from drivers who need only primary education and 8 weeks of training to machine operators who are given 6 months training; secondary vocational education is required of surveyors.

The most notable feature at the ARD programme is the effort being made to keep it geared to actual employment requirements. Instead of establishing long range training targets on the basis of general statistics, each changwat is each year required to identify how many operators, construction foremen, drivers, etc., are actually required to operate, maintain and repair the construction equipment on hand and expected within the ensuing period. The changwat is asked to first recruit this required workforce and then send it for training. At present 3 teams are conducting a survey on the utilization of trained people under the ARD programme, in order to revise its pre-employment training programme and at the same time to design in-service training courses to upgrade employees.

ARD is branching out into other types of training based on employment requirements. One training centre in Pathun Thani province provides 400 hours training for youth leaders and a 350 hour course for elder advisers on youth activities; the content of both courses related largely to agriculture and youth activities and mobile training teams are organized to spread this training at the village level.

While at present there seems a substantial overlapping of ARD and Community Development Programmes in rural areas, it seems likely that in the future better coordination will take place because both are now within the same Ministry.

2.1.6.2 Community Development Department

The Department of Community Development, Ministry of Interior, has organised training for rural youth at 2 levels, namely the training of a limited number of selected youth at 2 regional training centres and training at the village level for rural youth in general.

At the higher level there are 2 centres at Saraburi and Kanchanaburi which accommodates rural youth between the ages of 15-20, with at least 3/4 level education, who have been selected upon recommendation of village committees. These trainees are provided free lodging and board. The training programme is 6 months in duration and has produced about 210 graduates. While general policy is decided by the Department of Community Development, daily administration is assigned to the local changwat officers and, with the exception of administration, there are no permanent staff. Instructors are borrowed from various departments on a part-time basis and mostly are from changwat officers.

Out of 1,440 total training hours at the centres, in the case of boys, 50% is allocated for agricultural training (field stock production, livestock production, sericulture), 32% for technical training (water pump maintenance and repair, motor and hand spray usage, motorcycle maintenance and repair, farm equipment maintenance, and home industries), 9% for general education (complementary education, field study trips, farmers' association principals, health education) and, 9% is allocated for physical education.

As in the case of the 2 training centres for rural youth leaders organised by the National Youth Office, on finishing the course, trainees are expected to return to their own villages and become leaders in village development. To this end, there is a scheme of providing groups of trainees with loans to a maximum of 10,000 Baht,

and so far 3 or 4 groups have been provided with such assistance each year.

The department intends to establish 7 more centres so as to cover 9 community development regions, but in this connexion it should be noted that while the present centres receive "too many applicants" the centres often operate under capacity because applicants cannot meet basic entry requirements. This raises the possibility that the entrance requirements may be somewhat unrealistic and that more flexibility should be introduced in the selection of trainees. What makes it particularly difficult to determine this point is that there has been no systematic follow-up on the extent to which the skills required by the training programmes have been usefully employed at the village level.

The second type of training is organised by community development workers at village level, with courses varying according to subject from 10 days to 2 months. These courses also have no permanent training staff, being manned by officials from various departments on an ad hoc basis. It is estimated that 300 or 400 courses are organised every year throughout Thailand, but since there are only about 200 community development workers at the Amphur level as against 600 required, only those villages having such workers are provided with courses. Community development workers are presently either university graduates or vocational school graduates who receive additional CD worker training.

A typical community development centre covers 8 provinces with some 160 CD workers. The main personnel problem is the high rate of turnover caused by transfers to the Department of Local Administration "where they have power".

The centre provides 4 kinds of training:

- a) CD workers are trained for 6 months, 2 being devoted to theory and 4 to practice in villages such as organizing groups and planning projects.
- b) CD volunteers regionally were trained for 6 months, lately for 3. Volunteers receive 500 Baht per month for 1 year then a lump sum of 5,000 Baht; they get priority if they want to become regular CD workers. There are 600 volunteers throughout Thailand.
- c) Youth CD volunteers is a new programme started last year which accommodates individuals who have failed to get into university, giving them training in academic teaching and community development, so that they can work as Assistant Teachers and Assistant Community Development Workers.
- d) Youth leaders are trained for 1½ months in problem solving, public speaking, democracy and leadership.
- e) Young girls from villages are trained "to play their role in the development process". 25% of training time is devoted to such subjects as morals, etiquette, and citizenship, while 75% concerns such practical subjects as embroidery and sewing, nutrition and agriculture, artistic crafts utilizing waste materials, and knitting. During the 4 months course, trainees receive a per diem of 12 Baht from which they cook their own food as part of the course.

Community Development Workers do not seem to have much direct involvement, but operate as development catalysts in villages, persuading various departments to undertake projects. It seems likely that they could play a more active role in training at the village level if the necessary non-formal programme and materials could be organised.

2.1.6.3 Public Welfare Department

As indicated in Section 2.1.5.1 above, much of the training sponsored by the Department of Public Welfare is done by cooperative arrangement with other departments which have established training sections; some is developed with the assistance of outside aid organisations. In any case this training is of importance in any discussion of rural training because it actually reaches the village level, with 65 mobile teams now covering some 1,200 villages in which 69,000 people live. The target by 1976 is to service 3,000 villages with 300,000 people. While their job is to implement education, health and agricultural development programmes, they open the way for considerable specific occupational training, largely done by the Department of Industrial Promotion.

The importance to non-formal training planning of Public Welfare Department experience seems to lie in the following observations of officials working at the village level:

1. Academic qualification in instructors is unimportant. What counts is local acceptance and personal commitment.
2. Training at the village level essentially is by demonstration; the most effective trainers are professionals in their fields of training.

3. If training is to be used locally, the tools and equipment are either available locally, or must be readily fabricated, or must be made available by the Government in quantity. In any case adequate village instruction does not require transporting a large amount of training equipment from one location to another; mobility is a matter of moving the instructor and relatively simple training equipment by normal transport.
4. Village training courses can and should be brief and move on, so recruiting instructors on a permanent basis makes little sense, particularly because persons requiring permanent contracts most likely will want to settle down in one location. A relatively high rate of turnover is normal and must be anticipated.
5. Mobile teams are now being used successfully to train village extension workers; there is no reason why villagers cannot be similarly trained as occupational trainers serving neighboring villages. If the principle of temporary contracts is established there is no problem when the need for specific training in a given area has been met - the instructor simply returns to earning his living at his trade.

2.1.6.4 Direct Village Training

For years the problem of bringing training to villages in Thailand has been handled by the construction of ladders designed to carry social and employment training from the planning centre in Bangkok progressively down to the village level. As in the conspicuous case of MTS programme (section 2.1.3 above) many of these efforts

have been largely grounded at the Amphur level and have not actually reached village life. While the community development programme is far more rural in design and implementation, the final step of the ladder toward village implementation tends to be rather weak, and local officials have become increasingly impatient because the benefits of nationally organized programmes do not reach the lives of their villagers. This frustration is resulting in the local organization of training which is not only aimed at, but starts and ends at the village level.

One such programme has been organized by the Governor of Lampung Province to stem the migration of village youths to urban centres. Backed by special and private funds, a programme for boys' training is in the planning stage, while one providing training in home economics and sewing for girls has been in successful operation for 3 or 4 years. This particular province has 5 Amphurs out of which one mobile unit operates in Amphur villages. Training equipment is kept as simple as possible and any available transport is used to move from village to village at the completion of training courses. These courses are relatively standard, of 3 months duration, 3 courses being given each year, the remaining 3 months covering time lost when classes are interrupted for harvest or festivals. Classes are held in empty schoolrooms or private homes, obviating the necessity for even temporary school structures. There may be as many as 3 teachers in one class, because enrollment in the classes is open to all who are interested and teachers are provided according to the volume of demand. One of the teachers usually is a graduate of a technical school but also has had 2 or more years practical experience. None of the teachers are civil servants, but are hired on temporary contracts. Since they come from the local area, most commute from their regular homes on motor scooters.

Training in a typical village, famous for cotton growing and weaving, is geared to local self-employment opportunity. In this area dealers come to the villagers with necessary materials and patterns, and in this way girls can make 15 Baht per day. Sewing machines can be purchased through the dealer at 20% interest. Since the school is seasonal, operating in the off-agricultural season only, the teachers support themselves by making dresses during the agricultural season. Some of the teachers, with approximately 10 years of education, were graduates from the same programme and had no other technical or teacher training, a fact which apparently does not influence their effectiveness as teachers.

If this provincial programme is a fair sample, creating effective employment training at the village level is surprisingly simple and inexpensive, once training planning is freed from the involved pattern of traditional vocational training and is conceived directly in terms of what rural youths need and can use in their own villages.

2.1.7 PRIVATE FOUNDATIONS & EXTERNAL PROJECTS

While the ARTEP mission studied a large number of privately sponsored non-formal training projects in all regions of Thailand, many have purposes additional to training for employment which make it difficult to draw conclusions which will benefit the planning of non-formal training for employment generally. Because of the vastness of the subject, this report arbitrarily limits itself to brief comments on three projects, selected because their approaches are basically different.

Because decentralised planning and control are essential to make non-formal training programs responsive to actual employment opportunity, there is much to recommend isolated projects in this field to private sponsorship which will ensure practical planning, cost control and personal follow-up. Government might well encourage private involvement so it can keep in contact with such developments and profit from their experience.

2.1.7.1 Thailand Rural Reconstruction Movement

This is perhaps the best example of successful rural training in Thailand. Qualified workers in agriculture, education, health and cooperatives are recruited and sent to live permanently in villages, first to find out the actual needs of farmers and then to be effective catalysts in the improvement of living conditions. This improvement covers livelihood, health, education and group activities, and while the present direct employment content may be limited, it is directed to and does not exceed local employment opportunity. A conspicuous start has been made developing the present agricultural base, creating a practical foundation on which handicraft, servicing and small-scale industrial activity can be built in subsequent stages.

An outstanding feature of this program is that it cooperates rather than competes with governmental efforts at the village level,

although without doubt it is attempting to do things which the Government should be doing. Its value is that it is a Thai pilot effort which can pioneer the way to sounder governmental policies and procedures. Its main weaknesses seem to be centered about an extremely idealistic approach which does not find expression in solid project proposals and budgeting. Related to this is the danger that the programme may take on too much responsibility and spread its efforts so thinly that it will not be able to achieve the impact of solid examples which are necessary to influence rural development strategies.

2.1.7.2 British Boat Building Centre

It is unfortunate that so few organisations concerned with non-formal training have ^{not} taken the trouble to discover and visit this centre at Nong Khai, because it clearly illustrates a number of positive and negative considerations when planning practical production training. The idea of such a centre was conceived 10 years ago by the Mekong Committee but awaited finance until the British surveyed it in 1967 and started the project in April 1970. The heart of the project is a UK staff of three tough-minded, competent and industrially experienced practical engineers, who will be replaced by Thai counterparts now in training in the UK.

The phases through which the Centre has gone merit study. Initially the objective was a "pipe-dream" which envisioned a far more expensive operation featuring instructors far more "qualified" from a vocational training standpoint, and no end product - just training. The production program which builds boats on a commercial basis was devised in order to create effective training, but the key reason the centre policy turned in this direction was that they had to get practical in order to make supplementary money to run the centre. The irony is that the training program was outstandingly successful, all graduates finding employment, but the training-cum-production made so

much money it was diverted elsewhere and does not find its way back into funding the training programme, so that at the time the centre was surveyed by the ARTEP mission, training had been temporarily discontinued and production was being carried on by paid workers.

The foregoing development is of great concern to the Centre's direction, which is primarily concerned with effective industrial training but has no say whatever regarding financing. Funding is, to be charitable, quite unbusinesslike, the only sensible funding provision in evidence being a revolving fund contributed by the U.S. Government for daily expenditures, i.e. short supplies; the Director spends from this fund as required and submits receipts for audit and reimbursement. Main centre financing seems to have been pushed to a corner by lucrative profit cuts made possible by a 1 million baht sales turnover in 1972. The training budget has no relationship to the volume of work or production, and in consequence the greatest problem of a financially successful training-cum-production programme is how to finance the training. The reason for the extreme dependence of the training on budgetary considerations is that raw materials, fiberglass particularly, are very expensive. These are now being provided by those for whom boats are being built, largely the Mekong Committee and the Royal Thai Government.

Besides financing, the Centre has other problems which stem from lack of realistic overall planning. To be successful, this type of training-cum-production must be fed work, which now comes largely from the other side of the Mekong River. Potential customers are mostly European firms whose confidence in any RTG operation seems hardly conspicuous. Three river tankers represent one year of training work for the Centre, but because training scheduling necessarily is slower than straight production scheduling, borderline bids are required to attract initial contracts and establish a reputation. This conflicts with initial profit margins and there seems a tendency on the part of

the responsible officials to increase prices until the Centre is no longer competitive and loses contracts. What obviously is required is someone in charge of Thailand's official representation who has a commercial eye and understands what must be done to become established in business.

A third problem concerns the recruitment and placement of trainees. When surveyed the Centre had only 37 out of a programmed 80 trainees. Most of the market for this type of training is in Bangkok, the centre of Thai boat production, and potential trainees in Bangkok do not want to go to Nong Khai in spite of facilities which include boarding in two dormitories. The nominal Baht 20 per month tuition is no problem, but there is no effort to recruit trainees until the last minute and selection is on the basis of school records plus an interview over which the training staff has no control. The trainees are from the Nong Khai area but almost all are going to Bangkok for employment, particularly those trained in fiber glassing.

The training itself is quite realistic and effective. Theory is limited to a maximum of 20% and "we teach them what they are doing"; practice increases as the maximum 6 weeks training courses progress. It can readily be seen that this approach to training not only is successful but is relatively inexpensive and can be conducted with minimum slowing of production scheduling. But it may well be that the only way in which the training centre can become effective both as a training organisation and from a production standpoint is for it to be taken over by the Thai Navy. As one official remarked, "They are the only people with enough money and interest to keep the place running properly".

2.1.7.3 Don Bosco Technical School

In addition to the formal training programme described in Section 1.5.2.7 of Chapter I, Bosco handles informal training with equal success.

An example of direct on-job production training is their printing shop, which is operated by "street boys". The boys' lunches are payed for by the Lions Club and after two years working experience with on-job training they get outside jobs paying roughly the salary of a policeman, as compared with their fathers' earnings of half that sum.

As in the case of their formal training, Bosco's major goal is qualification for actual employment, and governmental recognition of its success is indicated by a request to plan programmes in which ex-soldiers would be integrated into present training. Because the Bosco approach is geared to local employment, in this case Bangkok, it could be duplicated in small cities throughout Thailand, where training centres without academic studies are needed to qualify the poor for existing jobs. Two complementary programmes would be evening training courses for the employed, with training materials or sponsorship from industry, and parallel evening educational courses for the employed.

2.1.8 PRIVATE OCCUPATIONAL SCHOOLS

As compared with schools "sponsored" by the Government or by private foundations, private occupational schools cannot survive without a demonstrable connection with subsequent employment. For this reason they are not apt to train in fields where there is no specific training need. On the other hand they necessarily are supply-oriented and reflect the ambitions of their young customers; in Thailand private occupational schools are largely limited to commercial and accounting courses, and students in the main are those who could not remain in the regular academic stream.

At the lower end of the commercial school spectrum are the numerous establishments which are not really schools or training establishments since they have no programmes of instruction; actually they are in the typewriter and space-rental business, filling the gap caused by Government commercial school regulations which requires so many hours of typing practice per week at institutions which lack sufficient typewriters. At the other end is the Bangkok Commercial College with its abundance of the latest office equipment and highly trained instructional staff. In between are a number of instructional schools which prepare students for employment in Thai industrial and commercial firms.

The market for commercial schooling is relatively steady, due to the inadequacy of such training in the public formal system, the fact that formal dropouts are more interested in commercial employment than those who can continue schooling, the appeal of white collar status, and the turnover caused by marriage. In most manually skilled occupations there is not at present sufficient volume demand to justify the establishment of vocational schools on a commercial basis, but unless governmental training programmes are revised so as to meet actual industrial employment requirements, private schools can be expected to

fill the vacuum, as they have in other countries throughout the world. Due to the lack of sufficient volume, private schools cannot, however, be expected to make any substantial contribution to employment training in rural areas, where most Thais live.

2.1.9 PRIVATE ENTERPRISE TRAINING

2.1.9.1 Use of Vocational Training Graduates

Generally speaking there seems little question that, with outstanding exceptions, products of most training systems in Thailand do not match the viewpoint of the private sector on what constitutes employability. Small entrepreneur-industrialists want products of the education/training system who can perform different kinds of work involving general technical knowledge, who are willing to work in an untidy environment, whose initial wage demands are below Government pay scales and, importantly, who accept individual responsibility for demonstrating their effectiveness and contribution to the firm as the basis for pay increases. From the viewpoint of medium and large private enterprise, a variety of technical personnel at different levels is needed, for example skilled workers, foremen and technicians. It is toward this more modern industrial sector that many vocational training programs now are aimed, and their pay is on par with public sector rates. However, these larger enterprises find that they still must provide specific training to the graduates of training institutions before they can qualify for skilled and technical assignments, a combination of on-job training and working experience to which few graduates of vocational training institutions take kindly. As a result it was difficult for the ANTEP mission to find skilled operators in industry who were graduates of the vocational education system; most technical institute graduates were found working as draftsmen or clerks.

While it is difficult to locate vocational training graduates at work in industrial establishments, a large number of firms have hired them and tried to integrate them into the labour force. One employed 6 graduates, but their work had to be redone by uneducated skilled workers and the graduates lost face and quit. Employers generally

have no interest in unnecessary training effort and fall back on the apprenticeship system as the only way to keep production going.

2.1.9.2 What Employers Want

If the objective of vocational training is to make graduates employable, curriculum building logically would start with those jobs which are filled by external recruiting, with the qualifications set for them by employers and with a careful study of how employers train and upgrade external recruits so they can be integrated into productive employment. In the erection of the many overlapping approaches to occupational training in Thailand, scant attention seems to have been paid to what employers want or do, the basic assumption apparently being that the educational and training system knows best and that employers should "upgrade" production organisations by employing products of the training system and reorganising production to meet the arbitrary standards of training classifications.

Entrepreneurs with wealth and education seem less likely to worry about the technical qualifications of initial employees, but those with little education often have made repeated attempts to employ those with the advantage of technical education. One entrepreneur with 4 years of general schooling has the greatest respect for education and realizes the importance of theory when attached to practical experience, so tried having his employees given instruction at the factory in job-related theory, using technical institute instructors. The experiment failed because the instructors, none of whom had had industrial experience, were not satisfied with the level of written answers. "To be effective, the instructor should be able to adjust the training to the trainees, but they don't seem able to." His lone employee product of institutional training is an MTTTS graduate welder, and both employer and employee agree that while MTTTS training gave him a good start, he had to learn most of what he is doing on the job "because MTTTS training did

not make me familiar with different materials and techniques". This plant, like most of the more prosperous industrial undertakings, believes in labour mobility within the plant, shifting workers to give them wider experience so that the best can be identified and upgraded. Typically, they do not hesitate to hire from the outside when new specialised skills are needed.

A revealing and qualified view of skilled and technical employment qualification has been contributed by a young, able engineer who is in charge of electrical distribution for a private power company. His background itself is illuminating:

- 1) Graduate of Bangkok Technical Institute;
- 2) 5 years practical work experience and technical training in Germany with Siemens;
- 3) Eleven months with Philips in Bangkok in their programme office;
- 4) 2 years with a Thai Siemens dealer doing cost estimates on actual field jobs;
- 5) 8 months with Toshiba Company in their production department;
- 6) 6 years working experience with present employer.

When this man graduated from Bangkok Technical Institute, his training was not completed but had only started, and the manner in which he became qualified for technical supervision illustrates the value of labour force mobility; had he stayed with any one employer he could not have moved up so rapidly. Asked what kind of skilled people his company really wants to hire he replied, "Industrious, honest, willing to work with their hands, good personality, fast at absorbing problems, and with practical skills and theory on the same level."

He reports that while LIVE graduates learn faster because they have broader theoretical background, they are difficult to handle "because they think they already know everything". "The main problem with schools is their curriculum, which is insufficiently practical and taught by instructors without practical work experience". He feels this might be solved by bringing in persons like himself from industry as guest instructors. "I didn't used to be interested in helping with the school programme, but I'm willing now to give time if it will be really useful". But when asked about hiring vocational graduates as skilled workers he replied that "they can't do our work the way it must be done - we have to go to the apprenticeship system"; such a programme is now being developed by the company. Asked whether school facilities might be useful to his apprenticeship programme he said, "No. We have better and more appropriate equipment for training here."

2.1.9.3 Equipment Sales Training

One of the most important sources of industrial training comes from the manufacturers of equipment. This is true of complete plants of foreign origin set up in Thailand with one or more consultants on fixed contract to set up, organise, train and depart. It is also true of considerable mobile machinery and small stationary equipment whose manufacturers use training in the operation and maintenance of their products as a sales wedge. The more sophisticated the equipment the greater likelihood of an arrangement which includes training in the initial sales package. This is generally paralleled by training fellowships at the manufacturing plant abroad, programmes which sometimes do not result in longterm benefit to the individual manufacturer but are important agents in upgrading the labour force generally. Here again, governmental training programs might benefit from a study of how industrial plants are set into operation from scratch, complete with reasonably qualified staff who at least are trained sufficiently to profit from experience, and not trained so excessively as to refuse

the opportunity for experience and further training. This study might help in the design of short, specific training inputs with minimum interference in ongoing production.

Employers generally do want better qualified personnel, but it is easier for them to visualize an improvement in their present labour force than to persuade them to retrain products of a training system with values alien to production.^{1/}

2.1.9.4 Strengthening Industrial Training

Throughout Thailand, the overwhelming volume of the nation's large and growing skilled working force is created by varying degrees of organised and disorganised apprenticeship and on-job training. Because of specialised equipment and processes the pre-employment training system cannot be expected to qualify trainees for the bulk of skilled employment opportunity, but perhaps the most sobering aspect of industrial training in Thailand is the insignificant impact of the two fields of traditional vocational training which seem easiest to gear to industrial needs - auto mechanics and machine shop - both of which are turning out graduates on a volume basis. For better or worse auto mechanics and machinists come overwhelmingly from a system which, typically, may train the unskilled for from 3 to 6 months at very low or no pay, then pay Baht 200-300 per month, increasing to Baht 1000 with experience and skill. While hardly ideal in its present state, the common apprenticeship and on-job training system in Thailand certainly has been a more effective, faster and less expensive way of producing required skilled manpower than has institutional training and there seems much to be said for redirecting Government assistance toward strengthening this system, particularly since it is the only one which can hope to make the necessary constant adjustments to product, technological and organisational changes which characterise an expanding

1/ This subject is further dealt with in Section 2.1.12, Below.

economy which has its feet on agriculture and rural industry and its head in the modern sector.

The assumption among many professional trainers that modern industry requires generally longer education and training and a labour force with wider theoretical comprehension of the complex processes involved is not well supported by modern industry in Thailand. It is the one-man repair shop on the edge of a rural town which requires the owner-operator to be mechanic, machinist, electrician and all-around welder, whereas most employees of the most modern precision watch-case and dial manufacturing firm need little education and with no prior industrial experience are trained on the job in from three weeks to three months. The larger the establishment the more the occupational structure is broken into subdivisions which require less training, and at the same time the ratio of theoretically competent supervision tends to be reduced because necessary theory is standardised and broken down to each job.

2.1.10 GOVERNMENT SERVICE TRAINING

An interesting sidelight on training for employment in Thailand is provided by Government service itself. As has been noted by a number of outside scholars and is widely accepted as factual by Thai educators, "formal education predominantly has served to prepare candidates for political service ... and ... education primarily has been the occupational tool of a bureaucracy".^{1/} Without question the major goal of educators, students and their parents has been employment by the Government and, on the obverse side of the coin, the major qualification for Government employment and pay levels has been academic achievement. One might think that if the educational system seriously thought itself capable of fully qualifying individuals for employment, it would start with the elements of government service employment rather than those of industrial employment, but nothing of the sort has happened.

The one branch of Government service for which the Ministry of Education seeks to fully qualify employees is in education itself, and it does so in the same manner as industry prefers to qualify its employees - by apprenticeship (practice teaching) and on-job training. Most graduates accepted by other departments must be retrained to undertake technical work and, due to the absence of job entry training programs and supervisory time, they are mostly trained in a trial-and-error manner which is hardly more effective than traditional industrial apprenticeship training. When the urgency or importance of the workload demands it, departments throughout Government service create their own training programmes, for the same reasons and in a manner quite similar to the way industry goes about solving the same problem.

^{1/} Norman Jacobs, "Modernization Without Development", Praeger Publishers, New York, 1971, p.185.

In view of the foregoing, it is difficult to understand why there is such resistance to **the view** that qualified skilled and technical workers cannot be produced by vocational training alone, without working experience and on-job training. The failure to develop a cadre of skilled operating personnel to qualitative and quantitative standards in keeping with the expansion and increasing sophistication of Government service is basically due to the factor which inhibits similar workforce development in Thailand's rapidly expanding and increasingly sophisticated industry - the low quality of on-job training and conventional barriers to promotion on the basis of proven ability. It is here that it would seem appropriate to focus outside training resources, rather than on the expensive and largely unsuccessful effort to produce qualified workers in an institutional vacuum.

2.1.11 PUBLIC ENTERPRISE TRAINING

Nowhere is the gulf between the declared employment objective of formal and non-formal training programs in Thailand and employment reality more clearly seen than in public enterprises; they train their own employees, establishing training programmes to meet their own peculiar and changing manpower requirements.

2.1.11.1 Jute

A major jute mill has operated for 18 years, employs 2,500 workers directly and another 500 by contract. It has established "vestibule" training in a shed furnished with 1 machine of every type used in the factory; operators are qualified in 3 to 6 weeks of training while mechanics must get further in-plant training for a total training period of 1 year. Before the training programme was started new workers learned from the old; now old workers learn from new, a sure sign of effective training. There seems little distinction between some 20 mechanics with vocational training backgrounds and workers promoted from helper to operator to oiler to mechanic - all go through the in-plant training programme - but turnover among those who have come up through the ranks is low while that among those with vocational backgrounds is high because they leave for government jobs; of 50 recruited 10 years ago only 3 were still employed at the time of the ARTEP survey mission.

2.1.11.2 Telephones

The Telephone Organisation of Thailand operates a training centre where all newly recruited personnel, largely graduates from technical institutes, must undergo 3 months of specialized training,

one month of which is devoted to applicable technical knowledge, one to field experience and the final month to combining what has been learned. Analysis of the training and subsequent employment requirements indicates that graduates of technical institutes not only understandably lack the bulk of electrical theory specifically required here but that their previous theoretical training has not been in a sufficiently practical context and has included a volume of theory which will never be used by the Telephone Organisation.

2.1.11.3 Electricity

The Electrician Training Centre, established by the National Energy Authority with assistance from the Government of France provides training for new recruits, skilled workers and foremen of three electrical authorities and private firms. The Japanese Government is now assisting in expansion of training in electronic controls. From 1968-74 the Centre provided basic training to 102 persons, upgrading training to approximately 1000, and specialized short-term courses to another 60. This can be considered 100% employment training because all trainees are employees. Total basic training is for one year, with 450 hours allocated to common subjects whereas 720 hours are provided in the special fields to which individuals are being assigned. Half of the 1 million baht annual budget is contributed by the three electrical authorities, the balance being borne by the NEA; the Board of Directors represents all four bodies and is responsible for formulating training policy and supervising its implementation according to the national requirements. In this connection it should be noted that training requirements are derived from project manning tables which take into consideration ~~internal consulting~~, and not from manpower forecasts.^{1/}

^{1/} For an analysis of the utility of manpower forecasting in determining training requirements, see Report Two, Chapter I of this mission, Chapter I, "Manpower Forecasting in Thailand".

2.1.11.4. Telecommunications

With the rapid expansion of the telecommunications system in Thailand there has been an increasing need for technicians to supervise the installation, operation and maintenance of the latest modern equipment, and a requirement for a very large number of skilled workers. Since 1963 this need has been met by a Telecommunication Training, Test and Development Center jointly funded by the Thai Government and UNSF, with ITU as the executing agency. Training in telephony, radio, transmission, outside plant, telegraphy, traffic and administration is provided to engineers, technical assistants, technicians and other staff in two distinct classes: Regular courses for new recruits vary from 4 to 43 weeks, and the intake for technician courses are either graduates of technical institutes or assistant technicians with at least 3 years of service; special courses for in-service staff or providing instruction on new equipment and methods are organised on an ad hoc basis and generally are short.^{1/}

At present theory is taught by Training Center staff, while practical instruction is from operating personnel without teaching experience, who take time from their regular jobs. The Center now seems intent on developing its own practical training staff "who will also have practical experience", but it is difficult to see how this could result in anything but a lowering of effective training. The creation of a permanent, full-time institutional staff also ignores the fact that, while the present expansion period provides a steady market for graduates, future requirements are likely to be characterised by less volume and increasing specialisation. The administration seems concerned about the high turnover of teaching staff

^{1/} It is interesting to note that the length of both types increased until 1970 and have since dropped, while the cost per student week varied inversely; whether the length was decreased to meet rising costs or the costs increased due to more intensive training could not be determined.

caused by more lucrative jobs with the Electrical Authorities, which runs at 20% per year, but this has not had a demonstrable effect on the quality of training because of the preponderant influence of the practical side of the programme. What seems more significant is that the turnover of graduates on jobs after training is practically nil because the training has been organised narrowly and deeply, permitting graduates to go to work productively right away. As for trainee qualifications, it is evident that broad vocational training is useful, but what makes it so is the math and general theory which enable more rapid assimilation of specialised training, which must be undertaken subsequently regardless. From an employment standpoint much of the specialised training given in vocational institutions seems wasted and unnecessary. One year of training at the Center seems clearly more qualifying for employment than are 3 years in a technical institute, which raises the question of why the educational system should go to such expense to provide non-essential training. Training Center authorities seem to agree with the ARTEP mission position that there is a limit to the pre-employment training which can be used effectively; all telecommunications workers, however previously trained, seem to need practical working experience before they can absorb specialised training in the context of its application.

Telecommunications training is characterised by a strong element of selection. Not only are trainees selected from more applicants than can be accommodated, but they are self-selected by the willingness to pay \$2,500 tuition without a definite employment commitment on the part of the Authorities. There is also a large element of pre-selection by employers who nominate trainees on the basis of working experience. Selection continues during training by test and interview, and the Center seems to have little hesitancy about

ridding itself of what it terms "hooligans".

The move toward further institutionalisation of the Centre seems less motivated by training authorities, who fully appreciate the vital contribution of part-time working trainers, than by the reluctance of operating executives to lose costly supervisory time. Their point is well-taken in that the time of the practical training staff is expensive, which is what makes it valuable from the training standpoint. Against this apparent trend are the following considerations:

1. Full-time practical instructors will not be "permanent", for they are wide open to loss by employment in industrial operating assignments.
2. Specialised experience required for effective training varies from time to time, and a permanent staff loads the Center with people who may not be needed and precludes obtaining better qualified specialists for short training courses.
3. By losing part-time industrial trainers the Center loses contact with employment realities.

On balance it would seem that management must determine whether they need the training badly enough to contribute the necessary supervisory time; if they don't need it the training should be discontinued, not permanently mummified in a second-class training institution.

2.1.11.5 Railway

Successful combination of full-time theoretical instruction staff with part-time specialised practical instruction staff is further illustrated by the Railway Training Centre operated by the State Railway of Thailand. There are 15 theoretical instructors and 43 practical specialists. The Centre brochure states that admission is limited according to the requirement of departments, and students must be between 16 and 22 and have passed secondary education, a medical exam and an entrance examination, but is silent on the one selective factor which probably has the greatest influence on the attitude of trainees, the low number of dropouts and low subsequent job turnover - namely that the best way to gain admittance is to be born into a railway family. Working for the railway is not so much a matter of being an employee as of joining an exclusive club which expects new members to demonstrate their worthiness for the honor. Training is divided into non-technical and technical: The procedure in non-technical training is 1) employment by Personnel Department, 2) orientation course of 2 weeks at the Centre, 3) working experience for 3 or 4 years, 4) in-service training at the Centre, either as a brakeman for 3 months or as a station clerk for 5 months. Technical training is in two sections, Mechanical Engineering consisting of converting steam locomotive drivers with at least 5 years working experience into diesel drivers, a 3 week course, while Civil Engineering is 4 weeks of training in railway construction and maintenance given to technical school graduates with 3 years working experience and experienced foremen, most of whom have P4 level education.

In addition to pre-selection which cuts down 500 applicants to 80 trainees, the Railway Training system features selection during training, failures being required to repeat or drop out, and during

a subsequent year of on-job training in the workshops during which the trainee submits reports and is rated by supervisors. Finally, there is on-job selection for further upgrading training.

In sum the training here is highly selective, restricted to job requirements and, from an employment standpoint, efficient and effective.

2.1.12 NATIONAL INSTITUTE FOR SKILL DEVELOPMENT

In 1968 the Royal Thai Government requested technical assistance from the UNDP/SF for the establishment within the Department of Labour of a National Service for Technical Skill Promotion and Job Entry Training for Industry, including the organisation of a National Office and a pilot National Institute for Skill Development. The project became operational in May 1969 with ILO as the executing agency. The Institute was envisioned as playing a major role in skill promotion activities for industry at large, including the preparation and introduction of tests as required for skill-upgrading and certification.

2.1.12.1 Trade Standards and Methodology

With the assistance of the previous National Committee for Trades Standards and its 13 subcommittees for specific trades, 8 trade standards have been approved by the Council of Ministers and 5 more are being prepared. Without question this is a notable achievement because it has established a procedure by which standards of foreign origin can be revised and negotiated so as to meet the industrial needs of the Thai economy. First the standards are redrafted by the subcommittee, they then are submitted to a working group for each trade with equal representation from government and industry, and finally the standards are circulated by mail to 200 industries in the Bangkok area for their comments. As yet the standards have not been checked out against operations in typical types and sizes of industries throughout Thailand, so as to create modular standards which meet the requirements of different undertakings. Understandably, the effort to date has been concentrated on industrial conformity to trade standards; as indicated in Section 2.2.6.6 below, the mission feels trade standards can be a tool by which training is made adaptable to specific industrial needs.

The preparation of the trade standards and their presentation has been accomplished in a professional manner with one notable exception, the clause in each standard whereby "Candidates who have successfully completed a training course approved by the National Council for Skill Development may claim exemption from undertaking the test". While no such courses have as yet been approved, the principle of expecting industry to accept definitions of skill attainment from which training institution graduates are exempt seems unrealistic and unnecessarily discriminatory. It would seem that the tests either are essential to establish levels of skill or they are not. If they are not, it is difficult to expect industry to accept and enforce them. If they are necessary, they should be a prerequisite of any diploma or certificate which implies the achievement of a skill level.^{1/} The existence of such an exemption clause does not indicate much confidence in the standard of their training on the part of training authorities, and this doubt is clearly conveyed to prospective employers who are asked to participate in the testing programme.

2.1.12.2 Pre-Employment Training

Pre-employment training is considered the main activity of the NISD. Until 1971 a 12 month basic training course was followed by 6 months of practical in-plant experience and training, but at that time it was found that the basic course contained unnecessary repetition and it was reduced to periods of from 3 to 9 months, depending on the trade. While the courses originally were organised along rather traditional vocational training lines, their content has increasingly been influenced by the requirements and advice of employers. Similarly, while the scheduling of courses initially was predicated on student demand, there is an increasing trend toward tailoring volume to employment demand; the discontinuation of courses for which there is insufficient employment is now being considered.

^{1/} A recommendation to this effect was made by the National Trade Standards Testing Committee in an undated memorandum to the National Council for Skill Development.

As compared with other governmental vocational training, the Institute lays strong stress on selection of trainees. Officially, 20% of selection is based on aptitude and general knowledge tests, while 80% depends on individual interviews with instructors. Main points covered by the interview procedure are: a) Family status; the Institute discriminates against the well-off who are more likely to be temporarily thwarted professional students, and in favour of the poor or middle-class who are more likely to go to work after training. b) Physical fitness for specific types of work. c) Maturity (as opposed to age). d) Individual commitment to become employed in industry as a worker. The Institute considers this very important, for those so committed are easiest to train. e) Special interests: Why does the individual want a given line of training? What is his basic motivation? A recent group of 1700 applicants is said to have been reduced to 500 acceptances by the foregoing process, but the actual selection procedure seems essentially determined by favouritism.

After completion of preliminary training in the Institute, successful trainees are assigned to in-plant training for 3 months, during which they return to the Institute one day per week for specific instruction the need for which may have developed during working experience, and to solve individual or group problems. Construction trainees are an exception; they cannot return for final training because their employment is too far from the institute. Efforts to arrange this vital segment of training by the cooperative use of local Department of Vocational Education facilities have not been successful.

After training most are said to get jobs with firms which cooperate with the in-plant programme, but there is strong evidence that the on-job training programme is declining. This downward trend seems due partly to bad trainee behavior, which reflects inadequate selection of trainees before and during training. This triggers a second factor,

the unrealistic expectations of some employers who expect first class mechanics, something no institutional training programme can produce. A third factor is sub-standard instruction. While the teaching staff is half from Teachers' Training Institutes and the other half have had some industrial experience, neither group shows interest in pre-employment instruction. This seems largely due to very low salaries which preclude the employment of better instructors, plus the peculiar provision for extra pay when teaching upgrading training only. Further, the products of teacher training persist in teaching the way they were taught and do not follow curricula revised to meet current industrial needs.

That an employment market does exist is indicated by the 300 prospective in-plant training assignments awaiting 200 current graduates, but the effort to establish a firm link between the training of individuals and their subsequent employment has not been made. At present there is no record of what has happened to old graduates after their initial employment; how many still are working in industry is not known. An effort is now being made to push the employment of graduates and in future it is planned to organise routine follow-up at 2 and 5 year periods after graduation.

2.1.12.3 Apprenticeship Training

While at present the apprenticeship training conducted by the Institute is the same as that offered by the pre-employment training programme, the key difference is that trainees are the employees of industrial establishments. The basic idea is to save training time and expense on the part of employers, but this has not yet caught on, employers tending toward doing their own training on the job unless they can use the recruitment and selection factors of the regular pre-employment training programme. The term "apprenticeship" in this connection refers to the traditional non-formal type of apprenticeship and should not be confused with a formal, contractual apprenticeship programme.

Without a formal apprenticeship programme which is legally binding on employers and apprentices, it is impossible for the Department of Labour and NISD to foster industrial apprenticeship under controlled conditions which insure programme effectiveness. At present such a programme cannot exist in Thailand because apprentices cannot be exempted from active military service and employers are not "prepared to take part in a scheme of training at the completion of which (and just when his services are most valuable) a young man has to leave his employment to undergo military service. If, on the other hand, the military authorities could be persuaded to agree to a military training programme to be incorporated into the apprenticeship scheme and undertaken throughout the apprenticeship, this would be more acceptable. In fact, such an arrangement would have the advantage of acting as a deterrent in the event of an apprentice wishing to leave his employer before his apprenticeship was completed as, if he did so, this same young man would not be able to claim exemption from full military service at the age of 21."^{1/}

2.1.12.4 Upgrading Training

The philosophy behind upgrading training has been to open the doors of the Institute to the employed, but these evening courses have become popular with laymen who, for a variety of reasons including employment, want to learn trades. Many are graduates of vocational training institutes seeking more specific training. While there is good intention to make use of the training on the part of persons willing to attend evening courses, there is, according to Institute officials, a large element of waste. For this reason a major campaign is being planned to counteract the unfavorable attitude of many industrial managers and recruit more of the employed, so as to achieve the original intent of the programme:

^{1/} F.M. McCullough, "Report on Apprenticeship Training in Thailand", ILO, Bangkok, 1973

There is a strong element of selection in upgrading training and assignment to courses is far from haphazard because demand has so far exceeded training space and instructors have a personal interest in eliminating those whose primary motivation is social.

As with the balance of Institute training, this effort is handicapped because it is inconvenient for persons beyond a 20 kilometer radius to attend institutional courses. This makes it particularly difficult to service small industry, and there is talk of organising upgrading courses closer to areas of industrial concentration. Some trainers are going into industry and serving as training consultants, a related activity which should be encouraged.

2.1.12.5 Instructor and Foreman Training

Here the programme is directed entirely to the needs of industry, with the result that it certainly is one of the best efforts of the Institute and one which creates job opportunity for the less skilled as workers are upgraded. Course elements mainly involve leadership training and effective industrial relations, instruction and communication problems and techniques, and safety; most courses are organised specifically for different manufacturing enterprises. Closely related is one of the best Institute programmes, the training for larger firms of their personnel training officers. The 6 weeks course consists of 2 weeks at the Institute on a half-day basis, then 2 weeks of mass training courses in the factories, and a final 2 weeks "clinic" in which the training experience of the second two weeks is discussed. After training the company trainers train their personnel both in-plant and at the Institute as is appropriate to the subject.

2.1.12.6 Regional Multipurpose Vocational Training Centres

A second phase of the original UNDP project involves the establishment of three regional centres with training programmes similar to those of the main Institute in Bangkok. The first is now under construction at Rajburi, the second is expected to be built in Cholburi during 1975, to be followed by a third at Lampang. The Second Phase seems largely a projection of the initial First Phase proposal, with little effort to profit from the experience of the present operation, to correct limitations of the present Institute approaches, or to take into due consideration great regional differences in the nature of employment opportunity and therefore of training requirements.

The importance of tying training to specific job opportunity is not indicated in the project document, which connects the necessity of training with the growth of the labour force and the outfall of the educational system, rather than with employment. Item 8 of "Justification for the Project" goes so far as to take the Second National Economic Plan projection of 142,000 skilled workers in major trades to be needed by the economy, subtract an expected 31,000 products of vocational training establishments and come to the surprising conclusion that "Thus, the imbalance is 111,000". This of course assumes that a) the graduates of vocational institutions will in the main find employment in industry and b) that the economy of Thailand is depending on these institutions for its supply of skilled labour; both these assumptions are at present contrary to fact.

It is understandable that the project document lays stress on providing "vocational training opportunities" rather than training for existing job opportunities because, as quoted in the proposal, this is exactly the position taken by the National Third Five Year Plan: "The

development plan for out-of-school youth is focused on ways to provide training, particularly vocational training for those who cannot further their schooling."^{1/} The spectre of trained unemployment becoming an extension of the problem of educated unemployment does not seem to have been visualised.

Finally, the project document again cites the Third Five Year Plan regarding "A chronic shortage of skilled workers in rural areas. Shortage of skills is an obstacle to regional industrial development". It implies that this problem may be solved by the establishment of regional institutes, when in fact the mother Institute is having logistic difficulty servicing industry in the Bangkok Metropolitan Area. The basic program contains no provision for its adjustment to rural requirements.

Perhaps it is not too late for a rethinking of objectives and the methods likely to achieve the excellent basic purposes of the project in the three locations now envisioned. Some suggestions regarding possible courses of action may be found in Section 2.2.6, below.

^{1/} National Third Five Year Plan, NESDB, Chapter 7, page 27.

2.2 RECOMMENDATIONS

2.2.1 FUNCTIONAL LITERACY

While the main objective of this programme is educational, it now includes training for social objectives and might well be directed in part toward employment training objectives. Because of the importance of the Ministry of Education's current efforts to develop a curriculum for functional literacy which will be relevant to local rural life, the ARTEP Mission looked closely into the subject, including attendance at UNESCO's "Regional Field Operational Seminar on Functional Literacy Linked with Agricultural Development". On this basis the mission respectfully suggests the following considerations:

1. It appears that curriculum committees are composed of local education officers and representatives from various government and private agencies involved in rural development. Teachers who have experienced the local problems and local leaders, who understand their people best are not included, and should be.
2. To identify problems and undesired conditions, a "base line" survey is conducted. Understandably, there is a tendency on the part of officials in the curriculum committee to translate the results of such surveys into the language of official government objectives, because that is the language to which they are accustomed. From the standpoint of effectively reaching the minds of those attending literacy courses it appears too abstract and generalized. There are two considerations here. The first is that there is nothing to be gained if the concepts

advocated by the educational programme are not supported in fact by actual rural development. For example, the problem may be less that people do not consult the doctor in time than that there is no doctor serving the area. A second consideration is that farmers are not noted for responding favourably to moral pronouncements from outsiders but, as in any conservative society, they pay a great deal of attention to what fellow farmers think and do. The implication of this seems that the literacy curriculum might best be constructed on the basis of favourable and unfavourable concrete examples, expressed in the common thinking of the villager himself. It is important to realize that the language of national or regional policy, and the language of agricultural textbooks are both quite different from the language of the farmer, which is much more specific and should be the language employed by literacy courses if they are to be really "functional".

2.2.2.2 Personnel

Accomplishing the objectives summarized in item 4 above means not only an increase in applied field staff time, but a shift in policy toward the recruitment of a different calibre of staff. That the changes recommended here cannot be fully effective immediately is just as well, for it is essential that the agricultural extension service, which ultimately must be large in order to cover the needs of rural Thailand effectively, should be organized carefully and allowed to profit by its experience as the programme develops. In this context, the following changes in recruitment policy are indicated:

1. The basic problem with present professional staff is that the agricultural schools in which they are developed are largely attended by the sons of officials and storekeepers who do not have an intimate knowledge of and experience in practical farming, and therefore cannot be expected to communicate satisfactorily with farmers. This particular problem can be solved only by a long-range programme of recruiting outstanding village youths and seeing to it that they receive the educational opportunity necessary to qualify them as professional extension agents.

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2. Since it is most unlikely that the Department of Agricultural Extension will, in the foreseeable future, be able to field a sufficient number of professional agents to cover rural Thailand effectively, it seems obvious that a serious effort should be made to train selected progressive farmers as non-professional assistant agricultural agents, or "animateurs". Since the purpose of these assistant agents is training farmers by demonstration on their own or

neighbouring farms, 60 days of preliminary training is all that such agents can put into use to begin with; as they need to become qualified, such agents can be brought back for additional short training courses in the specific techniques which they will then be demonstrating.^{1/} On the basis of very satisfactory experience in the South of Thailand with volunteer workers, it is possible to state that the appointment of farmers or their sons as extension assistants would, in this area, be highly effective.

2.2.2.3 Organization

In connexion with the advantages from a development standpoint of having extension agents attached to development projects, it is important that in such cases the extension workers should be attached to the project management rather than to local administration, and that they be trained by the project staff. In addition to irrigation projects, an example from the South of Thailand might be cited: There is at present a special extension staff attached to the Rubber Research Centre and its substations, where the agents could be first trained and subsequently posted as an extension task force to extend the creation of marketing groups and improve techniques of tapping and processing.

^{1/} This approach has been outlined in detail and fully supported by Dr. George W. Hill, ILO Adviser in Rural Manpower, NESDB.

2.2.3 RURAL SERVICES AND INDUSTRIAL TRAINING

At present there is comparatively little officially sponsored skills training going on at the village level in Thailand, and the training which does reach into villages has often been appraised by vocational training authorities and consultants as not only under-financed and inadequate in terms of the enormous number of rural people who "need" training, but has been considered of inferior quality. Recommendations have been made which raise the danger that funds somehow will be found and allocated to the establishment of a network of impractical vocational training institutions intended to serve the training requirements of rural Thailand.

The ARTEP Mission feels that such an approach not only would be expensive and unnecessary but doomed to failure. It feels that the further creation of fixed regional training institutions cannot effectively influence rural lives and should be avoided; available funds should be spent taking the necessary training into the villages where rural Thais live and work. Further, rural training should not inflict on rural people "high technical standards of training" along lines which graduates cannot use to improve their daily lives. In short, rural training must be predicated on the existing bases of skills and employment opportunity.

The foregoing is not a call for a new approach, but rather a recommendation that the present cooperative efforts, such as training planned by Community Development and implemented by the Cottage Industry Division of the Department of Industrial Promotion, be strengthened and extended. In this connexion, attention should be drawn to the village training programme initiated by the Governor of Lamphang province. These successful efforts, as well as the years

of experience gained by the Ministry of Education's movable Adult Vocational School Programme and the successful innovations of individual Polytechnic Schools and MTTs units, form a adequate basis for the outline of Rural Training Policy which follows:

1. Rural training should be directed toward actual employment opportunity. If the goal is employment by others, a local demand for such an employee must exist. If the goal of training is self-employment, provision for necessary tools, equipment, financing, marketing and transport must exist.
2. Training should be erected on the present skill base. Vocational trainers tend to consider villagers "unskilled", when in fact the level of traditional skills in rural Thailand is quite high; the main problem is not so much creating new skills as channeling existing skills into economically more productive lines of work.
3. The content and length of training should be limited to that necessary and applicable at the time of training. This means short, specialized courses attended by small groups of trainees.
4. Rural training should be almost entirely by demonstration. One does not need to know physics in order to repair a bicycle, and the electrical theory necessary to understand basic electrical wiring and repair can be demonstrated with a simple model using water and small plastic piping. This means that instructors need not be professional staff and therefore that it will not take years of expensive training to develop them. Rural trainers may be selected on the

basis of practical experience and given at most 3 months of specialized rural instruction training.

5. Rural training may best be organised on a provincial and district basis, with roving supervision and wide regional latitude to initiate, alter and discontinue courses without reference to central authorities, who would audit the training and guide training policy on the basis of periodic reviews of training operations and their results.
6. Wherever possible, local personnel should be employed as instructors and regional personnel should be selected as supervisors. This means a long range policy and programme to develop selected rural youth into training instructors. It should be noted that such training can and should largely take place on the job, so that local conditions can be taken into consideration fully by the training instructor's supervisor. In addition to being a superior way in which to train instructors, this approach permits the more speedy employment of rural youth as temporary instructors, and at the same time provides the training system with a rural feedback which is essential to effective rural training planning.
7. Thailand can hardly afford a continuation of the present trend toward increasing overlapping of rural training efforts on the part of various governmental organisations. While important, questions as to which organisation should have jurisdiction over what aspects of rural training are far less important than reaching functional jurisdictional decisions which will eliminate duplication and confusion before they become entrenched institutionally in rural training practice.

- 8. There is much to be said for a clear distinction between the responsibilities of planning and executing training, such as presently exists between Community Development and the Department of Industrial Promotion.
- 9. Training should follow the normal pattern of rural development from agricultural and handicrafts skills to the skills required by agro-services, general services and small-scale industry ^{and then} to those of agro-industry and decentralized major industry. This pattern starts with the present efforts in rural training to equip farmers for productive work in the off-agricultural seasons. In this pattern the training required by each successive stage is easier and more effective if built on work experience gained in preceding stages.

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- 10. In the total rural development pattern, the greatest potential both for employment opportunity and for ultimate area development lies in the encouragement of self-employment and small-scale entrepreneurship. Since training must feed into actual employment opportunity, the following restrictions must be observed in organizing such training:

- a. Training for self-employment and entrepreneurship must not be undertaken in the absence of the markets, financing, facilities and transport necessary for their success.
- b. Such training must include business as well as skills training.
- c. Except in rare cases, entrepreneurial training should be restricted to those with practical working experience in the line they intend to pursue.

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2.2.4 MINISTRY OF EDUCATION NON-FORMAL TRAINING

2.2.4.1 Purposes

At the present time, Polytechnic Schools, Mobile Trade Training Schools and Adult Vocational Schools all serve the same basic objective, namely to make skill training available to those who are no longer in the formal education stream. All three seek to tie such training into employment opportunity and the planned economic development of Thailand. Since it is the intention of the Ministry to make educational and training opportunity of the same quality as universally available as possible, the social, political and employment objectives of all three present out-of-school training problems may be covered by one statement of purpose.

2.2.4.2 Organisation

The separate operation of Polytechnics, MTTs and AVS can readily be explained historically, but its continuation cannot be justified rationally. In addition to serving the same basic purposes, all three share common problems, solutions to which are made more difficult rather than facilitated by separate administration. The stationary, movable or mobile nature of the training programme does not clearly differentiate them, mobility being a factor necessarily related to the impracticality of establishing permanent facilities in locations which do not have sufficient population to create steady demand. Many "mobile" centres have remained in one location for two or three years; while others never have moved and are unlikely ever to be moved. In any case, the need for mobility need not and should not alter the common training approach or its quality.

ARTEP respectfully calls attention to the strong support for consolidated operation given by many of the more experienced and effective principals in all three present Ministry of Education out-of-school training organisations. Organisational unification would have the following results, largely beneficial:

1. Existing programmes could be restructured into 2 functional approaches:
 - a. Stationary schools, would, as at present, be located in centres with sufficient population and industrial development to justify, in terms of available resources, continuous training school operation.
 - b. It might be recognized that the concept of mobile schools mounted on wheels and of movable schools which abandon one location and move in their entirety to another has little to recommend it in achieving the Ministry of Education's out-of-school training objectives. Mobility of training might better be based on movable course units which, after serving in one area are moved to enable different communities to receive the training. Since one principal can be responsible for more than one small rural training location, an entire training programme can be moved from one location to another, or training can gradually be phased from one operation into another, or individual courses can be redistributed as desired. Since most out-of-school training buildings are borrowed or rented, moving presents no particular

problem providing an accumulation of unnecessarily large equipment has not been permitted. If all course equipment is containerized, it can easily be transported by any common carrier, providing maximum mobility at low cost and security for tools, equipment and supplies without extensive remodeling of temporary facilities. In sum, the concept of mobile training should be redesigned to meet actual training needs in rural Thailand and existing equipment should be redeployed accordingly.

2.2.4.3 Curriculum

Heretofore, curricular changes seem to have been considered only in terms of one branch of the Ministry of Education's various non-formal training programmes at a time. Further, changes seem largely to have been in the direction of increased academic content and modifications copying some recognized system of Western vocational training. If enhanced employability and potential income are to be serious objectives of the non-formal training system, it seems apparent that a complete rethinking of what should be taught in the non-formal system throughout Thailand is in order:

1. Since few officials and principals in the three separate ~~systems~~ are satisfied that present curricula meet actual training needs, particularly from the standpoint of local employment opportunity, the suggestion that a revised combined curriculum be created is hardly revolutionary.

2. As in the case of formal training (see Chapter I, section 1.9), the non-formal system needs to be freed from the impractical notion that individuals can be fully qualified as skilled workers by pre-employment training alone. Recognition of this obvious fact will permit the design of training courses stressing skills which are useful in the daily lives of trainees, whether they are employed or not, and which also provide a sound basis for the acquisition later of employable skills by on-job training and working experience.

3. Without question the most common criticism of the present courses relates to their inflexibility in content and duration. This inflexibility often is justified by principals on the grounds that standardizing course content is essential, and that administering different lengths of courses which are determined functionally by the requirements of each course is too difficult. On the other hand, the thesis that it actually requires precisely 300 hours to provide training in such diverse subjects as auto-mechanics, barbering and radio assembly is quite difficult to support. The solution to this dilemma appears relatively simple: With the goal in mind of modularizing^{1/} all out-of-school training so as to permit course flexibility while maintaining effective standards, a basic course unit

considerably shorter than 300 hours but sufficient to cover the requirements of more simple courses may be adapted, and courses which are more complex may be divided into several of these time units. There is a present need for scheduling more specialized as well as less advanced courses, which the existing system resists; shorter training units would make scheduling advanced training more practical. Additionally, it would make the entire training programme more adaptable to farm labour schedules, which would reduce course dropout rates. As the unified curriculum is developed and functional modules of training in various courses are created, it will be possible for principals to adjust the curriculum to the needs of the economy in their areas of operation.

4. With the exception of dressmaking and tailoring courses, where the major need is to bring designs up-to-date with local taste, occupational curricula in general needs to be carefully examined and overhauled to free them from traditional and outmoded vocational training patterns and adapt them to local requirements and conditions. One obvious appropriate subject largely ignored by present training programmes is bicycle repair, which has widespread local use and is an effective entree to more complex mechanical and electrical skills. In many areas, the utility of mechanical and electrical training would be increased and training costs decreased were new courses to be designed

in electro-mechanical maintenance of scooters, klong engines; small farm cultivators and pumps.^{1/} Another example of presently unexplored rural training is the adaptation of auto junk yard parts to the creation of rubber tyred ox carts. A number of labour-intensive agricultural processing machines, the value of which has been demonstrated in parts of Thailand and other Asian nations, could well be fabricated in non-formal training programmes. On the electrical side, training should in the main be restricted to sources of power which are locally available; as new sources of power are introduced, they can be accompanied by appropriate curricular changes. It is essential that all products of training programmes be locally useful.

5. A widespread constraint in present training programmes is that when curricular materials are prepared in Bangkok their effective distribution to instructors throughout Thailand is notably uneven. This problem would partly be met by consolidated and more decentralized organization as recommended in section 2.2.4.2, but special attention must be placed on the importance of the prompt distribution of all curricular improvements to concerned instructors, wherever they may be

^{1/} One of the mysteries of vocational training in Thailand is how both the formal and non-formal training systems have managed to so largely overlook the long-tail outboard motor, which is a major factor in the transportation of people and goods in Thailand and, in modified form, also irrigates thousands of acres of land. The economic advantages of these engines are such that a manual on their construction, care and use has been prepared by D.C. Medina, UNICEF Asian Regional Vehicle Management Adviser, so that its versatility can become known in developing nations outside of Asia.

in Thailand. (This may be the greatest single factor behind the feeling frequently expressed by individual instructors on isolated projects that their existence was ignored and their work seemed of no importance to authorities in Bangkok.)

6. Many of the advantages of non-formal system disappear when it is saddled arbitrarily with strictures inherited from the formal educational system which have no positive functions in the non-formal context. If informal training programmes are to be recognized by employers, it is essential that the present system of graduation based on having attended class for a prescribed number of hours be replaced by graduation based on achievement. In cases where individuals have previous experience or particular aptitude which enables them to complete course requirements ahead of schedule, they should be graduated so that they can go to work and the attention of the trainer can be devoted to those who still need it.
7. To maximize its effectiveness in rural areas, non-formal training should be freed from academic scheduling and planned in terms of avoiding agricultural labour peaks rather than conforming to educational semesters.

2.2.4.4 Personnel

1. Pooling the personnel of the existing three organizations would have a number of advantages:
 - a. The total system would have access to the best and most experienced principals. Present Polytechnics, and

additional stationary schools designated as required, would act as centres of a district school system, their principals becoming district superintendents, responsible for all the out-of-school training being given by the Ministry of Education in a given area. This would make maximum use of present experienced personnel, place key negotiations at the provincial level in their hands, provide younger principals with the personal supervision required for their development, make it possible to assign teaching personnel with due consideration for family factors, and permit the use of younger staff in more remote locations without reducing the quality of training being provided to rural citizens.

- b. The combined operation would permit expansion of specialised training courses which could be moved individually to different schools, whether stationary or movable, as required.
- c. Combined operation would make it possible to reassign present equipment so that it can be more fully utilized. It would act as a safeguard against disproportionate allocations of outside assistance, which tend to leave parts of the programme under-equipped while others may in some respects become over-equipped.
- d. Out-of-school training budgets could then be based on area requirements, without favouring one size of community at the expense of another.

2. Operating policies of the combined system should be redesigned so as to realistically cope with the present quantitative and qualitative teacher shortages. On one hand, it costs too much to recruit instructors from industry who are sufficiently qualified in theory as well as experience. On the other hand, the cost of seeing to it that theoretical instructors have sufficient current working experience to handle the practical side of training tends to be prohibitive, and when successful tends to result in the loss of the instructor to industrial employment. The Mission feels that the answer to this dilemma may be found in recruiting temporary instructors from industry,^{1/} some of them for specialised parts of a given course, to concentrate on the application of theory to current practice in the area, leaving exposition of theory and normal practical instruction in the hands of the regular teaching staff. Close working relationships between civil service instructors and private industry instructors cannot but be beneficial to both and to the acceptance of training results by employers. If, as has sometimes been maintained, it is impossible to administer such a combined system of instruction, then it must be said that such an administration is inadequate to the needs of non-formal training.
3. Definite provisions should be made for the establishment of part-time employment counselling and placement services within each training project, no matter how isolated or staffed. As indicated in section 2.1.2.7 above, a precedent has come into being informally in one of the Polytechnic schools. For effective operation it is essential that counselling and placement be the functions of responsible schools authorities

^{1/} For a precedent, in Polytechnic Schools see Section 2.2.1.5 of this Chapter.

rather than of officials not involved in the actual training; in remote areas these functions might be handled by the roving principal in-charge of several rural centers. The importance of allotting sufficient time to employer contacts should not be minimized. The active intervention of a concerned official in the employment efforts of graduates often is essential to break into the pattern which traditionally restricts employment to family members and friends; additionally, if training is to result in employment, contact with prospective employers by the individual who is responsible for curricular changes is essential. This is not something that can await the development of a sophisticated employment and counselling service within the Labour Department, for even that cannot create training programmes which currently meet existing job opportunity unless all such training is to become the province of the Labour Department.

The present policy of selecting teachers on the basis of academic qualification, including academic teacher training, should be altered in the direction of the present emergency practice of hiring, in many instances on a part-time or temporary basis, individuals who have practical working experience plus the ability to convey the basics of what they know to others. In either case a major element in training instructor selection should be hiring those who have a personal interest in providing practical training which results in employment, and who are both willing and able to keep in personal contact with local employers and actual working conditions. As has been noted in section B.1.2, there is a strong probability that the ability and commitment of teachers is more important to the quality of training than are the curriculum or material provisions.

2.2.4.5 Trainee Selection

From the standpoint of the intent of the Ministry and also that of the motives of individual students, Ministry of Education out-of-school training courses inevitably will remain a mixture of employment and social objectives. However, to the extent that employment is the objective it is important that trainee selection take place, so that the training effort will not be wasted and the individual led to believe that he can achieve consequent employment which is not possible. Increase in individual school industrial contacts and the inclusion of persons with industrial experience in the training staff inevitably will heighten the element of self-selection and reduce the number of misfit trainees with unrealistic expectations, for the training will reflect actual conditions of employment.

2.2.4.6 The Materials Constraint

While grants and loans seem available for sometimes dramatic expansion of equipment, the greatest constraint on effective training, aside from the quality of instructors, remains the materials which are consumed in the training. Granted foreseeable budget limitations coupled with social and political pressures for the rapid expansion of the informal training system, it simply is not possible to plan effective training without assuming the purchase of training materials outside of the regular operating budget. The obvious answer to this problem has for sometime been given by the courses within the present Polytechnic and MTTs systems which have proved most effective from an employment standpoint, namely semi-commercial training.

Theorists object to semi-commercial training on grounds that it leads to corruption, that it poses unfair competition and takes work away from commercial enterprises, and that it detracts from the training result which comes from "pure training". From an employment standpoint,

however, it is not just understanding theory and somehow being able to produce an identifiable training product which is important, but rather being able to put theory into practice the way it is done commercially, both as to procedure and as to standards. If the training is actually geared to employment opportunity, training courses will be limited to the incidence and number of individuals actually needed in the local labour market, so by the time it would be possible to classify the training as a commercial threat, it would have ceased to exist. But the greatest insurance against unfair competition to private enterprise from non-formal training is that by the time semi-commercial trainees are able to fully compete, they will not be in training but working on paying jobs. Even the most effective present auto-mechanic training programmes in Thailand do not constitute effective competition for commercial shops; if they did it would be an indictment of those shops rather than of the semi-commercial training. Ironically, what contributes most to the questionable reputation of semi-commercial training in Thailand is the fact that its practice is not recognized and controlled officially. Training conducted in a truly semi-commercial manner will be on a strict business basis, with regular job orders, time sheets and full costs and income accounting. Most principals encountered were operating in this manner, but a minority keep no such records and stoutly maintain that cost controls and financial records are "completely unnecessary". The answer to this problem is to recognize the semi-commercial practice and safeguard it with standard budgetary and costing procedures.

A widespread modification of semi-commercial training involves the fabrication for the school itself, and for other educational institutions, of basic equipment. It obviously is more sensible for a sheet metal class to be fabricating gutters which will be used on the roofs of schools rather than to be making traditional vocational

exercises which pile up in a corner gathering dust. Many of the tools and much of the basic equipment required by various training programmes, which are in such short supply, could be made in shop courses. Beyond the non-formal training system itself there is a tremendous potential semi-commercial market in the expansion of primary education, and training should be altered to meet the needs of this construction and equipment programme, because the skills involved are precisely those which are in demand on the open labour market.^{1/}

^{1/}As reported in section 2.1.2.6, this approach has been pioneered with conspicuous success by present Polytechnic Schools.

2.2.5 DEPARTMENT OF INDUSTRIAL PROMOTION

As has been outlined in Section 2.1.5 above, the Department of Industrial Promotion has been responsible for training programmes which have been generally effective from an employment standpoint. The danger seems to lie in the trend toward building fixed institutions as a substitute for the far harder task which actually is required - institution building. If the Department is to actively further industrial development, it must concern itself primarily with developing the institutional structure essential for entrepreneurship development: the necessary package of finance, consultancy and training which will foster self-employment, services entrepreneurship and small-scale industrial entrepreneurship. It must build on the present agricultural and rural base, as recommended in section 2.2.3 "Rural Services and Industrial Training" above, as well as encourage larger industry.

It does not appear realistic to think that entrepreneurs who need assistance will come from all over Thailand to the existing Industrial Services Institutes, or that it will be financially possible to multiply such institutes so as to obtain effective national coverage. Further, fixed institutional facilities do not take the training and consultancy where they are needed - into the shops and plants where the work is being done. This means that decentralisation and mobility must be built into the programme and maximum use made of existing and temporary office space as may be available in various districts. The money saved by eliminating unnecessary buildings may be well invested in creating a flexible consultancy staff with appropriate industrial working experience.

While it has been the policy of the mission to confine its observations as much as possible to positive and negative experience

within Thailand itself, entrepreneurship development is a new field here and much trial and error can be by-passed by considering the experience of others. Without doubt the nation which has fostered the greatest number and variety of such schemes is India, and a study of the Indian experience by ARTEP is available. It analyses entrepreneurship development scheme experience in terms of training policy, financing policy, bottlenecks of raw materials, finance, power, facilities and administrative procedures, consultancy factors and business organisation.^{1/} While much of the value of Indian experience lies in avoiding unnecessary and self-defeating approaches, clearly the greatest success has been achieved in Gujarat State by the Gujarat Industrial Development Corporation and the Gujarat Industrial Investment Corporation, and it is this experience which is most applicable in Thailand.^{2/}

One of the basic problems of small-scale entrepreneurship development is that newly established firms are so scattered as to be difficult to service or even locate after a period of establishment. If the Royal Thai Government is serious about developing entrepreneurship from a solid base and at the same time making progress in the direction of incomes distribution, the establishment of small-scale industrial parks should be considered, with their advantages of shared common facilities, mutual help, joint contracting and ease of access to markets including ancilliary relationships with major industry. Investment in this direction can become self-financing and makes better economic sense than the establishment of prestigious institutes.

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- 1/ "Generating Employment for the Educated in India", Asian Regional Team for Employment Promotion, Bangkok, 1973, pages 114-164.
- 2/ Dr. V.G. Patel and Anil Trivedi, "Report on the Third Entrepreneurship Development Programme", Ahmedabad, 31.3.72 covers the early efforts in Gujarat which led to present policies.

One aspect of the overall entrepreneurship development package which requires immediate attention is financing. Present financing with the Krung Thai Bank is inadequate for this purpose, as there is too much emphasis on collateral and insufficient emphasis on legitimate risk. This calls for the creation of an autonomous financial organisation dealing specifically with small-scale industrial promotion or, alternatively, for the Government to establish a credit guarantee system covering, for example, 50% of possible loss in lieu of collateral.

The promotion of self-employment and small-scale entrepreneurship will generate employment and can be accomplished with limited resources. Without such a programme there seems little prospect that the Thai economy can cope with the worsening employment situation and absorb the 2.5 million additions to the labour force which are projected for the ensuing 5 year period.^{1/}

^{1/} Third Five Year Plan, NESDB.

2.2.6 DEPARTMENT OF LABOUR

2.2.6.1 Basic Policy

An almost universal experience of employment services throughout the world is that, due to the constantly increasing pressure of population, they tend to become unemployment services. To develop sound Labour Department policies it is essential that the basic distinction between the employment and unemployment functions of the Department be maintained. Unemployment being the absence of employment, the facts and figures developed by its study are largely negative from an employment standpoint, and policies developed from that base may be expected to relate to social welfare measures rather than to productive employment. Since it is viable agricultural and industrial production which creates employment, the Department can best further employment by an active role in accelerating the normal upgrading process within the present employment structure.

Essentially, this means concentrating on the upgrading of the presently employed (the original basic objective of the National Institute for Skill Development), but it also means using this upgrading to increase labour mobility between productive projects so as to more rapidly develop the middle layers of technical supervision which are essential to expand the production of present enterprises, develop new ventures and consequently increase the volume of employment opportunity for the less skilled and inexperienced ranks of the unemployed.

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2.2.6.2 Pre-Employment Training

A general review of Government-sponsored training indicates that when the purpose of the training is to develop future employees for an agency itself, selection tends to be a serious factor, but that when the intention is to have graduates of training courses employed by others, selection is largely ignored. For this reason recognition by NISD of the importance of selection as a success factor in industrial training deserves strong commendation. However, it would be unfair to the Institute to leave the impression that the present selection procedure need not be improved. Institute officials are aware of its limitations and their efforts to end selection by favouritism and bring the procedure into line with actual employment selection criteria should be supported by the National Council for Skill Development.

What puts NISD pre-employment training in an entirely different class from other vocational training efforts of the Government is that in-plant working experience is an integral part of the training. As long as this provision remains, apprenticeship assignments must be solicited from industry, with the consequence that the curriculum cannot stray far from practical employment criteria. The present 3 months scheduled for in-plant training appears adequate for construction trades, but in the case of electrical, electronic and mechanical training it should be extended to a maximum of 6 months, depending on market requirements for specific skills. This would greatly enhance the employability of graduates.

While it appears that most graduates get jobs, there is no follow-up to verify this, to determine the extent to which employment is along the lines of training, to reveal the influence of the training on employment over a period of time and to use all this information to improve the training programme. To plan such a follow-up at 2 and 5 year periods after graduation seems inadequate; training planning has to be more sensitive to constant changes in labour market conditions and to changing patterns of industrial organisation. At a minimum an annual follow-up seems indicated.

Perhaps the key consideration is that the Institute should gear its courses and admissions to the actual demands of the labour market and not respond to public demand for courses or cater to the unsuccessful outfall of the educational system. The validity of pre-employment training depends *he-* on whether it does indeed result in employment. If employment does not *labour* ensue what has been taking place is not training for employment but post-*high* education training and disguised unemployment. The educational system *Gen. all gov. also Govt N* can, by renouncing responsibility for producing skilled manpower, rid itself of the employment imperative. The Labour Department cannot, for the basic rationale of its training is meeting the industrial demand for skilled manpower; a duplication of Ministry of Education efforts to cater to the needs of out-of-school youth who have been unable to continue formal education can hardly be justified. The obvious implication is that the scheduling of courses must be predicated on industrial need and must not be contingent on filling up classes; the utilisation of equipment should be handled by scheduling rather than by arbitrarily planned trainee volume. The success of the training may properly be judged not by the number of graduates cranked through pre-employment courses, but by the increase in industrial involvement and, as a consequence, the increase in resultant employment and incomes.

2.2.6.3 Apprenticeship Training

To have an impact on the industrial production system of Thailand sufficient to create an upgrading of the labour force which will influence employment opportunity substantially, ways must be found to increase Institute involvement in traditional informal apprenticeship training. This is a difficult thing to sell smaller industrialists, who have difficulty believing governmental intervention in the operation of their plants will increase their production, and who fear that external training assistance will result in labour unrest. But, as officials of the Institute realise, the effort must be made.

But even if the Institute were to succeed overwhelmingly in attracting the active cooperation of industry in apprenticeship training courses at the Institute, it would only be serving industry within a 20 kilometer radius. It follows that if the programme is to be influential throughout the Bangkok Metropolitan Area it cannot depend on bringing apprenticeship to the training but must take training to the apprentices. The development, if necessary by trial and error, of this approach becomes even more essential when the fact is faced that at present the Institute serves only medium and major industry and is able to do nothing for small industry, where the bulk of employment and, for better or worse, the bulk of industrial skill development in Thailand now occurs. Since it cannot be imagined that these small shops will knock at the door of the Institute for training which has not been designed for their requirements, it seems clearly up to the Institute to start building a programme which goes to places of employment, finds out what sorts of training are needed and provides it on an in-plant or temporary vestibule basis. An increase in the use of Institute trainers as mobile training consultants seems clearly indicated.

An organisational tool which can reduce the expense of apprenticeship pre-employment and training in small firms is the formation of cooperative training groups. This approach also has public relations advantages and tends to keep wavering employers in support of the programme.

2.2.6.4 Upgrading Training

The ARTEP mission strongly endorses the present intention of the Institute to mount "a major campaign" to secure industrial support for training the employed, as was the original intention of the upgrading training programme. To the extent that the Institute is continuing the institutional training of academic and vocational graduates without a definite employment connection, it is duplicating programmes of vocational

education and failing to accomplish its own unique mission. There may be valid social reasons for programmes which keep the unemployed off the streets, but it is difficult to extend this responsibility to Department of Labour industrial training without crippling the effectiveness of its efforts to increase industrial productivity and employment. As presently conducted these courses involve a too substantial percentage of disguised unemployment as opposed to employment training.

2.2.6.5 Instructor and Foreman Training

Here again, present efforts to break the present 20 kilometer radius barrier should be encouraged. This means creation of a training unit which can move about, utilising unoccupied building space on a temporary basis. It means putting up with unideal circumstances and concentrating on effective training rather than on the image of the trainers and the mother Institute. If this can be accomplished, the problem of industrial cooperation in apprenticeship training will be largely solved.

2.2.6.6 Regional Training Centres

While the project document is critical of the shortcomings of the traditional vocational training approach when applied to rural training by others, it does not itself seem to take this point into sufficient account. "The number of training establishments in the province is meagre. Generally, such vocational establishments as do exist are devoted to three year courses not always sufficiently related to the requirements of the small-scale industrial and agricultural enterprises in the area in which they are situated."^{1/} The document recognises that "The region is predominantly an agricultural area, and the planned industrial development pays much attention to the set-up of primary production processing ~~industries~~",^{2/} but the apparent intention is to develop the training staff

^{1/} UNDP Project "National Service for Technical Skill Promotion and Job-Entry Training for Industry", (Second Phase of THA 69/529, page 9, paragraph 29.

^{2/} Ibid, page 18, paragraph 45.

from the urban mother Institute in Bangkok, and there seems little understanding of curricular changes necessary to make the programme appropriate to an agricultural area where village life predominates. The Centre clearly is expected to serve the entire region with reference to small-scale industrial and agricultural enterprises and two "developing urban centres of Chiangmai and Lampang" are mentioned^{1/}, but how this can be done from one fixed institution is not discussed.

Not in original
Now that expansion of the Institute programme into three additional regional centres has been approved and started, the basic problem is that the practical limitations of the present programme do not seem to have been analysed so that corrective measures could be included in the expansion. Further, there has apparently been no corollary effort to alter the basic concept so as to fit regional realities. A sound choice has been made to establish the first of the three new institutions in a relatively industrialised area, but of course as a fixed institution it faces the same limitation as the mother Institute at Din Daeng and perhaps the same prospect of a building layout which exceeds the requirements of utility.

Virtually everyone connected with the programme realises that the erection of such an institute at Lampang is likely to result in something of an embarrassing monument because that immediate area lacks the volume of medium and large industry required to keep such a facility productively employed. The generally heard reaction is that the third centre will be "at Lampang or somewhere else". If located somewhere else other than in the Bangkok Metropolitan Area it will face similar problems, and therefore the focus of attention now should not be on selecting a location where the erection of such an institution will be less obviously inappropriate, but

^{1/} UNDP Project "National Service for Technical Skill Promotion and Job-Entry Training for Industry", (Second Phase of THA 69/529, page 18, paragraph 46.

rather on what sort of an institution and programmes will provide the flexibility and mobility required to meet the actual industrial training needs in the Lampang area. When this problem is solved there will be little difficulty designing appropriate facilities and programmes anywhere in Thailand. For to be effective, all of the training organised by the Labour Department must be geared to actual employment requirements rather than to some vision of how many jobs of standard vocational training description "will be provided" so that there will be no unemployment. The time to raise the standards of training is when the standards of employment opportunity are raised, and this is unlikely to take place unless training is focused within plants on existing productive jobs.

2.2.6.7 Trade Standards

In an undated copy of a memorandum which came to the attention of the ARTEP mission, the National Trade Standards & Trade Testing Committee advised the National Council for Skill Promotion that it did not fully understand why, despite the declared support of trade testing by officials, employers and workers, only a small number of workers have come forward to be trade tested. It then proceeded to demonstrate its remarkably clear comprehension of this situation in the following analysis:

- "(1) Workers have little understanding of the programme.
- (2) Even if workers do understand they see no positive advantage in undertaking a trade test.
- (3) Workers are afraid of failing the trade test.
- (4) Wage rates have not been set for different grades of the trade tests.
- (5) There is no compulsion to take a trade test and therefore it has no meaning for workers.
- (6) Employers do not want their workers to undertake a test because:

- (a) a worker in possession of a trade test certificate will want a higher wage to which the employer is reluctant to agree;
- (b) it will disrupt amicable industrial relations if a worker on a higher wage level fails the trade test while a worker at a lower level might pass; or
- (c) it will provide an opportunity for a worker to seek better employment outside the firm."

The Committee goes on to make the following recommendations:

- "(1) A communication, in the name of the Cabinet, should be addressed to all employers of skilled labour inviting attention to the Trade Standards and the Trade Testing system and requesting that the system be brought to the notice of workers. Additionally, employers would be asked to encourage workers to undertake a trade test. The communication from the Cabinet would be transmitted to employers through their associations and be given wide publicity.
- (2) The Cabinet should address the various Government Departments, responsible for issuing contracts, and advise them that contractors should employ trade tested labour and that over the next period of five years the Government will insist that contractor's artisan labour should be at least up to Grade 3 Standard.
- (3) The Cabinet should instruct the Civil Service Commission and the Ministry of Finance to examine the salary structure of skilled workers employed by the Government with a view to basing the salary and promotion of such workers on the trade testing system.

- (4) The Cabinet should request the Ministry of Education to examine a proposal that all students from vocational schools in order to graduate must pass a trade test; in the case of lower schools at Grade 3 level, and in the case of higher schools at Grade 2 level, in a trade associated with their course of study.
- (5) The Cabinet should request the General Managers of the Metropolitan Electricity Authority and Provincial Electricity Authority to examine a proposal that all electrical installations must be carried out by, or under the supervision of, a person in possession of, at least, a Grade 2 Electrician's Trade Test Certificate and, if agreed upon, to decide in what period of time this requirement should become effective.
- (6) The Cabinet should request the Ministry of the Interior to draft regulations which will require that no person shall work at a particular trade unless he is in possession of at least a Grade 3 Trade Test Certificate in that trade. These regulations to come into force after a period of five years."

Four of these six recommendations seem well founded, two somewhat questionable. Regarding item 4, while this seems preferable to excepting vocational graduates from trade tests, it should be emphasised that no vocational institution can, without including industrial working experience in its curriculum, provide the proficiency necessary to pass a valid industrial skill test, because that proficiency comes from working experience.

With reference to item 6, at a time when the civil service itself has no tradition of promotion on the basis of merit only, it seems visionary to make trade testing compulsory on individual workers; if compulsion must be involved it would seem preferable to have it applied to employers, and then only after the Government itself had set a solid

example. But an overriding objection is that such a decree is unenforceable, and nothing is to be gained by edicts without teeth.

The rationale for the Committee's recommendations "that action at the highest level is required if trade testing is to go forward and not stagnate" does not appear to take into consideration that action at the highest level is not fully justified unless the standards programme itself goes forward and avoids stagnation. Enforcing or even inducing conformity to a standard is hardly a constructive achievement if the standard be arbitrary and inappropriate to the performance of individual jobs. The excellent start made in adapting foreign standards to Thai needs must be continued by an intensive effort to check out the standards in large, medium and small industrial undertakings, applying the modules of knowledge and skill, and hence modules of training which may be required, to actual productive jobs. This will disclose which elements apply and which additional modules should, in certain situations, be added. Once this has been done in an urban area, the procedure should be followed in all rural areas where it is intended to apply test standards.

For the basic purpose of the standards should not be permitted to become merely conformity to a central standard, but rather be maintained as a tool which will effectively raise the level of productive work. Even more valuable than defining levels of individual skill is, from a development standpoint, being able to determine in any given work situation the job elements which require training. This can be done readily once a complete modular structure of job definitions appropriate to rural as well as urban occupations is established. This is essential because the Government does not have sufficient resources to train the entire population to arbitrary occupational standards, and employers are simply not going to pay for what people know or can do unless it can be applied to their own activities and thereby converted into increased productivity.

The Institute has made important progress toward training for employment by dropping the idea, which seems so engrained in many training institutions, that industrial productivity can be increased by years of successive upgrading training before an individual has had the opportunity to put any of the training into working practice. By opening its doors to active workers and taking training into establishments, it makes recurrent training as required by the job, and for promotion, within reach of those who not only need but can make use of such training. This clearly is more of an achievement than providing training to a large volume of young persons who cannot use it and who, in fact, have no serious intention of becoming industrial workers if such a fate can be avoided.

Beyond the necessity to upgrade the urban force stands the greater need for training appropriate to rural industry as it gradually builds on the present agricultural base. It is here that the creation of job standards sufficiently flexible to be used in any rural employment context becomes a greater contribution to Thai industrial development. Today the need for rural training approaches which feed into the actual employment structure is obvious and becoming a popular theme, but concrete methodology seems in short supply. The ARTEP mission respectfully suggests that it may be unrealistic to expect the solution of this problem to come from more industrialised countries where it has not been experienced in the form and circumstances now facing Thailand. The place to dig out the answers to this problem is here in Thailand, and the logical tool from which the solution can be made should be developed from the present trade standards and methodology programme of the National Institute for Skill Development.

2.2.6.8 General NISD Recommendations

If the National Institute for Skill Development is to accomplish its original objectives and meet the challenge of expansion into a truly national institution, it seems essential that those presently responsible for NISD operations be supported in their efforts to channel the training directly into employment requirements. Overall policy assistance urgently required from the National Council for Skill Promotion falls mainly into three major problem areas:

1. Curriculum: The entire curriculum must be revised and related to the actual needs of industry.
2. Instructors: Trade instructors must have significant work experience in their respective trades. Since it is impractical to qualify regular vocational graduates as industrial skills instructors, qualified tradesmen of leadman or foreman calibre must be selected and trained to teach their skills. This means that they must be paid according to industrial rather than academic standards. If regulations cannot be altered to accomplish this, the stated employment objective cannot be realised.
3. Equipment: Because the NISD project is in its infancy and extensive expansion is now in progress, it is essential to face the fact that the shops are over-equipped with unnecessarily sophisticated machines. If the object of the training is employment, this is counter-productive and must be avoided in future, particularly when equipping training centres outside of Metropolitan Bangkok. When training is needed on specialised machines, they will be available in the shops of employers.

2.2.7 EXTERNAL ASSISTANCE

The motivation behind international financing and external assistance projects often is complex, as are the regulations which have developed down the years. In many instances outliving their usefulness. There are purposes and considerations other than effective training which determine the focus and form of external training projects and it would be presumptive indeed to imply that training should not be financed unless it is effective from an employment standpoint. However, employment has been and is being used as the primary rationale for projects involving increasingly substantial financing and in that context determining the extent to which the training being financed does indeed result in employment which utilises this training seems a valid consideration. Further, when extension, expansion and increased sophistication of training projects prospectively adds the problem of trained unemployment to that of educated unemployment, Thailand must question whether it can afford socially and politically to accept assistance which is counterproductive to national development objectives.

In bilateral assistance projects there is a natural tendency on the part of donor nations to stuff training projects with equipment and tools manufactured by the donor, and there is understandable reluctance on the part of recipient nations to "look the gift horse in the mouth". However, a serious review of equipment lists is precisely what must happen if the interests of both recipient and donor nations is to be protected. For there is no lasting value in shipping useless equipment around the world when equipment appropriate to local needs in every part of Thailand is manufactured in industrialised countries; it is a matter of insisting on practical equipment specifications."

In Thailand the record of bilateral assistance seems considerably better in this respect than is that of international funding organisations. Here the basic problem seems to be that the banking procedures of such organisations as the World Bank and the Asian Development Bank, while moving in the direction of new procedural requirements which better reflect developmental realities in Asia, still follow traditional banking approaches. It is relatively easy to justify loans for buildings and equipment and banking criteria favour established projects. This tends toward bigger institutions, more complex equipment and the perpetuation and expansion of existing and sometimes obsolete training approaches and their multiplication in areas where their programmes are inappropriate to local training needs.^{1/} What seems required is a new approach to rural training in which training programmes are built up on the basis of local needs and kept small, mobile and flexible. It means not only a modular approach to training curricula,^{2/} but designing the training organisation itself on a modular basis. Local programmes necessarily would vary so as to restrict the training to existing jobs or in connection with realistic projects which will create jobs. Additionally the overall approach and project specifications must be sufficiently clear and practical to satisfy the jaundiced eye of the banker.

Thailand cannot afford to accept unsound projects which mean long-run expenditure; training institutions tend to take

^{1/} For example, during the past year ADB was actively attempting to identify, for the purpose of expansion funding, an established, successful rural training institution in Laos or Nepal, something which does not exist and could hardly be useful if it did.

^{2/} "A New Approach to Vocational Training", ILO, Geneva, 1973.

on a life of their own - they exist, therefore their buildings and equipment must be utilised, and therefore their use must be rationalised and budgeted, ad infinitum. In this connection it is unnecessary to follow new fads of training; The basis for the development of a sound national training policy already exists in Thai experience. The only alternative to continued acceptance of foreign designed training which is not appropriate to current conditions in Thailand is Thai-designed training which meets those conditions and is sufficiently well planned to justify external assistance and financing.