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ABSTRACT

Nonformal education in the SEAMEO (Southeast Asian Ministers of Education Organization) Region was studied to gather information on significant ongoing programs/projects in nonformal education and to identify problems as well as potentials of the broad spectrum of nonformal education activities in the region (SEAMEO countries are Indonesia, Khmer Republic, Laos, Malaysia, Philippines, Singapore, Thailand, and Republic of Vietnam.) Focus of the study was on literacy, technical/vocational training, and rural development, including certain relevant aspects of mass media. Five questionnaires used for data collection were concerned with general information, agricultural development, literacy, vocational/technical skill development, and mass media. Data analysis was divided into three areas: (1) Classification of nonformal education activities according to established criteria of significance, (2) significant programs and projects depicting the major components, indicators, and characteristics, and (3) concise description of the programs/projects identified by the member country as significant. Discussion of data, conclusions, and recommendations on each area of focus are included in Part 1 of the report. Part 2 contains the significant programs/projects in nonformal education, priority rankings of significant projects, and project summaries, listings, and details. The appendix contains a list of institutions and agencies conducting nonformal education activities. (TA)

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BEYOND SCHOOL WALLS

A Study of Non-Formal Education
in the SEAMEO Region
1973-1974

SEAMES

Bangkok

U.S. DEPARTMENT OF HEALTH,
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PART ONE

Chapter One

INTRODUCTION AND METHODOLOGY

INTRODUCTION

The SEAMEO region, not being richly endowed in terms of material wealth, will have to strive to maximize the potentiality and capability of its human resources. As a result of the relatively low literacy rates and the rising unemployment in the region, it has become imperative that greater educational opportunities should be provided for the great proportion of adult population as well as the large number of youth outside the formal school system to help them acquire further knowledge and skills and thereby improve their livelihood and strengthen the development of the country. It is also evident that the existing formal school system in almost all SEAMEO countries cannot meet the diverse demands of the rapidly rising school population.

It is in this context that a variety of educational experiences beyond the school wall should merit urgent attention. The Southeast Asian Ministers of Education Organization and its Secretariat, hence, acted with great expediency upon the "Proposal for a Study of Non-Formal Education in the SEAMEO Region". This "proposal", dated 30 May 1973, suggested this study to be carried out by a Research Team consisting of a Project Co-ordinator, one specialist each in literacy, agricultural and vocational/technical education, one in statistics, one in mass media and an assistant to the Project Co-ordinator, with possibly the services of consultants. After one month of preparatory work of the Project Co-ordinator, the Research Team got together to prepare the instruments for country data collection. The actual gathering of information was agreed to be the responsibility of National Liaison Committees appointed by the SEAMEO Governments, while SEAMES was expected to select the members of the Research Team.

Objectives

To serve the SEAMEO countries in line with the mentioned necessity, the objectives of the study were as follows:

1. To gather information on significant on-going programmes in non-formal education and their effectiveness in the SEAMEO region.
2. To disseminate information thus gathered to individual SEAMEO member countries to enable them to strengthen and/or develop their national programmes in non-formal education.
3. To identify problems in non-formal education significant to the SEAMEO countries for subsequent regional and/or national action.

FRAMEWORK

From the findings of a Seminar on Non-Formal Education, organized by SEAMEO/SEADAG in 1971, it appeared that literacy, agricultural and vocational/technical education were the areas of major interest in the SEAMEO region, and these fields should be particularly studied. Modern mass media could be an excellent means of communication for educational purpose, and their study should, therefore, be included.

As the definition of non-formal education (NFE), the Team adopted the one definition as given by Coombs: "any organized educational activity outside the established formal system—whether operating separately or as an important feature of some broader activity—that is intended to serve identifiable learning clientele and learning objectives".¹ The Team does not pretend that this definition is completely unassailable; in fact, the Joint FAO/UNESCO/ILO Advisory Committee on Agricultural Education, Science and Training, in its Third Session (Paris, 3-8 December 1973) agreed on the difficulty of differentiating between formal, non-formal and informal education (the latter expression commonly being used for any unorganized transmission of knowledge and skills in the family, at play, etc.), and the Team clearly felt this difficulty in some cases when studying the many projects described. However, in practice, the distinction between the two forms of organized education can be made, and the definition given above may be helpful in explaining the essential elements of non-formal education.

The Research Team agreed with the Proposal in that the study on non-formal education should be carried out against the background of the total development of each country. Therefore, the "Background Information" tries to provide data on population growth, economic development as well as formal education, since these are the basic factors which would indicate the nature and scope non-formal education should have in each country, providing the necessary education for particular groups or in certain fields not reached by the formal system. This should not imply that non-formal education as such is to be regarded as second to formal education, but its more flexible nature makes it far more easily adaptable than the more rigid types of the formal system. This point will be discussed more thoroughly in the body of the report.

In the chapter on "Literacy" it is attempted not only to see what facilities exist—and how far these are used—to provide a second chance to those who, for one reason or another, did not go to school (or for such a short time that the effect can be neglected), but also to indicate whether besides the "3 R's" a certain educational content was provided in the sense of UNESCO's work-oriented and similar programmes, since it would seem that these would be more attractive and useful to adults. Connected with this point is the type of teaching staff employed: who they are, how they are trained. The kind of teaching and follow-up materials used was also a point of obvious interest, as well as possible evaluation studies.

In the chapter on "Agriculture", the Research Team felt that the term "agriculture" should be interpreted even more widely than it was done in the terms of reference as given in the Proposal, where animal husbandry, fishery and forestry were already included, and has preferred the concept of "rural development", including particularly non-formal education in the field of co-operatives.

¹ Philip H. Coombs with Roy C. Prosser and M. A. M. Ahmed (Barbara Baird Israel, editor), "New Paths to Learning for Rural Children and Youth," prepared for UNICEF by the International Council for Educational Development, New York, 1973, p. 11.

On the other hand, it was thought better not to go too far by trying to include the very wide and important fields of health, hygiene, nutrition, family planning etc., particularly since other enquiries and a number of seminars had recently been devoted to these subjects. Since Rural Development is so important in Southeast Asia, given the fact that about two thirds or more of the population (except in Singapore) live on the land, this chapter is necessarily rather substantial, although most of the economic data were already furnished under Background Information. In most SEAMEO countries, two types of extension system exist: one where training is given to farmers—or cattle breeders, or fishermen—invited to spend some time at a training centre having all the facilities required, the other where the extension workers go to the villages explaining and demonstrating new methods.

Under Vocational/Technical Training a wide range of activities were to be reported, since here not only governments but also private initiative appear to be active, more than in the two other sectors. There is here a very active demand for training to which private agencies respond in the form of numerous courses. Formal vocational schools are moreover sometimes used in the evening for non-formal education. However, an important question remains (which would go far beyond the terms of reference of the Research Team): how far is a certain type of training really needed by the economy or acceptable to the people for whom it is meant?

In various chapters were discussed the problems of teachers in non-formal education, their number and level of training and the difficulties encountered. As was to be expected, the replies showed that there were seldom sufficient well-trained teachers. Therefore, also in all three fields the possibility of using mass media is taken into consideration. Moreover, a separate chapter is devoted to this important subject which might be a useful means of solving one of the basic problems connected with non-formal education.

As expected, not in all cases was it possible for the respondents to provide satisfactory replies to all the questions. In some cases, the Team has been able to complement the information given by studying published or unpublished reports, or consulting with specialists in the offices of international organizations having their Headquarters or Regional Offices in Bangkok. Even so, it was not possible to obtain answers to all the questions asked which might have enabled the Team to show a complete picture of non-formal education facilities in the eight SEAMEO countries with their strong and weak points.

Therefore, it was felt that, also with a view to the substantial differences in size, in socio-cultural conditions and in educational systems, it would not serve a useful purpose to prepare a large number of tables showing the details of the situation in the eight SEAMEO countries. Such data would, in many cases, not be genuinely comparable, and too many footnotes would have to be added. It seemed more useful to discuss the main types of non-formal education as distinguished in the questionnaire, to identify the specific problems as felt in the different countries, and to see how far perhaps elsewhere a solution to such problems had been found.

This would also provide an opportunity to draw the attention to certain cases which, either by their special approach or the originality of their methods, could be useful for further consideration elsewhere.

In the last chapter of this report, a number of conclusions and recommendations will be found since it seemed logical that certain points and certain questions derived from the study

should be emphasized. The recommendations, however, were the outcomes of the Meeting of the Chairmen of the National Liaison Committees and the Research Team held in Bangkok from May 13 to 17, 1974.

It is clear that in preparing a collective report each member of the Research Team has concentrated on a specific part of the subject matter with which he was most familiar. It was therefore considered desirable to leave each member the freedom of deciding how to organize the material. However, it should be stated that the Team and the Chairmen of the National Liaison Committees as a whole have reviewed, discussed, and approved each chapter and would feel responsible for the report as such.

METHODOLOGY

In order to achieve the three main objectives of the study mentioned earlier in the Introduction, the following methods and procedures are employed:

Data Collection

1. The questionnaires were constructed by the Research Team during their first meeting of two weeks in August 1973. The questions covered five areas, namely general information, rural development, literacy, vocational/technical skill development, and mass media. The questionnaires were accompanied with the direction for data collection.

1.1 The general information questionnaire was designed to inquire about the socio-economic as well as the educational and cultural background of the country deemed pertinent to the non-formal education effort in that country.

1.2 The agricultural development questionnaire was divided into three sections. Questionnaire A was intended to inquire about agricultural/rural development as background information related to the non-formal education effort in this broad field. Questionnaire B was devised for the identification of significant programmes/projects in non-formal education in agriculture. Questionnaire C was meant for project case studies on selected programmes and projects as decided by the country concerned.

1.3 The literacy questionnaire was divided into two sections. Questionnaire A was the general inquiry into the area of literacy in the non-formal context and the identification of significant literacy programmes/projects. Questionnaire B was for case studies.

1.4 The vocational/technical skill development questionnaire was divided similarly into three sections. Questionnaire A was the general inquiry about the background information deemed pertinent to the non-formal aspect of the vocational/technical skill development. Questionnaire B was intended for the identification of significant programmes/projects and Questionnaire C was for case studies.

1.5 The mass media questionnaire was designed to inquire about the resources as well as the problems and potentials of mass media as another avenue of non-formal education. Apart from what was inquired exclusively in this section, series of mass media questions were attached as an integral part of every area except the general information questionnaire.

2. The questionnaires were tried out in two countries, namely the Philippines and Thailand, to validate and modify the inquiry to suit the actual circumstances of SEAMEO member countries. The 'try out' results were consequently used to modify and improve the questionnaires.

3. A National Liaison Committee (NLC) for the "Study of Non-Formal Education in the SEAMEO Region" was organized in every member country to help coordinate the data collection and supply pertinent information to the Research Team. The committee members were composed of key officials from the government agencies concerned with non-formal education activities in the selected areas of agriculture, literacy, technical/vocational skill development, mass media and general statistics. Upon receiving a series of questionnaires, the NLC collected information from various sources in their country. In general, the information requested in Questionnaire A was collected by the committee members, while responses to Questionnaire B were handled in consultation with the agencies concerned. The translations from English to the vernacular and vice versa were executed by the National Liaison Committees. They were provided with a budget to cover various expenses.

4. The Project Coordinator, besides, was given the opportunity to acquaint himself with the actual circumstances and to have a glimpse on a few programmes/projects in every country during his brief visits. Such experience added to a more genuine understanding of the subject of the study. Correspondence to seek further clarification on certain problems or issues was also conducted when needed.

Data Analysis

5. The data collected and assembled by the National Liaison Committees were submitted to the Project Coordinator from mid-January to the first week of March 1974. Inasmuch as the questionnaires were quite comprehensive and lengthy, preparing the replies consumed a great deal of time and effort of the National Liaison Committees and the authorities concerned, not to mention the translation. Upon receiving a good proportion of data, data processing was conducted to make the data display ready for actual analysis. However, since a large proportion of the information supplied was of a descriptive nature, it was thought better to leave the material in its original form and leave the analysis and interpretation at the discretion of the area specialists themselves.

6. Their second period of work took place in March and April. From what was stated, the Non-Formal Education Research Team had to rely heavily on the information derived through the questionnaires. In fact, there was also a definite effort to seek information from documentary sources which were made available to the Research Team. Publications from member countries as well as from international organizations were heavily consulted. Of no less importance was the resourcefulness of the area specialists and the consultant whose experiences in SEAMEO countries, even if personal and subjective to some degree, were undeniably an important asset of the study. Preceding the analysis of the non-formal education activities in the SEAMEO countries an analytical description is given, as mentioned under 1.1. Accordingly, facts and figures presenting such common features as population growth, economic changes, the changing role of agriculture in national economics, the enrolment patterns particularly of the first and second levels of education, resources for educational development, as well as the social and cultural peculiarities conducive or not conducive to non-formal education were described briefly. Inter-country comparison, however, was mainly undertaken—if at all—as a

comparison of *changes*, since that of absolute figures would not serve a useful purpose inasmuch as conditions were different from country to country. Still, in certain cases, absolute figures were given, exactly to draw attention to inherently large differences, e.g. in population.

7. The analysis was divided into three manners namely:

7.1 First, the analytical and interpretative treatment of the information in order to classify the non-formal education activities in the light of the established criteria of significance.

7.2 The study of the significant programmes and projects depicting the major components, indicators, and characteristics; then the actual findings were discussed in order to arrive at some clear patterns, variations, as well as problems and potentials entailed therein.

7.3 The concise description of the programmes/projects identified by the member country as significant. The description serves eventually as an inventory of non-formal education activities in the SEAMEO countries, although no claim is made for complete coverage, or even full representativeness.

Priority Rankings of Significant Projects

8. Since each country reported many projects as significant, it was deemed interesting and helpful for future policy planning to furnish follow-up by asking the NLC to rank their priorities in the light of established criteria, i.e. degree of urgency, degree of support from the authorities concerned, response from the people, multiplier effect, etc. Consistency of the scale values adopted was checked, thus hinting at probable explanations, as well as bringing to awareness certain limitations of the ranking.

Conclusions and Recommendations

9. The study was culminated by having the Chairmen of the National Liaison Committees, the SEAMES officials, the Research Team, and the consultant, review and discuss the findings together and recommend follow-up actions.

Limitations of the Study

10. The study was admittedly a comprehensive and ambitious one with a sense of mission to fulfil the expressed need of the SEAMEO countries. There were evidently certain limitations and shortcomings.

10.1 The Research Team faced difficulties in trying to secure sufficient and accurate statistical data. When and where necessary the team sought additional information from the available documents published by national and international agencies. However, since the true nature of the study was not a statistical survey but rather an identification of the existing ideas and practices of non-formal education in SEAMEO countries, facts and figures could be regarded as supportive, hence, having secondary importance.

10.2 Due to their nature of being conducted most liberally by many agencies, governmental, semi-governmental, and private, the non-formal education programmes/projects were widely scattered. The National Liaison Committees demonstrated their most admirable effort to collect information for the purpose of the study; yet a certain number of the replies submitted were not relevant and occasionally questions were totally misinterpreted by the

parties concerned. Inconsistencies could be found now and then. These mishaps were due partly to the questionable validity of the questionnaires, even if the 'try out' was made in the Philippines and Thailand. This kind of inadequacies somehow reduced the confidence of the Research Team in trying to give a more specific and full account of the existing situations.

10.3 The Research Team was facing a serious time constraint, since data collection had taken more time than previously anticipated, due again to the length and complexity of the questionnaires on the one hand and the broad spectrum of non-formal education activities on the other. The eight weeks session allotted for the analysis was economical, but apparently not enough to allow a more thorough and meticulous treatment of the acquired information.

10.4 Despite our definite effort to identify non-formal education broadly enough to cover the private sector, the information received was extremely scarce on the private effort, if not totally lacking, with the exception of some countries.

Chapter Two

BACKGROUND INFORMATION

In the first part of this study, it is pertinent to present background information about Southeast Asia as a region with special attention directed to economic, social, cultural and educational aspects of eight SEAMEO countries. The study was intended to focus only on selected features of the mentioned aspects since they are the primary asset of non-formal education activities. In presenting the economic background, for example, we chose to focus on the 1960-1970 decade inasmuch as it was regarded as the first development decade by most SEAMEO countries. Furthermore, we chose to concentrate on agricultural development with good reasons: the largest proportion of the population of the SEAMEO countries, with the exception of Singapore, or at least three fourth of the approximately 240 million population are still engaged in agriculture in its broad sense. However, other sectors of the economy are not ignored. Besides, the countries of the region share a rather common geographical condition with only minor variations, but socially and culturally, there is great diversity among the countries. As such, it is not possible to go exhaustively into varied details. We decided therefore to deal candidly with certain social and cultural peculiarities which might exert significant influence on education, and for that matter, non-formal education. With regard to the educational aspect itself, we intend particularly to review the actual performance of the formal system with the hope to identify the rightful place and probable strategy for non-formal education.

A. THE ECONOMIC BACKGROUND

The economies of SEAMEO countries in the decade 1960-1970 were marked by a number of developments, of which three are prominent. There are firstly the well documented disparities of rates of growth both between countries and between time periods.¹ A second feature is the relatively high rates of population growth that threaten to nullify the beneficial effects of national income growth; while the third factor, the presence of inflationary pressures on the economies, tends to produce the same results. A quantitative summary of these features is given by Table A:1.

¹ Comprehensive accounts of these are contained in various issues of ECAFE: Economic Survey of Asia and the Far East as well as books on the Southeast Asian Region, e.g., Fryer, D.W., *Emerging Southeast Asia: A Study in Growth and Stagnation* (New York, 1970).

In Indonesia, Khmer Republic, Vietnam, and almost certainly Laos,¹ growth in real GNP was in the region of 3-4% a year, though in money terms they would have been much larger. In other countries, the average annual percentage change varies from around 6% (West Malaysia and the Philippines) to around 15% or more (Sabah and Singapore). In the case of Indonesia, the period 1960-1970 can be conveniently divided into two subperiods, with the partition occurring around 1965. The first was a period of relative stagnation and decay while the second was one of recovery and growth. The summary figures below bear ample testimony:

	Average Annual Change (%)	
	1960 -- 65	1965 -- 70
GDP at market price	+ 2.0	+ 5.0
Gross National Savings	+ 1.0	+ 8.0
Gross Domestic Investment	+ 3.4	+ 11.8
Exports	- 1.8	+ 8.0
Imports	- 1.6	+ 12.4

In Khmer Republic, Laos and the Republic of Vietnam, political uncertainties and military conflicts were obvious obstacles to growth. Among the remaining countries with higher growth rates, the single most important factor responsible for the growth of Singapore's national income has been the rapid expansion of industrial output, this growth being achieved despite fluctuations in the value of its entrepôt trade. The growth of Thailand's GNP occurred through the operation of two factors: i) favourable internal and external conditions, ii) vigorous expansion of private investment,² and after 1968, of public expenditure. The second factor was also operative in West Malaysia, where an average increase of just over 6% a year was achieved despite low commodity (especially rubber) prices. In the Philippines, the rate of growth of manufacturing output was not much higher than that of agriculture, the average increase being respectively 6.1% and 4.7% for 1960-1970. The substantial growth in gross investment does not seem to have appreciable effects on the rate of economic growth.³

The effect of relatively high rates of population growth is to make growth rates of per capita income somewhat lower than the above.⁴ With the exception of Khmer Republic, Laos and Singapore, population grows at around 3% or more a year. In Singapore, the figure of 2.69% is an average of rates of above 3% between 1960 and 1965 and much lower figures towards the end of the decade. In Malaysia, the average increase remained fairly stable at 3.1% until 1969, when it declined to 2.9%. In Indonesia, the Philippines and Thailand, the rate of growth has actually increased, as shown below: (ECAFE 1973)

	1960 - 1968	1969 - 1971
Indonesia	2.4%	3.1
Philippines	2.5	3.5
Thailand	3.1	3.3

¹ Laos had no national accounts for this period.

² Private investment was invigorated by U.S. military installations in some areas of the country before 1968.

³ Gross domestic capital formation increased from 13% of GNP in 1960 to 20.7% of GNP in 1970.

⁴ In the Philippines, for instance, the change in per capita GNP between 1960 and 1970 was only 2.9% per annum.

Table A.1: Real GNP, Population and Prices in SEAMEO Countries, 1960-1970
(average annual changes)

Country	Change in Real GNP ³	Population		Change in Consumer Prices
		In 1970 ('000)	Change	
Indonesia	+ 3.37	119,913	+ 2.96	
Khmer Republic	+ 3.78	7,176	+ 2.57	+ 5.35 ¹
Laos	- 4	2,962	+ 2.67	+ 57.73
Malaysia:				
Sabah	+ 18.35	660	+ 4.54	
Sarawak	+ 9.56	983	+ 3.01	
W. Malaysia	+ 6.34	9,288	+ 3.12	+ 0.92
Philippines	+ 5.72	38,493	+ 3.44	+ 7.09
Singapore	+ 14.92	2,050	+ 2.69	+ 1.13
Thailand	+ 7.90	35,814	+ 3.11	+ 2.32
Republic of Vietnam	+ 4.33	18,332	+ 3.00	+ 59.41 ²

¹ Phnom Penh only.

² Saigon only.

³ Where GNP at constant prices was not given, the consumer price index was used as deflator.

⁴ GNP per capita was estimated to be US\$72 (US\$120 in the monetized sector).

Source: U.N.: Statistical Yearbook 1971.

Apart from the direct effects on national income, the unevenness of growth between rural and urban areas as well as changes in dependency ratios i.e., the number of those who cannot yet, or no longer, earn, divided by the number of those who do earn, have significant implications for regional and manpower development.¹

A third feature of the 1960's is increasing inflation in most countries. In Laos and Vietnam, increases in consumer prices occurred at the rate of more than 50% per annum, while figures for Indonesia are probably no less frightening.² In the Philippines and Thailand, average increases for the 10 years were roughly 5% per annum, while stability of prices was maintained in Malaysia and Singapore. In both these countries, inflationary conditions are of more recent extraction, being significant only after 1970. It would appear that this inflation has two sources, one domestic and the other international. To the extent that domestic

¹ No comparable figures for all 8 countries are available, but for Malaysia between 1957 and 1970, the urban population grew at the rate of 3.3% while the rural population grew at only 2.4%. The youth dependency ratio increased from 82.1% in 1957 to 85.3% in 1970 in West Malaysia, and from 83.3% to 91.3% in East Malaysia. (See Malaysia: Midterm Review of the Second Malaysia Plan 1971-1975 p. 26.) It should be added that these figures do not include the old age group, equally dependent on those who work.

² The consumer price index with 1963 = 100 was quoted as 76,156 in 1970 (U.N. Statistical Yearbook 1971).

monetary expansion or fiscal policies have been responsible the adoption of appropriate countermeasures would suffice. However, the 1960's also witnessed a world-wide expansion of economic activity, and there is no way for the 'open' economies of less developed countries to combat such imported inflationary pressure. The Table (A.1) shows how much population growth and inflation take away from GNP growth when it would be expressed per head of the population. What is not shown, however, is the widespread inflation from late 1972 through 1973, when consumer price increases of around 20% p.a. or more were recorded for practically all SEAMEO countries.

The Changing Role of Agriculture in National Economies

Given the diversities discussed above, there is a common characteristic of all countries, and that is the importance of agriculture in the national economics¹, with the obvious exception of Singapore. For the 1960's, however, there are clear indications that this role is changing. If we consider the proportion of economically active population in the agricultural sector, declining trend is obvious from Table A.2: There are two major factors responsible for this decline. In some countries the policy of governments to encourage diversification both within and away from agriculture would induce changes in the industrial and occupational structure of the population. This is certainly the case in Malaysia, where the share of the agricultural sector in job creation between 1971-3 is only 28%, while the share of population in agriculture is still 50%. The same is true of Indonesia in the late 1960's. The second factor is a negative one, and that is the persistence of political and military unrest. There are two aspects of the problem. First, it implies the maintenance of a large part of the young adult population in unproductive employment—in the army—and second, military conflicts often drive farmers from the land and into towns. The situation in Laos in 1969, where an influx of 70,000 refugees into urban centres was reported,² is just one example.

The downward trend is even more obvious if we considered the share of agriculture in total GDP. In Table A.3, with the solitary exception of the Philippines, the share of agriculture has fallen, in some cases quite substantially, between 1960 and 1970.³ In the Khmer Republic, the reasons for the decline have already been sketched. The situation deteriorated after 1969, as shown by a reduction in paddy output from 3.8 million tons to 953,000 tons in 1972/3, 50% of the livestock were estimated to have been destroyed. This decline in agricultural output was however compensated by a 30% increase in tertiary sector product in the form of military expenditures, so that GDP remained relatively stable. The same situation probably existed in Laos but the extent of changes in the structure of GDP is unknown. The situation was rather different in Vietnam, where the gradual de-escalation of the War from 1970 resulted in improvements in agricultural production through both better cultivation techniques and renewed farming of abandoned land. At the same time, the performance of industrial production was only moderate as a result of a gradual reduction of U.S. military expenditure. These combined to give agriculture an undiminished share of GDP between 1960 and 1970.⁴

¹ Here 'agriculture' is used in its wide sense to encompass fishery, forestry, etc.

² ECAFE: Economic Survey of Asia and the Far East 1970.

³ ECAFE: Economic Survey of Asia and the Far East 1973.

⁴ In 1973, the share of agriculture increased to 35.1% of total GDP.

Table A.2: Proportion of Economically Active Population in Agriculture, 1960-70

Country	1960	1970	Percent
			Percentage Change
Indonesia	74.8	70.0	- 6.4
Khmer Republic	81.9	76.4	- 6.7
Laos	83.2	78.3	- 7.1
Malaysia:	63.0	56.5	- 10.3
Sabah	80.5		
Sarawak	81.4		
W. Malaysia	58.6	51.4	- 9.5
Singapore	8.9	8.2	- 7.9
Thailand	83.8	76.5	- 8.7
Republic of Vietnam	79.7	74.3	- 6.8

Source: FAO: Production Yearbook 1972.

For Indonesia, agriculture maintained its share until 1965, with about 54% of GDP, helped no doubt by the lack of progress in manufacturing. Thereafter growth in the latter sector, which accounted for 9.3% of GDP in 1970, against 7.9% in 1965, began to erode agriculture's share. This trend is expected to continue, especially in view of high levels of investment from 1972 and after¹. The experience was broadly similar in the Philippines, where, however, a high rate of growth for manufacturing (10%) in the 1950's had set the stage for the expansion of import substituting industries in the 1960's. This expectation was not realized, and the share of agriculture actually increased slightly during the period. Manufacturing output grew modestly from being 17% GNP in 1960 to 19% in 1970. Strong government support for the industrial sector occurred only towards the end of the decade.

By way of contrast, a policy of import substitution was implemented with considerable success in Malaysia during the First Malaysia Plan, as shown by a modest growth in gross imports between 1965 and 1970. In terms of GNP, the share of imports declined from 39% to 34% in the same period. The provision of investment incentives, together with the decline in rubber prices combined to produce an appreciable fall in the share of agriculture.² Finally, agriculture, which had never been important in the economy of Singapore, declined to under 3% of total GDP in 1970. The last column of Table A.3 leaves us in no doubt where her area or sector of expansion is.

¹ It is interesting to examine the growth rates of agriculture and manufacturing in rural and urban areas:—

	Growth Rates in Java and Madura 1961-71(%)		
	Urban	Rural	Total
Agriculture	- 0.2	0.4	0.4
Manufacturing	- 1.0	7.0	4.6

The better performance of the rural areas in manufacturing would seem to stem from the spontaneous development of small scale, marginal, manufacturing activities in these areas.

² Despite its rapid growth, the manufacturing sector constituted only 13% of GDP in 1970.

**Table A.3: The Share of Agriculture in Gross Domestic Product:
SEAMEO Countries, 1960-1970**

Country	Around 1960		Around 1970		Av. Annual Change in Share (%)	Average Annual Change in Value ¹ 1960-1970(%)	
	Year	%	Year	%		Agriculture	Manufacturing
	Indonesia	1960	53.9	1972		47.7	- 0.52
Khmer Republic	1961	51.0	1969	38.3	- 1.58	- 2.3	+ 1.9 ³
Laos			1972 ²	85.0			
Malaysia, W.	1960	40.6	1970	30.6	- 1.00	+ 3.3	+ 14.7
Philippines	1960	31.4	1970	35.8	+ 0.43	+ 4.7	+ 6.1
Singapore	1960	6.1	1972	2.8	- 0.27	+ 3.8	+ 51.7
Thailand	1960	37.4	1972	27.4	- 0.83	+ 8.7	+ 23.0
Vietnam	1960	34.2	1970	33.0	- 0.12	- 3.6	- 3.7

¹ At constant 1963 prices. Computed from U.N. Yearbook of National Accounts Statistics, 1972.

² Estimate only.

³ Includes construction.

Sources: U.N. Statistical Yearbook 1971. Also questionnaire A. The last two columns were computed from U.N. Yearbook of National Accounts Statistics 1972.

Parallel to the decline of the agricultural component of GDP, its share of exports also falls. In many instances, the decline in the share does not tell the whole story, which is that significant changes in the composition of agricultural exports have also taken place. A good example is Indonesia, where the distribution of agricultural exports away from the traditional commodities (rubber, palm oil, palm kernel, tobacco, coffee, tea, copra cake and pepper) is shown below:

Composition of Non-Oil Exports 1965-71

	1965	1971
9 traditional agricultural commodities	83.1%	55.5%
Lumber	0.5	23.1
Non-agricultural exports	16.4	21.4

The same is true of Malaysia, where the diversification in agriculture has reduced the share of rubber from 48% of total export earnings in 1961 to only 33% in 1970. At the same time the shares of palm oil and timber increased to reach 5.8% and 6.0% of total export earnings (1970). In Thailand, too, the importance of rice and rubber in total exports declined, but that of maize and tapioca increased. The figures on the top of the next page are self-explanatory:

Thailand: Share of Agricultural Commodities in Export Earnings: 1960-70

	1960	1970
Rice	31.3%	22.4%
Rubber	31.4	19.9
Maize	6.7	16.5
Tapioca	3.5	10.9

In the Khmer Republic, the fall in the share of rice was largely compensated by the growth in the share of rubber, which had yields among the highest in the region.¹

Table A. 4: Share of Agriculture in Total Exports, 1960-1970

Country	Around 1960		Around 1970		Average Annual Change(%)
	Year	%	Year	%	
Indonesia	1960	60.3	1972	47.0	- 1.11
Khmer Republic	1962	65.0	1969	63.7	- 0.18
Laos	1960	21.9	1970	28.6	+ 0.67
Malaysia	1960	66.8	1972	58.6	- 0.68
Philippines	1960	86.8	1971	68.7	- 1.64
Singapore ¹	1960	59.5	1970	44.6	- 1.49
Thailand	1960	95.4	1970	75.9	- 1.95
Republic of Vietnam	1960	78.6	1970	70.8	- 0.78

¹ Total exports, of which a large proportion is entrepôt trade re-exports. For domestic exports the shares of agriculture are respectively 29.8% and 6.8% for 1960 and 1970.

Source: U.N.: Statistical Yearbook, 1971. Questionnaire A. General Information.

The trade of Singapore is unique among SEAMEO countries in that a large part of it is, entrepôt trade, though the role of domestic exports and retained imports is of growing importance. In the period 1965-1970, entrepôt trade, of which around 50% was agricultural in nature, continued to grow unevenly under the influence of three factors. First, the ending of 'confrontation' in 1965 removed the barriers to Malaysia/Singapore-Indonesia trade. Second, Malaysia continued to be dominant in this trade, and finally, the decline of the world price for natural rubber was partly responsible for the fall in the rubber and more generally agriculture component of exports. As far as domestic exports go, the sharp fall in agricultural exports from 30% in 1960 to 7% in 1970 is a direct consequence of the expansion of petroleum exports, and to a lesser extent, industrial exports.²

¹ See, for instance, Fryer, *op.cit.*, p. 432 and ECAFE: Economic Survey of Asia and the Far East, 1969: Report on Cambodia.

² Between 1968 and 1971, it was reported that the outputs of labour intensive industries and of electrical equipment and industrial machinery grew at the rate of 33% and more than 200% per annum respectively.

Table A.5: Shares of Food and Capital Goods in Total Imports, 1960-1970

Country	Percent					
	Food			Capital Goods		
	1960	1970	Average Annual Change	1960	1970	Average Annual Change
Indonesia	23.0	14.4	- 0.86	26.9	35.2 ¹	+ 0.92
Khmer Republic	10.6 ²	7.5 ¹	- 0.39	24.8	46.2 ¹	+ 2.37
Laos	30.1 ³	16.5	- 1.70	19.7	27.3	+ 0.76
Malaysia:						
Sabah	17.9	15.4	- 0.25	25.9	45.8	+ 1.99
Sarawak	14.1	15.4	+ 0.13	9.0	18.0	+ 0.90
W. Malaysia	25.9	19.1	- 0.68	20.8	36.1	+ 1.53
Philippines	9.9	8.6	- 0.13	40.0	41.1	+ 0.11
Singapore	16.6	12.6	- 0.40	10.2	29.6	+ 1.94
Thailand	8.2	4.1	- 0.41	37.6	46.4	+ 0.88
Republic of Vietnam	12.1 ²	29.2	+ 2.14	30.2	32.9	+ 0.27

¹ Year 1969.

² Year 1961.

³ Year 1962.

Source: U.N.: Statistical Yearbook, 1971.

Food imports are not only a measure of the degree of self-sufficiency in food production in a country, but also serve as an indicator of economic development. The general pattern is that as development proceeds, the share of capital goods in total imports increases at the expense of food imports, and if the country becomes increasingly self-sufficient, this latter share will decline even faster. This situation seems to hold for most SEAMEO countries except Thailand—always an exporter of rice—and Vietnam. The War had so disrupted food production in Vietnam that progressively greater food imports became necessary. The share of food imports rose by almost 2% a year, while in terms of value, the increase over the decade 1960-1970 was some 82%. In Khmer Republic and Laos, where efforts were made to boost agricultural production through higher fertilizer input¹ (from 950 tons in 1961 to 17,000 tons in 1967 in Khmer), propagation of new varieties, farm mechanisation and the use of insecticides, the share of food imports, mainly rice, declined somewhat.² Unfortunately, the deteriorating military situation after 1970 may see a reversal of this trend. In Malaysia, the high level of investment activity under the Five-Year Plan was reflected in the substantially increased share of capital goods imports. Between 1969 and 1970, there was an increase of 42.7% in the value of imports of machinery and transport equipment. The situation in Thailand was broadly similar. In Singapore the increasing importance of capital goods imports was a function of her industrial capacity.

¹ In Laos, however, it has been observed that fertilizer input was highly correlated with the price of the previous year's harvest.

² Rice imports fell by 20,000 tons while production increased from 550,000 tons to 570,000 tons between 1968 and 1969 in Laos.

Table A.6: Food Imports and Population Growth, 1960-1970

Country	Years	% Change in Food Imports	% Change in Population
Indonesia	1960-70	- 3.31	+ 23.62
Khmer Republic	1961-69	- 8.81	+ 25.73
Laos	1962-70	+ 14.64	+ 26.74
Malaysia:			
Sabah	1960-70	+ 100.71	+ 45.37
Sarawak	1960-70	+ 56.63	+ 30.06
W. Malaysia	1960-70	+ 6.43	+ 32.22
Philippines	1960-70	- 29.08	+ 34.44
Singapore	1960-70	+ 26.22	+ 26.93
Thailand	1960-70	+ 12.91	+ 35.13
Republic of Vietnam	1961-70	+ 81.48	+ 30.01

Source: U.N.: Statistical Yearbook 1971.

Table A.6 gives a broad picture of the relationship between changes in food imports and population growth. In three countries, the value in 1963 prices of food imports have actually declined, while in other three food imports have increased less than population. Therefore, progress towards self-sufficiency would appear to have been made in these countries (Indonesia, Khmer Republic, Laos, West Malaysia, Philippines). The case of Singapore, where food imports rose by the same percentage as population, is easily explained by the virtual absence of an agricultural sector on the island. In Vietnam and East Malaysia, food import growth exceeded population growth.

Output and Productivity in Agriculture

While all indications point to the diminishing role of agriculture in national economies, the fact remains that agriculture is still the mainstay of the economy, and that agricultural output increased over the past decade, though not as rapidly as non-agricultural product. There are two sources of this growth. First, output may increase because the cropped area has increased. This is termed the 'area' effect, and is made up of two components, either changes in arable land suitable for the crop, or changes in cropping intensity, the extent of multiple cropping. The 'yield effect, on the other hand, represents improvements in fertilizer inputs, farming methods, better strains of seeds, etc.

For paddy, changes in area, yield, total production, together with the relative contributions of area and yield, are shown in Table A.7. Area under rice declined in the Khmer Republic, Laos and Thailand, but the growth in yields (per hectare) permitted output to increase in the first two of these countries. The actual yields, however, remain low in most coun-

Table A.7: Rice: Sources of Growth and Percentage Changes in Area, Yield and Production: SEAMEO Countries, 1966-1971

Country	Yield ¹ 1971	Percentage Change			Source of Growth ²	
		Area	Yield	Output	Area Effect	Yield Effect
Indonesia	22.0	10.2	20.9	32.7	32.6	67.4
Khmer Republic	14.5	-13.8	33.0	15.0	-51.5	151.5
Laos	13.5	-28.5	66.7	19.4	-65.5	165.5
Malaysia:						
Sabah	21.8	28.6	4.8	34.3	85.6	14.4
Sarawak	11.9	17.1	10.2	29.2	62.6	37.4
W. Malaysia	29.5	27.8	15.2	47.3	63.4	36.6
Philippines	17.2	2.0	30.3	32.8	6.2	93.8
Thailand	19.7	-8.5	7.1	-1.7	-77.0	177.0
Republic of Vietnam	22.8	13.0	26.3	45.7	3.3	6.7

¹ In 100 kgs/hectare.

2. Computed using the identity $\frac{\Delta \log A}{\Delta \log X} + \frac{\Delta \log Y}{\Delta \log X} = 1$

Where: A = area

Y = yield

and X = A x Y, output.

Source: FAO: Production Yearbooks, 1970, 1971.

tries, with all countries but West Malaysia having figures below the world average of 2,300 kg./hectare. The contrast is even more unfavourable if we consider the yields for North America and Europe,¹ which are in the region of 5,200 kgs. and 4,600 kgs. per hectare respectively. This is particularly true of Khmer Republic and Laos, where despite high rates of yield growth, yields per hectare were less than 1,500 kg. in 1971.² To a lesser extent, the same applies to the Philippines, which is a major producer in this area,³ while in Thailand, the reduction in the area under rice resulted in a 2% shrinkage in output between 1965 and 1971.

Comparing the sources of output growth, the yield effect seems to predominate in 6 countries (Indonesia, Khmer Republic, Laos, Philippines, Vietnam and Thailand). Of these six, the yield effect was sufficiently large to compensate for a negative area effect, signifying a reduction in the rice acreage, in 3 countries (Khmer Republic, Laos and Thailand). For the Philippines and Thailand, the observed results are the reverse of those observed for the 1950's, when area expansion compensated for the decline in yields. The area effect is the more important in Malaysia. The main factor is the increase in double cropping, with double-cropped

¹ These figures were computed from the Production Yearbook, 1971 of the FAO.

² In Laos it was reported that new varieties with an average yield of 4,500 kg./ha. had been introduced, but up to 1972, less than 10% of the farmers had adopted these varieties. ECAFE: Economic Survey of Asia and the Far East, 1973.

³ Concepcion, M.B., (Philippine Population in the Seventies, Manila, 1969) attributes the relative inefficiency of agriculture to the uneconomic size of holding and low level of technology. A labour force: land ratio of only 1:1.32 hectares was reported.

rice land rising from 96,000 ha. in 1958 to 350,000 ha. in 1968. It was also estimated that cropping intensity rose from 1.28 in 1968 to 1.5 in 1972/3. Changes in the sources of agricultural output growth are shown for four countries below:

Country	1950 - 1960 ⁽¹⁾		1965 - 1971	
	Area Effect	Yield Effect	Area Effect	Yield Effect
Indonesia	80	20	33	67
West Malaysia	39	61	63	37
Philippines	143	-43	6	94
Thailand	130	-30	-77	177

(1) Source: ECAFE: Economic Survey of Asia and the Far East, 1969.

Note that apart from the Philippines and Thailand, Indonesia and West Malaysia also had the relative importance of area and yield reversed between 1950-60 and 1965-71.

Table A.8: Other Major Crop: Sources of Growth and Percentage Changes in Area, Yield and Production: SEAMEO Countries, 1966-1971

Country	Crop ¹	Percentage Change			Source of Growth	
		Area	Yield	Output	Area Effect	Yield Effect
Indonesia	Maize	-20.6	-1.0	-22.0	93.6	6.4
Khmer Republic	Maize	5.6	-15.7	-10.3	-33.0	133.0
Laos	Maize	0	25.0	25.0	0	100.0
Malaysia, W.	N. Rubber	-3.2	55.0	50.1	-2.1	102.1
Philippines	Maize	11.1	21.7	34.9	38.8	61.2
Thailand	Maize	27.1	33.2	69.3	45.5	54.5
Republic of Vietnam	Sugar Cane	-66.7	-3.5	-68.0	95.1	4.9

¹ Crops chosen by each country in answering Questionnaire A.

Sources: FAO: Production Yearbooks, 1970, 1971; West Malaysia: Monthly Statistical Bulletin, 1974 Jan.

Table A.8 is of the same form as Table A.7 except that it refers to a second major crop in each SEAMEO country.¹ Much the same picture emerges with the yield effect predominating in 5 out of 7 cases. Only in Indonesia and Vietnam did changes in cropped area account for 90% of the variation in output. In the Khmer Republic, there was an increase in the cultivated acreage, but a severe fall in yields reduced output by 10% between 1966/67 and 1970/71. In Malaysia, the factors responsible for the improvement in natural rubber yields are well documented.² It needs only be mentioned here that the reduction in rubber acreage had been due both to estates replanting to oil palm and/or other crops. Similarly in the Philippines, the area effect for maize would have been smaller but for the shift from rice to corn mentioned

¹ In the questionnaires, each country was asked to furnish information on one other major crop besides rice. The crops shown in Table A.8 were cited by the countries concerned. It is not implied that the cited crop is the most important in the country.

² See for instance the various Bulletins of the Rubber Research Institute of Malaysia.

above. About half of production growth in maize in Thailand was contributed by each source, with yield increase being slightly more important. In Vietnam, the severe reduction in sugar cane output from 936,000 tons to 300,000 tons was largely the result of a 67% fall in area under the crop.

Table A.9: Growth of Fertilizer Use and Farm Machinery in Use: SEAMEO Countries, 1966-1971.

Country	Fertilizer Use ¹		Farm Tractors in Use		
	Among in 1970/1 ²	Percentage Change 1966/7-1970/1	Years	Number ³	Rate of Change Per Annum(%)
Indonesia	9.0	+ 77.1	1948/52-61/5	1.1	+ 21.0
Khmer Republic	1.2	52.9	1948/52-61/5	4.7	18.3
Laos	0.2	50.0	1948/52-1966	0.5	15.3
Malaysia					
Sabah	81.3	53.3	1966-70	10.7	18.6
W. Malaysia		86.5	1948/52-61/5		16.2
Philippines	23.3	112.4	1948/52-1967	5.4	7.5
Singapore	55.6	20.0	1966-1970	2.2	5.2
Thailand	7.0	39.6	1948/52-61/5	1.8	8.7
Republic of Vietnam	17.6	53.2	1948/52-61/5	1.0	19.5

¹ Total consumption of nitrogenous (N), phosphates (P 205) and potash (K 20) fertilizers.

² Metric tons per 1,000 agricultural population

³ No. of farm tractors per 10,000 agricultural population in terminal year.

Source: FAO: Production Yearbooks, 1970, 1971.

With the relatively greater influence of yield as a source of growth in agricultural output we need now to analyze the factors commonly cited as being responsible for changes in yields. Two of these are fertilizer input and farm mechanisation. Table A.9 shows changes in both variables up to 1970/71. As far as fertilizer input is concerned, substantial improvements have been recorded for all countries in the five years ending 1970/71, but the first column in the Table shows the exceedingly low level of consumption in Indonesia, Khmer Republic, Laos and even Thailand. In the case of Malaysia, the high figure of 81 metric tons per thousand agricultural population is in no small measure due to heavy fertilizer consumption in the estate sector for rubber and oil palm. The considerable differences in growth of fertilizer use between East and West Malaysia can also be noted.

With regard to tractor use, Malaysia and the Philippines had more than 5 tractors per 10,000 farm population at the end of 1965. Singapore had roughly 2.2; Laos had for the same number of people less than one, while Indonesia had just over one and Thailand just under two. Admittedly, the optimal number of machines depends, among other things, on the density of farm population and the type of crop cultivated, and it is unwarranted to judge one country's requirements on the basis of the experience of another. These figures are cited only to put the apparently good growth performance of farm machine usage in its true perspective.

The third and crucial factor is the adoption and diffusion of high yielding varieties of crops. Unfortunately, data at our disposal are at best fragmentary. In the case of rice, some information is furnished by the IRRI and reproduced below. (Table A.9A). In general, 'new varieties' refer to varieties disseminated since 1965/66. The growth of high yielding rice land is again rapid, but note the small proportion of rice land under high yielding varieties.

Table A.9A: Hectarage of New Rice Varieties: Selected SEAMEO Countries

Country	Year	New Varieties	
		'000 hectares	% of total rice land
Indonesia	1968/9	271	3.7
	1969/70	809	11.0
	1971/2 ¹	1,449	18.0
Khmer	1972/3 ¹	0.4 ²	c
Laos	1967/8	1	c
	1972	3	0.4 ³
Malaysia	1966/7	4.5	c
	1967/8	30	6.3
Philippines ⁴	1966/7	75	2.4
	1967/8	447	14.4
Vietnam	1967/8	0.9	c
	1968/9	44	1.8
	1969/70	200	8.7

¹ Information from Questionnaire A of Agricultural Development.

² Mainly IR from the Philippines.

³ Estimate only.

⁴ Includes BPI-76.

c Negligible.

Sources: IRRI in ADB: Regional Seminar on Agriculture: Papers and Proceedings, Sydney, 1969, p. 235; Questionnaire A of Agricultural Development.

Changes in the Structure of the Economically Active Population

To complete the picture, some insight into the changes in the non-agricultural sector is necessary. Structural changes in this 'sector' consisting of manufacturing and services, are shown in Table A.10 for four countries. One obvious observation is that both manufacturing and service sectors have grown over time, though the latter by a somewhat larger percentage. The reason is not difficult to find since the former sector's growth depends largely on the success of industrialization in each country, whereas the expansion of the service sector is a characteristic of nations under economic development. However, the latter indicates, in most cases, a proliferation of government employment whose economic value is at best doubtful, while the desirable increase in industrial employment remains low. Thus the slight decline in manufacture's share in the Philippines between 1960 and 1968 is the consequence of the lack of success in building up an import substituting manufacturing sector, and reflects a serious

stagnation in industrial development at a time when world industrial development was particularly strong. It must in all fairness be said that the progress of the economy after 1970 was quite a different story with GNP growing by 8.3% in 1973 and manufacturing accounting for 20% of this total.

Table A.10: Growth in the Non-Agricultural Sector: Selected SEAMEO Countries

Country	Years	Manufacturing & Construction			Services		
		Share of Total		Change in	Share of Total		Change in
		Employment (%)	Change in		Employment (%)	Change in	
Around	Around	Share (%)	Around	Around	Share (%)		
		1967	1970		1960	1970	
Indonesia	1961-71	7.4	9.8	+ 2.4	24.6	27.0	+ 2.4
Malaysia	1957-71	12.1	14.9	+ 2.8	30.4	33.5	+ 3.1
Philippines	1960-68	12.6	12.3	- 0.3	25.9	33.8	+ 7.9
Thailand	1960-69	4.2	5.5	+ 1.3	12.9	16.4	+ 3.5

Table A.11: Occupational Distribution of Economically Active Population¹

Country	Year	Farmers and Related Workers	Professional and administrative	Clerical and Sales	Production Workers Craftsmen Labourers	Others
Indonesia	1969	68.9	3.3	13.0	10.5	4.3
Khmer Republic	1962	90.2	0.3	3.7	5.8	0
Malaysia:						
Sabah	1960	77.3	2.2	5.4	9.7	5.4
Sarawak	1960	81.5	2.4	5.5	6.8	3.8
W. Malaysia	1970	48.8	5.5	13.7	20.9	11.2
Philippines	1970	55.1	7.1	10.4	14.9	12.5
Singapore	1970	4.1	10.3	29.2	39.2	17.2
Thailand	1970	81.4	3.4	6.5	6.6	2.1
Republic of Vietnam ²	1971	55.1	11.2 ³	-	19.5	14.2

¹ Figures for Laos are not shown since information available refers only to 5 big cities: Vientiane, Luang Prabang, Savannakhet, Khammouane and Pakse and are, therefore, not representative of the whole country.

² Information for 16 largest provinces only.

³ Includes Clerical and Sales.

Sources: Questionnaire A and ILO: Yearbook of Labour Statistics, 1971

Table A.12: Changes in the Numbers and Occupational Distribution of Economically Active Population: Selected SEAMEO Countries

A. Changes in Share

Occupation Group	Indonesia 1965-1969	West Malaysia 1957-1970	Philippines 1960-1970	Singapore 1957-1970	Thailand 1960-1970
Professional	+ 0.05	+ 1.67	+ 3.00	+ 3.48	+ 0.49
Administrative	+ 0.09	- 0.44	+ 2.67	+ 0.07	- 0.07
Clerical	+ 0.10	+ 2.02	+ 1.83	+ 1.36	+ 0.06
Sales	- 0.06	+ 0.13	+ 1.69	- 2.07	- 0.14
Farmers, etc.	+ 0.04	- 7.78	- 7.61	- 3.72	- 1.32
Transport	- 0.05	- 0.27	+ 2.25	+ 0.71	+ 0.31
Production workers, etc.	- 0.14	+ 5.10	+ 1.37		- 0.55
Service	0	+ 1.98	+ 1.13	+ 0.18	- 0.06

B. Level¹ around 1970 and Change in Numbers

Occupation Group	Indonesia		West Malaysia		Philippines		Singapore		Thailand	
	Level in 1970	% Change 1965-69	Level in 1970	% Change 1957-70	Level in 1970	% Change 1960-70	Level in 1970	% Change 1960-70	Level in 1970	% Change 1960-70
Professional	900	+12	129	+ 97	668	+179	56	+132	25	+45
Administrative	400	+20	20	- 17	140	- 57	11	+ 44	228	+ 1
Clerical	900	+14	133	+117	383	+ 81	84	+ 54	171	+11
Sales	4,200	+ 9	237	+ 30	799	+ 79	106	+ 22	735	+ 2
Farmers etc.	27,000	+10	1,322	+ 10	6,253	+ 20	27	- 27	11,330	+ 3
Transport	600	+ 6	78	+ 17	513	+171	255	+ 40	195	+35
Production workers, craftsmen etc.	4,100	+ 8	566	+ 69	1,701	+ 50			923	+15
Service	1,100	+10	225	+ 23	894	+ 60	89	+ 25	417	+53

Sources: ILO: Yearbook of Labour Statistics 1971 and Questionnaire A. General Information.

¹ In thousands

The occupational structure of the economically active population is examined next. Although there are 9 occupational classes, it is convenient to group these into just 5--farmers and related workers, who still form the bulk of the economically active population, professional-administrative workers, clerical and sales workers, production workers, craftsmen and labourers, and finally a group containing all others. The last is not particularly homogenous as a group, but a rationale of such a grouping can be found from the fact that vocational/technical training tends to be directed at this group of people. The predominance of farmers and related workers has received sufficient attention, but notice also that the last two groups just described, which for Singapore assumes a figure of 56.4% (39.2% craftsmen and 13.6% production workers) is also sizeable. On occasion, clerical and sales workers are also an important group, as are the cases of Indonesia, Malaysia, the Philippines and Singapore, where more than 10% of the economically active population are so engaged.

Changes in this occupational structure are represented in Table A.12, where all 8 groups are shown. The tendency for agriculture workers' shares to decline is clearly shown by falls ranging from 1% to 8%. Only in Indonesia did the share of agricultural workers remain unchanged. However, it is expected that with the development of small scale manufacturing and service industries, and the increasing incidence of 'off-farm' employment in other activities, sometimes in urban areas, the proportion of these workers will decline.

West Malaysia saw the most severe reduction in the share of farm workers, and the reasons, already discussed, are industrialization and diversification under the Five-Year Plan. Note though that this reduction is almost entirely compensated by the growth in the shares of craftsmen-production workers and service workers. Changes in other occupation groups are relatively unimportant. The Philippines, which witnessed a decline in the share of farm workers almost as severe, had increases in the shares of other occupation groups more evenly distributed. It has been argued that the growth of manufacturing employment had been partly a transfer of labour from the 'unorganized' to the organized manufacturing sector. We have no means of validating this, however.

The situation in Singapore, where agricultural workers are relatively few, is quite different. There, the main source of growth is, not unexpectedly, the professional and administrative/clerical workers while the share of farm workers declined and all other occupations remain relatively static. The problem here appears to be shortages of or bottlenecks in labour as manufacturing industries expand. This would impose a real constraint on such expansion. Finally, very little structural change occurred among Thailand's occupation groups. The relative constancy of the agriculture: non-agriculture ratio appears to point to the limited employment generating effect of non-agriculture activities, particularly manufacturing, which accounted for only 7% of incremental employment over this period.

Two observations may be made in passing. First, while the proportion of agricultural workers remains high, the figures themselves may be somewhat overstated, especially since, in Thailand for instance, women who are family workers in agriculture are also included. And second, for most countries, there has been a tendency for labour force participation rates to fall. This is the consequence of better educational facilities and also of rural-urban migration, since it is well known that participation rates are much lower in urban areas.

However, some other points are perhaps more important. The first is that the general decline of the farmers' share (except in Indonesia) in the occupational distribution is not always an unqualified blessing. On the plus side, diversification in and away from agriculture is

a positive element in safeguarding the economy against a fall in prices in one produce or the other. However, to the extent that this decline is usually accompanied by a rural-urban drift, additional problems are created. There are in the SEAMEO region three motivating forces behind this drift. The first, population pressure on land, results usually in a selective movement, usually young men, to urban areas. The second, people moving into the comparative security of towns, as a result of insurgency and war in the countryside, is much less age-selective. And with a few exceptions, we do not observe a strong increase in industrial activity which would provide employment opportunities to these people.

The problem which interests us, therefore, is to know how far the educational services—formal and non-formal—have shown awareness of their tasks of supporting manpower and economic development. They should help to spread agricultural information which is badly needed as one of the several essential elements of increasing yields per hectare and making possible needed diversification. These services should also play an important part in providing information and training for industrial development in those areas where it is needed.

B. THE SOCIAL AND CULTURAL BACKGROUND

Since it is neither relevant nor possible to treat the subject with exhaustive details, it might be appropriate to highlight only a certain number of social and cultural features which are considered to bear influence upon the effectiveness of non-formal education activities in SEAMEO countries.

The Language Problems

Due to a complex history of Southeast Asia, none of the countries admit that the languages used in their country are homogeneous. For the purpose of this study we can roughly differentiate the language situation in the member countries into two groups in terms of the number of speakers and the degree of complexity.

In the first group there are Khmer Republic, Laos, Thailand, and Vietnam where the national languages, namely Khmer, Lao, Thai and Vietnamese respectively are widely spoken by the majority of people. Yet, there is a colourful variety of ethnic minorities, living in the remote mountain ranges or along the border areas, who speak their own indigenous tongues. However, these ethnic groups do not constitute a proportionately large size of population to pose a significant problem, with the exception of the Malay speaking people in the three southern provinces of Thailand of whom a great many who attended schools can understand Thai but are naturally inclined to use their mother tongue. In these four countries foreign languages such as English and French are well understood among the more affluent in the modern sector of the society and pose no significant problem in our non-formal education frame of reference.

The second group is composed of Indonesia, Malaysia, the Philippines, and Singapore. Malaysia and Singapore are viewed as multi-lingual societies where Malay, Chinese, English and Indian (Tamil) are used simultaneously. Malay, however, is declared official language of both countries, while Chinese is spoken by the largest number of people in Singapore and by the second largest in Malaysia. English is used extensively in the educational and business realm in

both countries. In Indonesia, the Bahasa Indonesia is the official language and most widely understood by the population throughout the archipelago. Yet, there exists a rich variety of languages spoken by a significantly large group of population namely Javanese, Sundanese, Malay, Madurese, Buginese, Achenese, etc. For the Philippines, the national language is Filipino understood by approximately half of the population, while, as recorded in 1960, English is the second most widely used language because of the school influence, with about 40% of the population understanding it. Other languages and/or dialects used by a significantly large group of the population are Cebuano, Tagalog and Ilocano. A significant number of Filipinos also speak Bicol, Waray-Waray, (Leyte and Samar), Kapampangan, and Pangasinan. Spanish is spoken by a dwindling number of peninsulars and ilustrados; it is a required subject in colleges in the Philippines.

What is the implication of the language problem on our concern for non-formal education? If non-formal education should be made accessible to the people at large no matter what language they speak, the effective communication must be established. Evidently, each country has its own degree of complexity to cope with.

Urban-Rural Disparity

The responses to the General Information Questionnaire enabled us to look at the problem from two angles.

First, after the Second World War until now it has been a phenomenon everywhere—including the Southeast Asian countries—for the great mass of people to flock to the cities because of numerous well-known reasons ranging from abandoning their poor land and looking for new opportunities to seeking better education or even sheer excitement. In three SEAMEO countries, however, the migration was greatly intensified by war, when people became refugees from a war-torn country-side. In any case, slum areas in the cities are swelling with many thousands of people who have not been prepared to make a decent living and to adjust themselves well to the urban mode of life. The problems of housing, health, nutrition, prostitution, crimes, etc. have been discussed in many serious studies, and efforts are going on to cope with the situation. From the educational point of view, formal or non-formal, these people need at least some kind of social and vocational re-orientation and training so that the industrial, commercial, and service sectors of the economy can absorb them. As reported by most countries, the government's effort either in training or in seeking employment for them, are rather minimal and sporadic.

Second, looking from the opposite angle, it is obvious that the life style and mode of thought in the urban community are different from what they are in the rural community. The crucial point is that the planning and the implementation of many rural development programmes including various kinds of non-formal training—be it functional literacy, agricultural extension, technical/vocational skills training or what not—are conducted principally and predominantly by city-oriented government officials, voluntary organization workers and/or university people with good intention. Frequently the lack of genuine understanding of the needs and sentiments of the rural people, due to a failure to communicate effectively if not to lack of interest, has been detected as the basic problem. For any development programme to be successful, serious thought should be given to remedy this situation.

Values and Traditions Bearing Influences on Education and Development

In all the SEAMEO countries there exist certain values and traditions which can be regarded as potentially either conducive or prohibitive to development, including education. At the risk of over-generalization we mention the following features reported to the study team.

On the positive side:

(a) All the countries reported that the prevailing attitude of most people—urban or rural—is all for development and progress. On that account education is taken for granted as an effective means for personal advancement of the individuals and economic prosperity of the country. In some cases pro-development and pro-education enthusiasm reached such a degree as to make people less critical about the existing fallacies so keenly felt among the professionals.

(b) In some countries such as Malaysia and the Philippines, a large proportion of people, as indicated, expressed their support for the governments' new economic and social policies.

(c) In Thailand, Laos and Khmer Republic, the Buddhist temple, as one of the strong traditional institutions, is generally regarded as a good asset for education—formal or non-formal—and because of tolerance and liberalism of the institution, the Buddhist temple is regarded as posing no obstacle to change and development. Take, for instance, family planning.

(d) From the Philippines it was reported that people show ready acceptance of things novel, and they have a keen competitive spirit. Similarly but to a lesser degree perhaps, people in Thailand are fast becoming competitive, at the expense, probably, of traditional easy relationships.

(e) In Laos and in many other countries of the region, particularly in some areas of Thailand and Vietnam, village solidarity is strong and as such can be regarded as a favourable asset for rural development provided that planning, leadership and communication are effective.

(f) In the countries like Laos, Khmer Republic, Thailand and Vietnam, there is a three-month dry season, a slack period during which there is little agricultural activity. Farmers are able to participate in adult education programmes at a low or zero opportunity cost.

On the negative side:

(a) In several countries such as Malaysia, Laos, Thailand, and the Philippines, the rural people in the relatively less-developed areas still hold on to some traditional beliefs regarded by their more affluent counterparts as contradictory to innovation and new technology. Superstition is an inhibiting factor preventing people from accepting new scientific measures, say, in agriculture and family planning.

(b) In the rural setting as well as the city slum areas of most countries, child labour is still required to help the parents look after the household chores and, in many cases, to help earn a living. Children particularly of the 9-12 age group are thus denied the educational opportunity.

(c) On this account and with the traditional value of keeping women at home, a still

big proportion of girls are prevented to receive education beyond the lower cycle of the first level, although this problem no longer exists in some of the SEAMEO countries.

(d) In all the countries, particularly the Philippines, education in the mind of the public is equated with schooling; there is, therefore, a strong urge and strong competition to climb the educational ladders. White collar jobs, as a consequence, are still highly esteemed, and mastery of technical/vocational skills was rated inferior.

(e) In the rural setting in most countries a closely knitted strong family tie is frequently the obstacle for the younger members to venture into things novel and different, or to resettle elsewhere. There is also little motivation to work for people outside the extended family.

(f) As expressed by Thailand, a desire for immediate pleasure with little emphasis given to future consequences is still a prevalent attitude among the people who have been too long accustomed to abundance of food and other basic necessities.

(g) In a casual, laissez-faire atmosphere which is typical of Southeast Asia, people relax sometime to the point of lacking discipline and particularly work ethic.

(h) A hierarchical organization of society such as Thailand causes a lack of dialogue including criticism between hierarchical superiors and inferiors. Coupled with a desire not to cause offense it is frequently difficult to clear or to settle problems.

C. THE EDUCATIONAL SITUATION IN SEAMEO COUNTRIES

The Problem of Literacy

A convenient starting point in our review of the education situation in SEAMEO countries would be the consideration of their literacy rates. While quantitative statements on literacy depend largely upon the definitions used, it is widely recognized that literacy is a prerequisite of every aspect of development.

Table C.1 shows literacy rates for the eight countries as well as the average annual change over the last decade or so. Strictly speaking definitions of literacy rates differ between censuses and inter-temporal comparisons implied by the last column of this table are not entirely valid. However, since later censuses usually adopt stricter definitions, the percentage changes shown may be considered a minimum rate of growth. It is readily seen that literacy rates have risen for all countries, but the level of literacy in most cases still leaves much to be desired. Around 1970, the Philippines and Thailand head the table with rates of 83.4% and 82.3% respectively, followed by Singapore with 77.2%. The figure of 60% for Vietnam is an estimate,¹ but in the absence of more reliable information, no adjustment to the figure is possible. Further, on the basis of the rates shown, a rough partitioning of countries into two

¹ This figure was obtained from Vietnam: The Alexandre De Rhodes Educational Television Centre, Saigon. (Saigon, Sept. 1971), mimeo. An alternative figure of 80% by UNESCO: Education in Asia, Bulletin of the UNESCO Regional Office for Education in Asia, Vol. VI, No. 2, is obviously upward biased.

groups—one with literacy rates above 60%, and the other with rates below this figure—can be made. The 'high' group consists of West Malaysia, the Philippines, Singapore and Thailand, while the 'low' group would have Indonesia, Khmer Republic, Laos and East Malaysia as members. The need to distinguish between East and West Malaysia is clear from an examination of Table C.1.¹ It will also be seen that the above grouping corresponds to the groups B and C in the *Asian Model* of UNESCO.²

Table C.1: Literacy Rates for SEAMEO Countries, 1960-1970

Country	Year	Literacy Rate (%)	Year	Literacy Rate (%)	Average Annual Change (%)
Indonesia	1961	39.0	1971	59.6	+ 2.0
Khmer Republic	1958	31.8	1970	60.0	+ 2.3
Laos ¹	1960	25.0	1968/9	30-35	approx. + 0.8
Malaysia:					
Sabah	1951	17.1	1972	42.7	+ 1.2
Sarawak	1947	17.6	1972	34.5	+ 0.7
W. Malaysia	1957	47.0	1970	60.8	+ 1.1
Philippines	1960	72.0	1970	83.4	+ 1.1
Singapore	1957	52.3	1970	77.2	+ 1.9
Thailand	1960	67.7	1970	82.3	+ 1.5
Republic of Vietnam			1972 ²	60.0	

¹ Taking into consideration the campaign against illiteracy conducted in the zones under the control of the "Patriotic Front," the literacy rate would in fact be higher than that given above.

² Estimate only. See reference cited in footnote 1, p. 28.

Sources: Questionnaire A. Also Duvieusart, R. and Ughetto, B. *République Khmère: Projets de restructuration du système d'éducation* (UNESCO, 1973).

Table C.2: Literacy Rates by Region, 1970

Region	Male	Female	Total
World	72.0	59.7	65.8
Europe	97.6	95.3	96.4
N. America	98.9	98.1	98.5
Asia	63.0	43.3	53.2

Source: UNESCO: *Literacy 1969-1971*, (Paris, 1972)

¹ The rates from Sabah and Sarawak, however, refer to the period 1947 to 1972, and are again not really comparable with those of other countries, where 1960-1970 is usually the period under consideration.

² UNESCO: *An Asian Model of Educational Development: perspective for 1965-1980*. Paris, 1966.

It will be seen from Table C.2 that while most of the SEAMEO countries have literacy rates above the 1970 Asian norm of 53.2%, there is still some way to go before levels of literacy comparable to those obtaining in Europe and North America can be reached. Whether this is a desirable direction for SEAMEO countries remains highly debatable.

Apart from the large disparities in literacy rates shown in Tables C.1 and C.2, there are two disturbing features that deserve mention here. First is the fact that the average annual increase of literacy rates are slowest in countries where the levels of literacy are already low. For instance, the average annual increase for Sarawak, with a literacy rate of 34.5% in 1972, is only 0.7%, whereas Thailand, with a literacy rate of 82.3%, has an average annual increase of 1.5% between 1960 and 1970. This makes for increasing disparities between countries in the 'high' group on the one hand, and those in the 'low' group on the other. Second, the reduction in literacy rates does in no way imply a decline in the number of illiterates. A rate of growth of population higher than that of literacy would result in a large number of illiterate people. This appears to be the case in at least 3 out of the 8 countries under study. And this increase will continue as long as effective enrolment remains as low as it is at present in most SEAMEO countries.¹

Literacy rates are however highly aggregative statistics that tell us nothing about the spatial or age distribution of literacy in each country. For instance, since literacy rates are lower in rural areas than in urban centres, Table C.3, would indicate that for the bulk of the population in each country, where rural residence predominates, the average rates given in

Table C.3: Percentage Distribution of Population and Average Years of Schooling According to Rural and Urban Residence

Country	Population Distribution ¹			Average Years of Schooling		
	Year	Rural	Urban	Year	Rural	Urban
Indonesia	1961	85	15	1967 ²	2	7
Malaysia						
Sabah	1960	85	15			
Sarawak	1960	85	15			
W. Malaysia	1957	57	43			
Philippines	1960	70	30	1960 ³	4	9
Singapore	1959	37	63	1966 ⁴	4	6.5
Thailand	1960	90	10	1969 ⁵	2	4.5
Republic of Vietnam	1960	90	10			

Sources: ¹ Lefebvre, L. and M. Datta Chaudhuri: Regional Development: Experiences and Prospects in South and Southeast Asia, p. 272.

² Socio-economic Survey of Indonesia, 1967: Java & Madura only.

³ OECD: Occupational and Educational Structures of the Labour Force and Level of Economic Development, (Paris, 1971).

⁴ 1966 Singapore Sample Household Survey.

⁵ Labour Force Survey, August 1969.

¹ See the discussion on drop-out rates from primary schools on page 37.

Table C.1 are over-estimates. Even in highly urban Singapore, the average years of schooling in urban and rural localities are in the ratio of 3:2, while in Indonesia, the Philippines and Thailand, this ratio is in excess of 3:1.

As regards age distribution, Table C.4 shows that, for the countries studied, the great bulk of the population in school is in the first level of education, corresponding roughly to the age group 6-12. In Thailand and Laos, the proportions of children enrolled in this group are respectively 91% and 94%, while in none of the countries is the percentage below 70. Further, while these proportions are declining somewhat with the rapid expansion of second level education,¹ the number enrolled at the first level increased in 6 out of 8 countries between 1968 and 1972. In Indonesia, this increase amounts to 1.1% per annum, while for the Philippines, the corresponding change is 6.6% p.a. In Khmer Republic, the drastic decline of 50% in numbers enrolled appears to be the consequence of hostilities in that country, while the slight decline in numbers in Singapore is caused in part by the change in the age distribution of the population.²

Table C.4: Enrolment of Pupils at the First Level of Education: SEAMEO Countries, 1968 and Around 1972

Country	Number (in thousands)		As Percentage of Enrolment at all Levels	
	1968	1972	1968	1972
Indonesia	12,787	13,600 ¹	87.2	85.6 ¹
Khmer Republic	920	461	90.4	83.8
Laos ²	214	274	94.2	92.4
W. Malaysia	1,364	1,493	75.3	72.7
Philippines ³	4,199	6,969	81.0	73.4
Singapore	372	355	72.6	68.7
Thailand	5,123	6,080	91.2	85.1
Republic of Vietnam	2,084	2,911	77.7	76.3

¹ For the year 1973 (REPELITA II).

² The high rate of enrolment at the first cycle can only be attributed to a high rate of repeats.

³ The years are 1960 and 1970 rather than 1968 and 1972.

Source: Answers in Questionnaire A.

¹ See UNESCO: "First Level of Education in the Asian Region", Bulletin of the UNESCO Regional Office for Education in Asia, No. 14, June 1973, hereinafter referred to as UNESCO: First Level.

² In Singapore, the 'baby boom' which occurred from 1947 to approximately 1960 was followed by a rigorous population control programme, which began to reduce natural increase in the sixties. It is this latter factor, that is responsible for the observed phenomenon above, as well as an inverted age pyramid at the lower levels in 1970. However, an increase is again visible in the number of births from 1970 which is likely to continue for some years, reflecting the multiplier effect of the increases after the War. It is interesting to note that the Government recently took several measures to discourage large families such as allowing tax relief on no more than 3 children, no paid maternity leave for female government employees after the third child, priorities for families with two children or less in subsidized government flats, etc., fair consideration being given to existing large families. See Chen, Peter S.J., Social & Psychological Aspects of Fertility: Findings from Family Planning Research in Singapore (mimeo., November 1973).

Enrolment ratios, classified by sex, are shown for the age groups 6-12 and 13-18 for each country in Table C.5. In the age group 6-12, differences between country in the 'high' group and those in the 'low' group are again clear. The former group has rates well in excess of 70% while the latter group's rates range from 45% to 60% (Vietnam excepted). The above mentioned concentration of students enrolled in this age group manifests itself in the much lower enrolment ratios in the age group 13-18. In the former age group, the high enrolment rates for West Malaysia, the Philippines and Singapore imply the near achievement of universal primary education. In Malaysia, primary education was free (but not compulsory) from 1962 and the secondary school entrance examinations were abolished in 1965. For most countries, the figures indicate significant differences between male and female enrolment, with Malaysia, the Philippines and Singapore again being exceptions. The main problem here appears to lie in the rural areas where, in addition to lower enrolment rates, high drop-out among girls is to be found.¹

The very much lower enrolment rates for the age group 13-18, corresponding roughly to the second level of education, is not unexpected, but again there exist significant imbalances between male and female enrolment. The highest rates are for the Philippines and Singapore, where the negative entries in the column for shortfall from target indicate that the 1980 target of the *Asian Model* has been more than achieved. However, some caution is necessary in interpreting the results since the relevant age groups do not always coincide. In Malaysia, the figures are somewhat inflated by automatic promotion from the first to the second level.

The shortfall of enrolment rates for each country from the target specified by the Asian Model is also shown in Table C.5. For the first level of education the 'high' group of countries is reasonably close to the 1980 target so that achievement of that target by 1980 is very probable.² On the other hand, only 50-60% of the target has been achieved by the 'low' group of countries except Vietnam. For Khmer Republic and Laos, an annual rate of increase of around 5% would be required before the target can be achieved in 1980. The pattern is unique in the case of Thailand ('high' group) where the shortfall is 57.8% for the age group 13-18, while those of Indonesia and Vietnam ('low' group) being, understandably, 58% and 31.9%, respectively.

However, the question should be asked as to how far the Asian Model should be adhered to in the present circumstances of massive youth unemployment, particularly of secondary school graduates. The discussion papers at the ESCAPE meeting (Colombo, Sri Lanka, 1974) would seem to indicate that the demand for secondary education by the economy is more than fulfilled. Although it is here not the place to go more deeply into this problem, it seems pertinent to raise this question.

The First Level of Education

For the purpose of this study, the age group which is of primary concern is that which

¹ See UNESCO: *First Level*, op. cit., pp. XVIII-XIX.

² Much, however, depends on the rate of population growth in this period. In the Philippines, with a population growth rate of 3.5% per annum, the annual growth in enrolment may have to be in the region of 5% before the target can be achieved.

Table C.5: Enrolment Ratios in the Age Groups 6-12 and 13-18, Around 1970

Country	Year	Age Group 6-12			Percentage Shortfall From Target ¹	Age Group 13-18			Percentage Shortfall From Target ¹
		M	F	M+F		M	F	M+F	
Indonesia	1971	65.5	55.8	60.7	32.5	8.6	4.4	13.0	58.0
Khmer Republic	1972	64.5	35.4	50.1	44.3	26.0	7.8	17.0	45.7
Laos	1972	58.1	35.1	46.8	47.9	5.8	2.0	4.0	87.2
Malaysia:									
Sabah	1969 ²			63.0	37.0			18.0	59.8
Sarawak	1969 ²			86.0	14.0			23.0	48.7
W. Malaysia	1972	94.0	89.1	91.6	8.4	40.3	29.6	35.0	21.9
Philippines	1970 ⁵	100.0	100.0	100.0	0.0	50.1	48.5	49.3	10.0
Singapore ²	1972	98.3	95.5	96.9	3.1	55.9	53.9	55.0	22.8
Thailand ³	1972			75.7	24.3			18.9	57.8
Republic of Vietnam	1972	97.4	76.4	87.0	3.2	27.2	21.3	24.3	31.9

¹ Under the Asian Model, the target enrolment ratios for the first and second levels of education for 1980 are as follows:

	Group B Countries	Group C Countries
First Level	89.9	100.0
Second Level	31.3	44.8

Group B Countries: Indonesia, Khmer Republic, Laos and Vietnam

Group C Countries: Malaysia, the Philippines, Singapore and Thailand

² Age groups are: 6-11, 12-18.

³ Age groups are: 7-13, 14-18.

⁴ Age groups are: 7-12, 13-18.

⁵ In the Philippines, the starting age for primary school is 7, so the age group 7-12 is used instead. For the second level, the age group is 13-16 inclusive.

Sources: UNESCO: Asian Model, op. cit., Questionnaire A

: Progress, op. cit.

corresponds to the first and lower second levels of education since the majority of non-formal education programmes are directed at those who are either not enrolled or have dropped out from school in this age group. Considering the first level of education alone, there are 3 groups of people who make up the out-of-school population. First, there are those who have never enrolled at school. Then among those enrolled, some would leave during the 6 or 7 years of primary schooling, while the balance consists of those who drop-out on completion of their schooling at this level.

Some idea of those not enrolled in the first level can readily be obtained from Table C.5, where the main features are:

i) Indonesia, Khmer Republic and Laos have 40% or more of the population between 6 and 12 years old out of school, and

ii) Among this group of people, females predominate.

Out of these data, it is difficult to determine the proportion of those who have never been to school, but an indication of the wastage from first level education can be obtained from age-specific enrolment rates (Table C.6).

Table C.6: Age Specific Enrolment Rates for the First Level of Education: Selected SEAMEO Countries

Country	Year	Age (in years)								Percent
		6	7	8	9	10	11	12	13	
Malaysia:										
Sarawak	1967	26	79	92	92	86	77	59	26	
								(64) ¹	(50)	
W. Malaysia	1967	94	92	90	84	82	73	0.1	0.0	
								(64)	(44)	
Philippines ²	1968/9	3	86	105 ²	108 ²	109 ²	98	95	57	
								(100)	(80)	
Singapore	1970	88	98	96	97	95	88	44	19	
								(82)	(74)	
Thailand	1968/9	35	87	100	96	84	59	40	22	
								(42)	(29)	
Republic of Vietnam	1970	69	92	94	87	76	47	25	11	
								(51)	(43)	

¹ Figures in brackets show the combined rates of both first and second levels of education.

² Ratios in excess of 100% arise from the lack of exact corresponding data between population and enrolment.

Source: UNESCO: Progress, op. cit.; and First Level, op. cit; Questionnaire A.

The pattern for all 5 countries is broadly similar. For West Malaysia and Singapore, with almost universal primary education, enrolment ratios are uniformly high for ages 6 to 11. For all other countries, enrolment ratios rise from age 6 to a peak around ages 8-9, after which the effects of drop-out begin to be felt. In the case of the Philippines, ratios in excess of 100 indicate the lack of corresponding data between population and enrolment. Around age 11 or 12 children transfer to the second level of education, so that estimates of drop-out after completing primary education should be obtained from the enrolment ratios of both primary and secondary education. From the table, it would appear that the incidence of drop-out on completion of the first level of education is highest for Thailand and Vietnam. Unfortunately, information for Indonesia, Khmer Republic, and Laos is not available. For these countries, alternative approaches are required.

One such alternative is the examination of grade enrolment pyramids (Fig. C.1). Two broad patterns are discernable here:

i) the almost rectangular pyramids for West Malaysia, the Philippines and Singapore, and

Figure C. 1: Distribution of Enrolment at the First Level, By Grades, 1968 and 1972

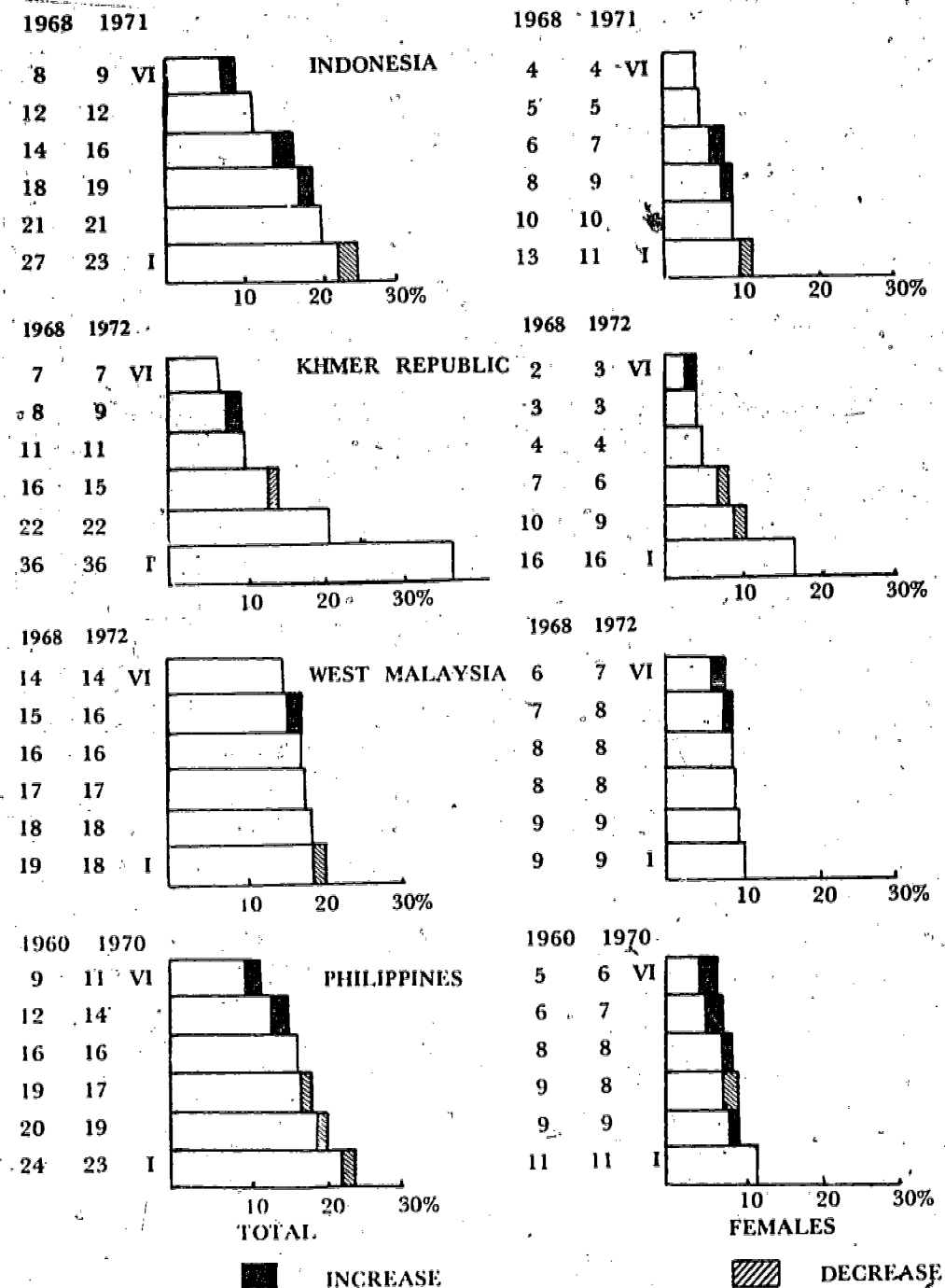


Figure C. 1: -- (Continued)

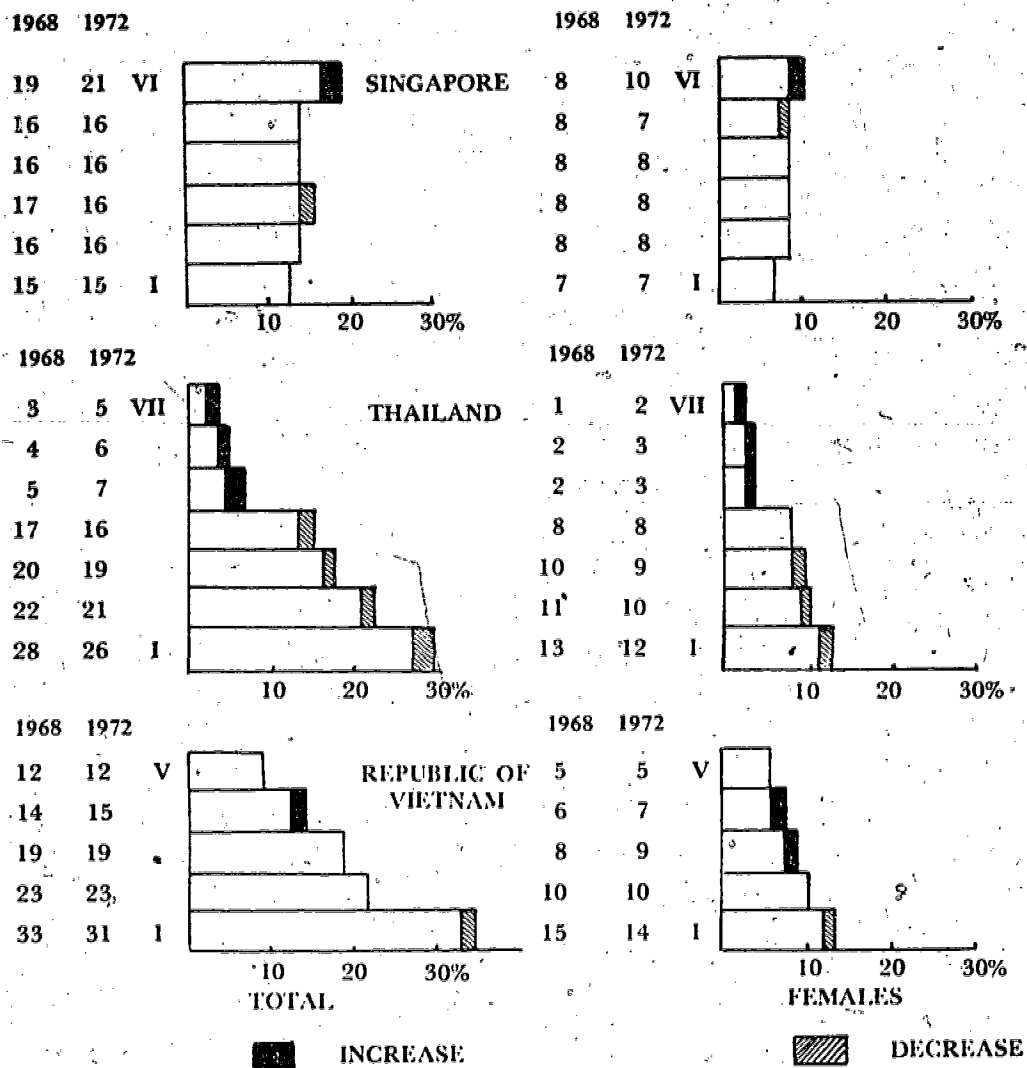


Table C.7: Drop-out Ratios¹ (in relation to Grade I) of Pupils at the First Level of Education, Both Sexes

Country	Cohort Starting in	Grade						
		I	II	III	IV	V	VI	VII
Indonesia		na	na	na	na	na	65	—
Khmer Republic ²	1963	0	33	41	55	65	69	—
Laos	1964	0	54	63	74	80	80	—
Malaysia:								
Sabah	1964	0	24	25	26	32	27	—
Sarawak	1965	0	6	10	16	25	25	—
W. Malaysia	1965	0	0	2	4	7	10	—
Philippines	1962	0	16	21	29	38	44	—
Singapore	1965	0	— 3	— 2	— 1	2	—26	—
Thailand ³	1962	0	26	30	39	84	85	87
Republic of Vietnam	1964	0	23	33	44	51	—	—

¹ The term 'Drop-out Ratios' is misleading because in some SEAMEO countries where primary education is made compulsory, drop-out as such is not allowed. In this context, therefore, the term should mean 'Crude Transition Ratio'.

² See also the 1955, 1956 and 1957 Cohorts shown in p. 32 of République Khmère: Rapport sur l'évolution de l'éducation de 1971 à 1973 (Phnom Penh, August 1973).

³ The high transition ratios for Thailand arise because the transition from a 4 year to a 7 year first level education system has not been completed

Source: UNESCO: Progress op. cit.

Sudarmadi, S.: in SEAMEO/SEADAG Seminar on Non-Formal Education (Penang, 1971, p. 264).

ii) gradually tapering pyramids with relatively broad bases, for Indonesia, Khmer Republic, Thailand and Vietnam.

For almost every grade, in each country, the proportion of females out of total enrolment is less than half, while for all countries, there are visible efforts to reduce the imbalance between grades, as is shown by the increase in the proportions in the upper grades over the past four years.

For Indonesia, this redistribution is particularly marked, with a 4% reduction in grade I and increases in the proportions of third grade pupils and above. The much flatter pyramid for the Khmer Republic is accompanied by very little change in the distribution over grades for the past four years. With 58% of total first level enrolment in the two lowest grades, the problem of drop-out which existed even before the war situation¹ must be considered a serious one

¹ See Rapport, op. cit.

here. In the case of West Malaysia there is an even distribution over primary grades and drop-out does not appear a real problem. Equality between male and female enrolment was achieved in 1972. The pyramid for the Philippines shows significant redistribution of enrolment towards the higher grades, so that a near rectangular-shape is beginning to emerge. Singapore is the only country of the eight where enrolment is highest in the upper primary grades and lowest in grade I—an inverted pyramid. The tendency over the last 4 years has been to exaggerate this phenomenon rather than to reduce it. The reasons for this have already been discussed. Thailand, like Indonesia and the Philippines, exhibits significant adjustment towards reducing the imbalance between the lower and higher grades.¹ In 1972, however, the imbalance was still substantial, with the first grade accounting for 26% of the total enrolled, and the 4 lowest grades (there are 7) containing some 82% of all primary pupils. The same pattern exists for the enrolment pyramid for girl pupils. Finally, in the case of Vietnam, which has primary education spanning 5 grades only, one third of total first level enrolment is in grade I, with the proportion declining more or less evenly from grade II to grade V. There was little change in distribution between 1968 and 1972, though the pyramid for girl pupils does show some tendency towards balance in distribution over grades.

Crude transition rates are shown by grade for the first level of education in Table C.7. In Khmer Republic and Laos, 55% and 74%, respectively, of those enrolled in grade I in 1963-1964 left school at the end of grade III. This drop-out problem is compounded by the already low enrolment ratios in these countries (Tables C.5 and C.6). Even in the Philippines, which has the highest proportion of the population enrolled among these countries (53% of the population aged 5-24 in 1967), 44% of those enrolled in grade I in 1962 left school by the beginning of grade VI. And in Thailand, with a heavy concentration of primary enrolment in the first four grades, the figure is as high as 87% in the final year. The phenomenon is understandable since the enforcement for expansion at the three upper grades was made only after 1962 when compulsory education act providing 7 years schooling was promulgated. The drop-out rates in East Malaysia (Sabah and Sarawak) are relatively low, so the main problem there is essentially the small percentage of children enrolled. The figure for West Malaysia of 10% is even lower, there being virtually no drop-out until grades V and VI.² For Singapore, which has a 100% enrolment ratio for her own citizens, it is not certain to what extent the enrolment of Malaysians in her schools may be responsible for negative drop-out rates.

¹ This is in accordance with the objectives of the Education Plan, one of which is: "to expand lower elementary education to cater for the growth in school age population and to expand upper elementary enrolments as rapidly as possible so that universal compulsory 7-year education can be achieved by the late 1980's".

² This finding is confirmed in a study of drop-outs in West Malaysia published in 1973. See: Malaysia: *Kajian Kacikiran (Drop-out Study)* (Kuala Lumpur, Ministry of Education, 1973).

The table as a whole clearly demonstrates that, with the exception of Malaysia and Singapore, the primary enrolment rates, which already show some weaknesses, do not provide the reliable picture of the future situation as far as effective education is concerned. What may be called effective enrolment is to be found in the combination of Tables C.5 and C.7, since it should be assumed that only a child who has completed primary school would have absorbed the minimum knowledge and abilities which would enable him to progress in his society, using whatever (formal or non-formal) education he may want.

If this norm of effective enrolment is accepted, it appears that the ratios of those who have completed primary education to the number of children of school-going age in the SEAMEO region are as follows:

Table C.7a: Effective Enrolment Ratios: SEAMEO Countries

Country	Year	Effective Enrolment Ratio (%)
Indonesia	1971	20
Khmer Republic	1972	15
Laos	1972	9
Malaysia		
Sabah	1969	40
Sarawak	1969	64
W. Malaysia	1972	82
Philippines ²	1970	55
Singapore	1972	97
Thailand ¹	1972	15
Republic of Vietnam	1972	33

¹ If only the 4 lower grades are considered, the ratio is 56%.

Source: Tables C.5, C.7

From what appears in Table C.7a it is quite obvious that, with the exception of Singapore and West Malaysia where the enrolment ratios are high, a very large proportion of children of school-going age in SEAMEO countries are staying outside the school. Whether it is a good thing to keep them all in school is a different matter. Our great challenge here and now is the matter of giving fair and widest educational opportunities within and beyond the walls of the school. Perhaps we can give these young people and the states concerned greater justice if we look for more liberal and realistic alternatives in the light of our circumstances.

It may appear pessimistic to state that the above figures indicate the future literacy rate of the countries concerned, but if it is agreed that more complicated production processes, especially in agriculture, require somewhat more than just the ability to read and write a simple sentence, and that, particularly in arithmetic, a sound knowledge will be needed, then the conclusion seems unavoidable that in most countries of the region, serious thought should be given to the problem of how to provide this minimum of knowledge. Moreover, when we rank the countries according to this Table¹ and compare it with the ranking of GNP per head, we find a correlation of no less than 0.93. It would seem, therefore, that effective enrolment is a rather fair indicator of economic development in the SEAMEO countries.

¹ Thailand was put at 35, being the simple average between the 15 and 56 figures.

The Second Level of Education

In the above section it was observed that the lower second level of education is also important in the analysis of the drop-out problem. However, the nature of the problem at this level differs from that already discussed. For whatever may be the opinion concerning the need for a number of years of full secondary education, drop-out from schools at the second level does not necessarily constitute 'wastage', as it is at the first level when the children have learned too little to give them any real advantage. At the second level, every year of schooling will have been beneficial, at least if the programme itself is assumed to be useful. In Singapore, the enrolment ratio fell from 77% to 54% between ages 13 and 15, while in the Philippines, the reduction is of the order of 10%. In West Malaysia, a decline from 44% at age 13 to 19% at age 15 was observed. In all countries shown, the enrolment rate by age 15 is only around 20-30%. By age 18, no enrolment rate has a value as high as 15% (Table C.8).

Table C.8: Age Specific Enrolment Rates for the Second Level of Education: Selected SEAMEO Countries

Country	Year	Age (in years)				Change in Rate Ages 13-15
		13	14	15	18	
Malaysia:						
Sarawak	1967	(26) ¹	(8)	(3)		
		24	30	31	13	- 16
W. Malaysia	1967	(.1)	0	0		
		44	36	19	3	- 25
Philippines	1966/7	(49)	-	-		
		20	28	29	11	- 40
Singapore	1970	(19)	(2)	-		
		55	58	54	7	- 20
Thailand	1967/8	(22)	(8)	(2)		
		6	11	12	5	- 14
Republic of Vietnam	1967/8	(13)	(4)	(1)		
		30	32	28	17	- 14

¹Enrolment ratio for the first level of education.

Source: UNESCO: Progress, op. cit.

Information on drop-out rates at this level is available only for the Khmer Republic. The measure of contribution from the terminal grades of level one, and of lower level two is given by the transition ratios for these grades (Table C.9). Column 1 contains information that has already been described in the previous section. The transition ratios from the lower secondary to upper secondary level reveal that around 35% to 45% of those in the terminal lower secondary grade discontinue their studies. The high rate for Singapore may have been a consequence of taking the transition point to be between grade X and grade XI. By the same token, inter-country comparisons would be a hazardous undertaking, but the broad pattern is nevertheless clear from the examination of both Tables C.8 and C.9. And that is that both

Table C.9: Transition Ratios from the First to Grade I of the Second Level, and from Lower to Upper Second Level: SEAMEO Countries

Country	Level 1 to Grade I, Level 2		Lower Level 2 to Upper Level I		
	Year ¹	Ratio	Year	Ratio ² (Total)	Ratio (General)
Khmer Republic	1961-64	31	1964-67	—	49
Laos	1966-69	35	1966-69	65	54
Malaysia:					
Sabah	1967-69	45	1966-69	—	64
Sarawak	1967-70	47	1967-70	—	61
W. Malaysia	1967-70	67	1967-70	—	51
Philippines	1964-67	71	1964-67	91	91
Singapore	1967-70	55	1967-70	19	—
Thailand	1966-69	87	1965-68	68	37
Republic of Vietnam	1965-68	69	1965-68	78	77

¹Ratios are averages of years shown.

²Total includes: General, Vocational and Teacher Training.
Source: UNESCO: Progress, op. cit.

during and at the end of lower secondary schooling, drop-out occurs so that only a small fraction of the school population remains to complete their education at the second level. What these young school leavers do actually after their school years is a big question for our study. Evidently a great number of these people have no definite skill or knowledge to earn their living right away. All of them are in a critical formative age and before long they are supposed to be responsible citizens in the flux of the much propagated 'development'.

Resources for Educational Development

Apart from the drop-out problem, an examination of resource constraints in educational development is also instructive. The two types of resources particularly relevant here are personnel and finance. First, while literacy and enrolment rates point to a general quantitative improvement in educational facilities in the SEAMEO countries, they say very little about qualitative developments. Yet it is precisely the quality of education that should be a matter of grave concern in our region. A report on the educational situation in Khmer sums the problem up succinctly:

"Not only is the content (of primary education curricula) not geared to the needs of every day life, but the war situation has made it impossible to maintain the infrastructure of schools and facilities intact. The refugee problem is enormous, necessitating double use of the facilities in secondary and triple use in primary schools. Teachers moreover have 50-70 children per class, children of widely different ages and haphazardly put together from different areas....." (translated from French).

Elsewhere in the Report,

"Our present educational system appears to be little effective and does not fulfil the requirements of socio-economic development. It is geared to a limited number only of students to be prepared for higher education. No special attention is given to the masses of the school population who go on directly to actual life and who actively participate in the development of the country".¹

Table C. 10: Pupil-Teacher Ratios at the First and Second Levels of Education: SEAMEO Countries, 1965-1969

Country	No. of Pupils per Teacher			
	First Level		Second Level	
	1965	Around 1969 ¹	1965	Around 1969 ¹
Indonesia	42	40	17	17
Khmer Republic	48	48	25	32
Laos	32	33	22	18
Malaysia:				
Sabah	29	26	24	26
Sarawak	27	34	25	26
W. Malaysia	28	32	26	26
Philippines	40	43	27	30
Singapore	29	29	25	22
Thailand	34	33	17	20
Republic of Vietnam	56	58 ¹	37	39

¹Year 1968 for the Khmer Republic, Sabah, the Philippines, Thailand and the Republic of Vietnam; Year 1969 for Indonesia and Laos; and 1970 for all other countries.

Source: UNESCO: Statistical Yearbook 1971.

With the absence of greater use of educational innovation and technology, perhaps one indicator of qualitative change is the pupil-teacher ratio, and it is to be expected that quality improvement would be reflected in a fall in this ratio over time. The trend that emerges from the figures in Table C.10 is unfortunately quite the reverse. At the first level of education, only 3 out of 10 ratios fell between 1965 and 1969 (Indonesia, Sabah and Thailand), while two countries (Khmer Republic and Singapore) had ratios that were constant over the period. Despite this constancy, there exist considerable doubts as regards the qualitative adequacy of education in the Khmer Republic.¹ Among the other group of countries, Vietnam, with the highest pupil-teacher ratios (above 55:1) registered an increase, while even in the Philippines and West Malaysia, this ratio has increased. In Thailand, the 1971 figure for rural pupils remains at 35:1, although the overall ratio has come down to around 33. At the second level, only two out of ten ratios have fallen, while another two (Indonesia and West Malaysia) are unchanged. The deterioration of the ratio is greatest for the Khmer Republic, while both the Philippines and Thailand also experienced significant increases in their ratios although Thailand still has,

¹See République Khmère: Rapport sur l'Evolution de l'Education de 1971 à 1973 (Phnom-Penh, Ministère de l'Education Nationale, 1973).

with 1:20, an excellent teaching arrangement, one of the lowest in the region. Taking both levels together, only Singapore has ratios that did not rise, while the good performance of enrolment ratios for Vietnam appears to be nullified by poor pupil-teacher ratios so that any education improvement there may be more illusory than real, which is only to be expected in the war circumstances.

Table C.11: Developments in Recurrent Expenditure in Education in SEAMEO Countries, 1965-1972

Country	Change in Expenditure Per Annum		Educational Expenditure as % of Total Recurrent Expenditure		Expenditure as % of G.N.P.	
	Year	%	Percent	Change	Percent	Change
			1972	1969-72	in 1969	1965-69
Indonesia	1969-72 ¹	+ 31.4	5.1	40.4	1.2	-
Khmer Republic	1965-72	+ 1.5	3.0	- 12.7	3.9	- 0.3
Laos	1965-71	+ 5.2	10.7 ¹	-	-	-
Malaysia:	1965-72	+ 22.7	25.9	+ 2.6	5.2	+ 1.8
Sabah	1965-69	+ 24.4				
Sarawak	1965-69	+ 3.8				
W. Malaysia	1965-69	+ 15.2				
Philippines	1965-72	+ 20.9	26.3	+ 1.7	3.1	+ 0.5
Singapore	1965-72	+ 12.0	15.3	+ 0.1	3.3	+ 0.2
Thailand	1964-72	+ 26.9	19.1	+ 2.1	2.6	- 1.0
Republic of Vietnam	1965-69	+ 29.2	4.2 ¹	-	4.9	+ 1.0

¹ In 1969.

² In Vietnam recurrent expenditure on education was 4.2% of total recurrent expenditure in 1969.

³ Total state development budget, 1969/70-1973/74.

Sources: UNESCO: Statistical Yearbook 1971,

Davieusart R. and Ughetto, B.

République Khmère: Projet de restructuration du système d'éducation (Paris, UNESCO 1973).

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Rapport sur l'Évolution de l'Éducation de 1971 à 1973 (Phnom Penh, 1973).

Bank of Thailand:

Annual Economic Report 1972.

Republic of Indonesia:

The First Five-Year Development Plan, 1969/70-1972/74.

The second type of resource considered is recurrent expenditure on education, and Table C.11 shows that the increases are in almost all cases significant whether measured

directly, or with the use of total recurrent expenditure and GNP as deflators. In almost all countries, educational expenditures constitute a progressively larger slice both of total recurrent expenditure and of GNP:

Table C.12: Percentage Change in Public Recurrent Expenditure Per Pupil on Education, First and Second Levels: SEAMEO Countries, 1965-69

Country	First Level		Second Level	
	Current Price	Constant ¹ Price	Current Price	Constant Price
Khmer Republic	(-25.30) ²	(-52.25)	-30.67	-37.72
Laos	+22.37	- 8.15	-17.36	-37.95
Malaysia:				
Sabah	-21.10	-24.14	-52.74	-54.56
Sarawak	- 6.48	-10.06	-30.81	-33.47
W. Malaysia	+13.64	+ 9.28	+75.86	+69.10
Singapore	+62.19	+53.18	+81.37	+71.29
Thailand	+15.28	+ 2.30	+ 6.35	- 5.57
Republic of Vietnam	-30.78	-80.79	-58.12	-88.37

¹Showing the influence of inflation on per pupil expenditure by the consumer price index (1963=100).

²For years 1970-72. No data available for 1965-69.

Sources: UNESCO: Progress, op. cit., and Statistical Yearbook 1971.

U.N. : Statistical Yearbook for Asia and the Far East 1971.

République Khmère: Rapport, op. cit., p. 9.

But an indicator of the quality of educational services offered is not total educational expenditures but per pupil expenditure, since a larger number of pupils would ensure a higher aggregate expenditure on education, regardless of whether quality improvements have taken place. The results from column (1) (First level) and column (3) (Second level) of Table C.12 are mixed. For Laos (first level only), West Malaysia, Singapore and Thailand there have been significant increases in per pupil expenditure over 1965-1969, while for Khmer Republic, East Malaysia and Vietnam, the reverse is the case. A valid comparison of expenditures over time must however take changes in the general price level into consideration, since the observed change in per pupil expenditure may largely reflect price change. To allow for this, columns (2) and (4) express expenditure changes in terms of constant 1963 prices.¹ It is immediately clear that the resultant figures show much smaller increases and much sharper declines. The positive change features remain significant only in West Malaysia and Singapore, while for Thailand, per pupil expenditure increased only marginally at the first level, and decline at the second. The most serious decrease is again that of Vietnam, where falls in the region of 80-90% are encountered.

The brief review of the educational situation has demonstrated the existence of pro-

¹While it is admitted that the use of consumer price indices is not entirely satisfactory theoretically, the unavailability of the appropriate series leaves us no alternative.

blem areas deserving attention. First, the proportion of out-of-school youth remains large in some countries despite significant increases in educational expenditures. In the remaining areas, the apparent improvement in literacy, enrolment and similar rates masks to some extent underlying difficulties with respect to the quality of education offered, as well as the adequacy of available resources.

We may pose the question: given these constraints, what is the role of NFE in these countries? The answer, partial though it may be, is the subject of the next, and indeed, all subsequent sections.

D. THE NON-FORMAL EDUCATION DEVELOPMENT IN SEAMEO COUNTRIES

Development

Non-formal education along the adopted definition of this study is indeed of recent origin. It is in fact a discovery of something which has existed for a long time in many different forms. During the last few decades all SEAMEO countries are known to have operated non-formal education programmes/projects loosely under the 'adult-education' blanket.

It might be more instructive to let the countries which submitted concise but adequate accounts describe their cases in their own words. This will serve as a starting point to investigate the whole matter more thoroughly in the subsequent chapters that will follow.

As reported by Singapore:

The awareness of the concept of non-formal education in the Republic of Singapore dated as far back as 1950 with the establishment of the Singapore Council for Adult Education to co-ordinate adult education activities organized by the Ministry of Education, the University of Singapore and voluntary bodies.

The role of the SCAE was to provide those agencies with subsidies to organize adult education programmes.

In 1960, the Adult Education Board, a statutory body was established to promote adult education in the Republic. The role of the AEB is to extend greater understanding among the people of the importance of adult education in the task of national development and nation building through the organization of a great variety of courses/classes in conjunction with private, semi-public and public institutions and the People's Association.

The People's Association, providing adult education activities at community centres, has brought understanding of non-formal education to the people at grass-root level.

Non-formal education, therefore, takes place at the home front through the mass media, at the community centre, and in places of work and in institutions. Non-formal education is provided at all levels from top management through various supervisory levels, at dif-

ferent types of technical and vocational institutions. The objectives are to promote community development as well as individual and personal, and work development for the people.¹

As reported by Thailand:

As in all traditional societies before a formal education system was developed (the first formal school was established in 1870) all education took place in a non-formal manner through the Buddhist temples, through apprenticeship schemes, through the family, through community elders, and for the elites through the palace. There was, however, no conscious awareness that non-formal education was being practised.

In 1937 the government formulated its first policy on adult education. This policy had two main aims, firstly to provide literacy training, and secondly to provide citizenship training. An adult education office was established in the Ministry of Education in 1940, and the first programmes for adults were mounted in the same year.

Not until 1954 was the concept of adult education broadened with the establishment of TUFEC (Thai-UNESCO Fundamental Education Centre). There were field workers in seven fields: health, agriculture, education, home making, village industry, and the production of instructional materials.

Since 1948 short vocational training courses have been offered, and in 1964/65 a new flexible programme of short course vocational training was started from mobile schools. (MTTS).

With the development of functional literacy-family life education courses in 1969 adult and non-formal education can be said to have passed its watershed, and achieved a considerable degree of acceptability.²

Financial Resources

Of late, the desirability of programmes in non-formal education has received explicit acknowledgement in national development plans. A good example of this recognition appears in the Third National Development Plan, 1972-1976, of Thailand. Among the numerous objectives of the Education Plan is the proposal to expand NFE:

- to promote adult and out-of-school education for drop-outs and those who have no opportunity to continue their studies by providing basic reading and writing classes as well as vocational training to suit local needs,

- to improve adult education contents and mobile vocational training units to suit socio-economic conditions of rural areas,

- to promote the use of mass media in the development of adult education and to improve and expand public libraries in areas which lack adult education centres, and

¹ Questionnaire reply from the National Liaison Committee of Singapore

² Questionnaire reply from the National Liaison Committee of Thailand.

to promote youth activities in local development and vocational training of young people.”¹

In the light of these objectives, it would be interesting to examine the financial allocations for NFE under these plans. Actual figures are not always easy to come by, but the following should give some indication of relative magnitudes.

In Indonesia, the First Five-year Educational Development Plan of 1969/1970–1973/1974 estimated that in the first year of the Plan, 160 million Rp. was to be spent on Community and Adult Education out of a total of 5,813 million Rp. for Education. This represents a meagre 2.8% of the total. Over the entire Plan period, 1.7 billion Rp. out of a total of 53.7 billion Rp. was to have been so spent, again only 3.2%. The Second Five-Year Educational Plan is equally spartan regarding NFE resource allocations. A figure of 3 billion Rp. or 0.6% of the total education budget is to be devoted to NFE programmes out of a total of 495.8 billion Rp. However, a large proportion of expenditure for “institutional/official training” may be devoted to NFE projects, and this item is expected to account for 14.9% of the Development Budget in education in 1974/1975, with the corresponding percentage being 13.8 for the entire plan period. By comparison, the allocation to the formal education system is projected to finance and estimated growth in enrolment and the number of teachers by 50% and 21% respectively between 1973 and 1978.²

Similarly, enrolment in the Khmer Republic is envisaged to grow by 12% between 1974 and 1978, while both the number of teachers and expenditure on education are expected to increase 50% over the same period. Details on the allocations for NFE are unavailable, but it was stated that the Directorate of Mass Education, Special, Out-of-School and Permanent Education (DEMEP) would be set up with the following budget for 1974-1978.

DEMEP: Project Budget (in US\$) 1974–1978

	1974	1975	1976	1977	1978
Staff (Expert)	—	30,000	30,000	—	—
Training	27,500	35,000	35,000	20,000	27,500
Materials	15,000	9,000	9,000	9,000	3,000
TOTAL	42,500	74,000	74,000	29,000	30,500

The above figures, extracted from *Questionnaire A: General Information* do not, however, give the whole picture, since the Report (p. 38) clearly indicates that an important role is played by other Ministries. Despite the lack of data, the authorities appear to be initiating a real effort in the direction of NFE.

The first Malaysia Plan, 1966-1970, focussed attention on the formal education system, but also referred to the need for “the training of personnel outside the school system.”³ Again no specific data for NFE programmes were given, but the budget for ‘Other Programmes’

¹ Thailand: The Third National and Social Development Plan, 1972-1976 (Bangkok, 1972) pp. 256-60. Similar statements are to be found in Plans for Indonesia and the Philippines.

² Republic of Indonesia: Repelita-II, (Second Five-Year Plan) 1974-1978, Ch. 22 and Ch. 24.

³ Malaysia: Second Malaysia Plan (Kuala Lumpur, 1971), p. 228.

accounted for only 0.7% of the total expenditure under the Plan. There was no explicit mention of NFE programmes in the Second Malaysia Plan, 1971-1975, but a total budget of 537.3 million was envisaged, compared to the M\$ 329.4 million between 1966-1971. Of the former figure, 5.2% was allocated to 'other programmes', a considerable increase over the 1966-1970 allocation, while, of the allocated M\$ 1,921 million for agricultural development, 5.0% was to be devoted to extension and services. The only other information available relates to literacy (Questionnaire A: Literacy) where it is reported that the literacy budget declined from M\$3.6 million 1968 to M\$ 1.3 million in 1972.

It was not possible to obtain exact data on total NFE expenditures in the Philippines. However, detailed descriptions of NFE projects are available in at least two sectors. First, Special Programmes in education consist of manpower training, sports development, community development, etc. and budget allocations for these are as follows: (values in million Pesos)

	FY1972	FY1973	FY1974	FY1975
Special Projects & Development Programme	—	61.8	61.8	61.8
Total Education	435.0	523.8	626.1	626.1
% Special Project/ Total Education	—	11.8	9.9	9.9

In addition, expenditures in the field of cooperatives and social welfare are given as (million Pesos):¹

	FY1972	FY1975	% Growth
Family Welfare	2.73	3.64	+ 33.3
Child & Youth Welfare	3.81	5.02	+ 31.8
Vocational Rehabilitation	1.55	1.97	+ 27.1
Training & Research	2.87	12.29	+ 328.2
Field Services	26.13	47.26	+ 80.9
TOTAL	37.09	70.18	+ 89.2

A similarly detailed description of NFE expenditures is furnished by Singapore for the fiscal year 1973/1974. The following is a brief summary of expenditure in 4 Ministries:²

Ministry	Budget (S\$ million)	(NFE Programme)		Remarks
		(S\$ million)	% of Ministry Budget	
Education	259.7	1.97	0.76	Adult Education Board and CEPTA T.V.
Culture	27.7	6.68	24.12	People's Association
Finance	368.3	0.28	0.08	Staff Training Institute
Labour	4.9	1.24	25.31	National Productivity
TOTAL	660.6	10.17	1.54	

¹ Republic of the Philippines: Four-Year Development Plan FY 1972-1975 (Manila, 1971).

² Communication from Mr Chan Kok Kean, Chairman of National Liaison Committee, Singapore, on 28th March 1974.

While NFE expenditures form a sizeable proportion of some ministry budgets, it is obvious that the overall percentage is quite small.

As mentioned above, Thailand has given prominence to non-formal education in its latest development plan, but the proposed budget for the Adult Education Division, Department of General Education, represents only 1.5%–1.6% of total expenditure for education between 1972 and 1976. Some illustrative figures are:

Adult Education % of total	1972	1976
Budget	1.51	1.66
Enrolment	0.52	1.15

The emphasis on formal education is again apparent from Table D.1.

Table D.1: Planned Growth of Enrolment, Number of Teachers and Education Budgets in National Development Plans

Country	Plan/Years	Enrolment	No. of Teachers	Budget
Indonesia	Second Five-Year Plan 1974-1978	50.3	20.9	¹
Khmer Rep.	Five-Year Development Plan 1974-1978	12.0	59.8	53.9
Laos	Second National Programme 1975-1979	²	²	—
Malaysia	Second Malaysia Plan 1970-1975	24.4	33.3	³
Philippines	Four-Year Development Plan 1972-1975	22.8	—	33.8
Thailand	Third National Development Plan 1972-1976	24.4	23.3	38.8
Vietnam	Educational Development Plan 1972-1975	33.8	36.3	23.8
Singapore	1973-1977			45.7 ⁴

¹The total budget for the Plan period is 495.8 billion Rp. (Repelita II, 1974-1978).

²For Laos, enrolment figures of 295,750 are given for 1973. There are also 9,113 teachers (Second National Programme 1975-1979).

³The Second Malaysia Plan envisages education expenditure to be M\$ 537.3 million. By 1973, 63.4% of this figure had been spent.

⁴Singapore has "no formal plan for the development of education in the coming years" (Reply in Questionnaire A). However, it is estimated that government current expenditure will grow from S\$ 210 million in 1972/1973 to S\$ 306 million in 1976/1977.

Sources: Responses to General Information Questionnaire.

Finally, enrolment, number of teachers and expenditures are expected to increase by a third between 1972 and 1975 in Vietnam. However, from available data, the participation of NFE appears to be small, as the following data show:

Vietnam: Enrolment, Teachers and Expenditure in NFE Literacy/Adult Education as a Proportion of Total Enrolment Number of Teachers and Educational Expenditures 1972/1973—1975/1976

	1972/1973	1975/1976
Enrolment	0.76%	2.97%
Teachers	0.94	0.07
Expenditures	0.11	0.29

It would, therefore, appear from the description above that, despite the publicity accorded to the development of NFE programmes, the financial support for these remains relatively meagre. In fact, while it is expected that enrolment will increase four to five times, so as to become about 3% of that in formal education (which is obviously a very modest target), the number of teachers would be drastically reduced.

It is perhaps appropriate to end this section, as we began, with a quotation from Thailand:

“Despite the fact that there are more than fifty different organized programmes of adult and non-formal education in operation, still only a small proportion of educators are aware of the crucial role that non-formal education must play, if rapid and smooth social, cultural and economic development is to be achieved. In general it is only those officials who are working directly or indirectly in the field of non-formal education and a few other educational officials at the highest level who are fully aware of the concept and its importance. The importance of non-formal education is not felt either by the central budgetary officials or the central planning officials.”¹

¹Questionnaire reply from the National Liaison Committee of Thailand.

Chapter Three

LITERACY

A. CONCEPT AND MEANING OF LITERACY

Conceptualization of literacy is applicable at the individual level as well as at the societal level. Illiteracy does not necessarily define a person. Indeed the mere allegation that an adult illiterate is deficient assumes that literacy is a necessary commodity for the society.

In almost all SEAMEO countries,¹ educational authorities are anxious to stress that the total eradication of illiteracy is one of their country's ultimate objectives. But the problem to be tackled is vast and complex, and it has to be admitted that the achievement of its objectives, at least for those countries which still have a high illiteracy rate, lies in the distant future.

But, what is really meant by literacy?

At the societal level pre-literate societies need to undergo a process of literization before their members can be considered literate. Such a process is really a cultural metamorphosis and will not be achieved through the relative simple "alphabetization" of the population. It implies, more fundamentally, the internalization of a literacy consciousness, and that the skill will be operational and functional. In this context, literacy is not just the proportion of people who can read and write, but more important are the circumstances which compel the people to be able to read and write, the level of development forcing the people to do so, and printed material so plentiful that one feels alienated if one cannot read and write. This last contingency has not always been the case in developing areas. In the countries we studied, the official concept and the meaning of literacy is almost universal. In any modern society, reading and writing are taken for granted as an indispensable element in a person's equipment for living. Children are taught to read and write at the earliest possible age, for the rest of their education depends on their possession of the skill of literacy. The whole social, political and economic structure of a civilized society rests on the assumption that every citizen can communicate, and be communicated with by means of the written or printed word. However, this does not apply to all parts of each country, or to each group of the population.

¹With the exception of Singapore, which stated that the question of illiteracy is no longer considered a major problem because of its satisfactory literacy rate, due to the universal primary education, the high level of secondary education and its urban character.

The Development of the Concept

It has always been more convenient, for operational purposes, to speak about literacy at the individual level. Until the early 1960's most governments adhered to the Unesco standard proposed by one of its committees that:

"A person is literate who can, with understanding, both read and write a short simple statement on his everyday life".¹

This leads to conceptualizing literacy as a minimum level of "education" to which the greatest possible number of illiterates should be brought. The reading and writing-skill of individuals is the end in itself and considered as isolated entities separated from their environment.

Still every government prescribes variations in interpreting this concept, namely, from writing his own name up to the level equivalent to a certain grade completion of a formal school (usually third or fourth grade). The significance of literacy rests on the assumption that in order to engage in modernization processes more educated people are required. Literacy is considered as the minimum level of education which will enable people to take part in the development processes.

With this concept in mind, almost all countries consider literacy as one of the projects of education, especially non-formal education. In one country it is called adult education, in another community education or mass education, depending upon the administrative structures of the respective countries.

Some countries described literacy as the first and important step toward further education. They launched the *mass literacy programme* to teach illiterates reading and writing and a little arithmetic. The committees in charge of the eradication of illiteracy were not the responsibility of only one ministry, but involved other ministries as well, and the programme was considered as a national campaign against illiteracy. This era is normally called the traditional literacy period.

Later it was found that the traditional approach to literacy was difficult in several ways. By teaching too simple reading and writing only, it dispersed in a minimum of time and often wasted its efforts. By mobilizing untrained instructors and school teachers, using available materials—usually primary school textbooks—it tended to treat adults as children. And by viewing literacy as a consumption item, it limited the funds available from national budgets which could ill afford to waste money on "low priorities".

Seeing these weaknesses, some countries felt the necessity of taking care of the new literates by providing them with *follow-up activities* such as reading material, reading centres or small libraries and community classes. Being able to read and write was no longer an end in itself, but applying the skill for further learning and understanding written material was equally if not more important. Literacy was not just teaching the alphabet. It should be followed by creating the situation that people would feel the gain of being literate.

¹Unesco's Expert Committee on the Standardization of Educational Statistics (1951).

It was not until the beginning of the 1960's when the so called traditional and the mass concept of literacy was changed into a trend to differentiate between a "literate" person and a "*functionally literate*" person as proposed in the 1962 UNESCO definition:

"A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning in his group and community, and whose attainment in reading and writing and arithmetic makes it possible for him to continue to use these skills towards his own and the community's development."¹

This definition was elaborated further by UNESCO, which proposed:

"In quantitative terms, the standard of attainment in functional literacy may be equalized to the skills of reading and writing and arithmetic achieved after a set number of years of primary or elementary schooling."¹

Both statements adopted by the International Committee of Experts on Literacy Problems (Paris 1962) were reaffirmed by a later conference of the Ministers of Education in Teheran in 1965.

This World Congress of Ministers of Education approved the UNESCO proposal of literacy teaching which stressed a selective, intensive and work-oriented strategy and accepted the concept of functional literacy, with the corollary that literacy teaching, while it must be integrated with a country's educational programme, could no longer be viewed as a purely educational matter but was to an even greater extent bound up with general social, economic and cultural development, and, as, such, should have the support of the public as a whole.

It appeared that a large number of developing countries all over the world, including the SEAMEO countries, expressed their interest in this new concept of functional literacy, since the objectives will be not only to bring about literacy but development as well.

Since the adoption of this new definition, the countries we studied have already subscribed to functional literacy linked to development programmes or community needs. However, some countries may not completely abandon the massive, undifferentiated approach as a means of stemming illiteracy. These countries reported a mixture; the traditional approach was followed in many areas while at the same time they started the selective approach as experimental projects in other areas. Since results of these experimental projects have not yet been produced, it still remains to be seen whether this new concept will definitively be adopted or not in the SEAMEO region.

¹Meeting of the International Committee of Experts on Literacy Problems (Paris, June 18-28, 1962).

Literacy and Development

In examining the relation between literacy and development, previous studies showed that the existence of such relationship was not doubted,¹ but it was not necessarily a matter of cause and effect in the sense that an increase in literacy should be seen to have an automatic result in raising the per capita income of a community. The contribution which literacy could make to economic development still depended upon many other circumstances of the country concerned.

In a recent study,² it was indicated that the value of literacy will be greatest whenever there are opportunities for the exercise of literacy skills in the daily functioning of the family at work and in the home. It could be particularly significant in cases where development takes the form of the improvement of production or the increase of services. That literacy would have both direct and indirect effects on increasing productivity could safely be assumed, provided that it was given beyond the elementary stage, and the concept and meaning were progressively transformed into work-oriented literacy.

It may be stated that at present most educational authorities agree with the view that literacy—including arithmetic—should have the very practical purpose of serving development.

However, not all development authorities in the SEAMEO countries are convinced that even this new type of literacy which is geared to their very purposes is really one of the necessary development inputs. Could one, for instance, not teach better agricultural methods and have these adopted by the farmers, without their being literate? Several examples could be quoted of such cases. However, a good number of studies in different developing countries have disclosed that there are three main factors which are favourable to the adoption of new farm practices, namely, education, larger size of farm and contacts outside the village. Obviously, these three factors are usually strongly interrelated, as it is logical that the better-to-do farmers will have some education, and have outside contacts. Nevertheless, the educational factor remains, even when isolated, as has been done in some cases. It is also interesting to note that the replies from the SEAMEO countries concerning difficulties, experienced in agricultural extension, nearly all mentioned "lack of literacy", "lack of arithmetic", "lack of basic biological knowledge". It should be added that, although the results of the evaluation studies carried out in the various Unesco experimental work-oriented projects have not been published, it would seem that there is indeed a positive relationship between "literacy" and increased income in agriculture.

A much older study, carried out by the Unesco Research Centre on the Social Implications of Industrialization in Southern Asia, also showed that, in large textile factories in Bombay and Calcutta, there was a peculiar difference between the productivity of literate and illiterate workers. One could not say that there was a statistically significant difference between the performance of a literate and an illiterate spinner, or weaver, or dyer, but it appeared that all the maintenance men (who were better paid) were literate.

¹UNESCO: Literacy as a Factor in Development, Working paper for the World Congress of Ministers of Education, Teheran, September 1965.

²H.M. Phillips, Literacy and Development, UNESCO publication, Paris, 1970.

Similarly, the study by Phillips already quoted, did not find direct productivity advantages, but it was found that there was a significant difference in favour of the literate factory workers who tended to be more accurate, more punctually on time, less accident-prone, etc. It should not be forgotten that the full impact of literacy in a factory can be felt only when *all* the workers (or at least the large majority) are literate, since only then will it be feasible to change the whole production system and to use written explanations and orders instead of oral ones. Therefore, only when the near total factory population is literate and particularly when they have acquired at the same time the necessary understanding and skills of the functioning and maintenance of their machines will it be possible to fully appreciate the value of work-oriented literacy which would permit the switch to a far more efficient production system.

This means that functional literacy and/or work-oriented literacy, imparting technical skills and understanding as well as literacy, can best be taught by those who, either in rural development or in factories, are the technicians who know the trade and have also learnt how to impart these abilities along with the literacy factor. The latter should not be regarded as a by-product only, since it does provide tremendous advantages, particularly in the modern production process.

High yielding seed varieties are more complicated to cultivate; the planting distance, amount of water, quantity and type of fertilizer, plant protection etc. are not always the same, while it cannot be expected that personal contact with an extension officer is so frequent that his advice can be requested at any time when a particular difficulty is encountered. Therefore, printed information, reinforced whenever possible by radio broadcasts, would appear to be the answer. But this means that the extension service itself, agricultural or industrial, should be interested in imparting literacy along with technical advice and demonstrations.

This does not mean that they should all become literacy teachers, but it does imply that development personnel should recognize the importance of the functionality of literacy, and be willing to assist it by giving their advice in planning and programming, and in the implementation as well.

B. LITERACY IN SEAMEO COUNTRIES

INDONESIA

Literacy Situation

One of the main achievements since the Proclamation of Independence in 1945 was the setting up of a literacy campaign for the adult population (aged 13 and over). This campaign throughout the country was carried out by all levels of the society which were literate, under the leadership of the Community Education workers. The President commanded the total eradication of illiteracy in four years, beginning August 17, 1960—Independence Day—on which the President traditionally makes the political statement of the government. Within four years 24 million people have been freed from illiteracy, according to a government statement.

On 31 December 1964 when Indonesia was declared free from illiteracy, the total literate population was 98,006,002 out of 98,305,345 people of 10 years of age and beyond.

The criterion used was that someone would be considered literate if he could read and write the Roman script in the form of simple sentences as well as perform simple arithmetic. The test for an area to be considered free from illiteracy was carried out in three stages, i.e.

1. the village test (house to house sampling);
2. the district test (random sampling);
3. the general check-up throughout the districts (tests on the spot in public places).

Notwithstanding the results gained during the campaign, the literacy rate in the subsequent years has fallen very drastically. This was due to three factors:

1. the more sophisticated criterion used in judging the level of literacy;
2. the minimum standard of skill of the literates and the low level of teaching quality of the volunteer teachers/instructors;
3. the lack of using reading ability because of the inadequacy of reading materials and their insufficient quantities.

It was soon recognized since the first years of the literacy campaign that reading and writing was not an end in itself, and the achievement would have no real significance whatsoever for the people, if not followed by further systematic and orderly care and guidance for the newly literate adults, as pointed out above.

To carry out this post-literacy programme, a vast amount of funds was needed, and this was not available; the economic condition in the sixties was very hard so that neither community contributions nor government budget could be expected. Based on the census figures of 1971, the literacy rate was 60% among the population of 10 years of age and over, the rate for men being higher (70%) than that for women (49%).

Organization and Administration

In Indonesia, the literacy programme is the sole responsibility of the Directorate of Community Education, one of the sixteen directorates within the Ministry of Education and Culture. Supervision and inspection at the field level are carried out through the 130 provincial inspectorates and 560 district and 1529 sub-district offices of Community Education. Under the guidance of those supervisors, Community Education Committees at the local level are established to set up programmes in all sorts of community education activities including literacy. Since officials from various government and non-government agencies are included, efforts have been made to come to an organizational structure which will make inter-agency co-operation possible.

There are about 11,000 personnel working in the Directorate of Community Education from the national level down to the field level. In the community development programmes, where literacy is one of the objectives, the Community Education field workers are asked to take care of the reading classes. Besides literacy teaching, the Community Education Office is in charge also of conducting post-literacy classes, family-life education courses and vocational or leadership training courses. Community Education Centres are also its responsibility.

Actual literacy teaching is done by 7126 volunteers (mostly school teachers, but also other village officials, prisoners, housewives, etc.) who should receive 7 days of training; in 1972 only 640 were trained according to the reply. The number enrolled was 72,404 men and 62,688 women in 1972, of which number 46,249 and 40,768, respectively, passed the test (both 64% approximately). The budget increased from Rp. 38 million in 1970 to Rp. 56 million in 1972 (if 1/5 of the total Community Education effort is assumed to be spent on literacy work). This implies a unit cost of Rp. 418 per adult enrolled, or 643 rupiahs per adult made literate (US\$ 1.55 respectively) in 1972.

Private Agencies

Many private and community bodies exist at the local level which may contribute to the implementation of literacy programmes. The most important among the youth organizations is the PRAMUKA or the Boy Scouts and the Girl Guides Association. Many women's organizations are very active in conducting non-formal or informal education activities in the field of home-making, family-life education including family planning and the like. They may integrate literacy teaching in these activities.

Functional Literacy

Since 1970 Indonesia has embarked upon experimental projects in functional literacy. UNESCO assistance was requested, but so far the projects have been carried out by domestic resources. Seven micro-experimental projects were conducted covering different subjects: an erosion-control project in Central Java, farming-orientation in West Java, afforestation in Kalimantan, fishery in Sulawesi, home-making in urban Jakarta and instructors in functional literacy training in East Java. The primers and teachers' manuals were produced at Headquarters after identification of the field of interest of the villages concerned.

Although the training of instructors is longer (2 weeks) and offered to relatively more persons (175), taking into account the small number of projects, the duration is not regarded as enough.

However, the results remain to be seen and evaluation of the projects was not yet available so far.

KHMER REPUBLIC

Literacy Situation

According to the Census Report of 1962 the literacy rate among persons of 10 years old and over was 41.4% in rural and 64.4% in the very few urban areas, providing a total of 44%. As usual, literacy among men was considerably higher than among women: 67% as against 15% in rural, and 87% vs. 40% in urban areas.

At present the total literacy rate is estimated to be at least 60%¹, while the total population has increased from 5.7 to approximately 7.2 million.

¹ Estimate by R. Duviensart (Unesco) and B. Ughetto (ILO) in 1973: "Republique Khmere, Projet de restructuration du systeme d'education," p.6. Unesco, 1973 (mimeo).

Mass Literacy Campaign

In the mid-sixties the Khmer Government had embarked upon the task of putting all possible resources into a national literacy campaign which engaged the whole nation. In 1964 an "Ordre de Service" was issued by the Premier nominating all Cabinet members to become members of a Permanent National Committee for Literacy responsible to carry out the literacy campaign. The National Assembly passed the law on August 19, 1965, requiring all citizens aged 10-50 years to be literate in the Khmer language. Later the same law was imposed upon alien residents as well to read and write in the Khmer language, acquiring a certificate of literacy of a certain level. To carry out this programme all literate citizens should take part in this drive in teaching literacy.

A total of approximately 32,000 volunteers consisting of school teachers, civil servants, students and Buddhist monks were reported to have taught in literacy classes without expecting any remuneration, since it was a legal obligation of every literate citizen. The national budget covered the necessary expenditures, and the people, fully aware of the significance of being literate, voluntarily contributed to the classes whatever they had at their disposal. From 1965 to 1968, 1.17 million persons attended literacy courses out of 1.25 million illiterates and 387,000 obtained their certificates.

Administration

The Ministry of Education is the body which directs all educational and cultural activities including adult education carried out through the Directorate General of Education. Since 1971 the Ministry of Community Development coordinated all programmes in this respect. The campaign failed to continue because of the war, but the government still plans to continue the literacy programmes in the framework of community development.

Functional Literacy

In 1973 a new committee was established called the National Committee for Non-Formal Education (CONENF) with the task of re-inforcing non-formal education programmes including literacy classes. One of the significant projects is its pilot project in functional literacy in order to determine the actual needs of the population, to train key personnel and to organize courses in the non-war zones.

It is anticipated that literacy programmes will be expanded after this experiment and training project, but no decision has been made in this respect. However, the government is deeply convinced of the need for reforms of the total education to see that it becomes more closely linked with the actual needs of the population. Non-formal education is to be the task of various ministries, such as Agriculture, Health, etc. It will be the task of the newly created Directorate of Mass and Permanent Education (DEMEP) to establish co-ordination of efforts as well as integration of the formal and non-formal modes of education.

LAOS

Literacy Situation

The percentage of literacy as officially recorded was approximately 10% in 1950, 25% in 1960 and the latest estimate of 30-35% was made in 1968.¹ Various studies have been carried out to determine the literacy level, which will be discussed later in section D, "Level and Organization of Literacy".

Organization and Administration

Within the government system literacy has always been the responsibility of the Directorate of Primary and Adult Education of the Ministry of Education. Very significant is the Decree on the National Plan (1969-1974) by which, among other things, a National Literacy Committee was set up consisting of representatives of various ministries and aiming at the integration of the intensive literacy and adult education action into the overall development of the Vientiane Plain. A Decree of last year will establish libraries in rural areas and provide reading materials. Non-formal education including literacy programmes is carried out through the Rural Centres for Community Education (Centres Ruraux d'Éducation Communautaire, or CREC). These Rural Centres were created since 1962 in accordance with the principles of the Lao Education Reform introduced that year. These institutions reflect in fact the rural education system. A "CREC" may be established in a building specially constructed for this purpose, but it could also be housed in a simple pagoda school, a public school or anywhere else. The community is responsible for looking after the CREC.

Another significant effort is the literacy programme organized by the Army for about 10 years among its illiterate recruits. The Army has, moreover, contributed significantly also to the promotion of literacy in isolated villages by establishing schools. There are about 40,000 pupils and 1,200 teachers, generally non-commissioned officers, in these schools.

Last but not least, it has been a long established tradition for the Buddhist temples throughout the country to teach literacy, particularly to boys. Their contribution is always a significant one.

Functional Literacy

Since 1969 a National Committee for Functional Literacy was set up in charge of the preparation, the implementation and the training of "animators" with regard to functional literacy. The Directorate of Primary and Adult Education is responsible for the experimental functional literacy programme carried out in 5 out of 12 regions. About 3,350 villagers participate in this experiment; it is remarkable that only 207 dropped out before they finished the course. In addition, the Directorate of Primary and Adult Education is responsible for the community libraries for the rural population. A committee was set up to facilitate this drive to circulate all possible publications, to republish books covering subjects needed by the rural communities including agriculture.

¹Taking into consideration the campaign against illiteracy conducted in the zones under the control of the "Patriotic Front," the literacy rate would in fact be higher than that given above.

However, it is reported that there is still a general shortage of nearly all teaching materials and books, which is understandable, taking into consideration the prolonged period of hostilities in the country.

MALAYSIA

Literacy Situation

Malaysia consists of three parts, and it is useful to follow this division for the purpose of assessing the literacy level in the three areas, West Malaysia, Sarawak and Sabah. The literacy level in Malaysia around 1960 (1960 in Sabah and Sarawak and 1957 in West Malaysia) was ranging from 21% in Sarawak to 51% in West Malaysia. Like the other SEAMEO countries there were more literates among men than among women. The situation considerably improved in the sixties. The figure for 1970 was 61% for West Malaysia, while in the whole of the country the primary school enrolment figures for girls are higher which will improve the female literacy level.

Administration

Literacy classes in Malaysia are the responsibility of the Ministry of Rural Development, Division of Community Development and Adult Education, side by side with other programmes as follows:

1. Home economic classes
2. Child care centres
3. Work-oriented classes (vocational classes)
4. Romanized literacy classes
5. Religious classes.

Eradication of illiteracy is particularly understood as the teaching of reading and writing in the national language, using the Roman alphabet, especially in the rural areas. Each course covers a period of three years, and has been implemented by the Ministry of Rural Development since 1961. This programme is expected to continue until 1975.

There is another important programme in literacy conducted by the National Goodwill Department, the main objective of which is the teaching of literacy in the National Language among the non-Malay speaking population. However, teaching in other languages or vocational skills is also conducted on request. Together with other goodwill activities, these classes are intended to foster national unity.

However, with regard to the literacy programme, the goal is to reduce an estimated three million illiterate adults in 1961 to the minimum in 1975. From 1973, concrete steps were taken to switch the programme from the traditional 3R's to the functional literacy concept. The next few years should see more emphasis on family life education incorporated into the literacy programme.

The total personnel engaged in literacy work numbers 1376 and has received a special two weeks training. This is deemed enough for traditional literacy teaching, but not for functional literacy, as will now be their task. Moreover, the text-books are also being revised; a standard core text will be maintained, but changes will be made according to the cultural and

economic situation of the area or group concerned.

PHILIPPINES

Literacy Situation

According to the statistics, the Philippines has achieved a very successful work in reducing the rate of illiteracy. In 1948 the rate was 40%; it was better in 1960 when it was 28% and still better in 1970 at 17%.

Compulsory primary education in the Philippines was started in 1935. But not until 1937 when the suffrage was extended to women, were parents encouraged to send their daughters to school. However, only 80% of the children aged 7-12 were enrolled in 1960 (the same rate for boys and girls), but full enrollment was achieved around 1970. In the same year secondary school enrollment reached the level of 40% for both boys and girls. While it is true that the illiteracy rate in this country decreased from 48.8% in 1948 to 28.8% in 1960, the number of illiterates increased from 5,024,856 in 1948 to 5,072,124 in 1960,¹ an increase of approximately 4,000 per year. This increase was less and less in the succeeding years and has now become a decrease.

Administration and Legislation

In 1937 the Office of Adult Education was created with the task to wipe out illiteracy and to provide the adult citizens with the necessary civic knowledge and skill training (Law No. 80, 1937).

By virtue of Presidential Executive Order No. 94 (October 4, 1947) this office was converted into the Division for Adult and Community Education under the Bureau of Public Schools. Since then Adult Education became the extension of public schools and thus an integral part of the total education programme. Within this programme, literacy objectives were stated: "The immediate objective of adult education in the Philippines is the eradication of illiteracy and the promotion of better ways of life for those of the population who had not yet received the benefit of an education."

Besides the government bodies such as public schools, the Bureau of Prisons and others, there are non-governmental organizations which are teaching literacy, such as civic and religious organizations, Girl Guides and Boy Scouts, the Rural Improvement Clubs, the Philippine Rural Reconstruction Movement.

There are special programmes as well which conduct literacy training for ethnic groups, nomads, factory hands, agricultural labourers, fishermen, etc. Attendance at literacy courses is free but not obligatory. A national centre was established to handle the technical matters of the Division of Adult and Community Education.

¹Memorandum No. 22, S. 1966 entitled "The Six Year Intensive Literacy and Adult Education Drive," in R.S. Valino, The Six Year Intensive Adult Education Drive (1966-1972) in Penang Seminar Document. (SEAMEO/SEADAG)

The Six Year Intensive Literacy and Adult Education Drive (1966-1972)

After the World Congress of Ministers of Education in Teheran in September 1965, the Philippine Government, through the Bureau of Public Schools, issued a Memorandum (No. 22, S. 1966) entitled "The Six-Year Intensive Literacy and Adult Education Drive," which has as its main objective to make the adult illiterates functionally literate within a period of six years. This action was in line with the Five-Year Education Programme of the Bureau of Public Schools, 1965-1970.

In addition, this drive aimed at providing broad programmes in adult non-formal education in terms of acquiring knowledge, skills and attitudes in the vocational field, citizenship, health, socio-cultural and moral life. These activities are also intended to prevent the neo-literates from reverting to illiteracy.

This drive will be extended for another five years operative from 1972 to 1977, but the target in the present National Plan is more modest: to reduce by 25% the number of illiterates in the 15-35 years age group. Still, this would mean that approximately 90,000 adults should become literate every year.

Language

The national language in the Philippines is the Pilipino language, the modernization of one of the main vernacular languages, Tagalog. In 1968 the Government has come through with the printing of the primers in three vernaculars and the teacher's manual.

In addition, the Summer Institute of Linguistics is serving the Bureau of Public Schools, having prepared primers for approximately 24 of the minor languages out of which five have been used regularly by the public schools in teaching children and adults in the minority communities, and supplementary reading materials for approximately 26 of the minor languages.

Teachers and Participants

Different than in other countries in general, in the Philippines literacy education is the extension of school education. The Division Superintendent of Schools and his staff are concerned with the direct implementation of the adult and community education programme. The school teachers are responsible both for teaching and developing contacts with local agencies, government and private, for satisfactory co-operation in adult education or community development. At the forefront of the adult and community programme are the adult and community education (ACE) teacher-coordinators who are assigned to conduct the actual implementation of the programme, from designing and developing adult education projects, coordinating the co-operational activities of various agencies, to organizing the adult education classes.

The number of teachers and participants involved reflects the intensity of the programme and varies according to the activities carried out every year:

Participants in Adult Literacy Courses, 1968-1972
(Thousands)

	Male		Female		Total		Percentage Passed (rounded)
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	
1968	37.6	18.4	55.5	16.2	93.1	29.6	32
1969	n.a.	n.a.	n.a.	n.a.	83.4	34.2	41
1970	30.6	16.7	38.1	21.6	68.7	38.3	55
1971	n.a.	n.a.	n.a.	n.a.	64.4	36.3	57
1972	24.1	14.5	29.4	18.7	53.5	33.2	62

The Table shows that, although the total number enrolled decreased, the percentage of "passes" became much higher. However, their number stayed far below the target. The numbers of teachers were not given, but it appeared that in the year the largest number was registered, there were 1055 full-time and 6151 part-time teachers.

The change from traditional to functional literacy did not seem to affect the implementation structure of adult education very much. At least, the primers are not work-oriented and of a very general nature, which, if it is certain that they are on subjects of genuine interest to the learners, would make them acceptable, although this seems rather doubtful. For the more advanced courses (after 35 hours of more elementary courses) the reading materials are aimed at family life education, citizenship, health and the like (35 hours). Finally for courses attaining mature reading habits (40 hours) the material for reading appears more varied and really oriented towards the interests of the participants.

The SALAM Project

The SALAM Project is the Special Action for Literacy Advancement of Muslims. The project involves the twin aspects of the Adult and Community Education program—Literacy and Continuing Education. In the literacy phase, the Arabic script (not the language) is being utilized in four main Muslim vernaculars, Tausog, Marañaw, Maguindanaw and Samal. While basic literacy is being tackled, the continuing education phase covers concepts and information on the Philippine Constitution, important decrees, orders, and instructions. The program also draws out integrated training activities in the areas of citizenship, livelihood, home and family life and the socio-cultural and moral life of the Muslims.

SINGAPORE

For Singapore, illiteracy is no more considered to be a major problem. Universal primary education is practically achieved and the rate of enrolment in secondary education is high.

The task of literacy in Singapore has been determined as the ability to read with understanding a newspaper in any of the four official languages or in any other language. This criterion is far more stringent than that used in the 1957 census, which means that the actual improvement since 1957 is even greater than the figure indicated.

The rate of literacy in 1970 was 72.2% among the population of 10 years and over (83.8% among men and 60.0% among women). Among the illiterate persons 29.8% were males and 70.2% were females. The majority of the illiterates were in the older age groups with the largest number comprising women aged 25 years and over (79%), in particular 45 years and over (92.9%). Among the economically active population which was 46% of the total population aged 10 and over, the literacy rate was 81.5% as compared with 64.1% among the inactive group. The significant difference was again essentially due to the low literacy rate of women who were homeworkers in the older age groups without having previous formal education.

Currently, the language programme of the adult education agencies is oriented toward the promotion of "literacy" in a second or third language so as to facilitate communication between people of different races and speaking different languages. It is likely that many persons classified as "not literate" are attending language classes organized by the various adult education agencies though no statistics are currently available.

THAILAND

Literacy Situation

Since the Compulsory Education Act in 1921, there was a steady rise in the rate of literacy until the outbreak of the second World War. The task of teaching literacy among the adult population was transferred in 1940 to the Division of Adult Education. In that year the government adopted a policy demanding illiterate adults to attend adult education classes to learn how to read and write in Thai. The classes were organized by the Ministry of Education in rural as well as in urban areas throughout the country. Other ministries and government agencies cooperated in this drive. Until 1944, 1,409,868 adults became literate. Literacy classes were decreased during and after World War II, but revived again in the framework of community development during the year 1950.

Comparing the census data of 1947 and 1960, it appears that the rate of literacy increased from 52% to 68%; but the absolute number of illiterates remained more or less unchanged. From the 1960 census data it can be seen that illiteracy rates increase with age, a sharp rise being noticed beyond age 45-49 years. This reflects the effects of the literacy campaign which was begun in the thirties. The 1970 census showed that the literacy rate had increased to 82%.

Three Programmes

With its high literacy percentage, it is understandable that Thailand does not have a huge adult literacy programme. In fact there are three: the first, catering to about 1525 participants in the first cycle and 814 in the second, each of 6 months duration, is the Fundamental Education programme. It is the continuation of a programme started by a joint Thailand-UNESCO experiment in 1954 and combining literacy with community development. This programme is very close to the second, Functional Literacy, with which it will be combined. This second programme recently (Oct. 1973) organized a Training Seminar at Khon Kaen where the participants were shown, not only by demonstration but particularly by personal participation, the various stages of setting up a work-oriented programme: finding out the needs of the clientele, discussing with them and technical specialists what can be done about them, drawing up a programme, implementing and evaluating it. The present Functional Literacy Programme is implemented in 261 classes with approximately 5,000 participants.

Finally, there is the School Equivalency programme, established for those who somehow missed primary school, or want to get a certificate for further studies requiring a particular level. The first stage of this programme is equal to the second grade primary (2193 participants), while the second stage in which 2860 persons are now enrolled is identical with the 4th grade. Each stage is done in one school year during the evening hours, using the same books as at school and taught by the same teachers, probably in much the same way. There is a great interest in the third stage (58,672 participants) equivalent to upper-primary or the 7th grade, since this certificate opens the way to further schooling. There are further equivalency programmes, up to full secondary level, but this is obviously far beyond that of literacy in the usual sense of the term.

Follow-up Activities

The Adult Education Division in the Ministry of Education is responsible for the programmes mentioned above and shares the responsibility with any other agencies willing to organize programmes or assisting in follow-up work. For instance, municipalities, or the University Women Association co-operate in various activities of follow-up work, such as organizing village libraries, reading centres, distribution of wall newspapers, production of special readers for new literates, etc. The Adult Education Division has planned to establish over 7,000 village newspaper reading centres and to distribute 160,000 wall newspapers by 1976.

Finally, the literacy work of other government agencies should be mentioned: the armed forces organize courses for their recruits not having completed the full four years primary school, the Thai Rural Reconstruction Movement (a non-government agency), and finally the Ministry of the Interior, which provided literacy classes for prisoners, taught by the prison staff and prisoners of a higher educational level.

Personnel and Budget

The Adult Education Division has a total of 710 personnel, of whom 683 are engaged in actual literacy teaching. Only the 200 persons teaching functional literacy received 7 to 10 days special pre-or in-service training, while the whole school equivalency programme is the responsibility, as pointed out, of regular school teachers. There is felt to be a need for training of adult literacy administrators and inspectors. At present, this work is done by the regular provincial inspectorate. There are no serious shortages of teaching materials, although some books should be revised, being too academic.

VIETNAM

Literacy Situation

The difficulty of assessing the literacy situation in a single percentage was already discussed, and is also experienced when the situation in Vietnam is studied.

Clearly, besides the various problems mentioned, Vietnam has been a country at war for many years which makes it practically impossible to obtain reasonably reliable estimates, let alone exact figures.

Starting in 1954 Vietnam immediately utilized its few years of relative peace to carry

out a strong literacy campaign which started with 3,106 classes and 127,493 participants, culminated in 1957 when there were 17,794 classes with a huge 1,033,751 enrolment and tapered off, either due to the war, or to a satisfactory degree of literacy reached by this programme, to a 9,000, 5,000 and 2,000 class affair in the years 1960-1962. The latest figure given in the Table was 40 classes with 1974 participants in 1970.¹

However, by 1962 a total of 3.89 million adults had enrolled, although it is not clear how many became actually literate. In that year the illiteracy rate of Vietnam was, according to page 106 of the Unesco Working Paper "Statistics of Illiteracy," prepared for the Teheran World Conference (1965), very high: 77% for men and even 90% for women of 15 years and older, so, 84% for the country. This figure is incredibly high: it would mean that, even if only 40% of those nearly 4 million people who attended the literacy classes had become literate, this number alone would be more than the 16% literates of the Unesco statistics would indicate. In other words: at the beginning of the campaign there would not have been a single literate in the whole country.

Although it is clear that this percentage cannot be correct, another question is whether the figure provided in the replies to the Questionnaire is accurate: 82% literates in 1972. As it was found in Indonesia, the positive results of mass campaigns quickly wear off, unless they are supported by various follow-up activities which, due to the more and more devastating war effects, could not be provided. School enrolment automatically decreased while drop-out must have been high in the confusion of an on-going war. Extensive literacy studies could obviously not be made. An ad-hoc study carried out in 1971 provided an estimate of 60%² literacy which, in the present circumstances would seem to be reasonable.

Organization and Administration

There are at present four government agencies working in the field of adult literacy:

a. In the Ministry of Culture, Education and Youth, the Directorate of Elementary Teacher Training and Adult Education is responsible for adult literacy (as far as this ministry is concerned) through the Adult Education Bureau. The latter organizes instructors training courses as well as provides literacy programmes. The implementation of the literacy programme is done through Provincial, District and Village Committees for Illiteracy Eradication and Adult Education with official and non-official members. This programme at present includes 4 officers working full time for literacy programmes and 1,500 part-time instructors. Enrolment (and passes) varied strongly during the last few years. 7,560 in 1968 with 7,067 successful participants, less than half these numbers the two following years, 18,880 (16,820) in 1971 and 14,520 (13,765) in the following year.

¹ SEAMEO-SEADAG Seminar Report on Non-Formal Education, Penang, October 1971, p.93. The 1970 figure does not fully fit with that provided in the present Replies (giving 3,280 participants), while the figure for 1968 and 1969 are consistent.

² The Alexandre de Rhodes Educational Television Centre, Saigon, September 1971 (mimeo). On the other hand, Education in Asia, Bulletin of the Unesco Regional Office for Education in Asia, Vol. VI, No. 2, March 1972, gave an illiteracy estimate of "only about 20%" (p. 216), arguing that "in the last decade, the main objective of the adult education programme was to fight against illiteracy. As we have seen, relatively little was done in the sixties as compared to the previous decade.

The very high rate of successful participants was explained by the NLC, when asked about this unusual phenomenon (a pass rate of 90% or better nearly every year), because it was relatively easy to learn how to write Romanized Vietnamese. The explanation certainly is that the very numerous accents needed to indicate the tone value of the vowels can be neglected by those whose mother tongue is Vietnamese.

b. Besides, the Directorate of Rural Development in the Ministry of Rural Development established 44 provincial units having the double task of teaching children where there are no schools and giving adults the opportunity of becoming literate. The provincial units again organized village units, now numbering 1844 catering for 139,000 children and approximately 65,000 adults, while the Ministry of Culture, Education and Youth provides the teaching materials.

c. To serve the ethnic minorities, 25 Committees for Adult and Dialect Education were established in the Ministry of Ethnic Development. The task of these committees is to organize courses in local languages; there were 458 literacy courses for about 18,000 participants in isolated, mountainous areas.

d. Finally, the Ministry of the Interior organizes courses at various levels, and also for illiterates, in 4 large and 34 small prisons. Enrolment increased from more than 15,000 in 1968 to 27,000 in 1972 with an unknown number of illiterate participants.

It appears that the four ministries together teach about 100,000 adults at present, and that by far the largest group is taken care of by the Rural Development Ministry. As pointed out, the effective enrolment in the courses discussed under *g* is 90%; if it is equally good in the other courses, this would mean that every year 90,000 adults become literate, or 450,000 in the 5 year educational plan period. The target of this plan is to reduce the 18% illiteracy rate (as assumed to be the 1972 rate) to 15% which would mean that, with a population of 18 million, a total of about 300,000 adults to become literate.

C. SURVEY OF LITERACY PROGRAMMES

From Mass Campaign to Work-Oriented Approaches

Programmes of literacy in the SEAMEO countries evolved into a continuous trend from mass literacy campaign through literacy classes to work-oriented selected literacy courses.

Literacy programmes can be classified according to their approaches, the objectives and the target population the projects are dealing with.

These categories are:

1. Mass Literacy Campaign
2. Basic Literacy Courses
3. Literacy as part of Development Projects
4. Functional Literacy
5. Post-Literacy Courses and Programmes
6. Programmes Supporting Literacy

Categories 1 to 4 are projects of literacy teaching with illiterate adults as their targets, while Category 5 covers projects aiming at those people who already achieved their minimum skill. It consists of courses in further literacy and other subjects determined by the national or local authorities, and projects such as reading centres, libraries, development projects and the like.

Mass Literacy Campaign

Although the mass literacy campaign nowadays already belongs to the past, nevertheless this strategy played a very important role in reducing the rate of illiteracy. At least three countries have chosen this path, and two countries suggested an intensive drive to achieve complete literacy among their population.

In South Vietnam the drive lasted from 1954 to 1960 with its culmination in 1957 when more than one million adult illiterates attended more than 17,000 classes in one year. Indonesia declared a Mass Literacy Education Movement starting in 1960 by a Presidential Decree. At the end of the movement on 31 December 1964, when Indonesia was proclaimed free from illiteracy, 99% of all adult population were considered literate at the lowest level. In 1964 Khmer Republic launched an overall literacy campaign through a decision of the National Assembly ordering all adult citizens to become literate in the Khmer language. Until 1968 about 1.1 million out of a total of approximately 1.3 million illiterates attended literacy classes; at least 387,000 persons had passed the test and were awarded literacy certificates.

If the three illustrations mentioned were cases where literacy teaching had been carried out by volunteers from the literate population as instructors, two countries, namely the Philippines and Thailand reported to launch literacy drives by mobilizing school teachers and public schools to reach as many people as possible. In the Philippines, after the first Six Year Intensive Literacy and Adult Education Drive in the year 1966 through 1972 when an annual average of about 1,000 full-timers and 10,000 part-timers were mobilized, this drive will be extended for the second time beginning in 1972 to 1977. This drive does not merely aim at literacy teaching but will cover also post-literacy courses to prevent new literates from relapsing into illiteracy again.

In Thailand the programme proposed for the immediate future will mainly consist of the intensification of the literacy drive particularly in those provinces where the illiteracy rates are still high.

Basic Literacy Courses

This is the programme conducted to teach adults basic reading and writing and sometimes arithmetic.

The nature of the courses varies from country to country in terms of curriculum contents, instructors conducting the courses and the framework in which they are operating. But these courses can be clearly distinguished from the mass literacy campaign, by the use of professional or at least trained instructors. In some cases these courses were forerunners or the finishing stages of the literacy campaign. The courses were usually intensive, using well prepared primers and methods; in fact they were the prototypes of literacy courses.

Almost all countries studied maintain and develop their basic literacy courses. These programmes range from courses by school teachers (Philippines, Thailand) to special courses for adults by special instructors usually from the Adult Education Division (Malaysia, Indonesia). The content of the primers covers many subjects ranging from general to specific such as family life education, civics, health, nutrition or religion.

Literacy as Part of Development Projects

In the last few years the view of literacy has been changed and what was once considered an end in itself is now seen as being a means of achieving development objectives. In the beginning, literacy programmes were aimed toward eradication of illiteracy and thus the emphasis was mainly upon the ability to read and write. In the context of this new idea primers are produced to serve more specific development programmes.

Included in this category are literacy programmes fully integrated with development projects. The teaching of literacy has become a part of an overall curriculum and it is not to be separated from the teaching of the project objectives. The instructor is still interested in the literacy result only, because he is usually an official from the educational service. This is the forerunner of functional literacy. Examples are in Indonesia, where intensive agricultural projects are carried out; in the Philippines where literacy classes are done by school teachers; and in Thailand where primers are oriented toward development purposes.

CLASSIFICATION OF PROJECTS AND THEIR EXISTENCE IN EACH COUNTRY

Country \ Category	1	2	3	4	5	6
Indonesia	v	v	v	v	vvv	vv
Khmer Republic	v	v	—	v	—	v
Laos	—	—	v	v	v	v
Malaysia	—	v	v	—	—	v
Philippines	v ¹	v	—	v	v	v
Singapore ²	—	—	—	—	—	—
Thailand	—	v	v	v	vv	v
Vietnam	v	v	—	—	v	v

¹Philippines launched two "drives" in eradication of illiteracy.

²Singapore does not have any literacy programme. What is called "literacy programme" in Singapore is the teaching of a second or third language. The vast majority of participants are not genuine illiterates.

Functional Literacy

After the acceptance of the new functional literacy concept, all SEAMEO countries, in one way or another, have subscribed to the new way of approaching the problem of literacy.

Nevertheless, almost in all countries studied, it has been reported that rather a mixture of both approaches was in operation. In most of them functional literacy was still conducted as experimental projects:

Indonesia reported to have seven experimental projects in different fields: one in urban Jakarta and six in rural Indonesia. At the same time the national office was preparing material for nation-wide purposes in the field of family life education, especially in the context of population education.

In Laos a National Committee for Functional Literacy was created by an *arrêté* issued by the Prime Minister in November 1969, with the task of conducting experiments, developing material and preparing the necessary personnel to be used in connection with the integration into development projects in agriculture and industry. Two experimental centres have started already in the Mekong loop and another in the Tha Ngone Zone. Instructors consisting of teachers, agricultural agents and Buddhist priests were trained from November 8 to December 8, 1971 at the community education centre at Ban Amone, and the courses started in January 1972, with the assistance of a UNESCO consultant.

In the Philippines functional literacy is considered as a continuation of the basic literacy courses with the difference only that the primer and the teaching should be related to de-

velopment programmes. As mentioned elsewhere, the first Six Year Intensive Literacy and Adult Education Drive 1966-1972 and the second one from 1972 to 1977 were and are aiming at making the adult illiterates "functionally literate". The programme requires 11,000 public elementary schools, 254 public general secondary schools and seven regional normal schools and teachers' colleges to organize functional literacy classes. The primer of these classes in the three major languages will be supplied by the general office of the Bureau of Public Schools.

In Thailand an experimental project was conducted in the provinces of Lampang and Prae under the leadership of the Division of Adult Education in the Department of General Education. The Thai model is attempting to combine literacy instruction and functionality from the earliest stage of instruction. Reading and writing skills become a by-product of instruction rather than the main product.

However, in Thailand the work-oriented approach may not be found in all the experimental projects. This would not necessarily make them less "functional". After all, functional literacy is any literacy which fulfills a necessary function in life, and can therefore be acquired in many ways. Normally, any child having completed primary school is functionally literate: he reads fluently, does not find it difficult and can read whatever text is within his understanding. He can write a letter without trouble, and should be able to calculate at a level high enough to serve his day to day requirements.

In fact, this is the level the adult should also attain in his literacy class, although he may not have much knowledge of other subjects, which are also taught at school. On the other hand, he will have his life experience which will help him to acquire the 3 R's more quickly.

To make him do so, it is obviously helpful to give him the opportunity to acquire knowledge and abilities he can immediately use, so that he feels that the time he sacrifices is not wasted. Since he will need more profound and better knowledge about his work—most often agriculture—it is logical to connect literacy with his daily work and give him information about innovations he can use to earn more.

However, work-oriented literacy is not the only way of making adults functionally literate. It may be done in various different ways, *provided* these are of real interest. For instance, Malaysia as well as Thailand has taken family planning as one of the main subjects to be combined with literacy teaching. The advantage is that in this way a problem of vital interest, both to the individual and to the country, can be studied in a way which could provide far better results than just a radio talk, since the problem will be the subject of discussion for a certain period of time. People will concentrate on it, learning, reading and writing at the same time, although it would be perhaps more difficult to incorporate arithmetic in this method.

Another tremendous advantage is the relative simplicity of the subject, in that it would require just one programme. One of the objections to work-oriented literacy has always been the necessity to design an often wide variety of programmes to serve the many types of clientele. Although even this can be limited to a reasonable extent, there will always be a need for various programmes to be preceded by a study of the actual needs of a certain area, or of people.

If family planning is made the central theme, one can use the same programme everywhere which will provide a considerable saving in the total cost.

Post-Literacy Courses and Programmes

All countries studied recognized the fact that literacy teaching without its aftercare was of little significance and wasteful. In trying to prevent the new literates from relapsing into illiteracy again many countries reported activities such as community development classes, local reading centres, libraries, reading clubs integrated with broadcasting programmes, etc. to create the climate for the neo-literates to use their skill.

The objectives of post-literacy services are:

1. to prevent new literates from becoming illiterate again;
2. to help them apply their reading and writing skills in daily life;
3. to consolidate the achievements (psychological, social, economic and cultural) gained as the result of the literacy campaign;
4. to learn further and use their skill to read available material in the village.

The programme includes inter alia:

1. creation and maintenance of "literate atmosphere" in the village community, by posting road signs and name plates in public places, or their names in each house, and the maintenance of a bulletin board;
2. setting up follow-up courses in the fields of community development, socio-economic activities like cooperatives and home-making, including family planning and population education;
3. production and distribution of suitable reading materials for the new literates;
4. establishment of local reading centres;
5. development of a village library system;
6. farm broadcasting system integrated with listeners groups to read and discuss farming problems, as broadcast and as described in the agricultural pamphlets.

To facilitate the operation in cooperation with local resources, community centres were established.

The posting of road signs and name plates was practiced in many villages in Indonesia. In public places one can sometimes read the ten rules of better living. Community centres or village meeting places are decorated with posters and pamphlets on new agricultural techniques or information which is easily read by new literates. There was a time when community libraries were crowded by many new literates. Khmer Republic has plans to expand the community library system. Thailand has introduced Local Reading Centres, the distribution of wall newspapers for the new literates. Indonesia, Thailand and Vietnam reported to have produced readers for new literates. The Ministry of Rural Development of Malaysia organizes community development classes offering courses in home economics, child care and work-oriented skills. In Thailand, adults having literacy certificates can join the School Equivalency Programme. In Vietnam, the Information Service organizes Local Reading Clubs to

help adults to maintain their skill in reading, at the same time distributing current information of national interest.

Programmes Supporting Literacy

There is still one category of literacy: centres of training and research, which are very important in finding new ideas and development of new tools and methods, and the preparation of personnel who will conduct and supervise the literacy programmes throughout the country.

The programmes may take the form of a permanent research or training institution which offers periodic training programmes; or they may be conducted in the forms of seminars, workshops and the like.

But in terms of the scope of the problems faced, the implementation of this category of programmes is very limited and is reported to suffer from a number of shortages: shortage of funds and facilities, shortage of teachers, administrators and specialists. In addition, these programmes suffer from a lack of rational planning and co-ordination resulting in the duplication of efforts and dissipation of limited resources.

D. LEVEL AND ORGANIZATION OF LITERACY

Level of Literacy

Anyone who tries to compare the criteria to distinguish literates will be struck by the varieties employed in various countries, probably even in one country at several points in time. It should be stressed, furthermore, whatever criterion has been used, that it does not necessarily follow that what was officially adopted for a particular census or survey has been applied in an identical manner to every person enumerated. In spite of the efforts, particularly those of the U.N. Agencies, to improve the methods so that later censuses would be better than the previous ones, unification is far from having been achieved. The standard has changed from signing or reading one's own name, reading or writing a short statement or a short letter, to writing a letter and reading with comprehension a short article from a local newspaper. Criteria like the skills acquired at a certain grade level may be used, while sometimes arithmetic is required but sometimes not. It is almost impossible to mention the precise standard of every country, and cross-country comparison is always leading to a distorted picture.

To demonstrate how difficult it is to obtain valid and comparable data, the experience of Laos will be very instructive to be presented.

The 1962 census in Laos showed a literacy rate of 28%. Recent studies yielded percentages varying from 24.2% to 49%, from which it is not advisable to select one figure considered representative.

The first pilot investigation, carried out by the Laos Government with USAID support by Ralph H. Hall in December 1967, brought out the figure of 24.4% literates among Lao adults aged from 15 to 69. The sample consisted of 2,065 adults taken from the population of 91 villages throughout the country. The percentage of literates (having the knowledge of a fourth grade primary school child) is from 30-40% for men and from 10-15% for women. About 60-70% of the men and 30-40% of the women of the age 15-24 can read and write.

The second investigation carried out by a Unesco consultant, R. Couvert, in 1968 with a sample of 232 individuals gave the following results:

1. About 30% of the men and 65% of the women above the age of 15 are completely illiterate.
2. In the area near Vientiane 56% of the men and 19% of the women read and write fluently, still having only a vague notion of arithmetic; in the area near the dam these figures are 16% and 11% only.
3. 95% of the men from 15 to 24 years of age and 68% of the men from 25 to 44 years of age can read but cannot calculate, while only 58% of women from 15 to 24 years of age reach the same level of literacy. No women above 24 years and no men above 45 years can be considered literate, in the sense of reading, writing and arithmetic.

Another investigation, carried out by Bernard Wilder under the auspices of the Royal Laos Government and USAID in June-September 1968, gave more detailed information on literacy. Working on a sample of 8,000 individuals, 67% of whom live in rural areas and 33% in large agglomerations or urban centres, this study came to the following conclusions:

1. 25.2% of the sample can read a text used in the 4th grade (38.4% for men and 10% for women, and 26.9% for town people and 23.2% for rural people).
2. All women over 35 years of age are practically illiterate.
3. If we confine arbitrarily, like this study, the active population to the age group 14-34 for women and 14-45 for men, we can be optimistic for the percentage of literacy is relatively high. This is particularly true, with the age group 14-25, for 75% of the men and 25% of the women are literate.

The most recent investigation on literacy was carried out in the summer 1970 by the Lao National Committee for the Mekong in cooperation with the Planning Commission and the Directorate of Primary and Adult Education in the framework of the functional literacy project in an agricultural area. This exhaustive investigation was made on a population of 9,018 persons above the age of fourteen living in 31 villages in an area of 5,000 hectares south of Vientiane. In this rural area there are more schools as compared with the other parts of the Lao Kingdom, so the results obtained are not representative.

1. If the standard used is the ability to read only, the rate of literacy is 50% (70.8% for men and 31.3% for women). The rate of literacy is descending with the age and lower among women.
2. With a higher standard, namely the ability of reading and understanding a simple text connected with their daily life, then the figures are lower, namely 41% are functionally literate. All women above the age of 40 are practically illiterate. With regard to arithmetic, about 70% have no understanding at all, namely, 53.5% of the men and 84.5% of the women.¹

¹These summaries were derived from Annex I to L'Alphabétisation fonctionnelle Projet du Laos, Ministry of Education 1973.

This experience clearly shows that it is extremely difficult to give a reliable percentage of literacy, since so much depends on the criteria, and the sample. Census data covering the whole of the country are therefore probably the most reliable, although it is obvious that the census personnel will not have taken the trouble to give a test to each individual.

However, even if census data as such will not be completely reliable, they could well be used to indicate trends, if at least the literacy criteria remain the same. Unfortunately, this is not the case, since at least in one country (Singapore) the latest criteria were stricter. This means that literacy data should never be regarded as comparable, unless it is certain that the criteria are the same, and the samples taken in the same way.

However, there is another aspect as well: how far can one be sure that the statistics—uncertain as they are already—were provided as objectively as those for rainfall?

The problem of literacy is that it has become rather a battlecry than an educational fact. It cannot be denied that a high level of literacy has achieved some political connotation and has become identified—and rightly so, to a large extent—with a high level of development, at least in countries where it has not been achieved. A higher literacy rate would mean good government, whether or not the other inputs needed for development have been made available. Moreover, if other countries show better literacy rates, it may be difficult for one country not to do so, even if special circumstances would justify the less satisfactory situation.

Therefore, another “caveat” is justified when reading about levels of literacy, and the “30-35%” estimate of Laos may be, scientifically speaking, more accurate than figures in two decimals other countries would seem to be able to produce.

National Policies

A short review of government policies may be useful to see how far the targets would seem to be realistic and are actually being achieved.

Indonesia's reply stated that 5,000,000 illiterates should be made literate in the next five years. Moreover, in the draft Second Five-Year Plan, Pelita II 1974-1978, emphasis is laid on providing more schools for children. However, it is realized that, with the present enrolment rate at the primary level, there will still be a large number of children who never had an opportunity to go to school or dropped out. These should be caught up by non-formal education which should regard the fight against illiteracy as its first task, i.e. making use of the abilities of the literates: “let the literate teach the illiterate”, and a little further: “In this way it is expected that the fight against illiteracy will soon be over.” Will it?

However, the Plan well remembers the great and rapid loss of whatever literacy was acquired during the 1960-64 campaign due to a complete lack of follow-up activities, and therefore, reading material and periodicals must be made available. Thirdly, opportunities should be created to attend useful courses to be organized by the Village Social Units (Lembaga Social Desa), the Boy Scout Movement (Pramuka), women's associations, co-ops, sports clubs, etc. The Plan would hope that at least 2,000 programmes would be established to cover 1,000,000 children and youngsters. Even if that hope were fulfilled many millions would be left to their own devices.

As far as the *Khmer Republic* is concerned, as we have seen, the large thrust of the

literacy campaign has not produced the great results expected, but the government is aware of the need for a complete change in the educational system which is deemed unsuitable for the country. Functional Literacy experiments are being carried out, notwithstanding the devastations of the war.

This is also the case in *Laos* where efforts are being made to incorporate literacy into other development programmes which is undoubtedly the ideal solution, if only such services are really convinced that the literacy teaching would actually facilitate their work. It will be most interesting to see how far these attempts will prove to be successful. Furthermore, mobile libraries will be established for the villages where literacy classes are organized.

As already stated in Chapter II, *Malaysia's* policy is to reduce the number of 3 million illiterates (1961) to the minimum by 1975. The reduction in the illiteracy rate from 50 to 40% in West Malaysia (1957-70) is satisfactory, without being astonishing. It would seem that the progress is rather due to high primary enrolment ratios than to great activity of adult literacy classes. The point was already made in Chapter II that literacy classes often were organized rather as second language classes, since it is in the national language that literacy is particularly offered. This also may be the main reason for the three-year duration of these courses.

At present, the "Romanized Malay Course" is felt to be no longer adequate and no new courses have been started, and by the end of 1974 the last course will have been completed. It is planned to have these courses replaced by functional literacy courses, and an experimental project will be started as soon as the appropriate materials have been developed. Furthermore, an official policy statement "stipulated a programme for reducing illiteracy among adults in the national language as one of the pre-requisites for people's participation in development." (Questionnaire Reply).

The main points of the national policy of the *Philippines* were already discussed, and it was pointed out that the more modest policy to be followed in the present plan period (1973-77), namely, the reduction by 25% of the number of illiterates in the 15-25 age group, appeared to be too high a target to be achieved in the first year of the Plan (1972). In that year approx. 33,000 adults passed the literacy test, while this should have been approx. 90,000 to fulfil the Plan requirement.

It would appear that the "demand" for literacy steadily declines, as the number of persons enrolled in 1972 was only a little more than half that in 1968. This is understandable because of the high literacy rate already achieved; one can imagine that the relatively few illiterates (17% in 1970) are not among the keenest and most active of the population. It is, therefore, remarkable that the results become continuously better; the percentage of passes being 62 in 1972 which is nearly double that of 1968 when it was only 32. This means that the actual number of adults to become literate was even larger in 1972.

Without further information it is difficult to say why these good results have been obtained. It may be that the economic situation pressed people to become literate so that their motivation was stronger, or the teaching may have improved.

The main features of *Thailand's* literacy policy can be summarized as follows: to lower as much as possible the number of illiterates, mainly by improving the quality of primary education, expanding literacy classes and providing follow-up materials for new literates. The target for the Third Five-Year Plan (1972-76) is to increase the number of literacy classes from about 500 to 1700 in 1976, although it seems doubtful whether—as in the *Philippines*—the

about 40,000 envisaged participants will be found, given the fact that there are approx. 12,500 now.

Still, if such classes are regarded more as agricultural extension or whatever the subject matter may be, provided it is of interest, with reading support, they may happily serve the double purpose functional literacy is expected to do. They would attract a somewhat different clientele, and become most useful exponents of lifelong education. In that case, further expansion is practically unlimited.

The five-year literacy plan for *Vietnam* foresees the reduction by one-sixth of the present number of illiterates. It is stated that adequate personnel is available, but that the budget is not sufficient. Similarly, financial consideration prevents the transition from "traditional" to "functional" literacy, although this method has, in principle, been adopted and introduced in the training method of literacy personnel. Once the Mekong Project is implemented, there will be excellent opportunities of applying the method in actual practice.

The Organization

Four types of organization can be distinguished to group literacy programmes in the SEAMEO countries.

1. Literacy teaching by the public schools
2. Literacy teaching by special public educational agencies
3. Literacy teaching by public non-educational agencies
4. Literacy teaching by non-governmental agencies

Classifying countries into one of these four categories does not necessarily mean that in one country only one type of organized literacy programmes is in existence, but that other types are relatively less important.

Table: Type of Organization

	Prevalent	Other type(s) existing
Indonesia	2	4
Khmer Republic	2	
Laos	2	
Malaysia	3	4
Philippines	1	2,3,4
Thailand	1	2,3,4
Singapore	2	4
Vietnam	2	3

In the Philippines and Thailand, literacy is placed under the Division of Adult Education within the Bureau (Department) of Public Schools (General Education). Literacy courses are carried out by the school teachers in the school building, at least in Thailand's school equivalency courses. In the Philippines the classes are supervised by the Adult and Community Edu-

cation Teacher Coordinator who is to be responsible for the organization and guidance including the cooperation with the local government and the community.

Indonesia established since 1950 at the grass-roots level, the Community Education Committees consisting of representatives of various governmental agencies, the local authorities and community dignitaries. This committee was in charge of setting up policies, initiating literacy classes, and other non-formal programmes such as community libraries, adult classes, or in some areas it established Community Education Centres. Similar Committees also exist in Vietnam at the provincial and village level which would seem to facilitate co-operation with other services and with the public in general, as these committees were composed also of non-official members. When experimental functional literacy projects are started, such committees are usually established, e.g. in Laos, to maintain close contact with the clientele.

Budget and Personnel

Like in any other non-formal education programmes, assessing the amount of money spent on literacy projects is a very difficult task. If figures are available they cannot be compared since they may mean different things from country to country. At best, they can be compared over time in one country.

Usually, the allocation of funds formed a part of an overall budget spent for adult education or community development programmes. In Laos, the Philippines and Thailand, the budget was under the heading of primary education. In other countries the financing went only for the training of instructors while the literacy courses were to be paid by the trainees or the local community.

Sometimes one cannot help feeling that targets were set without much consideration of budgetary consequences: for instance, making 5 million people literate in the next 5 years seems unrealistic if no clear budget is provided and the latest figure of actual achievement shows that only 87,000 adults became literate in 1972 out of 135,000 enrolled (Indonesia), showing a 1972 budget of Rp. 56.1 million or approx. US\$ 135,000, a unit cost of US\$ 1. This low unit cost compares with US\$ 10.08 for formal education.

But other countries also show clearly financial problems in their literacy work: in the Philippines there is no follow-up material in *any* language, shortage of primers in Tagalog, Cebuano and Ilocano, while there are not even primers in other main languages.

Lack of funds is also the reason given in Khmer Republic for shortage of learning materials, and a similar problem troubles literacy work in Laos. Malaysia shows constantly decreasing salary budgets--from M\$3.6 to M\$1.3 million for the years 1968-72--for its literacy personnel. This is difficult to reconcile with the policy statement of reducing illiteracy to be one of the pre-requisites for development.

Although Thailand's reply does not clearly indicate what the budget is for the three different literacy programmes, there is no indication of special shortage of funds as mentioned in most other countries: it appears that teaching materials are not in short supply, although it is felt that certain books should be revised. Finally, as pointed out already, although in Vietnam's reply it is stated that the present budget is far too low, the modest target-reduction of the illiteracy percentage from 18% to 15% is already being overachieved, at least if the illiteracy figure is correct.

Concluding, one is inclined to say that in the SEAMEO countries, where illiteracy is felt to be a hindrance to development, the budgets allotted to improve adult literacy levels do not seem to indicate, in the majority of cases, deep concern about the literacy problem.

Closely connected with the budget is the availability of sufficient and well-trained personnel. Most of the problems have been mentioned already in B, and from what has just been said, it is understandable that most country reports showed that there was a lack of such personnel.

No uniform policy of recruitment and training of personnel exists within each of the SEAMEO member countries. Generally, it can be said that the bulk of the personnel are drawn from formal schools, in only a few cases a corps of full-time literacy officers appears to exist.

There is no evidence of literacy training as pre-service formal educational institutions in any of the SEAMEO member countries. In certain teacher training institutions, however, there are social/education departments catering for those who will become workers in community development and related fields.

In general, training takes the form of short-term in-service courses, workshops and seminars organized by the different governmental and non-governmental agencies to meet their own requirements. At least one or two training centres exist in each country. The training activities covered general areas as well as specific ones, from Adult Psychology, Methods of Teaching Adults, to Techniques in Group Dynamics, Creative Leadership, Preparation of Action Programme, Development, subjects mostly reserved for trainers of instructors, while on-the-job training is a more common practice in all the countries studied for the actual instructors themselves, apart from a few days before or during their actual teaching.

When one realizes the genuine difficulties, the short periods of training (practically never more than one week; two weeks in Laos for functional literacy training), it is clear that many literacy courses cannot be a brilliant success. The teacher, nearly always a school teacher, has been told that he should not treat adults like children, but that is not easy when the books are so similar to those he uses in day time (if not identical), if the whole teaching routine is not markedly different, often occurs in the same classroom and, moreover, the extra job does not bring him much extra income.

Clearly, if it is felt that the more sophisticated concept of work-oriented literacy—or in any case the equally more demanding idea of functional literacy—is worthwhile pursuing, then it is no longer realistic to maintain the concept of volunteers, (morally or legally compelled) to teach his neighbours without further training, "because he is literate already". This may work for a short period in a strong national mood which may overcome numerous difficulties in a mighty thrust of patriotism, but as soon as the work becomes a longish affair, yet demanding a certain measure of inventiveness, then it is necessary to train for it and to pay for it.

There is one aspect in the organization which should be mentioned particularly: that is the role of research.

Literacy research should not be regarded as a luxury. Practical experiments as now being undertaken in Indonesia, Khmer and Laos—the only three countries mentioning any

studies in this field—tend to lose much of their value if they are not carefully described and evaluated. Only then can a new technique or a better method be tested in actual practice. Such experimental research is obviously relatively expensive, but lack of functional literacy would prove to be far more expensive if it is not given where it might facilitate development.¹

In Indonesia, the literacy research is incorporated in the National Training Centre for Community Education (Pusat Latihan Nasional Pendidikan Masyarakat: PLNPM). This would seem to be a good combination: in any case the research unit should be connected with those in charge of actual literacy work, so that research is geared to practical problems and, moreover, its findings can rapidly be tested on a larger scale, and be adopted as soon as proven useful.

E. CONCLUDING REMARKS

Literacy at the Cross-roads

The basic hypothesis behind the new concept of literacy is that illiteracy on the part of the farmers or workers hinders the growth of productivity and must, therefore, be considered as a factor retarding development. This hypothesis is at the root of the concept of functional or work-oriented literacy teaching.

If literacy is thought of merely as an instruction in reading and writing, it may meet indeed the ethical or political requirement, but functional literacy teaching reflects a desire for economic growth and social progress, and is essentially an attempt to bring about individual advancement as well as socio-economic growth on the part of the society.

Literacy teaching in the first sense means the acquisition of knowledge, a key to progress and modernity, a tool for reading a newspaper as well as for abstract thinking or for the mental mastery of technical information, whereas the aim of functional literacy teaching does not stop at the individual level, but it is the transmission of practical ability, the awareness of one's role in the society in such a way that individual achievement will become a significant factor in society development as well.

Functional literacy work, then, should be taken to mean any literacy operation as a component of economic and social development projects. It is distinct from the so-called traditional literacy work in that it is no longer an isolated or distinct operation but makes it possible to treat the illiterate as an individual in a group context, in relation to a given environment and with a view to development.

The predominant feature of functional literacy work is that it is concerned with man in the performance of his functions. The key to the programme is not just the question of collaboration with the various social and technical agencies (agricultural extension, development projects, cooperatives, industrial enterprises) during the preparatory studies and in drawing up the programmes, but ideally, of these agencies actually assuming the responsibility for the operation of functional literacy including the setting up of an appropriate infrastructure. It means also that the financing of literacy programmes should be precisely indicated when planning development projects, of which they should form an integral part.

¹A number of research and experimental projects are briefly described in the "Literacy Research" issue of *Literacy Discussion*, Vol. 1, No. 3, Summer 1970, published by the International Institute for Adult Literacy Methods, P.O. Box 1555, Teheran, Iran.

In this context then being literate is no longer an end in itself, but rather a means toward achieving a certain end.

The difficulties experienced in the experimental projects are that community development agents or agricultural extension agents are already preoccupied with their own aims, which makes the literacy teaching second or third in their priority list.

As it is at present, work-oriented literacy has not yet proved itself to be the inherent component of development projects as we believe it to be. Nevertheless, it is interesting to note that in all the SEAMEO countries where illiteracy is felt to be a problem, experiments have started. In some countries, traditional and functional literacy go on side by side, in others, such as Laos and Malaysia, the authorities have definitely decided to follow the functional method.

The Level of Literacy and Arithmetic

As was pointed out above, functional literacy is a wider concept than that of work-oriented literacy, but both have in common the relatively high level of literacy they postulate. As long as reading is an effort, one can hardly expect that it will fulfil its function of providing useful information. Therefore, it is necessary that those adults who want to shed their shackles of illiteracy are really helped to do so, and not left alone at a point where it is impossible for them to continue without further assistance.

In practical terms: functional literacy requires longer courses, greater effort on the part of the teacher and of the learner, more money and more time. But it definitely means something, and is not only an improvement in the position of the country concerned in educational statistics!

To be helpful, real literacy should include sound knowledge of arithmetic; without that, the practical effect of the whole exercise, the result as a contribution to development, will be crippled. Here again, one has to consider carefully what level of arithmetic is needed, and how this can most quickly be attained. In arithmetic for adults it is more obvious than anywhere else that one should develop a method really suitable for people who have used mental arithmetic in everyday life, so that a method should be found to exploit existing abilities rather than destroy them. The need for arithmetic was clearly brought out in our study where this factor was mentioned many times as one of hampering agricultural extension work.

But it is not only so in agricultural extension, it appears to be the same in vocational training: an international study conducted by the United Nations Research Institute for Social Development, Geneva, among 271 experts in vocational training, ranked "arithmetic (e.g. basic operations, percentages)" first among deficiencies in school subjects encountered among trainees.¹

Improved Literacy Rates, Sex and Age Group Differences

In other respects also the present studies appear to be in agreement with international findings: the gradual—sometimes rapid—decrease in the illiteracy rates in all the SEAMEO countries, accompanied however, in some of them—but not in all—by an increase in actual

¹U. von Buchwald, Vocational Training in Developing Countries: a survey of Expert Experiences, U N R I S. D., Geneva, 1973, P. 125.

numbers, as pointed out in Chapter II. One point, though, should be mentioned: the more rapid increase in literacy in some countries among women than among men who, in all countries, always show a higher rate; therefore, the fact that in the Philippines women showed a slightly higher increase in their literacy percentage than men (1.03% against 0.76% per year 1948-1960) is an indication of the tendency to equality in education of both sexes. This is now confirmed by the finding of practically 100% school enrolment of girls as well as boys which implies an increase in girls' enrolment.

This is also shown in Laos,¹ where the increase in girls' enrolment between 1961 and 1971 was no less than 18% per year (from 18,000 to 88,000), even more than that of boys in the same period which amounted to 16% (from 56,000 to 149,000). Still, the absolute figures clearly show that, notwithstanding this favourable tendency, there will still be many more illiterate women than men.

The tremendous difference in literacy between age groups is equally common to the area, as is higher male literacy, but the relatively low "effective enrolment" rates as mentioned in Chapter II should be a warning that, even though general enrolment is no longer a remote ideal in some SEAMEO countries, the type and quality of education ought to be such that it is clearly felt by the parents that it is really useful, so that they themselves see that education is compulsory, not only legally, but actually, by the will of the parents.

In this respect, attention may be drawn to the very frank and courageous statement made by the Khmer Republic² at the 34th Session of the International Conference on Education (Geneva, September, 1973) in which it was clearly stated that this country wished to overhaul completely the whole educational system, as it was felt that it did not serve well the needs of the population.

Literacy and the Problem of Multiple Languages

Adult literacy as well as school education should be geared to the needs of the society and serve to widen the horizon of the whole population to take part in the total development of their country. However, here the language problem must be mentioned which exists in all SEAMEO countries, as there is nowhere one single language which is the mother tongue of all citizens. In some countries it may be a matter of small minorities only; in others it constitutes a major problem since large parts of the population speak different languages.

Obviously, when the number of literates in one single language is large enough to create sufficient demand for periodicals and books in that language to be printed in such quantities that it is economically viable, there is no real problem. Books in other languages can be translated and will be sold. In this respect, the unification of spelling established by the governments of Indonesia and Malaysia will be beneficial to both countries, even if there may remain difference in the use of certain terms in Indonesian and Malaysian which, obviously, are basically the same languages. The unification will create a stronger demand for publications in both countries, now having very similar national languages in identical spelling.

¹ L'alphabetisation fonctionnelle, Proj. du Laos, Annex I, p. 4, Ministry of Education, 1973.

² Rapport sur l'évolution de l'éducation, Phnom Penh, August 1973.

Similarly, "large" languages, such as Javanese or Sundanese, will not provide major problems since there will be plenty of reading matter available to make it worthwhile to be literate in these languages. While, moreover, all the children learn the Indonesian language at school.

However, what about languages with relatively few, or very few speakers? Would it be possible, economically speaking, to print periodicals in Cebuano? Probably yes, but can a sufficient demand for books be expected?

These are all major languages as compared with the many minor languages in the SEAMEO area which will never have sufficient speakers to permit active demand for printed material.

This problem has its consequences for literacy teaching and the production of follow-up material. It means that, in the case of a "small" language (and there are many not even having 100,000 speakers, while in certain areas there may be as few as some hundred only), literacy work actually means two things: making people literate in their mother tongue as well as teaching them a second language at the same time. If that is not done, their new knowledge will not serve any useful purpose.

In this respect, the work of the Summer Institute of Linguistics (SIL) should be mentioned. This Institute works in various parts of the world, and—as was pointed out already—has done a great deal to study a number of minor languages in the Philippines. Moreover, in many cases, a suitable alphabetical system had first to be established, and some reading material, besides a primer, had to be prepared. The costs of such an operation are obviously tremendous, since the number of speakers is too small.

In such cases governments are put in a difficult position: is it worthwhile to spend so relatively much money on such a very small group? Obviously, if a private organization like SIL takes the responsibility for the high initial cost of studying and alphabetizing a minor language, and of teaching the national language to the people concerned, the government can easily provide the necessary follow-up by making available reading material in the national language. However, if all the work should be government's task including the work of a linguist, it seems doubtful whether it is economically feasible, since the development needs of such isolated populations are in most cases not at the level of a real demand for literacy. Still, the answer is not easy, and the government may have to state certain priorities, according to the interests of the population concerned and the nation as a whole.

Follow-up Material Should be Attractive

It has been said several times, but it may have to be said again—without follow-up, literacy makes no sense. Therefore, if this cannot be provided, it is far better not to undertake the literacy effort at all. On the other hand, if it is attempted, it should be done well. Why should government pamphlets, extension brochures, medical hand-outs not be made attractive? The additional cost is little in comparison to the total expenditure.

Follow-up material for new literates should be made attractive also because it would bring home the message more easily. It should not only be so that people would like to begin reading, they should wish to continue to do so. Why should no use be made of "comics", a

form of message which is most popular in highly industrialized countries where it has spread far beyond the interest of children? The combination of pictures and words facilitates understanding, while well drawn, good pictures may help to remember the message all the better.

To use funny characters in bringing home a serious and useful message is not necessarily contradictory. It may even prove to be very successful.

In general, the combination of entertainment and the delivery of useful information should be tried. In this respect, one would wish to quote one of the tasks assigned to the Khmer National Committee for the Literacy Campaign: "to provide instructive entertainment with educational and vocational purpose". Nobody is eager to see the streams of city migrants swell, but then the village should become as attractive as possible; there should be entertainment, sports and village culture in which people should take pride.

Here again, adult literacy may play a role, not only to improve production, but also to enable people to read for pleasure, to read the Scriptures, as they wish, to find any case to try and find a solution for the boredom that so often mars village life and causes the youngsters to flee to the city.

F. RECOMMENDATIONS

1. Traditional literacy teaching has not produced the expected results, nor have experiments with work-oriented and other forms of functional literacy as yet convincingly proven their value as a decisive factor in development, so that at present there exists a danger of literacy efforts becoming less vigorous. However, the experiments carried out, also outside the SEAMEO area, are sufficiently promising to justify the functional literacy approach, in the sense of at least imparting the appropriate level of literacy.

Recommendation: Since it is undeniable that the appropriate level of literacy makes an important contribution to development and modernization, the governments of the SEAMEO countries are urged to integrate literacy teaching as an active component into development programmes.

2. From the data provided by the SEAMEO countries, it appeared that funds allocated to literacy were so limited that it can hardly be expected that literacy teaching will improve. In many cases the budget was even not specified. In countries where the rate of literacy is very low more money is needed.

Recommendation: In countries where there is still a large proportion of illiterate population, budgets and other resources for literacy should be substantially increased.

In order to make better use of the budget for literacy, priority should be given to carefully selected programmes/projects instead of spreading the budget thin.

3. Except in a few countries in the SEAMEO region, the problem of literacy is vast and complex, and the rate of literacy is too low. Some countries still carry out traditional literacy programmes side by side with functional literacy which is still at the experimental stage.

Recommendation: Since the problems differ from country to country, functional literacy should be relevant to the demands of the development of each particular country.

It is recommended that work-oriented and other functional literacy experiments should be further conducted in the SEAMEO region to find alternative ways of literacy teaching which, according to circumstances, could be applied.

4. Literacy teaching is not carried out for its own sake. Relapse into illiteracy is always due to lack of reading materials, at least of material relevant to the need of the people concerned.

Recommendation: Follow-up measures to serve new literates are necessary to be provided in order that people will have accessible opportunities to practice their literacy skills, especially reading.

Reading materials for adult learners should be further improved to be more relevant to the needs and interests of the adult population.

5. It has been shown by countries which were launching literacy campaigns that the role of the community was very important in reducing the rate of illiteracy in those countries. The participation of potential teaching groups in the society will reduce the cost needed, if the programme were carried out solely by government agencies.

Recommendation: Private organizations and associations should be encouraged to become more involved in literacy teaching activities, e.g. religious organizations, women's clubs, youth organizations, students, etc. However, it is understood that 1) some training should be provided to such voluntary teachers, 2) they realize that they assume a serious responsibility towards their fellow-citizens, and 3) genuine literacy requires more than learning the alphabet.

6. From the reports provided in this study, it can be observed that concerted literacy efforts by different organizations should be coordinated at the national level in order to be more effective and efficient. The national coordinating body should have the facilities to carry out research so that more methods can be communicated in order to achieve better results.

Recommendation: Since literacy programmes of different forms are conducted by different organizations, there should be a national body which coordinates the literacy activities.

7. In the literacy programmes studied, arithmetic has been mentioned as a very important part of literacy teaching. However, there seems to be little research done in the teaching of arithmetic, the level to which arithmetic should be taught to illiterates working in different occupations, and how it can best be done.

Recommendation: More researches in literacy teaching should be carried out. Especially in the field of arithmetic which is badly needed by all illiterates, research is needed to know how already acquired mental computation ability can be used, instead of being destroyed, when written arithmetic is taught.

Chapter Four

RURAL DEVELOPMENT

A. THE ROLE OF AGRICULTURE

By any measure, agriculture is quite important to the rural development of the SEAMEO countries. In terms of shares in the gross domestic product (GDP), agriculture leads all other sectors in all these countries except Singapore. Data for the early 70s show that agriculture constituted about a third to more than four-fifths of GDP; in export earnings, the same sector had about a third to more than seven-tenths of the total exports. Yet per capita incomes are only about a half to a seventh of the non-agriculture sector. About half to more than three-fourths of the economically active population are directly dependent on the land, suggesting that the levels of living of this segment need urgent attention posing challenge to governments and development planners in this second development decade of the United Nations.

Part and parcel of a country's development is the growth of industry and commerce hand-in-hand with urbanization; rural-urban migration increases, leading to declines in the percentage of the population actively engaged in agriculture as it has been—even if very slowly—in SEAMEO countries. This seemingly natural course of events, however, is unlikely to continue as long as agriculture is undeveloped, nor can industrialization proceed without substantial improvements in the rural areas. These should include a variety of activities, and not be directed to agriculture in the narrow sense of the term to achieve results.

Industrial output in early stage economy would likely have a very thin market. By reason of technology, such output would be unable to compete with the industrial products of advanced economies; urban population of the less developed countries (LDCs) is only a small fraction of the total population, they would even prefer imported goods to those produced domestically. This is to say that the hope for a fast industrial expansion lies in increasing the incomes and purchasing power of the population engaged in agriculture.

As agriculture develops, it relies more and more on manufactured goods as farm inputs, and the rural folk use increasingly the consumer products that industry turns out. As industry grows, there will be a burgeoning number of non-food producing population relying heavily on the farmers' marketable surplus.

In a very important sense, agriculture is a significant source of industrial investment (from export earnings) and at the same time it is a vast potential market for industrial products.

While agriculture is a dominant source of growth for many countries, yet it seems to have been a serious drag to the SEAMEO region.

Education and Rural Development

It is a common observation that economically advanced countries have a highly educated population. For some time this observation has influenced many LDCs in believing that the golden key to modernization as symbolized by advanced countries is education. Indeed, LDCs spent a substantial proportion of their incomes for education, not necessarily because it is a sufficient means to modernization and development, but that socio-economic advance is impossible without a fair amount of it.

In early stage agriculture, increased total productivity is possible by merely utilizing abundant labour to cultivate new fertile land. The marketable output (over and above subsistence) is exported (probably bartered) in exchange for consumer products. Attractive export prices and earnings expand production to the less and less fertile lands by utilizing more and more labour up to the point when further expansion is not worthwhile anymore. Population increase could easily wipe out the marketable surplus and probably even subsistence output, thus necessitating food imports to meet huge shortfalls and avert consequent famines. As population expands rapidly, as it has been among most SEAMEO countries, the prophets of doom couldn't be less than gloomy, except that modern technology offers a new hope and promise that abundance in agriculture lies in technological change on the farms and social change amongst the rural folk.

Because modern farm technology is sophisticated and therefore requires education, it is deceptively easy to think that intensive use of such technology needs a highly educated farmer, so that it is necessary to provide good education for young farmers. But the logic of this statement immediately breaks down when education, under the circumstances in LDCs, tends to drive away those who have it from the farms. Very few agricultural school graduates go back to farming; college graduates in agriculture prefer government posts. In fact, there is mounting evidence that this phenomenon is world wide. Never in any country the world over have farmers not been the residual population in terms of schooling. They are the people who have the least access to any school, but the fortunate few who had it tend to seek urban jobs.

If the SEAMEO countries want the rural population to receive education as a means among many to improve their productivity and levels of living, new approaches have to be found. This study looks at the non-formal modes of learning as a promising possibility.

Promising, because of the fact that it is flexible, practical, of short duration, and does not require big buildings or complicated equipment so that it is cheap as compared with formal systems. It can be given at the time when it is needed and precisely to those who require it.

This does not mean that such education should be of low quality; on the contrary, it should be as good as possible, but it should be practical and serve the farmer directly and fully, to serve the purpose of rural development.

How far have the SEAMEO countries developed systems of non-formal education which would serve this purpose? The present study attempts to answer this question and this Chapter will mainly discuss the information received on concrete programmes and projects,

identified as "significant" by the National Liaison Committees, while the rural development data of a general nature have been delegated to Chapter II.

B. SIGNIFICANT NON-FORMAL EDUCATION ACTIVITIES IN RURAL DEVELOPMENT

Sources of Information

In this survey several information sources were utilized:

- a) Questionnaire B (Q.B) which requested the NLC to make an inventory of country programmes and projects in agriculture and rural development, and followed by a smaller list of projects which in the opinion of the same NLC were sufficiently significant to be studied in depth;
- b) Questionnaire C (Q.C) or the project case study questionnaire to which responsible officials such as the leaders of the significant projects (listed in Q.B) were individually requested to reply.

From Q.B, a number of significant projects, mostly state-supported activities, were identified. However, getting more information on these projects, by Q.C was difficult. In spite of the efforts of the NLC, the Q.C. of *sixty-eight* projects were not available. The analysis of project case studies, therefore, mainly applies to the Q.C received, supplemented by available information from secondary sources.

Criteria for Significance

Before submitting the replies (to Q.C) to the Team for further study the NLCs were requested to use any of the following criteria in determining the significance of the projects:

1. The urgency of the project and its prospects of future development.
2. Size of the clientele or the number of people potentially or actually served.
3. Size of expenditures incurred by the trainees, employers, government, and other agencies, singly or collectively.
4. Volume of output of the industry or area of activity served by the programme/project.
5. Others.

In evaluating the regional significance of the projects as described in Q.C, the following criteria were further applied:

- a) the rationale
- b) the clientele
- c) costs and some indications of effectiveness, if available, and the potential (if not the actual) usefulness of the project.

Rationale. The rationale describes why the project is worthwhile to undertake in the

setting or conditions where it was actually conducted. The reasons could be in terms of using the project as a measure to stop losses, e.g., information campaigns and training to combat an outbreak of virulent livestock or plant disease; as a production-increasing activity, such as training in the wise and efficient use of irrigation water, fertilizer; and/or probably as a social welfare function to alleviate human deprivation in critical places, e.g., food production campaigns-cum-nutrition programmes.

The study on the rationale of the projects is intended to see the variety of uses of non-formal education (NFE) projects in agriculture under particular settings and conditions obtaining in the SEAMEO countries.

Clientele. Projects which are addressed to audiences and are of regional urgencies are obviously given attention, e.g., special projects designed to reduce unemployment of out-of-school youth, projects intended to increase the farm yields of farmers in high production-potential areas of the region, and also those projects which cater to small audiences such as specialist groups but which have potentially high-multiplier-effects.

Costs (and Effectiveness). Even by the sheer size of the expenditures, the project can easily be identified as important or significant. Governments or its sponsoring agencies, whether public or private, are unlikely to pour in huge sums of money and men to trivial projects, although some mistakes may happen. Even so, the huge costs of such mistakes still render the project significant—in the negative way, i.e., towards avoiding the replication and multiplication of such pitfalls, and showing what the agencies of countries forego by insisting on the continued support of projects which have huge costs with too little effectiveness. Close attention is given to projects which require high costs, without neglecting the inexpensive ones which on the basis of available information have high potential effectiveness and usefulness in the region.

Another way of looking at costs is in terms of what stream of benefits the project confers on the clientele. Assuming that the project is effective, i.e., high cost is due to its high quality in terms of increasing the productivity of the participants, then high cost projects could be useful devices to minimize worsening income inequalities, or to assist farm people to move out of extreme poverty, e.g., landless labourers who might be caught in the throes of rapidly changing land tenure conditions.

Potential usefulness. This criterion is intended to assess the project in terms of its applicability to a wide spectrum of educational urgencies in the region. Here the project is not evaluated in terms of specific practices but in terms of the logic of such practices, viz, the principles. The project is not seen as an aggregate of parts but in the unity and harmony of the various strategies employed, taking note of the various circumstances under which the project was undertaken. Given such principles, design of projects with similar logic could be rendered less difficult to suit various particular settings and conditions in the SEAMEO region. This way of looking at the projects could encourage the design of NFE programmes to solve common specific education-related urgencies rather than promote transplantation or copying of projects which are likely to be unsuitable to different conditions for which they were not intended originally.

NFE projects which are of action-research nature are highly valuable in terms of their potential usefulness.

Taxonomy of Non-Formal Education Projects

As a device to facilitate the analysis of the project case studies, a system of classification was created based on the following dimensions:

- a) interest area
- b) clientele
- c) method or delivery system used.

Interest Area. This category refers to the areas of activities in agriculture, classified according to the purpose of such activities, namely, crops, livestock, forestry, fishery, co-operatives and farmers associations, irrigation and farm machinery, farm home, and human resources. Projects which were multi-purpose in nature and without any major emphasis in any of the agricultural commodities were put together under human resources. This system of classification is an *ad hoc* strategy utilized mainly for the immediate purposes of the study.

The distribution of the project case studies (Q.C) received by the Team is the following:

	Total	RI	Khmer	Laos	M'sia	RP	Sn	Th	Vtn
Crops	13	—	1	—	2	6	—	—	4
Livestock	7	1	1	1	1	—	1	—	2
Forestry ¹	—	—	—	—	—	—	—	—	—
Fishery	5	1	—	—	1	—	1	—	2
Co-ops and Farmers Assn.	4	—	—	1	—	1	—	1	1
Irrigation and Machinery	3	—	1	—	1	—	—	1	—
Home	4	—	—	—	—	—	—	1	3
Human Resources	24	4	1	1	—	7	—	5	6
TOTAL	60								

Critical readers can readily detect gaps in the kinds of projects that are available for further study. Firstly, there ought to be some projects in forestry; there are, for example, novel projects conducted by the University of the Philippines College of Forestry to assist shifting cultivators who are close to the watershed of hydro-electric power dams; secondly, Malaysia is known to have a strong programme in farmers associations; and thirdly, only Vietnam and Thailand reported projects whose focus of activities is the home. It may be argued, however, that preliminary evaluation conducted by the NLC could have ruled out some of these projects as non-significant, although it is also possible that these projects, even if important, were obscure and were unknown to the same NLC; or, perhaps, it was extremely difficult to obtain Q.C replies from such projects.

¹Indonesia reported one work-oriented literacy project having soil erosion as its main theme. However, since the technical part of the information was little detailed, it has not been possible to take it into consideration in this Chapter.

In spite of the foregoing remarks, however, one can also see that the total of 60 items represents a wide variety of projects which, even if less than ideal in terms of representativeness, can be considered as a fair sample of NFE activities in rural development in the region.

Clientele. The clientele could be classified in several ways, namely, by the level of schooling formally received, by age group and – even if somewhat trivially, by sex. Cutting across these categories is whether the clientele is gainfully employed, under-employed, unemployed. There are also projects which are addressed to a wide variety of audiences.

It is shown in the tables (following immediately) that the projects analyzed in this study were addressed to several groups of clientele, mostly for the low-literate (and probably non-literate) audiences who were likely to be adults.

By level of formal schooling received	Number	Per cent
1. Third level; mainly specialist courses for high-level technicians, officials, and researchers.	5	8
2. Second level; mainly for volunteer cadres, technicians of junior grade, and research aides.	14	23
3. Multi-level clientele, mainly for low-literate audiences.	41	68
Total	60	99

By age-groups	Number	Per cent
1. Children (below age 15)	—	—
2. Young-adults (about ages 15-20)	23	38
3. Adults (above age 20)	37	62
Total	60	100

Method or Delivery System. Method or delivery system indicates the way in which the teaching-learning outcomes are produced. Two main categories are considered in this study, namely, training and extension. A criterion for this classification is the degree of the structural organization of the method, training as a highly structured activity on the one hand and extension as a somewhat loosely structured series of advisory activities on the other hand.

An ideal-type training method is exemplified by residential training which is not only highly structured but also so organized that the activity is conducted in a more or less contiguous block of teaching-learning time. Extension, as used in this study, is a series of loosely structured (yet possibly highly organized) advisory contacts between the technician or agent and the target audience, where the contacts are somewhat brief and in discrete periods of teaching time. Farm visits, field days observation tours, method demonstration, result demonstration, leaflets and other mass media activities fall under what is here called *extension*.

Training as a method could be undertaken in various forms such as residential training, on-farm/in-community training, courses offered by mobile training units, apprenticeship and on-the-job training in certain off-farm occupations in agriculture.

In most instances, however, training is supplemented by extension activities, as described previously. Such combination of methods should be properly called training-cum-extension or extension-cum-training, whichever is the main activity. For the purposes of this study,

training-cum-extension methods is simply called *training* and the latter, *extension*. The kinds of project case studies available for analysis are:

	Number	Per cent
Training	22	37
Extension	38	63
TOTAL	60	100

Logic of Method or Delivery System

In this section NFE is viewed as an investment, i.e., the transformation of present resources into a stream of future benefits. NFE is not wanted for itself but for the potential and likely benefits that one could receive via the skills that are acquired. If the activity brings forth in one's subjective evaluation—more income than expenditure, more rewards than punishment, alternatively, more pleasure than pain, then the motivation to seek such NFE activities will be strong. In this view, people who see the rewards of NFE, have the access to and have the capacity to incur the costs of such activities would likely participate in them; much more so, if they bear only a fraction of the total costs. It is in this view that individuals as decision-makers and governments, including their instrumentalities, as decision-makers from the social perspective, want to use present resources in NFE programmes and projects in order to reap the manifold benefits from such activities, which in present value terms are seen at least as more than what they cost.

In a more concrete way, education (whether formal or non-formal) is wanted because it tends to increase the productivity of educated people more than those who have less education; this productivity is reflected by the observation that, in general, persons who received more and better schooling tend to receive, *ceteris paribus*, higher wages. Statistical calculations to isolate the "pure" effects of schooling by partialing out the influences of sex, measured native ability, social class origins, and other factors, tend to demonstrate even more the aforementioned positive relationship between schooling and wages.

Like schooling (or formal education), NFE activities in rural development e.g., training and extension, have demonstrable effects on productivity. Distinctive characteristics such as specificity, divisibility (*ad hoc* feature), and even portability make NFE activities more effective means to alter step-by-step the production process under varying settings, cultures and conditions, unfolding virtually infinite ways of increasing the productivity of human and agricultural resources of which the SEAMEQ region has in abundance.

These optimistic gifts of NFE activities, however, are not easy to obtain. NFE is a powerful instrument, but the limits of its power hinge, to a large extent, on the user and his understanding of the dynamics and possibilities of education and his willingness to use them.

Training. The usefulness of the skills and particular knowledges furnished by training appears to be dependent on the production process itself where such skills or knowledge are among the inputs. Changes in the production process materially affects the usefulness of the skills acquired through training. Where technological change in an industry is rapid, the usefulness of some skills decreases considerably, thus these skills are rendered less productive and become obsolete. In changing agriculture, some skills have to be left in fallow while new ones need to be acquired.

Obviously, for training to be useful it is necessary that the learning results of such training (e.g., knowledge and skills, affective states) be utilized soonest; it is also obvious that this usefulness is directly linked to the interdependence between skill and productivity so that the training should be geared to the production process itself — if possible on the spot, and just before it should be used. Whenever under-utilization and/or non-utilization of the learning outcomes of training prevails, then training has no reason for being; the use of training-resources could probably be better used elsewhere. It is in this respect that training of workers and direct producers of agricultural commodities has a high premium, if the circumstances surrounding the production process encourage the utilization of skills and knowledge acquired from training. It is also in this view that firms, agri-business concerns, or even the government tend to spend more and more efforts on training programmes and projects.

From the foregoing views, farmers and possibly other workers in agriculture would welcome training if this is worth their time compared to other uses of their time. And indeed when scarcities of certain skills would command a distinct advantage on the part of the clientele, they would tend to seek such training, particularly when their expenditure is only their time.

Training in agriculture is usually heavily subsidized, i.e., the direct costs are borne by taxpayers. Society, through some governmental or political processes, chooses to use training as a mode of intervention (mediation, if this term is preferred) toward increasing agricultural productivity, and that the usage of training is justified because the gains from such activities are worth more than the trouble.

Productivity in agriculture, however, is not a simple matter. The thinking that more training always results in higher productivity is obviously quite simplistic; even if this relationship were true, more productivity in agriculture—under certain conditions—may even lead to a dramatic reduction in profits; under very uncertain farming situations, peasants were observed to maximize not profits but survival (Lipton, 1972). It is useful in this regard to think of training as only one of the many inputs, rather than as the single cause, of rural development. One keen observer labels education (of which training is only an aspect) as merely an *accelerator*¹ rather than an essential to development.²

Another feature of training is that if the skills acquired confer increased incomes (due to increased productivity) then it can be a useful tool to reduce income inequalities, particularly when the production and utilization of skills are addressed to deprived segments of the population.

Extension. Applied to agriculture, extension (C.V. Good, 1959, pp. 217-8) refers to "the diffusion of agricultural and related knowledge concerning rural life through demonstration, extension lectures, directed group study and discussion, bulletins, reading courses, and sometimes, farmers' institute and short courses." As described, extension in agriculture is a repertoire of communication activities to farmers and farm workers. It is a bridge, so to speak,

¹One could easily be tempted to say that an accelerator is also, like any other part, an essential to an automobile; the distinction is, however, subtle, i.e., that the accelerator is a convenient device to increase the speed of the car. In a somewhat similar fashion, the analogy is that education is an effective instrument to "get agriculture moving" when all the "other" essentials are there.

²A.T. Mosher, *Getting Agriculture Moving*, published for The Agricultural Development Council, New York: Praeger, 1966.

between the producers of new knowledge in agriculture (defined broadly) to its end-users, i.e., the farmers. The communication strategies are intended to increase the adoption (hence, utilization) of agricultural technology, that new technology leads to higher farm-resource productivity. Again, the end in view is that extension as an educational programme influences the productive capacity of farmers, although capacity should be expressed in terms of more rice per hectare of land, more eggs per hen, more milk per cow; in brief, more income from their farms as requisite to rural development in terms of more and better food on the table, better clothing on the person's back, better housing, a modicum of income to afford social services like education, medical care, and an increasing participation in community affairs and government.

All these promises of a better life for farm families are thought to be possible via the new farm technology. Extension appears to be the means by which technology is adopted or utilized, almost implying that more and better extension leads to more adoption of new agricultural practices. This is obviously an over-simplification, yet it appears that many extension programmes are influenced by this view.

Advances in diffusion of innovation research show that extension is not enough for practices to be adopted. If extension programmes increase the farmer's knowledge and his ability to choose, the decision to adopt certain farm technology would likely be postponed, withheld, if not become negative, if such practices are — from the point of view of the farmers — not profitable. Experience in the Philippines has shown, again and again, that lack of credit, fertilizers and farm supplies, and, obviously, low prices of farm products seriously limit the adoption of farm technology in spite of a well worked out extension programme. It appears that without the *essentials*, extension could likely end up in an exercise in futility, reducing extension activities to human relations, leaving the farmers as they were since time began. The foregoing discussion is not to argue for less of extension but to consider it along with the other development variables.

C. ANALYSIS OF CASE STUDIES

TRAINING PROJECTS

Rationale. In response to critical situations, the training projects were utilized in many ways, namely:

1. **Pre-service Training.** To supply specifically qualified personnel to particular jobs to meet manpower requirements. This rationale was accompanied by an awareness of, if not frustration on, the inability of formal schooling to prepare the graduates for specific jobs, and on the persistent, acute shortages of qualified personnel.

Examples: Specialist Training for Supervised Credit Technicians (Philippines), Fishery Training Course (Singapore), Training Agricultural Cadres and Specialists (Vietnam) and Agricultural Training Centre (Thailand).

2. **In-Service Training.** This type of training was designed to up-grade the competencies of personnel already on-the-job so that they could become more effective in their work. This training was also intended to "re-fuel" field workers with new technologies generated by research institutions.

Examples: Agricultural Training Centre (Thailand), Padi Mechanization Training (Malaysia), Vegetable Seed Production Training (Philippines) and Training Managers of Farmers Associations (Vietnam).

3. **Help solve critical problems which were linked to educational solutions.** High unemployment, malnutrition, acute shortages of vegetable seeds, high prices of staples and other food necessities, etc. were problems which might be alleviated by NFE projects.

Examples: Rakyat Training Centre (Poultry : Malaysia), Livestock Development (Laos), BVE Green Revolution Project (Philippines), Agricultural Skill Training (Indonesia), and Using Fertilizer in Rice Production (Khmer Republic).

4. **Supplement on-going formal instruction in schools, addressed to in-school pupils and school drop-outs.**

Examples: 4-T (4-H) Club Projects (Vietnam), and Agricultural Leadership (FFP, FAHP) Training (Philippines).

5. **Increase utilization of existing facilities in schools.**

Example: Summer Training Courses at Kasetsart University for interested people (Thailand).

6. **A quick means to facilitate acceptance of a new educational programme.**

Example: Seminar-Conference on Revised Secondary Agricultural Curriculum (Philippines).

Objectives

The *rationale* in the preceding section portrays the kinds of problems that the projects were addressed to. In a way, the rationale reflects also what the objectives of the projects were.

The analysis of objectives searched for regularities such as the specifics in terms of knowledges, skills, etc. acquired by the clientele, and the objectives that are somewhat remotely educative in nature yet are of immediate concern to the project/programme. Attention was focused also on the substance and manner in which objectives were expressed.

It was found that the project objectives were stated in broad, if not vague, teaching objectives, suggesting that the emphasis tended to be on teaching rather than on learning. The objectives, in the way they are, would render the project difficult to evaluate in terms of learning outcomes. Only in very few cases were the project objectives expressed in terms of outcomes, varying from precise statement to general anticipations.

Examples:

1. Statements of Expected Results

After a period of 5 months training, the participants, being agricultural extension workers at (post-) secondary level, should be able to:

- a. identify the requirements of crops used in cropping systems,
- b. select crops for cropping systems for given environmental conditions,
- c. design cropping patterns for a given location.
2. Objectives in terms of teaching rather than learning outcomes.
 - a. To train and improve teacher competencies in . . .(crop/livestock) production.
 - b. To prepare participants to become effective . . .(field workers).
 - c. To teach how to . . .(skills) . .
 - d. To (impart) technical skills in agriculture.
3. Objectives which are somewhat remotely educational
 - a. To improve the economic status of the family and the community.
 - b. (To) Produce well-nourished and healthy citizens.
 - c. (To) Bring about desirable changes in the attitude of the people towards work.
 - d. To promote the efficiency of extension workers who work in the rural areas all over the country.

Clientele.

The clientele of the training projects were mostly (but not in all cases, see previous section 4) those who had substantial amounts of formal schooling, as shown below:

Training courses mainly for specialists, high-level technicians, officials and researchers; require third-level education	9
Training courses mainly for volunteer cadres, technicians of junior grade, and research aides; require at least second-level education	4
Training courses mainly for young literates	8
T O T A L	21

Method.

There were different kinds of training methods used by the projects, namely:

1. **Residential training.** This type of training was provided by training centres with boarding accommodations, lasting from a week to as long as 6 months.

Examples: Specialists Course in Cropping System (Philippines), Training Course for Supervised Credit Technician (Philippines), Short Course in Co-operative Management (Thailand), Padi Mechanization Training (Malaysia).

2. **Mobile Training.** The training unit travelled to where the clientele were and

conducted the training course there; after completion of a course or a series of courses, the training unit moved to another site.

This type of training is particularly suited to simple, short term courses which are addressed to mobile groups, e.g. fishermen, and to other audiences which are widely dispersed geographically.

Example: Sea Fishing Technical Training for Fishermen (Vietnam).

3. "Quickie" Courses. These courses last only a few hours to a few days mainly for information campaigns followed by a how-to-do-it demonstrations. The participants were assembled in public places such as at the village temples, schools, or at training centres where the course activities were undertaken. The training consists of farmer classes, method demonstrations, and sometimes followed by practice and observation tours.

Examples: Short-Term Training for Farmers (Vietnam), and Increase of Food Crops Production (Laos).

4. Youth Club Training. This method was applied to the young and young-adults for the development of leadership skills, either to supplement in-school programmes and/or to cater to out-of-school youth.

Examples: 4-H Clubs, such as the 4-T in Vietnam and the Yuwa Kasetakorn in Thailand; the FFP and the FAHP projects in the Philippines are also in this category.

5. Seminar-Conference. This method has a distinctive usefulness in promoting the acceptance of an innovation by involving the participants in discussions to thresh out its advantages and disadvantages, its anticipated problems and conflicts as well as the guidelines in the resolution of such conflicts. For a long time, group discussions about new policies, farm practices, or a new consumer product have been known as an effective marketing or adoption strategy.

Example: Seminar-Conference on the Revised Secondary Agriculture Curriculum (Philippines).

Costs.

Cost is here interpreted as anything one gives up in exchange for something. Direct costs borne by the agency/office which conducts the training are shown by expenditures on the services of personnel, facilities, and sometimes on grants (whether in cash or in kind) to the participants. The costs incurred by the participant may involve out-of-pocket costs and the value of his time if this were spent in its next highest productive use.

Data on costs are sketchy, many of them are unavailable or if they are, they could be shaky estimates. The analysis that follows, therefore, should be understood with this limitation.

A perusal of the cost data revealed the following observations:

1. In terms of per capita income in the countries where the projects were conducted, the expenditures involved were substantial. This observation means that training activities as components of NFE programmes are important.

2. The value of the clientele's time is only a small fraction of the total costs. This information means that the sacrifices to be made by the participants were not important. The training projects were fully subsidized by state support whether from taxpayers' funds or from external sources.

3. In some instances, the volunteer component of the cost is significant. Tapping volunteers as a training resource could substantially lower the direct expenditures borne by taxpayers; alternatively, for a given cash budget, more clientele could be reached by the project by harnessing the services of volunteers.

4. Average unit costs (per participant) in most instances are quite low, indicating that for modest expenditures a good number of participants or clientele could be served.

5. Training at the high-levels, e.g. specialists, obviously entails huge unit expenditures; the question of the utilization of the training is, therefore, paramount.

6. At the lower levels of training, unit cost is generally lower than that of the specialist courses. But number makes the total cost large; the utilization of such training needs to be looked into, also.

Problems

The major problems of training projects are resource-related concerns. High on the list are: availability of equipment and facilities, availability of qualified personnel, adequacy of budget/funds, and availability of supplies.

	Frequency (Usually more than one difficulty was mentioned)
Availability of equipment/facilities	13
Availability of qualified personnel	10
Adequacy of budget/funds	9
Availability of supplies	8
Audience/Clientele	6
Administration	1
Others	3

The matter of the audience or clientele also deserves special mention. Although the frequency of mention is somewhat low, yet the level of difficulty is just as high as those at the top of the list. Under this category, the problem of "fast turnover", as mentioned by one of the specialist training courses, needs elaboration. Why the fast turn-over? How does this problem relate to the structure of the costs?

The project in particular was a joint project between a training institute and a sponsoring agency, where the latter specified what it wanted to be done to the participants as part of its pre-service training programme. Apparently, apart from the value of the participants' time, the total direct cost of the training was incurred by the sponsoring agency. But the skills acquired from the training were also applicable and highly valued (in terms of higher salaries) by other employers, especially by private agri-business firms. In this situation, the sponsoring

agency has to adopt a wage policy (for its sponsored trainees) that is competitive with those of other employers, otherwise, that agency will continue to have a crowd of trainees, yet too few qualified workers.¹

EXTENSION PROJECTS

Rationale

The extension projects were addressed to urgent concerns such as:

- a. low farm productivity
- b. low rural and farm incomes
- c. low bargaining power of farmers, poor access to production credit
- d. poor farm housing
- e. very poor nutrition, health and sanitation
- f. smallholders/farmers lack technical support
- g. poor use of irrigation facilities.

Considering that the farmers and the rural folk make up about three-fifths to four-fifths of the population of most SEAMEO countries, the problems cited above demand immediate attention and concerted action.

Objectives

By studying the projects in isolation from the total extension programme, it was sometimes difficult to see the relationship between the objectives of specific projects with those of the programme to which the same projects belong. Taking note of this limitation, attention was focused on the project objectives in terms of activities. A careful examination of available information on objectives pointed out the following:

1. The project objectives were expressed mainly in general terms making them appropriate as programme rather than as project objectives.

Examples: To increase the income of farmers
To improve the standard of living of farm families
To develop chicken farming, etc.

Some of the activity-type objectives were the following:

To help the farm families repair their houses according to sanitation and health principles;

To help farm housewives choose, and prepare inexpensive, hygienic and nutritious food.

¹M.D. Leonor, "Human Capital and Migration", *Farm Economics and Development Journal* Vol. 2:1, pp.59-65. Also, the writer's "Diplomas for Development? Observations on Graduate Unemployment in the Philippines" in *Studies in Education and Development*. DP#3, s. 1973.

2. The objectives were expressed in terms of teaching rather than learning activities. In this way, it follows that when the teaching (or assisting) activity is done, the project objective is said to be accomplished; whereas, if the objectives were stated in *learning terms* and further, in terms of specific behavioral consequences, e.g. the farmer is able to increase rice production from say 1.5 tons to 2.0 (or more) tons, under given situations, then judgements on the effectiveness of the project would be in an entirely different dimension.

3. The objectives were addressed predominantly to material technological change, e.g., new knowledge and skills in biological, chemical, and sometimes in mechanical technology, hoping that by these means the farmers could improve their situation. Rarely was re-structuring social institutions utilized to speed up the adoption of material technology.

4. Judged from what is known about what makes extension projects worthwhile, the objectives reflect heroic intentions but equally threats of ineffectiveness. This statement will be clarified later in this study.

Clientele

Extension programmes were generally addressed to the adult members of the farm family, and to a limited extent, to younger members. The relative importance of the different audiences of extension projects is indicated by the following figures:

Extension projects for	Number
Youth	5
Adults	20
TOTAL	25

The extension projects were directed to low-literate farmers and to other members of the farm household. It was not possible to ascertain to what extent non-literate farmers were exposed to extension activities; not one of the projects reported was specifically designed for such an audience, although certain work-oriented literacy projects had rural development as their theme.

Short training activities in extension projects, e.g., training for managers of farmers associations, training for older out-of-school rural youth, training in co-operative buying and marketing were directed to the more literate members of the farmers community. In effect, those who were literate and had more previous formal school tend to have greater exposure to extension agents.

Method

The project case studies yielded the following patterns of approaches in extension:

1. **Conventional Extension Services.** These are the usual technical backstopping to farmers in the form of advisory services, demonstrations, farm visits, etc. Specific extension activities directed at solving limited, particular problems, e.g., pest control, livestock vaccination, promotion of HYV seeds, digging latrines, etc. belong to this kind of extension approach. In some instances, short training is provided and then follow-up activities in the form of farm visits take place. Most of the project case studies submitted are in this category.

2. **Integrated Commodity-Oriented Approach.** This is production target oriented approach where technical backstopping by extension services is integrated with other production increasing factors such as liberal credit, availability of farm inputs such as fertilizer and other farm chemicals, mechanical tillers when justifiable, price incentives, etc. Land reform and the creation of other institutional structures such as co-operatives, farmers associations, etc. are also part of the integrated approach.

Example: Masagana 99 (Philippines), Pilot Project for the Development of Irrigated Cultures (Khmer Republic).

3. **Integrated Village Development Approach.** Instead of the commodity focus, this approach uses increased productivity of agricultural commodities as only one of the means to improve the levels of living of rural households in village communities. It develops and uses village institutional structures and governmental machinery to facilitate technological change in agriculture. Its distinctive feature is the sequence of mutually re-enforcing development activities to mobilize the human resources, to fully develop the land and water resources and to create a progressive rural structure towards modernizing agriculture.

Example: UPLB/SEARCA Social Laboratory (Philippines), TRRM Agricultural Development in Rural Villages (Thailand), Comprehensive Education Programme for Youths (Indonesia)

Costs

As in training projects, the budget expenditures in extension are generally significant, particularly for projects which are nationwide in scope; unit costs are obviously low, although the per unit costs do not tell anything on the project's effectiveness.

The total budget costs of individual projects pooled together would certainly be relatively large for each country, even if its relative size compared to GNP would be very small. This reasoning might be used by proponents for the expansion of extension programmes. That more and more services be extended to the farmers, few would object; what matters is not so much with the linear expansion of the farmer advisory services (hence, spending more), but with the reasonable effectiveness of such services that would justify additional expenditures.

Even if information on the effectiveness of the projects were not available, the elements or conditions which make projects and programmes increasingly effective are generally known; if these are absent, the increase in expenditures, or expanding the projects, are unlikely to bear fruitful results.

It might be noted, too, that some projects have high volunteer components and, therefore, tend to have direct costs which are a small fraction of the total project costs.

In projects which supplied information on the participants' time, it is generally observed that the value of such time is only a very small fraction of the total estimated cost per participant. If such projects were as productive at least as a bank deposit (yielding an interest of about 6-8 per cent), then the farmer would reap the benefits of the total unit expenditure for only his time as his cost. The project would then be persuasive in attracting participants. For some reason or another, however, some projects had problems with clientele. Although it is doubted whether any farmer, even unconsciously, ever made such a computation on the value of his time, there are certainly a good number who think that such a project is not "worthwhile".

Problems

As in the training projects, the problems in extension are also highly resource-related. High on the list is the scarcity of qualified personnel. Another acute problem is the unavailability (and the high price of) farm supplies and inputs; another obstacle is the inadequacy of operational budget and credit/loans to farmers. These major problems, if not solved, are sufficient to render any vigorous extension ineffective, much more so the linear expansion (more of the same) of such projects.

Related to the shortages of field personnel is the problem of technical competence. When the extension agent lacks the subject-matter competence, the accuracy of his technical advice would unlikely be better than chance, and his credibility to his clientele would be seriously impaired. Consequently, the extension project breaks down, reducing the extension service to sterile, back-patting excursions. This means that extension workers, if not well trained, are rather a liability than an asset, since they would reduce the credibility of the service as a whole, and would make future work in the same area nearly impossible.

D. DISCUSSION OF FINDINGS

Training and Extension Projects

The repertoire of uses that projects were put to give an indication on the exciting possibilities and potentials of NFE for further development and refinements in the SEAMEO region. It is remarkable that for country-specific situations, NFE projects were devised to suit to such situations. It is in this flexible character that NFE projects and programmes could have high significance to the region with its many-sided educational crisis situations and circumstances.

But the effectiveness of NFE projects and programmes is still an open question. Projects in a given setting could hardly be transplanted to another setting without altering their effectiveness. Nor is reliable information on effectiveness readily available. For one thing, most NFE projects were addressed to audiences who in the first place were in highly deprived circumstances; their educational levels were at the lower end of the ladder. Their situation appears to be so, not that they are poor because they lack schooling but the other way around. To push education hard by means of NFE projects and programmes without altering the deprived conditions by other means as well would certainly be a single-minded strategy. Yet most of the projects studied appear to have that common theme.

Invariably in many projects examined, the emphasis was on teaching rather than on learning. It is probably a surprise to note that even highly organized projects such as those run by state agencies and institutions still lack, remarkably, the refinements in the simple skills of stating training objectives. Of course, excellent results can be obtained even if the objectives are unstated, whether explicitly or implicitly. But it is in the way objectives are expressed that a rigorous technical evaluation of the objectives can follow, either within the framework of pedagogy and/or within the scope of the project's contribution to the alleviation of multi-faceted problems of which education is only a part in the entire package of either sequential or simultaneous solutions.

Training projects appeared to have various forms and content; they were designed to

meet specific manpower problems. An inventory of these projects and their configurations provided a good picture of how they were utilized, under what situations, for what clientele and for what purpose. Mainly, the training projects were in response to quickly meet acute shortages of specific manpower requirements of visible, on-going development programmes. They were, so to speak, used to supply the manpower requirements that could not be identified by forecasters, or to whittle away the inaccuracies of manpower forecasts. That training projects were undertaken probably in utter frustration on the inability of formal school curricula with high occupational—or job-bias to produce the kinds of qualifications that the job market wants is interesting and highly significant. The fact that there appeared to be a good number of more or less permanent training schemes for regularly needed personnel can only strengthen this observation. Even if primary information on project costs was shaky and on project effectiveness non-existent, few critical thinkers would likely object that, in the given circumstances, the training projects were the better strategy than formal school vocational curricula.

Formal vocational school curricula, i.e. those with a high occupation or job-specific bias, are likely to have a very slow reaction time. Long lead time is needed to plan the programme, acquire the site, build the facilities, recruit the staff, attract students, operate the programme, etc., and finally graduating less than a handful even after a lapse of a decade. Rapid technological change would leave such curricula way behind and the graduates would be well qualified for jobs which became obsolete. Retraining by way of NFE programmes could be of help, but this would be a step too late, meanwhile the route is extended and costs much more.

The finding that the training projects were on the whole addressed to those who already have had substantial formal schooling is another significant point. The per participant cost was often high in training projects which were addressed to those who already had high levels of schooling. If unit costs were any indicator of the quantity and quality of such training, then it is not far from the truth to say that those who have more formal schooling tend to have more non-formal training. This statement, in fact, is supported by mounting documented evidences that the better educated tend to benefit more of, and actually do invest more in, specific training such as given in NFE programmes, suggesting that indeed there is high complementarity between formal and non-formal education. Towards efficiency consideration, there must be near-optimal, if not optimal, mixes between the two modes of education among other variables in the development process.

All the project cases submitted for study were state organized except for some which were run by research and non-profit service institutions. It is of general knowledge, however, that many NFE programmes and projects are undertaken by private firms such as agri-business enterprises. In view of the lack of information on private industry-sponsored NFE training projects, the Team is unable to describe them or derive some guidelines that might be useful to the public sector. Nevertheless, the project case studies showed many possible ways of creating and utilizing training projects. They were less helpful, however, concerning guidelines in using a project effectively, for example, when to use it, how much of it, when to dispose of it, and under what specific circumstances.

Private industry is highly profit-oriented; from this consideration, training will likely not be undertaken when it does not add anything to profit, either in the short and/or in the long run. This is to say that a firm tends not to conduct training as long as it cannot internalize the benefits from such training; if firms do get partial benefit from training projects, they do pass some of the cost, if not all of it, on to the trainees in various ways such as wages

lower than marginal productivity supplemented by iron-clad devices to prevent quits until the full costs are recouped by the firm, immediate sharing of the costs, etc. But this is generally true only to firm-specific skills, i.e. those which are less useful to other firms by reason of technologies unique to the firms which undertake the training. From this discussion, it follows that training projects are undertaken when they bring in profits to the firm and are disposed of when the consequent profits are zero or negative (losses). This rule-of-thumb could be useful but is unlikely to be followed in the non-market sector, i.e., the public tax-supported agencies and institutions. It appears, therefore, that some measurable profit analogs will be useful as an indicator for the choice of training projects in the public sector as well as for determining the reason for the existence of such projects.

Extension projects could be viewed as training projects, in fact they really are, except that the clientele are geographically dispersed and the contiguity of contact time between the technician or agent and the clientele (farmer) is likely to be discrete in contrast with that in training, especially of the residential type. It follows that much of the foregoing discussion on training generally applies to extension.

The usefulness of training in a private firm is in terms of capturing the advantages (benefits) of a superior production technology. New machines are purchased, new management systems potentially reduce costs or increase productivity, and training is necessary to enable the firm to move to higher production feasibility frontiers; all costs considered, training of employees should bring forth more profits. Pre-service training could be argued in these terms. Extension might be viewed also in the same light.

Newer technologies exist, e.g., mechanical, biological, chemical, agronomic, etc. which have high potential for increasing the productivity of farm resources such as land and labour. Extension is a means of altering step-by-step the farmer's production processes towards the feasibility frontiers promised by new technology. But the conditions in agriculture are much different from those in industrial manufacturing, where raw materials and other inputs are conveniently brought together under one roof. On the other hand, the manufacture of food and fiber via the biological and climatological process necessarily requires its spread over wide surfaces of the earth, and needs much time, while production units are scattered and are less amenable to organizational techniques than in industry; prices fluctuate widely and unevenly; risks and uncertainty are high. Normally, the traditional farming system takes all this into account, and will appear to be the best in the long run, *unless* new factors are introduced. In a sense, therefore, the alternation of the production process is likely to be extremely difficult, demanding sophistication and skill. Much more, the project case studies indicated acute scarcities of farm inputs and supplies, etc. which inhibit the application of the skills that the farmers acquired from the extension agent. In such cases, skills that are unutilized provide only symbolic rather than tangible benefits to the farmers; the production of skills via NFE programmes would be an exercise in futility. Extension projects which are fascinating pedagogically but without the complementarities mentioned would come to naught.

In the search for analogs (to profit), extension projects could very well separate pedagogical objectives (learning outcomes) from productivity objectives (increased farm profits and incomes); and in the absence of visible increases in productivity, extension agencies might hang on to pedagogical profit-analogs as their reason for existence, inevitably also for the NFE programmes and projects that they undertake. Curiously, social organizations in the non-market sector tend to maximize their survival rather than their productivity. Without the productivity analogs, NFE projects and programmes would likely outlast their usefulness; NFE programmes

would tend to acquire the features, e.g. the sluggishness to respond to changing situations, that formal schools enduringly have.

In industrial and commercial enterprises, it is in the intimate association between training and the production process that the benefits of training are captured, either by the firm and/or by the trainee. It is also in this very same principle that the private (the farmer) and social (the entire society) benefits of extension projects are internalized. Extension projects, therefore, should be considered hand-in-hand with provisions for other production factors, such as farm supplies. It is for this reason that extension projects utilizing integrated approaches are of high potential for the SEAMEO region. One of the SEAMEO Project Centres leads in action-research in this direction.

E. TRAINING FOR CO-OPERATIVES¹

Generally speaking, no or little place is given to rural co-operatives in the curricula of formal agricultural schools and colleges, the main providers of extension personnel in the SEAMEO countries. This means that they do not sufficiently emphasize this important aspect of rural development, since they have been trained mainly in agriculture in the narrow sense of the term. This also implies that agricultural extension work is not or not enough co-operative movement.

Another point has also come out of the experience of a number of Asian countries: the difficulty for pure credit co-ops to function well. If credit is not linked with production and marketing, there appears to be little chance for the credit co-op to survive, since the right amount as well as the time when the credit is required are difficult to estimate correctly for the co-op personnel. Moreover, the money may be used for other purposes, so a multi-purpose co-operative, providing, preferably in kind, the various necessities such as HYV seeds, fertilizer, insecticides or whatever is required, and organizing, along with the farmers, marketing and transport facilities, is a far better proposition.

In some countries, however, this dichotomy has nearly resulted in killing the whole co-operative movement, since, for instance, the Ministry of Agriculture wanting to establish multi-purpose Farmers' Associations (of the type which works so successfully in Taiwan) competed with the narrow credit co-ops to the detriment of both. Therefore, in organization and training, the broad purpose of rural development including several aspects of rural life should be the acknowledged purpose which will then lead to a co-ordination of work of various services instead of competition.

Discussing the situation country-wise, it can be stated that *Indonesia*, although there existed officially a number of training institutions for co-operative personnel, is now using the services of three ILO experts to set up a real training system, since the existing centres were actually not dealing properly with the subject matter as such, but were not much else than secondary schools. KUD (a large rice growers co-op) has just started (15 April 1974) good training centres, having a double purpose: the future KUD officials will learn the details of rice cultivation, but also deal with the problems of co-operative production, credit and marketing.

¹The Team gratefully acknowledges the oral information it received from Mr. M. von Muralt, expert in co-operatives, ILO Regional Office, Bangkok who, however, should not be held responsible for possible errors in this section.

Besides, the Friedrich Ebert Foundation is supporting a successful training centre for co-operative personnel in North Sumatra.

In a different sector, that of "transmigration" (internal migration, particularly from Java to other islands), the policy has changed favorably: formerly the purpose was to persuade as many farmers as possible to leave Java, with the result that available resources were spread too thin. The rationale behind this was the hope that the particularly difficult demographic situation would improve by migration. However, a long history of efforts—before and after Independence—has shown that the number of migrants from Java was never even 100,000 in a single year and, moreover, that it was no exception that those who returned to Java outnumbered the migrants leaving the island. Gradually the authorities are now changing their views, and migration is more and more considered as a means of developing parts of the Outer Islands. The assistance now provided to each farm family migrating to one of the development areas is more substantial, including support to settlers' co-operatives and explaining to them how co-ops may help to improve living conditions.

The situation in *Khmer Republic* at present does not allow much work to be done in training for rural co-operatives, while this type of education has not progressed very far yet in *Laos* either. However, the Lao Credit and Savings Co-op started a few years ago small-scale but well-organized training efforts supported by the Agricultural Development Organization and USAID, mostly for organizers of agricultural production co-operatives.

In *Malaysia* a Co-operative Training College (at Petaling Jaya, Kuala Lumpur) organizes courses of different type and duration for various kinds of co-operative personnel, particularly managers and accountants. The training appears to be good, although perhaps a little too theoretical and not fully geared to practical needs. Besides this College, there are youth and settlement training courses which include training for co-operative organizers: settlers on "new lands" are required to become members of a co-op, which indeed is the most logical form of organization in such circumstances when the farmers, having moved to a new area, cultivating—in many cases—new crops, missing the social control of the village community, will be happy to have this co-operative to provide them the guidance and security they particularly need in these difficult conditions. This is given via the Federal Land Development Authority (FELDA, Kuala Lumpur) by training provided during the first few months when the new settlers have to learn how to cultivate oil palm and rubber trees. This training programme is again connected with the membership of a multipurpose co-op.

Another point of interest in Malaysia is the law requiring *all* co-ops to spend 2% of their income on training. The College mentioned above is financed for the greater part out of these funds which are rather important since the urban co-op movement in Malaysia is strong and, therefore, makes a considerable contribution.

In the *Philippines* the Agricultural Credit and Co-operative Institute (ACCI in The University of the Philippines at Los Baños) is providing high level training for co-op managers and, in general, it is a trainers' training institute. However, since the accelerated implementation of the Land Reforms which coincided with the introduction of Martial Law, a pre-co-operative institution, Samahang Nayon (Barrio Association) was created all over the Philippines with a staff of 2 500 government employees, selected and trained to set up, train and advise the local Samahang Nayon. These 2,500 staff members had received a series of courses (partly before, partly in-service) to a total of 3-months. In their turn, they organize the *compulsory* training

of altogether 40 weeks of the members who are admitted as such only after a two-week initiation course.

Since the Samahang Nayon is the organizing arm of Land Reforms and has inter-alia the task of collecting the yearly payments due by every farmer having received land via the Land Reforms Legislation, it is in the farmer's interest to join and follow the course which is excellent, practical, down-to-earth and just providing the knowledge the farmer who has to make the difficult transition from semi-dependent tenant to independent, decision making cultivator, would need in these circumstances. The Co-operative Training Manual (1973) is very good and follows the programmed learning method. It provides multi-purpose training from rice cultivation to hog raising, from co-operatives to farm management.

A Samahang Nayon is a farmers' association having the features of a pre-co-operative. Only after 3 years can a Samahang Nayon be registered as a full-fledged co-op, provided the training of the members has been successful. The training is monthly evaluated by ACCI.

Obviously, the purpose of this rather rigorous system is to avoid the common drawback of lower production after the introduction of land reforms when the newly independent farmers have not yet learned to make decisions, to find credit, and to take full responsibility. It will be interesting to follow the further development of this fast expanding movement.

Singapore has no training scheme for co-op members, but there exists in-service training for personnel of the larger co-ops. The co-op movement as a whole in Singapore is essentially an urbanized one. National Trade Union Congress has organized co-operative supermarkets, insurance companies, dental clinics, etc.

In *Thailand* the Co-operative Training Centre (Bangkok), supported by the Ministry of Agriculture and Cooperatives, used to be the only training institution. However, this task is now gradually being taken over by the (semi-government) Co-operative League of Thailand. The training is mostly confined to managers, accountants and co-op staff in general, although some work is also being done, via this staff, to train the members themselves. However, the type of training provided by the Centre as well as the League, is rather too theoretical while the total personnel trained is not sufficient.

The situation in *Vietnam* rather resembles that in Thailand: training for different types of personnel is provided, perhaps a little more theoretical than would be desirable. However, here also instructors are trained who have the task to organize courses for actual co-op members.

F. RECENT TRENDS AND PROJECTS OF HIGH POTENTIAL

With the rediscovery of NFE as an old resource yet useful to solve new problems, there seems to be a bandwagon for creating and trying various configurations of activities in training and education.

There was the period which could be characterized as the transfer of programmes and projects from the advanced countries to the settings in developing countries. In some countries where they were established for the first time, the approaches to extension services, and even such notions as felt-needs, client-systems, adoption stages, etc. were in many cases reminiscent

of what was taught in the land-grant colleges, U.S.A. The notion that farmers lack the modern know-how and that teaching them such know-how solves the problem of low productivity was pervasive. It was thought that the success stories of American agriculture are replicable in other cultures and economic conditions. It was a case of institution transplanting which was not too successful in Latin American¹ as it might be said also in certain SEAMEO countries.

As these countries gained experience and some degree of maturity to examine what things were successful and what were not and why, many of the transplant practices were modified; trials of new creations are increasing in tempo, receiving as much stimulation from the extreme necessity to innovate as from the technical backstopping provided by the more and more competent national university research groups. Some of these important developments are mentioned below.

Youth Training for Farming

Considering that the unemployed or underemployed out-of-school youth is a serious problem in SEAMEO countries, NFE programmes for this clientele would have a very high potential for wide application in the region.

A number of SEAMEO countries have programmes which train youth for farming. It is thought that if a country wants to modernize its agriculture, training in modern farming must be provided, particularly to the younger members of the farm family who will eventually replace their parents. The experience of these countries in these programmes, however, has not been very pleasant. Only a handful of the graduates, if any at all, went back to farming.

In response to the aforementioned situation, some innovative training programmes have recently appeared in the Philippines and are the subject of action-research activities, namely, (1) vocational education for out-of-school farm youth (e.g., Project VEOSFY and Social Lab's Training for Older Out-of-School Youth) and (2) the Barrio Development Schools. Essentially all these programmes have similar purposes i.e., training for farming, but differ in content, duration, and mode of delivery. In their present development, the projects may be described briefly as follows:

1. Training for Older Out-of-School Rural Youth (Project TOOSRY)

The project is an action-research which develops a two-year terminal training course for out-of-school farm youth, with emphasis on mastery of technical skills and the development of managerial abilities. The trainees are required to spend a major portion of their time in well planned home projects to be carried out in two years under the close supervision of the agriculture teacher. Production loans are made available to finance the projects of the trainees. The idea is to assist (unemployed/underemployed) farm youth to get started and established in farming while undergoing training.

2. Vocational Education for Out-of-School Farm Youth (Project VEOSFY)

This is an action research project designed to develop and conduct a pilot vocational training programme for out-of-school farm youth in order to gain more understanding of the

¹ cf. Rice, Extension in the Andes, Washington, D.C. AID Publication, 1969.

out-of-school youth and his family, and to discover and develop effective approaches to training these youths. The pilot training programme includes training in agriculture (primary emphasis), homemaking, handicrafts, and related trades, and citizenship training. The training methods include group instruction, instructional follow-up through home farm visits, supervised farming and group projects.

3. Barrio Development School (BDS)¹

As an action-research project, the Barrio Development School at Masaya Bay, Laguna, Philippines, is undertaken to determine whether a non-college preparatory secondary school programme is possible in a village setting, to determine the extent to which it can contribute to the socio-economic development of the clientele and the village, and to study the sociological processes involved in the introduction and operation of the school project itself. Although the Barrio Development School is a formal secondary school programme, it would seem to be of interest to discuss it briefly, because of its implications for the non-formal system.

To stem the tide away from college and from non-agricultural jobs, if not from unemployment, the Barrio Development School—using an existing school building—was launched as an experimental project. It is intended specifically for farm youth who want—or are compelled—to stay on the farm rather than for those who seek the seductive city lights. The approach assists the farm youth to make a beginning and get established in farming by closely supervised projects on their own farms, i.e. by means of heavy dosages of technical backstopping and production credit. Credit and saving education is emphasized, and students are aided in getting loans. To balance the education programme, general education subjects are added to the curriculum spread over 4 years. The method of organizing practical work on the home farms makes the school inexpensive since any farm machines to be demonstrated are borrowed from the parents. Probably to discourage college-bound students from participating in this educational project, the curriculum is considered not college preparatory; nor one which prepares students to take the national examinations for college admission. Going to college of further studies is one of the reasons why few graduates from other agricultural schools ever return to the farm.

To draw conclusions on the success of this project would be premature. However, a few observations even at this stage might be made. It is evident that the project follows the notion that school programmes (curriculum) should be fitted to the needs of the learner; basically, it is designed for those who, even at an early age, have decided to stay on the farm. And it is indeed an excellent idea. But behind such an idea is the notion that a different high school curriculum must also be designed for those who want to go to college and/or to the city; in brief, two different curricula for two different notions, i.e., the rural and the urban, or one for the peasant and another for the elite. Decidedly for the farm youth, it is better to have some kind of schooling rather than none at all.

However, few people who are familiar with the effects of unequal schooling on income inequality would agree to the fundamental principle behind the BDS project in spite of the fact that they, too, are aware that schooling is not a complete solution to the reduction of

¹Excerpts from the Seminar-Workshop Papers by Dr. T.E. Contado on the Project Implementation for Barrio Development Schools, Continuing Education Centre, University of the Philippines at Los Banos, College, Laguna, Philippines, February 18 to March 1, 1974. Dr. Contado is Director of Project BDS.

worsening income inequalities among peoples and among nations. Designing educational programmes in order to nicely bottle-up people on the farm immediately puts a constraint on factor mobility, inhibiting the movement of trained human resources towards places of their best use. Further, barrio high schools – of which the BDS is a variant—are necessarily small and will be unable to capture the effects of complementarity of different highly qualified teachers of general education subjects which larger schools can afford at low per student costs.

The plausible solution that BDS offers to the problem of why few agricultural high school graduates return to the farm is quite fascinating, but it ignores the brutal economic and demographic fact that the farming population has always been a residual population in terms of schooling. It is tantamount to solving a non-educational problem by an educational solution, of striking at the symptoms rather than the causes. Nevertheless, the BDS as an action-research project presents exciting possibilities of documenting the socio-economic processes and of understanding better the interactions between the school and the community in the adoption of an educational innovation such as the Barrio Development School as a “hybrid” between the Vocational Agriculture High School and the Barrio High School.

The merit of the “non-institutional” (non-formal) approach to training youth for farming was already discussed lengthily by G. Cameron Clark.¹ He cited the obvious advantages of young-adult, non-institution-based vocational agricultural education programme, given at the right time, i.e. when the youngster found – to his regret, perhaps – that farming should be his future.

1. Participants are highly motivated to learn (socially and psychologically ready);
2. An immediate pay-off on educational and material investment in the farm for increased agricultural production;
3. It strikes at a critical problem area of “fitting in” youth into established adult farming society;
4. Highly economical teacher-student ratio (1:60 to 80 vs 1:10 to 15 in regular vocational agricultural schools);
5. Educational investment is insured as it goes only to literate youth already committed to farming, and on land;
6. Provides the trainee with basic understanding of scientific principles governing farming as basis for continued self-learning (less reliant upon extension in the future);
7. Teaching tends to be more relevant and of a “problem solving” nature;
8. Large numbers can become involved in agricultural development at a relatively low unit cost.

¹G. Cameron Clark, “A Non-Institution-Based Approach to Vocational Agricultural Education in Asia” in *Extension: A Review of Selected Developments in Extension and Rural Youth Activities*. FAO, Rome, 1971, p. 52.

The formal school solution to the problem of training youth for modern farming is obviously clumsy.¹ It is firstly an expensive enterprise; secondly, once established it is hardly disposable even if its achievements in terms of its purposes are wanting, particularly so if such projects are heavily subsidized by external sources of funds.

Given the foregoing considerations and for the purpose of training youth for modern farming, the NFE solution seems to be decidedly better than the formal vocational school approaches. Even at their present stage of development, it appears that projects TOOSRY and VEOSFY have exceedingly high potential for wider trial in the SEAMEO region.

But it is not only in the Philippines that efforts are made to solve the problem of the young farmers. Indonesia reports an experiment which gradually grew from an administrator's concern for the young generation in his district: Jombang (East Java), while in Thailand and Vietnam equally interesting activities are being undertaken which deserve our attention.

In 1967 the Jombang experiment was not actually undertaken as such, but rather as an effort "to do something" for the young people in the district.² Therefore, there was no assistance from outside sources when the Bupati (Head of the District) decided to tackle the problem of youth unemployment combined with lack of skilled manpower resulting in urban migration. By bringing together the Boy Scout movement (Pramuka) and the leaders of all the Welfare Services such as schools, agricultural extension, health, cooperatives, etc. a committee was set up with the purpose not only to provide training in many fields but also to put it into practice. The idea of service as practiced by the scouts was applied more generally and, coupled with the community and mutual help system traditional in Indonesia, it appeared possible to achieve quick results.

Under the guidance of the various specialists vegetables were grown; animal breeding—including fish—was undertaken; preservation and processing was taught. But one also started making farm tools, simple house construction, small-scale irrigation, road building, various repairs and maintenance work, health practices, first-aid, family planning concepts were discussed, while cultural education—gamelan and angklung (bamboo orchestra) etc.—was not forgotten either. Finally, for those who had dropped out from school literacy and remedial courses were organized, while those who had some further education could be trained in the offices of the various co-operatives where they eventually were put to work.

The main feature is that there is a continuous effort to make the training immediately effective: poultry and vegetables are sold, people pay to get their radio sets or bicycles repaired. The main point, therefore, was to detect the areas of training where there were immediate economic possibilities, and to organize all this which has largely been the art of the

¹For an extended discussion on the subject, see Philip Foster, "The Vocational School Fallacy in Development Planning" in C.A. Anderson and M.J. Bowman (eds.) *Education and Development*. Chicago: Aldine Publishing Co, 1965. Also, Foster's, *Education and Social Change in Ghana*, London: Routledge and Kegan Paul, 1965.

²The following summary is based on a description prepared by the International Council for Educational Development "With extensive assistance from Mr. A.N. Lubis of IKIP (Teachers' Training Institute), Jombang and Mr. S.J. Woodhouse, a member of UNICEF's staff in Indonesia": *The Comprehensive Youth Education Programme in Jombang, Indonesia* (mimeo).

Bupati. Still to make a boy start work as an apprentice in a rice mill or a co-op office was largely due to the "good deed" ethic of the Pramuka, while the co-ops provided funds to start shops when the boys could begin independent work.

There has been a Body for Guidance and Development Education, headed by the Bupati, which is a genuine rural development agency. The total budget over 1967-73 was reported as the equivalent of about US\$27,000, and more than 1,000 youngsters were trained in the whole period. Of course, this is not much for a District of some 800,000 inhabitants, but the effort would seem to be admirable, since it is directly practical.

However, it has its clear limitations. Not only is inspiring leadership required to achieve such a willing co-operation of all the services available and is the result largely to be attributed to the free training provided by the officials concerned in their leisure time, but it also appears that only Pramuka members, not the really poor youngsters, benefited from the project. Moreover, the economy of the District as such has obviously not changed and detecting needed and economically feasible training opportunities is, therefore, not an easy task and has its obvious limitations. One has also to consider the competition between farmers and tradesmen.

At present the Bupati has the responsibility for extending his project over the whole province which will be the actual proof of its feasibility.

Another Indonesian project should be mentioned in this respect, described by Diana Fussell and Andrew Quarmby.¹ The idea is to insert 6 months of village work into the study period of each student at a point of his study when he is deemed to be mature enough to do so. Indonesia has an acute shortage of extension personnel and cannot afford to appoint even more government workers, so the purpose is to supplement village development personnel at very low cost, varying probably between the equivalent of US\$35 to 50 per student and per month. This figure includes the expenses for the upkeep of the student (\$12 to \$20), as well as the supervision, administration and evaluation of the project. It does not include the cost of any supplies to be contributed by the village.

It is stressed that this experience of six months village work will be extremely beneficial to the student who usually has only very vague ideas of what village life really means.

In 1971-1972 three universities carried out pilot projects with satisfactory results, so much so that the President of Indonesia decided to make it a compulsory service. At present approximately 400 students from 13 universities spread all over the country, are carrying out a further experiment.

Usually one or perhaps two students will be assigned to a village, and their work is not necessarily connected with their field of study: they are expected to work as generalists, work in the village at whatever project that seems useful. The student will often stay in the village Headman's home which will give him a useful introduction. He may help him to put the village administration in order, collect village statistics, but may also take the initiative to improve a

¹Kuliah Kerja Nyata (Indonesia's National Student--Service Scheme), Nov. 1973 (mimeo). BUTSI itself has submitted a most valuable reply to our questionnaire, but the new project, extensive as it is, may supplant most of BUTSI's work.

road or a bridge, a well, or the village school, etc. Here again, appeal is to be made on the traditional village community service. He may demonstrate the use of fertilizer, the advantage of poultry or fish breeding, girls may give courses in dressmaking or home economics, etc.

Technical knowledge is not expected—unless the village worker happens to be an agricultural, medical or engineering student but he has had a short training (how short was not mentioned), and can ask advice in any case from the technical service concerned. However, they should not only advise, but they are expected to work along with the village people and, if possible, find somebody in the village who, after his departure, can take over.

The students' important role would be fostering co-operation between the services, as soon as they have discovered in a simple survey what the problems actually are. Here again, no question of any "village research"—as some universities were inclined to carry out. Just an orientation to know what should be done, and what is possible to do. The authors feel confident that, on the basis of present experience, this work can be not only extremely useful to Indonesia's many thousands of villages as every year some 23,000 students will be available, but perhaps even more to the students who can take initiative, would understand inter-disciplinary co-operation and learn a part of Indonesian culture unknown to them.

This programme is integrated into intra-curricular activities and is intended to serve three purposes:

1. As a feedback for the University Curriculum;
2. To make students more familiar with farm work, village development and village life;
3. To help the farmers with reasonably low rate payment but with high quality manpower in managing and programming the development of the village.

The present project is a success: with a few hundred real volunteers who only seldom actually worked for more than 3 months. Can one expect students to do something really useful in a compulsory service? The supervision of 25,000 students would become a formidable task.

Another programme that should be mentioned here is BUTSI (Board for Volunteer Student Service). This programme started about four years ago, and up to this time has recruited about 850 young university graduates.

Cross sectoral approach is used in this programme rather than sectoral one, since the scope of activities covers many kinds of activities existing at the village level: agricultural, vocational/technical as well as managerial. That is why this programme appears in the Rural Development Chapter as well as in the Vocational/Technical Skill Development chapter.

The programme covers two steps of activities. The first step is to train the volunteer graduates who later on will be assigned to go to villages. The second step is the work in village itself. (See further in BUTSI case in Part II—Project Summaries).

In Vietnam, a youth-oriented project in the more conventional style—the previous one, after all was primarily set up to help extension work and not to train students—is the 4-T Competition in HYV Farming, Long An.

The purpose of the project was to promote the use of a HYV of rice which was carried out by organizing a competition among the members (12-17 years old) of local 4-T clubs. It started in 1967 and was yearly conducted among approximately 60 competitors. Each should have available demonstration site of 1,000 m² (one tenth of a Ha) to show that HYV gives a better yield than the local variety. A jury was established to judge the results and to award the prizes. The Educational and Information Services co-operated with the Agricultural Service (which conducted the project) to provide the necessary information about the plan, while the local administration also provided its support.

The competing members were shown how to select seeds, how to plant seedlings, what fertilizer should be used and when to apply it, how to protect the rice plant and finally how the rice should be harvested and stored—a full circle of model rice production. Moreover, double cropping was introduced which means that several demonstration plots became available in a number of villages where the farmers could see how the boys carried out the work and what were the results.

The 4-T members were meanwhile trained during the 8 months of the project's duration, 10-12 hours per week so that they could become cadres themselves, and guide their local 4-T teams, learn how to write reports on team activities and do simple book-keeping. Films, posters and printed materials were used in the training which was said to have produced 90% results.

A very similar project for out-of-school boys who also had to work on their own plot of 1,000 m² was reported from the Philippines with 80% good results, but there was here no competition involved. However, in this case the boys were also trained in farm management, a most useful subject.

Such projects may not show anything particularly surprising, but the Vietnamese one would seem to have the great merit of, by its competitive nature and official support, drawing general attention to the importance of using better seed varieties and following the best methods and techniques. One seems to have succeeded in demonstrating that rice farming can be interesting if done well, that it then produces more, that good training has visible results, while the boys themselves must have felt proud to be the centre of interest, not less than their parents and neighbours who, after such demonstrations, may become convinced of the value of the method.

The competition approach not only has the advantage of making youngsters really do their best, as there are prizes and honours involved; it also exploits the play element, always an important factor in life, and not only of the young.

It should be stressed that youth clubs may be particularly helpful when they provide combinations of various activities, work and play. Too often development agencies are only concentrating on work and serious messages, while play, sports and entertainment are completely neglected. Obviously, an extension worker is not expected to be a football coach, but it would do no harm if he showed some interest in recreational activities which would make it easier for him to deliver his actual message. Many-sided youth clubs, offering a combination of activities should, therefore, be supported to make village life brighter and more interesting to young people who otherwise would seek excitement in town. And, as it is likely that the more active youngsters having initiative and spirit would be the first to leave, this would mean

a loss of human quality. If there is a youth club in the village with competitions, games and sports, they will play their role at home and would probably not leave the village.

Training and Extension for Adult Groups

Complementing the youth training programmes for farming are two major kinds of integrated approaches, mainly addressed to adult farmers. Their importance is supported by the observation that immediate increases in agricultural productivity and improvements in rural life are likely to be attainable by adult farmers who are already cultivators and are likely to remain on the farm rather than by the youth whose commitment to farming is not yet very stable. The training usually provides not too many problems, since it is done in small groups, where the transfer of knowledge and skills can be controlled relatively easily. In general, we shall, therefore, concentrate on extension in which usually larger, unorganized groups are the target although certain training programmes will also be discussed.

Indirect and Direct Approach

Generally, both approaches, the direct and the indirect, are followed in the countries studied. The direct approach is obviously excellent, if it is possible for the extension official to reach his clientele personally. Examples are the fishery project in Singapore, where fishermen have the opportunity to work on a modern, well equipped vessel and so learn the more sophisticated methods and techniques; the training of managers of farmers' association, etc. which are generally relatively small groups.

In certain cases the direct approach is also followed when the groups as such may be large, e.g. rice farmers, but the training is purposely limited to a small number, or area, either to test a new method or seed variety, or to provide more intensive training.

In the case of large countries with millions of farmers it is hardly to be expected that extension workers could be appointed to serve a small number of farmers – say a few hundred – and here the indirect approach is often followed. In a nation-wide extension service like that of Indonesia or Thailand we find high extension worker-clientele ratios, one to several thousands,¹ which would obviously not permit direct useful contact with all the farmers. From one district (Klatan, Central Java) it was reported that the extension technician concentrated on 20 "contact" farmers in different villages, who, in their turn, had each selected 20 "progressive" farmers who were to share the information with the contact men. Finally, the progressive farmers were supposed each to influence 10 other farmers, so that – if every thing went well – the final result would be $20 \times 20 \times 10 = 4,000$ farmers reached. This is probably somewhat optimistic, but it is perhaps the only way to cope with the very large numbers, needing farm information. Still, these 4,000 farmers were living in only 3–5 villages in densely populated Java, which means that any farmer who wanted direct contact with the technician, would be able to establish that.

A similar system is followed in the Philippines by the International Institute for Rural Reconstruction, Silang, Cavite. Here a "farmer-scholar" programme was developed for farmers who, however, are trained at the Institute, after which they are expected to spread the message.

¹The statement made by Fassell and Quarumby (op. cit.) that there should be only one per kecamatan (sub-district) of approx. 40,000 inhabitants is not supported by the questionnaire replies received, indicating one technician for 1,000 to 5,000 farmers.

Thailand also reports concentration on leaders of Farmers Groups, who then explain the newly given information to their members, finally covering 3,500 or 4,000 farmers. One report from Vietnam also mentioned work via village or hamlet committees, and a similar system was reported by Laos, where veterinary personnel closely co-operated with trained farmer-leaders, but no precise ratios were given.

Obviously, in all these cases the use of mass media is clearly helpful, and agricultural services indeed generally use radio and press, which will be discussed in a separate chapter.

Ratio Extension Worker-Clientele

It is interesting to note that the ratio was relatively low in the majority of cases reported. Reference is made to extension programmes only, since training programmes always have a low ratio. However, out of the 22 extension programmes reported by the SEAMEO countries, 14 were said to have ratios of 1,000 or less, and 6 cases even 250 or less.

Much depends on the local situation, type of farming, density of population and the objective of the extension service. For instance, one extension agent for 1,000 farmers in 10 rice growing villages (Khmer) may have a harder job than his colleague in Java who has to look after 4,000 farmers in 3 villages, although it is clear that none of the two can manage direct contact with the whole clientele.

Results

It is obviously difficult to say what is the actual achievement of the extension work. The questionnaire asked for results, either precisely computed as the result of a study, or estimated by the Service. As could be expected, very few reports indicated that the percentage of positive results was the result of a study, although the percentage mentioned in the Vietnam youth competition will certainly be accurate. The two reports mentioning "study" as the source of results information were both from the Philippines: the out-of-youth training programme and an experiment reported by the Social Laboratory which is clearly not a regular extension project, but deserves special mention for the emphasis laid not only on tangible results, but especially on changing the attitudes of farmers.

The Social Laboratory is a joint project of the University of the Philippines College of Agriculture (UPCA) and SEAMEO Regional Centre for Graduate Study and Research in Agriculture (SEARCA). To achieve the change in attitude and thus fruitful co-operation between the government services and the local people, the Social Laboratory - basically a research institute which works through practical activities - tries to explain to the village people the advantages and possibilities of an all-round farmers' association.¹ When that is understood, and such an association has been established, the farmers are encouraged and helped to use their initiative in improving the village situation. One extension worker, himself first trained by the Social Laboratory, is assigned to two villages, each having an Association of about 50 members. Then the training, discussions and demonstrations take place, in which the purpose is to have the actual work done by the Association members themselves in their plots, so that they would not regard the demonstration plot as something completely foreign to their own experience.

¹This is an objective - or sometimes even the major objective - of several extension services, e.g. in Malaysia and Khmer Republic.

The identification with the innovation is the key to real adoption of a new practice which can only be achieved in the way of personal involvement with the demonstration. The Social Laboratory also followed the integrated approach: a HYV of rice combined with appropriate cultivation method and the necessary loans, and all this supported by the farmers Association. It appeared that 60% of the members had been able to double their yield from 50 to 100 cavans/ha. (1 cavan=44 kg.).

The estimated results are obviously some sort of self-evaluation of the service concerned, but the fact that the percentages given by one service concerning different objectives often showed wide variations would seem to indicate that the estimates were serious. For instance, the Tasikmalaya (West Java) Centre for animal husbandry gave 60% for better animal production, but only 30% for improved breeds.

On the other hand, the agricultural extension service reporting the use of the "multiplier effect" was probably not precisely informed about the precise results, estimating at 60% the use of HYV, fertilizer and pest control in rice cultivation indiscriminately. In another Javanese province on the contrary, sharp differences were estimated to exist in the results of various objectives: improved rice cultivation and farm management went well (80% and 75% respectively), but farmers associations did not really prosper (20%).

The Laos project mentioning the use of farmer-leaders as a link with the extension personnel, gave also rather different rates of success: 30% in poultry, 60% in pig raising, but only 15% in cattle.

The Khmer extension service reported ten times as much success in the use of fertilizer as in that of HYV and improved seed beds in rice cultivation.

Generally, it is not possible to say whether there is any correlation or not between the technician-clientele ratio and the success of the work, since the number of cases where both are clearly indicated is too small to draw any conclusion.

Projects with Special Features

1. One project may be mentioned because it succeeded in combining all the resources in the area in a pilot project.¹ The purpose of the extension project was to determine the effects of new rice technology in practical farming, using "a minimum number of highly skilled, action-oriented farm management technicians." The goal was to increase rice yields to an average of 99 cavans per ha. The project was located in Balacan, initially covering a not mentioned number of farmers cultivating 2557 ha. Since farms are small, there may have been 1,500 farmer. In any case 11 extension technicians were trained for 3 weeks to acquaint them well with the special techniques required by this type of rice. All available communication media were used, including posters, banners, radio broadcasts, leaflets etc., to draw attention to the projects, not only of the farmers, but also of rural bank officials, local administrators, etc.

¹See Project Review, The International Rice Research Institute, (IRRI), Office of Rice Production Training and Research, the Philippines, February 6, 1973.

The barrios (villages) were selected on the basis of interest shown, and 5 or 6 barrios were assigned to one extension official who was provided with a motorcycle to make him more mobile and effective. Also extra pay was given since they would have to spend over-time.

The farmers who were willing to join the experiment were provided with loans up to P 700/ha. in three instalments, and whenever possible given in kind.

The IRRI report is confined to only one cropping season (1972 - 1973), but it appears that 90 out of 100 ha. cultivated in the new way gave a yield of over 90 cav./ha., while the normal yield in that area varied between 35 to 65 cav./ha. In terms of money: a farmer cultivating 2 ha. made P 3,000 net for his 180 cavans.

2. Another programme has the special features of having a wide range of objectives as given by the Thailand Rural Reconstruction Movement. The project described is situated in 30 villages Chainat area, with approx. 10,000 farmers. The objectives are 1) to improve rice cultivation 2) to introduce second cropping 3) to promote home plot gardening 4) to assist animal husbandry, and 5) to promote fish pond culture.

Obviously, these various objectives require a number of practical measures to be taken and advice from more than one specialist. Promoting HYV of rice goes hand-in-hand with showing modern cultivation techniques and the use of fertilizer and pesticides. The assistance to animal husbandry requires vaccine to be available and teaching about diseases of various animals, particularly swine, cattle and poultry. Horticultural work and fish ponds again need different specializations.

There are 15 extension workers, a number deemed to be large enough (one for 100 to 200 families) although their training is not sufficient. They first follow a one-week orientation programme, then a 3-month volunteer course, followed by a 3-month trainee course. Having completed this, they are considered for extension work. The project experienced difficulties in selecting the right type of persons, having sufficient insight into the nature of their work, while those responsible for the training may not have adequate abilities according to the project.

Although the methods used for extension: demonstration, discussion and asking some farmers to apply the new methods giving them special advice would seem useful, the wide variety of innovations - requiring probably too much specialization on the part of the extension personnel - may be a drawback. However, no estimate of the results was given.

It should be added that the project used a number of mass media: films, newspaper articles, various pamphlets, posters, etc., and the most pressing difficulties were not in training of personnel, but in funds and water supply needed for the agricultural part of the work. However, immediately after that came the difficulty of changing people's attitude and their lack of knowledge of agriculture (as well as their lack of reading ability and arithmetic).

3. A third programme may be mentioned, since it concentrates altogether on *additional* earnings of the farmers. This refers to the Fruit Rehabilitation Project in Malaysia. It is felt that in this way the farming population could not only benefit by a better balanced diet, but they could sell their surplus produce and decrease fruit imports (and may eventually even export fruit), while finally farm unemployment would be reduced, which again would decrease the migration of unskilled rural workers to urban areas.

The project concentrates on rice, rubber and coconut farmers and attempts to con-

vince them of the advantages of growing fruit near their homes. Demonstrations of horticultural techniques are given on selected farms followed by group discussions and the distribution of leaflets and newsletters. The demonstrations seem to be particularly effective, and the farmers are encouraged to keep in touch with such farms to see the effects of weeding, manuring and pruning techniques in the orchards.

It was not felt that the generally low level of school education was a real hindrance in explaining the various techniques, since much could be done by simple demonstration, e.g. the proportions of different mixtures of fertilizer could be demonstrated by the quantity of each to be mixed. Moreover, the leaflets actually contained more pictures than words. There is one extension worker for about 50 farmers in 3 villages. The report states that the level of training is sufficient—they are graduates of a 3-year course in the Institute of Agriculture and receive further in-service training—but their number is not. This may seem surprising as such a low ratio is seldom observed, but it should be added that they have other tasks as well, such as providing farm supplies, assisting in marketing the produce, strengthening the farmers associations, collecting farm statistics, land inspection, co-ordinating other services' activities (health, welfare, etc.) for the benefit of the farmer, all excellent and needed work, but leaving only about 30% of their time to educational work. Still, the ratio would seem to be excellent as compared to most other services.

The report estimates that 20% results are obtained in the first objective (increasing and improving fruit production) and 10% in the other two (substituting fruit imports and reducing rural unemployment).

Extension and Research

It is not pretended that the above projects or programmes are particularly successful, well organized or in other respect worth imitating. The various projects were mentioned because they seemed to have certain particular features showing the variety of projects and the different ways in which extension is carried out in the SEAMEO area.

Although there are obvious weaknesses, extension is the link between research and practice and as such it is dependent on close relations both with the producers and the eventual consumers of research: the universities (or research institutes) and the farmers or fishermen.

Extension and research are highly rewarding, in fact, several studies have shown that research and extension are one of the best investments, producing, in sheer terms of money, returns of 35% or 40% per year on the average, but often even more.¹ This takes into consideration the cost of failures as well as the long preparatory work.

On the other hand, it also appears that extension without national research is not really effective for the simple reason that highly successful seed varieties in one area lose much of their applicability as soon as they are moved to places with somewhat different climatological and soil conditions. A case in point is that of the HYV of rice introduced by the International Rice Research Institute (IRRI) in the Philippines, introducing the "Green Revolution." It was

¹Robert Evenson, Evidence on Agricultural Research Productivity (Seminar Paper on "Institutionalizing Research Management in Asia" Laguna, Philippines, Dec. 1973). The following discussion is derived from this paper which quotes many studies, carried out in different parts of the world, including Asia.

expected that, considering the tremendous increases in yield obtained, the food problem of Asia was now solved. Nevertheless, it appears that this is not the case, even there where HYV has been adopted rather generally.

It has been found that the beneficial effects taper off after the first 40% to 50% of the area under rice has changed over to the new variety, since it is probable that this will first be done on lands having the best conditions. Hence the need for national research institutes to adopt the IRRI varieties to the local ones, to produce a new variety which fits the conditions, is disease resistant and suits the taste of the consumers.

The author gives an estimate of the results in terms of US dollars of the rice research by IRRI, and its aftermath: from \$120 million in 1966 increasing to \$1206 million in 1970-1971, but this would have been far less if the research carried out by IRRI had not been supported by national research: this is 75%, namely 40% from national research, 35% are transfers from other national research systems, while the "green revolution" research only provided 25%.

As pointed out, national research combined with a well organized extension system will be of great service to the national economy. The money spent on non-formal education appears to be a good investment.

G. CONCLUDING REMARKS AND RECOMMENDATIONS

By collecting the threads that run through the available information on non-formal education programmes in rural development, one finds that the following themes appear prominent.

1. There is a great variety of non-formal education programmes and project or activities in the region. The various features and uses of the projects described provide resource materials for creating new designs of non-formal education that are particularly suited to specific situations in the different SEAMEO countries. It is also possible that from such features and uses, general designs could be made for urgent educational problems common to SEAMEO countries, with built-in flexibilities for modifications suitable to country-specific situations and priorities.

Recommendation. Further vigorous effort should be made to develop resource materials from the region and from external sources for designing non-formal education programmes for the SEAMEO countries, either individually or collectively.

2. Noting that non-formal education is mainly used for skill generating activities, particularly those which are production process-specific skills, and that formal vocational school programmes appear to be clumsy devices for supplying trained manpower with specific qualifications, there seems to be a strong case for emphasizing the non-formal education mode for skill training and for shifting the general education abilities mainly to the formal mode of learning systems.

Recommendation. Further studies should be conducted to explore the possibilities of re-structuring the delivery system of learning outcomes, shifting vocational skill training to the non-formal education mode and strengthening the formal mode for the development of general cognitive abilities and attitudes. It is expected that this structure should lead to dramatic efficiency gains in the use of educational

resources both now and in the immediate future. These further studies should be used as bases for national and/or regional action.

Studies, preferably of a longitudinal nature allowing to follow various groups of learners over time, should be made to confirm or reject the hypothesis that this division of tasks would indeed produce the substantial efficiency gains in the use of educational resource.

3. Due to data limitations, it was not possible to rigorously evaluate the effectiveness of specific projects submitted by the NLCs. Even if some observations were made on the likelihood that some projects could be theoretically more effective than others, yet it must be admitted that the matter of effectiveness is still a widely open question.

The way in which project objectives were stated seriously limited the avenues for empirical evaluation. It is possible, however, that evaluation of non-formal education programme could be made less unmanageable by separating the learning outcomes from the production-process outcomes before making any judgment on the total result of the project.

Recommendation. In view of the great importance of knowing the effectiveness of non-formal education programmes and projects as basis for evaluating their usefulness to SEAMEO countries, it is urged that studies to measure the effectiveness of significant non-formal education programmes be conducted. This exercise will become more meaningful if undertaken with cost studies.

4. The range of arguments for skill training and extension hinges on technology transfer from advanced countries to LDCs and technological change at the farm or village level. It was indicated that education—whether formal and/or non-formal—is only one of the necessary means to achieve such technology transfer and change.

For land-scarce, labour-abundant countries, mechanical technologies from advanced countries are less applicable; much more so technologies such as those which are biological in nature, e.g., the HYV rice. However, experience and research have shown that the latter is quite environment-specific so much so that even for plant varieties which are said to be suitable for a wide range of similar environments, supporting adaptive studies need to be conducted to modify the varietal characteristics to particular soil, temperature range, moisture, day-length cycles, etc. Technology transfer to countries which did not have their own research and experimental base has had very little practical effect, even if the extension work was carried out with strong financial support. On the other hand, a substantial number of studies in countries at very different levels of development have shown that the research-extension combination provides a benefit-cost ratio amounting to about 3, and in certain countries as high as 7, the effect being usually higher in the less developed countries when farmers have few other sources of information. This means that it is practically certain that further investment in research and extension will provide a pay-off probably not expected by governments which, judging from the admittedly limited evidence available, have not made any heavy investments in this sector.

Recommendation. Training and extension should be research-based on endogenous situations. It is even better if such non-formal education is conducted at the research station where facilities are available and could be utilized more fully by training activities, and that extension activities to farmers be done by those who were so trained there. Furthermore, the extension service should be so organized that

extension officers — making use of the mass media whenever possible — would have a chance to have more or less regular contact with their clientele. Finally, the service condition and the selection of personnel should result in attracting and keeping the right kind of men.

5. Social technology is generally cultural-dependent. Specific culture groups vary in their response to strategies to change social organizations. Extension programmes developed for say North American Wisconsin farms, are likely not to have similar successes among Latin Americans, nor among culture groups in the Far East (Cf. Rice, Extension in the Andes). Since extension utilizes social technology as much as it does of material technology, it is best that this programme utilize endogenous social science research findings.

Recommendation. Training and extension activities for rural development should seek and utilize competent advisory services of university/college social science research groups.

6. From the data provided by the SEAMEO countries it is clear that in all (except Singapore) rural development constitutes the basic problem. Although non-formal education could play an important role in helping solve this problem, it should not be expected that education can produce solutions of difficulties which are not educational deficiencies. Education cannot produce more land, nor irrigation water or fertilizer. However, research supported extension can do very much to make the best of existing deficiency situations. It will be really effective only however, if it is geared to rural development as a whole. In order to achieve this, there should be much closer co-operation between the various services. First of all, demonstrating the advantages of HYV without being sure that the conditions needed for the cultivation of that variety are fulfilled, such as the seed itself—duly tested before hand to be sure that it really provides the expected higher yield in the area concerned—irrigation water at the right time, fertilizer, plant protection, etc., will not help much. Secondly, even if this is available, but the farmer is unable to buy it since he cannot get credit on reasonable terms, little will be achieved. Thirdly, transport and marketing facilities at acceptable prices are a necessary condition, while a radio service should provide information on production problems and market prices. Finally, animal husbandry development can increase the farmer's income, provided the service concerned assists not only in breeding and marketing, but also in providing fodder which, in a number of cases, could be produced by the farmer himself, if well advised. Such a net of services will generally best be rendered via farmers' associations, co-ops, or similar institutions.

Recommendation. Co-operation between ministries resulting in co-ordination of services is needed to make extension work achieve actual rural development. Such services should include extension in agriculture, animal husbandry possibly including fishery radio broadcasts and the press, co-operative services and/or farmers' associations, public works for irrigation, roads etc., provision of the necessities for crop and animal production.

H. THE PROSPECTS

The thrust that we have been concerned is toward understanding the dynamics of NFE projects so that their usage and application will be more efficient and, of course, more effective in relation to the costs incurred and in comparison with other modes of learning systems.

This exercise is only an initial step in the study of NFE in the SEAMEO region, its nature at this stage of the undertaking is obviously very exploratory. Yet, abstracting from the variety of NFE projects submitted, the setting in which the projects were conducted, the various conditions and circumstances which lead to the conduct of these same projects, and from other information, one can sense some features which contribute to the flexible character of these projects. It would seem that flexibility permits NFE projects to seep through the various interstices of the production process, thus strengthening the association between the totality of education and its desired effects in socioeconomic development.

Because designing NFE projects is preferable to copying what is practiced elsewhere, it is felt that we should lay bare what appear to us as the fundamental elements in the flexibility of NFE. In this regard, we feel that the following should be taken as parameters for NFE designs:

1. **Specificity.** As much as possible, NFE should be geared to the production process. Skills and knowledge which are general, i.e. those which are needed by everybody or are common to many industries or crops, and those which change very slowly, and therefore, obsolesce slowly, may be learned via the formal mode.
2. **Modifiability.** The NFE learning system should be amenable to quick adjustments. This is particularly true to production process specific skills which obsolesce rapidly. Parts of the content which change slowly may be taught earlier than those which change somewhat more rapidly. In order to capture this feature, it would require a dynamic organization of the agency that is undertaking NFE. Modifiability is closely connected with specificity in that both features fit in with the modern production process in which changes rapidly occur.
3. **Divisibility.** Because of the specificity of production processes and since production units are usually dispersed over space (especially in agriculture, but often in industry as well) and in agriculture also over time, it is important that NFE should be provided in small units. This is obviously particularly important for farmers who often have certain periods of the year when there is little to do. It is through these small convenient units that NFE interacts more efficiently with the production process. To provide divisibility of NFE programmes, it is important to emphasize decentralized planning, so that skills can be learned just before they should be put into practice.
4. **Disposability.** NFE projects should be disposed of whenever their productivity and effectiveness tend to be equal if not less than their costs. In brief, NFE projects should be designed on an *ad hoc* basis. If such projects were designed in small units, they would be less difficult to dispose of when they outlast their usefulness.
5. **Economy.** NFE often can and does use existing facilities and manpower which means that the unit costs are relatively low. Even in the case of NFE personnel not having a formal teaching task—as is the case in extension services—their cost should not be fully imputed to NFE, as they usually carry out other tasks besides.
6. An additional feature should be that NFE designs can be quickly assembled to respond to urgent educational needs. However, this quick response capability is often hampered not so much by lack of physical facilities, but of suitable and well designed programmes. Therefore, it would be extremely helpful to collect and codify a library of NFE resource materials as the *software* for programme/project design and implementation.

Chapter Five

VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

As was stated in the report of the Technical Working Group Meeting convened by SEAMES, 19th July—2nd August 1972, in Bangkok, the formal school system, especially in vocational/technical training, often takes place in an artificial simulated environment and therefore has its limitations. Firstly, the formal school system is very rigid in nature. Once established, it is difficult to dissolve when it is later discovered that the school is not needed any more. Secondly, the equipment is usually outmoded compared with that actually used in industry. Thirdly, the teachers in the formal school system have little, if any, contact with industry. Finally, the formal school establishment is expensive especially for our countries' limited financial resources.

It was thought that non-formal education can be an alternative since certain forms of knowledge and skills can be imparted more effectively on the job or in real life. This chapter of the report will try to give information on significant on-going programmes in vocational/technical skill development with emphasis on non-formal education, and identify its problems as reported by the SEAMEO countries.

A. THE NATURE OF VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

Scope and Coverage

In a broad sense vocational/technical skill development is a part of the total experience of the individual whereby he learns successfully to carry on a gainful occupation. In a narrower sense it implies the existence of a series of controlled and organized experiences used to train any person or persons for a given employment.¹

Vocational/technical skill development covers training related to (1) industry, (2) agriculture, (3) commerce, and (4) other services such as doctors, lawyers, artists, etc. The term "industry" covers handicraft trades as well as power-operated industry, wherever these trades make use of a regular system of training, and techniques in operation are not simply passed on from generation to generation within the family or learned through a wholly unregulated apprenticeship. Since agricultural skill development is discussed in a separate chapter of this re-

¹Prosser and Quigly, Vocational Education, American Technical Society, Chicago, 1968, p. 2

port, we shall not deal with it here. Nor shall we discuss training usually provided in universities or other third level institutions, as required for the professions (4) and some of the jobs under (1) to (3). Commercial skill training covers both business and office training. Modern undertakings of every kind need skilled personnel for accountancy, correspondence and general business administration, as much as they need skilled production workers in the case of industrial establishments. A great many commercial occupations also require training in the handling of machines, such as typewriters, calculating and sorting machines, etc. As regards the purpose of the vocational/technical skill development, there are four stages of training, namely, training for vocational preparation, vocational maintenance, vocational mobility, and training for vocational advancement. Vocational preparation refers primarily to persons entering employment for the first time. It is, however, not a matter for young people only but it also includes such training of older women to move from house hold duties to outside employment. Vocational maintenance training aims at giving appropriate courses, when changes in occupational skill as the result of technological advancement in industries have made it necessary to retrain workers. If there is change to such an extent that the worker is no longer employable within his initial field of training even with maintenance courses, then he should be retrained altogether. Training for horizontal mobility is of increasing concern in modern society. Vocational advancement training is attempting to improve a lot of workers to acquire vertical mobility, the opportunity for individuals to move from one level to the next according to their capacity.

Relation to the Labour Market

Of course, the primary intention of vocational/technical training is to provide skills which can be used. Unfortunately, there is no automatic relationship between such training and the placement of such trained persons in the labour market. There are many factors involved in the creation of employment, and it would be a bad mistake to assume that new industries would be created by making available workers trained for such industries. Economic problems cannot be solved simply by educational measures.

However, if there is the economic opportunity to establish a new industry, it will more easily become a reality when trained personnel are available, or such personnel have some basic skills so that they can be trained quickly on the job for which they are needed. In this respect technical training may encourage the establishment of industries.

Once industries exist, it is the task of those who organize training to see that the training provided suits the requirements, that the type of training as well as its level, respond to the needs. If not, the training will be wasteful.

It would seem that in this respect there remains something to be done in the SEAMEO countries which, with the exception of Singapore, do not yet have a well developed manpower unit-preferably connected with the planning board to study the requirements of the labour market. Such a unit, covering the public as well as the private sector of the economy, would help those in charge of technical training to determine the real needs.

B. THE TYPES OF VOCATIONAL/TECHNICAL SKILL DEVELOPMENT IN THE SEAMEO REGION

There are three channels through which vocational/technical training is conducted.

The first is formal training in different vocational and technical schools. In all the countries of our region, the vocational and technical schools begin at the secondary level of education. In most of the SEAMEO countries the schools are divided into two stages—the first stage takes three years immediately after the primary level while the second stage lasts another three years. Most of the vocational and technical schools in all the countries are established by the Ministry of Education but some are also set up by a variety of Ministries which aim at providing skilled workers either for their own needs only, or to be offered also at the labour market. The purpose of these schools generally is to prepare their students immediately for various occupations, but it is found that students, having completed the first part, tend to carry on their study to the second stage. (In Indonesia this applies to about 80%). Moreover, the graduates of the first stage are often still too young to join the labour force. Finally, this first stage has little public appeal, since it often carries the label of inferiority if compared with the general secondary system. (This is certainly the case in Thailand).

For all reasons there is a tendency in some countries to integrate those first stage schools into the general academic ones which, in their turn, would be given some prevocational bias.

The second channel is through non-formal education which becomes the topic of our study. This channel of training provides almost all varieties, stages, and kinds of training as provided by the formal schools. In addition, non-formal education has a large coverage in terms of geographical areas unlike the formal ones which only exist in larger towns or cities. The most important reasons are: firstly, because of its high flexibility and adaptability to local needs, to the convenience of its clients and to virtually any type of subject matter and learning objectives; secondly, because of its freedom to try new and unconventional approaches; thirdly, because of its ability to mobilize and utilize a wide range of human talent and to make off-hour use of existing physical facilities; fourthly, because of its potential for tapping many different sources of support, public and private; and finally, because of its freedom from rigid, standardized admission requirements and similar constraints of formal education.

The third channel is through in-formal education. However, it is hard to say anything definite about its development in terms of people involved since this channel is very loose and completely unorganized. But we have to note here that perhaps most of our technical and vocational training which is really directed to employment is still being done through this channel. Most of our farmer boys still learn the art of farming from their fathers, most of our girls still learn the duties of housekeeping from their mothers, and most workers in industries still learn their jobs by the pick up method, in which observation, initiation, and individual initiative are the only means of training.

C. THE ORGANIZATION OF VOCATIONAL/TECHNICAL EDUCATION IN THE SEAMEO COUNTRIES

Existing Opportunities through Formal Education

The following Tables will provide a reasonably clear idea of the situation, although they may not be fully complete in all cases, while their accuracy obviously depends on the sources quoted. Moreover, it should be stressed that the figures only relate to government schools, unless indicated otherwise.

Table 1: Enrolment in Vocational/Technical Schools by Stage and Country, 1971-1972

Countries	Year	First Stage	Second State	Total
Indonesia ¹	1972	307,626	352,797	660,423
Khmer Republic	1972	—	900	900
Laos	1972	913	218	1,131
Malaysia	1972	—	—	20,918
Philippines ¹	1971	—	—	227,952
Singapore	1970	—	—	13,685 ⁴
Thailand	1971	—	—	25,834
Vietnam	1972	—	—	17,620 ¹

¹includes pupils in private schools

- Sources: 1. Questionnaire A: Vocational/Technical Skill Development.
 2. Office of Educational Development, Jakarta, School Statistics 1972.
 3. Malaysia: Educational Statistics 1971.
 4. UNESCO Statistical Yearbook 1972.

To have a clearer picture about the opportunity of vocational and technical training in the formal schools, it will be more meaningful if we know the number of school population in the 13-18 age group. In 1971, there were 29.76 million children of that age group, and about 6.54 million went to school, out of which number 979,885 received vocational and technical education through formal schooling. Percentagewise we can say that there are 21.98% of the children of this age group who are in school and 3.29% of them are in vocational and technical schools or 14.98% of total enrolment at the second level. The information in detail, by country, regarding this matter can be found in Table 2.

Table 2: Total Population Aged 13-18, Second Level School Population and Enrolment of Vocational/Technical Schools by Country, around 1970

Country	Year	Total Pop. Age 13-18	2nd Level Sch. Pop.	% of T. Pop.	Voc/Tech. Sch. Pop.	% of Sch. Pop.
Indonesia	1971	14,835,000	1,930,630	13.0	671,850	34.8
Khmer Republic	1965	846,000	143,800	17.0	900	0.6
Laos	1972	379,000	15,010	4.0	1,130	7.5
Malaysia	1972	1,630,000	571,000	35.0	20,920	3.7
Philippines	1970	4,580,780	2,221,870	49.3	227,950 ³	10.2
Singapore	1970 ¹	341,600	150,467	55.0	13,685	9.1
Thailand	1972 ²	4,182,910	788,630	18.9	25,830 ³	3.3
Vietnam	1972	2,962,400	718,740	24.3	17,620	2.5
TOTAL		29,757,690	6,540,147		979,885	

¹Age groups are 12-17.

²Age groups are 14-18.

³Year 1971.

The distribution of students over different types of vocational and technical schools varies from country to country. Table 3 below gives some detailed information. Not in all cases was it possible to provide a break-down according to the type of school. Moreover, in a number of cases there appear to be schools providing training in more than one line; these were classified under "others".

Table 3: Percentage Distribution of Vocational/Technical School Enrolment 1971-1972

Country	Year	By Country				Percent	
		Agri.	Comm.	Techn.	Others	Total	
Indonesia	1971	0.5	35.1	42.4	22.0	100.0	
Khmer Republic	1972	4.6	10.9	67.1	17.4	100.0	
Laos	1971	7.5	13.6	71.2	7.7	100.0 ¹	
Malaysia	1972	1.02	n.a	41.13	57.85 ⁴	100.0	
Philippines	1972 ⁵	34.0	-	53.0	13.0 ⁶	100.0	
Singapore	1972	0.0	8.5	64.3	27.2	100.0	
Thailand ³	1971	8.04	19.80	47.82 ²	24.34	100.0	
Vietnam	1972	47.4	0.3	24.0	28.3	100.0	

¹No information available for Agricultural and Commercial Schools.

²Includes 3rd level.

³Includes pupils in private schools.

⁴Private Vocational Schools.

⁵Excluding Private Schools.

⁶Fishery.

Sources: 1. Questionnaire A: Vocational/Technical Skill Development.

2. Malaysia: Educational Statistics 1971.

3. Butler L., Laos Education Statistics 1962-1972.

As regards change in enrolment in vocational and technical schools as a proportion of school enrolment at the second level of education between 1968 and 1972, there was some increase in Indonesia, Malaysia and Vietnam, but decrease in the rest of the SEAMEO countries, as shown in Table 4.

There are important changes, particularly in Indonesia where there was a special reason for the increase, as will be explained below. The decreases in Khmer Republic and Laos may be due to the war situation which then became an important issue in these countries. The fall in Thailand is probably to be attributed to the general lack of appeal of this type of education, already noted, while that in Singapore is due to the transfer of vocational schools to the Adult Education Board and non-formal education organizations with effect in 1970. The slight increase in Malaysia may be attributed to the general great interest in all types of education in that country, but this does not explain the very high percentage in Vietnam. Here it may be the war again which caused many families to seek refuge in bigger towns, where this type of school is situated. As pointed out in Chapter II, the war situation disrupted the whole education system in Khmer Republic, while in Vietnam it has lasted so long that - as we will see - special remedial measures have already been taken.

How far does the vocational enrolment reflect the trends in the economy? In Indonesia, according to Table A 10 (Chapter Two) we find that employment in the manufacturing and construction sector increases its share in total employment from 7.4% to 9.8% in the period under discussion, which means an increase by 32%, while that in "services" over the much longer period 1960-1970 increases by not fully 10% (in absolute percentages: from 24.6% to 27% of total employment). This would mean that most probably trained manpower has increased more than enough to keep pace with the expanding economy.

In Malaysia this may not be the case: manufacturing and construction's share grew from 12.1% to 14%, so by 15% in 3 years, while "Services" increased its share from 30.4% to 33.5% or by 10%. It would seem, therefore, that Malaysia's trained manpower increased at approximately the same pace as the corresponding economic sectors, but not faster.

As far as the Philippines is concerned, here we observe a slight fall in the share of construction and industry: from 12.6% to 12.3% or by 2%, precisely the percentage of decrease in vocational enrolment. Too good to be true! Indeed, the services sector increased its share from 25.9% to 33.8% which ought to be reflected in the commercial schools. However, this type of formal school (at the lower level) does not appear to exist, which means that the expansion in employment must have been filled by the graduates from private courses.

Finally, Thailand, here we find a clear contrast between the economic opportunities (increase in industrial employment by 41% in 3 years) and decrease by 20% in lower vocational enrolment which clearly confirms the general observation of the unpopularity of this type of school.

Nevertheless, it is interesting to note that, apart from Thailand, the other countries seem to show a rather close correlation between formal vocational enrolment and economic development.

Table 4: Enrolment in Vocational/Technical Schools as a Portion of School Enrolment at the Second Level Education, 1968 and 1972

Country	1968	1972	Change percentage 1968-1972
Indonesia	27.10 (1965)	34.80 (1971)	+ 25
Khmer Republic	1.67	1.01	- 40
Laos	3.11	1.99	- 36
Malaysia	3.13	3.52 (1971)	+12
Philippines	6.08	5.95	- 2
Singapore	12.61	9.10	- 27
Thailand	4.07	3.27	- 20
Vietnam	1.27	2.10	+ 65

Sources: 1. Questionnaire A: Vocational/Technical Skill Development
2. Office of Educational Development, Jakarta, School Statistics 1971

As regards the distribution of students enrolled in vocational and technical schools by sex, available information indicates an average of 67% males and 33% females. (In most SEAMEO countries significant vocational/technical training is conducted, at least in some of the general academic schools.) For instance, there are some comprehensive schools in Thailand

which provide vocational practices ranging from 23% to 40% of their learning hours. In the Philippines, there are 1,670 "Barrio High Schools" possessing 250,000 enrolment which also provide intensive vocational training in agriculture. Concerning Khmer Republic, Laos, and Singapore, they provide 30%, 44% and 32% of their general academic learning hours for vocational training respectively.

The trend to provide vocational and technical training in general academic schools is actually based on a significant change of attitudes in this respect. Formerly, it was thought that in order to increase the number of technically trained manpower, one should establish more vocational and technical schools. This thinking was apparently followed by Indonesia, for example, in her first five-year plan or REPELITA I (1969-1973) by allocating one third of her educational development budget to the rehabilitation of existing vocational and technical schools and the establishment of some new ones. But as the cost of such schools was very high, generally 5 to 6 times that of general academic schools, only a small number of vocational and technical schools were actually established. On the basis of this experience, Indonesia has changed her policy for the next five years and included pre-vocational education in general academic curricula instead of establishing more vocational and technical schools. How to blend pre-vocational training with general academic curricula will be experimented in eight pilot projects.

The Philippines actually has a long experience in blending vocational training with general academic curricula. The "Barrio High School" has been operated since 1964. Although it limits itself to only vocational training in agriculture, it is a good example of how vocational training is integrated into general academic curricula. A detailed description of such vocational curricula in Barrio High Schools can be seen in INNOTECH publication written by Dr. Pedro T. Orata, the founder of Barrio High School.¹

On the other hand, it is quite common for vocational schools, particularly at the lower level, to provide a solid dosage of general education in their curricula. This means that the difference between the two types of school would seem to diminish and that it would not be surprising if they would finally be fully integrated, probably to the advantage of both.

These experiments in Indonesia would seem to be of great interest not only to formal, but also to the non-formal system, since one of the points to be tested is the functioning of the so-called "multi-exit-entry-system" which may have a direct bearing on non-formal education. This part of the experiment should therefore be explained further. In the multi-exit-entry-system each of the years of vocational training constitutes an independent unit, and, although the three years are of increasing complexity so that the second can only be taken after completion of the first, etc., this does not mean that all three are needed to be of value. On the contrary, it is expected - although not required - that the student will go to work after the first year, and would return whenever he feels he needs some further training.

¹ Cf. Pedro T. Orata, *Self-Help Barrio High Schools*, Singapore: SEAMEO Regional Centre for Educational Innovation and Technology, 1972.

Moreover, he may switch from a vocational year to general education and vice versa. This would make the whole system more like the non-formal one, especially since industrial workers are admitted to the vocational year into which they would fit on the basis of their abilities and skills, in whatever way these may have been acquired. Each successfully completed year carries a certificate.

One can foresee certain difficulties. For instance, an industrial worker may have the practical skills permitting him to follow the, say, second year, but may not possess the theoretical knowledge expected at that level. Where should he be placed? And how would a worker at the age of 25, having completed the second vocational year, but now attracted by general academic education, feel among youngsters of 16?

However, the system seems to have promising possibilities and deserves further attention.

Existing Opportunities through Non-Formal Education.

We have to admit, unfortunately, that for the time being, it is very difficult to get comprehensive data concerning the number of trainees of all activities carried out by all non-formal education programmes. The reason is that non-formal education is everywhere administered by a variety of ministries and voluntary private organizations and private persons. Since there is no registration, information is inadequately documented and seriously lacking in data. The point that complete enumeration is difficult, is valid. But each project may be well documented. The bewildering variety of institutions dealing with non-formal education complicates the matter even further. Firstly, there are multipurpose institutions, such as Rural Development activities in Laos and Indonesia, which promote village community development. Secondly, there are full-time vocational and technical training programmes for the school drop-outs and young unemployed in almost every country in the SEAMEO region especially in the Philippines, that aim at teaching young people in different technical skills. Thirdly, there are part-time vocational courses usually conducted in the form of night classes in Vietnam, Thailand, Philippines and probably in some other countries. Fourthly, there are courses in technical subjects provided by private organizations which generally exist in all the countries of the region, that want to help youngsters to acquire some skills for entering jobs. Fifthly, there is training provided by the military and the police. Sixthly, there are youth clubs or national youth service programmes which, in addition to social objectives, may also aim to provide vocational training: 4 H clubs in the Philippines, Pramuka Taruna Bumi (Agricultural Scout Movement) in Indonesia are among the many examples existing in the region.

Finally, there is the even much more varied group of commercial courses which defy even estimates of their number, type and clientele.

The following Table, therefore, only indicates the number of institutions/trainees as given in the questionnaire replies which did certainly not claim full coverage.

Table 5: Number of Trainees in Non-Formal Programmes/Projects Covered by this Study 1972, Selected Countries

Country	Number of Units Operating	Number of Trainees
Khmer Republic	1,144	11,594
Laos ¹	—	7,216
Philippines	809	124,425
Singapore	10	27,610
Thailand	133	39,124
Vietnam	1,755	193,867

¹Yearly average 1965 to 1972.

Source: Questionnaire B: Vocational/Technical Skill Development.

Existing opportunities through Informal Education

If we have difficulties in assessing non-formal education, it will be much more difficult to identify the scope of the activities of informal education in vocational and technical skill development.

But it might be recognized that the informal channel to acquire vocational and technical skills is still dominant in our region or perhaps it is the only way for most of our youngsters to get actual training leading to jobs, especially in agriculture, but also in a number of crafts. There is a vast network of apprenticeship training which in the unorganized sector is reminiscent of the guilds system of the Middle Ages. Finally, how many people are involved in this category of education is very hard even to estimate.

D. SIGNIFICANT CURRENT NON-FORMAL EDUCATION PROGRAMMES/PROJECTS IN VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

Variety of the Programmes/Projects

In reply to the questionnaire, the SEAMEO countries indicated 47 projects which can be classified as follows:

1. According to Sectors of the Economy

The term sectors of the economy refers to industrial, commercial and services. But there are some projects which can be classified under all categories or cannot apply to any category; these have been put under "general". According to this classification the project submitted by the National Liaison Committees (NLCs) can be classified as follows:

	Number	%
Industrial	24	51
Commercial	4	9
General	19	40
Total	47	100

2. According to Method

The projects can be classified according to method or delivery system as follows:

	Number	%
-training in the training centre	40	85
-on-the-job training in industry	1	2
-both	<u>6</u>	<u>13</u>
TOTAL	47	100

3. According to Sponsoring Agencies

With regard to sponsoring agencies all reported projects can be classified as follows:

	Number	%
Government	18	38
Semi-Government	11	24
Private	<u>18</u>	<u>38</u>
TOTAL	47	100

The industrial courses offered in these projects generally consist of automotive mechanics, electricity, radio mechanics, machine shop, forging and welding, varieties of crafts, engineering, etc.

That industrial training has a high percentage is not necessarily because this sector of the economy has developed very rapidly in our region and creates more demand for training. The NLC's made a choice on the basis of the significance of each individual project, which may not constitute a representative sample.

The criteria were earlier indicated already, but they were naturally applied individually by each NLC who also were dependent on the projects concerned for the replies. In some cases the research team did not quite understand why a certain project was judged to be "significant"—especially in the big sector of private commercial courses—while sometimes no example of probably important training opportunities, such as correspondence courses, have been provided by any of the NLCs.

The commercial training group consists of 9% of the total sample, to which should be added a substantial part of the projects classified under "general", since they very often provide commercial courses.

The third field of training which seems to cover a great part of participants is what we classified as "general". This kind of training offers a variety of courses which usually cover many vocational subjects and are directed mostly to people who have a low education (not more than primary) or no education at all, although some of them provide also for more educated people. This kind of training constitutes 40% of our sample.

Some examples of these types of training are:

(1) Mobile Training Unit in Thailand and the Philippines which goes to certain villages for a certain period of time to offer courses or practical work for farmers and villagers in simple vocational and technical skills as well as village development in general.

(2) National Youth Pioneer Corps in Malaysia, which trains the youth in agricultural work and in other vocational and technical activities such as building construction, motor and radio repairs, tailoring etc.

(3) University Student Volunteer Organization (BUTSI) in Indonesia which trains university students and graduates who later are assigned to go to villages to offer some practical knowledge and skills needed in daily life including some practical vocational and technical training.

(4) Adult and Community Education in the Philippines which offers training in different types of knowledge and skills such as arts and crafts, health, citizenship and family life.

(5) Training for disabled soldiers in Vietnam.

(6) Education for socially handicapped women which aims at providing useful skills to ex-prostitutes who want to become normal citizens.

(7) Numerous private courses in secretarial work, dress making, tailoring, hair dressing, etc.

(8) Vocational/technical training for the physically handicapped which aims at providing useful skills and knowledge in order that these adults can earn a livelihood and not resort to mendicant activities or rely on charities.

Method of Delivery System Used

Most of the training is conducted only in the training centres (85%), 13% in the training centre combined with in-plant training, and only one case is pure on-the-job training. Examples of training in the centres combined with in-plant training are craft and trade training schemes provided by the School of Arts and Trades in the Philippines, and training in travel and hotel management sponsored by the Tourist Organization of Thailand. The only case of on-the-job training, is that of Mercedes Benz auto mechanics in Manila. There are also a good number of apprentice schemes in Singapore and Malaysia, but special cases have not been submitted.

Staffing of the Projects

Staffing patterns vary between projects, so it is difficult to make generalizations. The staffing of the Mobile Trade Training School in Thailand for instance, consists of one full-time principal, several full-time vocational teachers, and several part-time teachers. The full-time principal and teachers are government officials, while part-time teachers are hired on a temporary basis.

Another example is the staffing of Evening Opportunity Classes of Marikina School of Arts and Trades in the Philippines. The whole staff consists of teachers who are under the regu-

lar employ of the school. Their services in the "evening opportunity classes" are rendered after regular school or office hours. All of them are paid full-time in the projects.

Still another example is the staffing of Industrial Vocational Training Centre in Indonesia. All of the teaching staff are government employees assigned as full-timers.

It is obviously not possible to draw definite conclusions as we are not completely sure about the accuracy of the figures provided, but generally speaking it would seem that the ratio teacher/student is satisfactory. Only a few cases of exorbitant ratios were submitted, such as a dress-making and tailoring course, having 4000 participants per year in 200 hour courses with only 15 part-time instructors (Vietnam).

It is obviously not enough to know the number of teachers and students, as one should also know the number of working hours of the teachers.

Although the number of "contact-hours" was usually given, varying obviously according to the type of course, the number of each individual teacher's working hours could clearly not be indicated. In regular school with full-time staff, it is enough to know the proportion teacher-students, but in non-formal courses with usually part-time staff this proportion as such does not say very much. Nevertheless, the impression created by the proportions given, was generally favourable.

On the other hand, the level of staff was quite often insufficient according to the project organizers, at least if they were government servants. Clearly, it was always sufficient in private courses!

Cost involved

Most of government sponsored projects are fully financed by the government, although some non-formal training courses, such as those provided by the school of Crafts and Trades in the Philippines, get some resources from their participants. The semi-government sponsored projects, in general, are financed by government for their equipment, while current expenditure comes from the participants. The financial resources of private projects clearly come entirely from participants, although there are some receiving funds from private organizations (women's associations, missions) or from the private enterprise concerned. For example, the tourist and hotel management training in Thailand gets its recurrent expenditure from the trainees, but the Tourist Organization of Thailand provides the facilities and equipment. The same financial arrangement is adopted by the Mercedes Benz mechanics training course in Manila.

One hesitates to say any thing about the amounts actually spent on non-formal vocational and technical courses. Budgets were usually provided, but it is extremely difficult to know what they really include (the building may often be provided by some formal institution, the instructors' salaries may actually have been paid by a different Ministry or some other institution, so that they are not fully calculated, etc.).

It would seem too hazardous to draw any conclusions in a field where the data are really too shaky to help in throwing some light on the problem of more or less accurate cost calculation.

From the total field of non-formal vs formal education cost in terms of percentage of the Ministry of Education budget, it would vary from less than 1% to nearly 2% in the SEAMEO countries, but in a number of cases other Ministries are also making contributions. Nevertheless, the conclusion that the unit cost in non-formal education is substantially lower than that in the formal system is justified, even if it may be so that the cheaper system would sometimes seem to parasitize on the more expensive.

Problems of the Projects

The problems involved in the reported projects according to the rating as given in the replies are as follows:

Problems	Frequency	Level of difficulty					
		extreme					little
		5	4	3	2	1	
1. Equipment/facilities	13	—	6	4	2	1	
2. Training supplies	11	2	3	5	1	—	
3. Qualified instructors	6	2	—	3	1	—	
4. Location of the project	5	—	1	2	1	1	
5. Budget/funds	3	2	—	1	—	—	
6. Determination of the type of courses	2	—	1	—	1	—	
7. Lack of co-operation from local authorities	2	—	—	—	2	—	
8. Placement of graduates	4	—	—	1	—	—	

(Not all the projects had difficulties, but 43 out of 47 had)

Equipment and shop facilities are the most costly part of conducting vocational and technical training, and they are also a very important component for the success of the training. It is interesting to note that the problem of building does not appear in any projects. Apparently this is because all the projects make use of available buildings.

Regarding the problem of training supplies, it was mentioned by 25% of the projects reported. It is understandable since most of the training in vocational and technical skills consumes material.

As non-formal education varies in kind, spreading out over a large area, and often is specific in nature, its problem of qualified instructors is a very paramount one. Even if the project is centrally organized, it is very difficult to transfer instructors from one place to another. Therefore, it will rely only, in most cases, on the availability of local instructors who usually are less qualified.

In fact, the difficulties mentioned so far are basically financial ones: those of equipment and supplies are clearly so, but that of qualified teachers would be much easier if non-formal education courses could pay good salaries. Therefore, with more funds it would be possible to solve 38 of the 43 problems. However, finance is exactly the crucial one!

The problem of location of the project, particularly refers to projects which are part of national programmes. If the project is located in a very far place from its headquarters, and its operation depends much on its headquarters' decisions, then it will have some difficulties.

Secondly, the location of projects involves difficulties to bring the participants from distant areas, especially when transportation in the areas is still in poor condition.

Non-formal education and training aims at supplying skilled manpower in relatively short courses in specific fields for people who seek employment and not just wish to "improve their minds". Therefore, its courses must be arranged according to the needs of employment. Since usually there is no adequate information concerning the future employment, it is very difficult for the project to determine the type of courses which will satisfy the needs of society as well as of individuals.

In addition to the above problems, there are also problems mentioned such as the lack of cooperation from local authority and placement of the graduated participants. In this study we have frequently stressed the problem of services' cooperation, while that of placement is in fact the same as 6. and was already discussed under B.

Some Possibilities to Overcome or Minimize Some of the Problems

There are some possibilities to overcome or minimize some of the problems.

(1) Concerning the problems of instructors, one possibility is to make a national programme to involve university students in technology in non-formal education as a part of their intra-curricular activities. Indonesia has moved in this direction. This arrangement might result in two things. One, it will help non-formal vocational education to get more instructors, and second, it will be a valuable experience also for the individual students, helping to bridge the gap between their theoretical thinking and the real practice in the society. If this is done on a voluntary basis this project may indeed be helpful, though on a limited scale, as previous efforts in Indonesia have shown. If it should be compulsory, little can be expected. (See discussion in Chapter III).

(2) Regarding equipment, it is normal to make use of existing equipment and facilities whenever possible, be they in schools, factories, or military bases. One good example of this is the use of facilities of the schools of Arts and Trades in the Philippines. Vocational/special trade courses are offered, organized by the Bureaus of Public and Private Schools. Some figures of 1972 are as follows:

No. of schools involved	633
No. of participants enrolled	121,709

(3) Concerning training materials, one may consider to develop training courses utilizing abundant raw materials. One good example is the training organized by the National Cottage Industries Development Authority in the Philippines. Some figures of its achievement from the middle of 1963 to the end of 1970 are:

No. of training projects	1,571
No. of trainees	58,891

It must be mentioned, however, that kinds of trainings under (2) and (3) must be limited to the economic feasibility. The question of job opportunities and markets for the products should be carefully considered for the benefit of the participants.

E. PROJECTS WITH SPECIAL FEATURES

1. Evening Programme in Pangasinan School of Arts and Trades, Philippines

Project Description

The evening opportunity vocational courses offer basic skill training. As a training centre, the courses are geared to the basic needs of the existing industries within the service area of the school. Moreover, building and equipment of the formal school, now serve a double purpose.

It is often called the 2-Year Special Trade Curriculum; it is divided into 4 semestral periods to allow specialization on certain job operations within the semester. Each semestral training block is so designed that it will provide the students an opportunity to be employed in the industries needing operational skills. However, the students can continue going to school at the beginning of any semester to complete the course.

Classes are conducted in the evening to allow employees as well as out-of-school youth to upgrade their skills for ready employment. Students, before graduation, are recommended to the 25 cooperating industries for further training (on-the-job training). It occurs that before graduation the industries absorb them as regular workers. Furthermore, the course is broken down, whenever possible, into independent units. In car mechanics, for instance, being a full 2 year course, one can take separately engine repairs (15 weeks), or engine diagnosis and tune-up (5 weeks), etc.

The project started in 1958, preceded by an occupational survey conducted by the school all over the province of Pangasinan which showed that the majority of those employed in the local industries had not gone to any organized training programmes, while the occupational preparation of the others was outmoded by the new and modern needs of industry. This project in this institution provides better facilities, training instructors and supervised training methods of instruction to enable also those actually employed to upgrade their skills.

The project which has been in operation for almost 16 years now was an outgrowth of the demand for vocational training among the high school graduates and out-of-school citizens who want to seek employment in industry. The enrollment is gradually increasing yearly and it has reached a total high of 410 adult students in 1973. After completion of the course the trainees usually have no difficulty in finding a job.

Specific Learning Tasks

The learning is conducted by lecture, demonstration and on-the-job training in shops or industries. The number of hours of contact are 3 hours daily or 252 hours in a semester. For auto-diesel mechanic course the hours of contact are 171 hours, for machine shop are 159 hours, and for radio mechanics are 65 hours.

Staffing

There are 14 teachers or instructors and 6 clerical personnel. All the instructors are part-timers with pay. They consist of one training administrator, one training supervisor, and 12 instructors for auto-diesel mechanics, machine shop practice and radio mechanics. To those instructors who want to improve their skill there are many auto-repair shops available.

2. Training in Cottage Industries Using Local Materials

This kind of scheme aims at upgrading skills in the production of cottage products. In line with the development of tourism the production of cottage industries seems to become more and more important, because the craft industries reflect the cultural aspect of the country which usually attracts the interest of the tourists. The problem of learning materials will not be very difficult, because the trainees provide the materials themselves. A very good example of this scheme has been done in the Philippines organized by the National Cottage Industries Development Authority. The activities cover a great variety of crafts and their total figures from 1963 to 1970 can be summarized as follows:

Craft	Number of Projects	%	Number of Trainees
1. Needle and Embroider. crafts	511	32.53	21,071
2. Loom weaving, Mat and Hat weaving	211	13.43	7,213
3. Fiber, Bamboo, Shell, Wood, Rattan and Metal crafts	351	22.35	12,247
4. Toy crafts	17	1.08	715
5. Ceramics	15	0.96	421
6. Other crafts	466	29.66	17,224
TOTAL	1,571	100.00	58,891

3. High-Level Courses

It should be recognized that non-formal courses are conducted at all levels, and not at all limited to the lower levels of education. In business and industry it is common, although perhaps not in all the SEAMEO countries, to organize meetings, seminars, or refresher courses for high level personnel, not only to hear about new procedures, but also to discuss among themselves their own experiences.

For instance, the Staff Training Institute, Singapore, organized a one-week, 45½ hours course in General Management for Personnel Officers of various enterprises. The course was conducted by three persons, one from the University, the other made available by the companies concerned and the third from the staff of the Institute. There were 18 participants.

In this case the "missed opportunity" cost of this high level personnel (computed as their week's salaries' total) was considerably higher than the cost of the honoraria of the three lecturers, being the only direct cost of this course.

4. White Collar Changes to Blue Collar Jobs

This project was initiated by the Department of Manpower, Transmigration and Co-operatives, Jakarta, Indonesia in 1956. Its purpose is to provide technical training (building, metalwork, electricity, automechanics) to younger and older people, usually unemployed graduates from secondary schools or universities, who wish to try their hand at this new type of work, having failed to find "white collar" employment.

The project received support from the Colombo Plan (machines and equipment),

UNDP and private industries, the latter providing the personnel to conduct the courses which include managerial training and practical work. The teaching staff are all university graduates with non-formal technical training, and the courses take 480 to 960 hours. The project issues a special bulletin entitled "Information on Industrial Vocational Training."

There were 515 participants in 1972 and 767 in 1973 (it is interesting to note that there were resp. 23 and 81 women among these), but it is still a major problem how to find placement for the graduates.

5. Private Vocational/Technical Training

There are many projects in vocational and technical training provided by private undertakings in all the countries of the region. The variety of courses offered by those private firms or organizations covers almost all the sectors of the economy, namely trade and industry, commerce and services. But because the courses in trade and industry need a heavy investment in equipment, most of them only offer commercial and service courses such as accounting, typing, secretarial work, and home services like cooking, tailoring and dressmaking.

To provide an example, below is a case study of "Da Nang Vocational and Technical School", Da Nang, Vietnam.

Project Description

This is a private project but in co-operation with the leaders of a public school; the project uses the facilities of the Public Technical, Vocational and Commercial School in Da Nang. The entire operation and management of the project is in private hands, but its instructors, mostly teachers of the school, are working part-time in this project.

Most students who completed the course were recruited by industrial companies. The project was started in 1969.

The Clientele

The participants were veterans, disabled soldiers, soldier orphans and widows, and unemployed youngsters and adults.

The number of participants was 2,650 in 1971 and 3,032 in 1972, which indicates its encouraging development. If funds, facilities, personnel, etc., were available, the project could accommodate around 5,000 participants a year.

Specific Learning Tasks

As usually happened in any vocational and technical training, the course is conducted by lectures but mostly by practical work. The training covers machine repairing, machine operation and maintenance, business, and home economics. Each course takes 500 hours.

Cost Involved

The project total expenditure in 1972 was 6,450 thousand Piasters. The breakdown of its components is as follows:

(in thousands Piasters)

Item	T. Exp.	% from T. Exp.
Salaries	1,800	27.91
Travel	300	4.65
Supplies	400	6.20
Equipment	3,000	46.51
Capital Outlay	500	7.75
Others	450	6.98
TOTAL	6,450	100.00

The income of the project comes entirely from its participants which in 1972 was 7,000 thousand Piasters. The average cost per trainee for one cycle course is 2,500 Piasters or approximately US\$4.- which is a very reasonable fee for a 500 hour course!

6. Mobile Trade Training Programme

Recognizing the fact that a great part of the population is living in rural areas, the Adult Education Division, General Education Department, Ministry of Education of Thailand, offers courses in vocational/technical skills for rural people with the co-operation of the local government. In addition, this project gives the rural people the opportunity to diversify their skills beyond agricultural practices.

There are 45 mobile units which usually stay in a district for a short duration depending upon the needs for the training of that particular locale. They operate mostly in the Northern, Northeastern, and Southern provinces, sometimes in the Central Plain. The USAID contributed experts and equipment during the early stages of the programme.

Programme description

Before the training starts a survey is conducted by district officials concerning the people's interest in this kind of non-formal education. If it appears that quite a number of people are interested and that the district agrees to provide a building for the purpose or some space already available, the district authority then makes a request to the Department of General Education, Ministry of Education, to establish such a training programme. After the approval is granted and the preparation is completed, the training project can start.

The programme began in 1960 as a national activity covering a large number of districts of the country. Participants numbered 10,074 in 1972 and 17,479 in 1973.

The main purpose is to give opportunity to the rural people, not only the youth but also adults, to diversify their skills. They should have at least 4 years primary education. Since the training is not recognized in the formal school system, the participants who complete their courses cannot use the certificate to qualify for office status. But most of the participants

use their experiences from the training for working independently or for improving their working abilities.

Specific Learning Tasks

The teaching is conducted by demonstration and practical work. Courses cover a wide variety of subjects, such as tailoring and dress making, auto mechanics, electronics, typing, food preparation, cosmetics, etc. The duration varies but 6 months is an average.

Staffing

The staffing of the project consists of one full-time principal, some full-time instructors, who are all government officials, and some part-time instructors who are hired locally on a temporary basis.

Cost involved

The programme total expenditure in 1969 was 45,395,340 Baht. The breakdown is as follows:

(In thousand Bahts)

Item	Exp.	% of Total Exp.
Salaries	8,775	19.3
Travel	680	1.5
Supplies	1,840	4.0
Equipment	600	1.3
Capital Outlay	6,800	15.0
Other	26,699	58.9
TOTAL	45,394	100.0

The "other" item consists of expenditures of USAID in terms of foreign experts' salary and counterpart funds from the government.

The income of the project almost entirely comes from the government budget, since the fee of participants is very small (0.7%).

If in 1969 the number of participants was also approximately 10,000; the Unit cost was not counting the item "other"—roughly 2,000 baht or US\$100 per participant. This would be unusually high, since the budgeted unit cost in Thailand in 1972 was 740 baht only for non-formal education. However, there are two factors which increase the cost of this programme: the capital item in 1969, and the relatively high cost for salaries inherent in the programme, as the permanent personnel must receive daily allowances for practically the full period of their work.

7. Manpower Department—Training Service

The training Service in the Manpower Department under the Ministry of Labour and Manpower, Malaysia has responsibility of organizing and implementing industrial training programmes and providing consultancy and other services to industry as required.

The following industrial training courses are provided at the Industrial Training Institutes in Kuala Lumpur and Prai:-

- (a) Apprenticeship Courses
- (b) Preparatory Trade Courses
- (c) Skill Up-Grading Courses
- (d) Instructional Techniques Courses
- (e) Trade Instructor Training Courses

8. Institutional and On-the-Job Training

Apprenticeship Courses

These courses are provided to apprentices employed in both the public and private sector industrial undertakings and registered for training under the National Apprenticeship Scheme as operated by the National Industrial Training and Trade Certification Board (NITTCB). The scheme provides for the training of craftsmen in a systematic manner to standards set by industry. The training programme for the apprentices involves a combination of institutional training at the Industrial Training Institute and on-the-job training in the employers' establishments.

Institutional training is provided for the present in four stages over the 4-year apprenticeship period—the 1st year stage is of 22 weeks duration and the 2nd, 3rd and 4th year stages are of 11 weeks each. The courses are provided on a block release system sandwiched between on-the-job training periods.

Apprentices are required to pass progress tests during each of the four stages before proceeding to the next higher stage, and finally to the apprenticeship final examination conducted during the last half-year of the apprenticeship period by an independent panel of examiners appointed by the Central Apprenticeship Committee of the NITTCB. On passing the prescribed examination and completion of the apprenticeship period apprentices are awarded certificates of proficiency by the NITTCB.

The National Apprenticeship Scheme caters for the training of apprentices in the following "declared" apprenticeship trades in the mechanical, electrical, building and printing industries:-

A. Mechanical

1. General Mechanic
2. General Machinist
3. Motor Vehicle Mechanics
(including Diesel Engine)
4. Welding
5. Construction Plant
Mechanics

B. Electrical

1. Electrical Fitting
2. Armature Winding
3. Electrical Fitting
and Armature Winding
4. Electrician
5. Radio & Television
Servicing
6. Refrigeration and
Air-Conditioning.

- C. Building
1. Bricklaying
 2. Carpentry and Joinery
 3. Plumbing

- D. Printing
1. Hand Composition
 2. Machine Composition
 3. Letterpress (Machine) Printing
 4. Bookbinding

Entry requirements into the Scheme:

Apprentice

Age: At least 15 and under 21 years

Education: A pass qualification in the SRP/LCE Examination or its equivalent. (Candidates who are unable to offer this qualification but have successfully completed a related technical training course in a recognized training institution would also be considered).

Employer: Be qualified to give adequate training to the apprentice or be in a position to provide such training by some other qualified person, and the undertaking in which the training is to be given should be such as will permit the apprentice secure a proper training in the trade to be learned.

Course Fee: Institutional training of apprentices is free of cost for the present.

Hostel Accommodation: Free (priority being given to apprentices who are based far away from the Institute and are unable to commute daily).

Board: Resident and non-resident apprentices can purchase meals at the canteen at contract rates. Meals per day cost M \$1.47 per head at present contract rates.

9. In-Plant Training

On-the-job training is nothing new; on the contrary, it is the oldest system, whether in crafts or in industry. What makes it new is its institutionalization. This is less simple than it may seem, as the interests of the plant, the branch of industry to which the plant belongs, and those of the trainees have to be taken into consideration.

Training-within-industry was particularly reported by Malaysia, the Philippines, Singapore and Thailand, either as the single system, or combined with a formal or non-formal course (See D. above).

Obviously, on-the-job training may have its disadvantages, especially for trainees. He may be trained in a narrow way, just enough to do the job for which he has been hired, without any understanding of the functioning of his machine except the barest minimum which would enable him to clean, lubricate and maintain it properly, if at all, since special maintenance staff may have been appointed.

He will have no idea of the production process either, and would have to be trained

all over again should he be transferred to another job in the same establishment. He may become trained, but certainly not skilled.

Another danger for the trainee is that the factory would regard him as a trainee for a rather indefinite time, paying him some pocket money only. Moreover, his "instructor" may be a skilled worker himself, but may lack the pedagogical and psychological abilities to become an "educator" and will simply be an "instructor". A clumsy apprentice may cause an accident, hurting himself or damaging an expensive machine.

Finally, when the trained worker would wish to go elsewhere, he would be unable to show any proof that he has the ability to work on several machines, as he would usually only receive a simple statement that he has worked for a certain period of time in such or such a factory:

All these difficulties can be solved, but it does require a certain time to bring together various establishments in the same branch of industry, convince them that, in the long run it is more advantageous to build up a sound training system rather than to "steal" skilled workers from each other. Finally, the government should take the initiative to promulgate legislation or administrative measures to control the system, supervise the instruction and, in co-operation with the industry, lay down certain levels of ability required for agreed levels of skill, so that trainees can acquire recognized levels which would assure them the corresponding level of wages.

It also means that "instructors" no longer can be just skilled workers, but should know what to teach and how to provide a certain basic understanding needed for a (semi) skilled worker.

Co-operation between a (non)-formal technical course and industry which would permit a division of labour between the two may be an excellent solution which is followed -- besides pure in-service training -- in Malaysia, the Philippines and Singapore. The systems are safeguarded by a number of measures, such as registration, inspection, examination by an independent board, etc.

In Malaysia there are two apprenticeship schemes, one organized by the Ministry of Labour already described, the other by the Ministry of Culture, Youth and Sports which established 15-18 year limits. Moreover, these apprenticeships are not particularly in factories, but rather with traditional trades, covering also agriculture, animal husbandry, etc. The duration is 1 to 3 years, according to the type of trade.

In Singapore apprenticeship training in industry is under the supervision of the Industrial Training Board. Legislation (or administrative ruling) is being finalized and is expected to be applied later in 1974. It will include procedures and agreements between the trainee, the employer and the Board, whose Training Officers are supervising the training. In February 1974 under this scheme 1691 apprentices were registered, almost all in the various engineering industries.

Apart from this, the Ministry of Labour, in its Supervisory Unit of the National Productivity Board, conducts training-within-industry (TWI) courses for foremen, supervisors, senior instructors, etc., to improve the quality of their work. Eight courses are offered, such as Job Instruction, Job Safety, Job Control, etc. in which, since their inception in 1968, some 19,000

students participated. These courses are conducted currently by 87 licensed trainers.

Besides, last year the National Trade Testing System was approved by the government, in which standards are laid down (in consultation with the industries concerned) for three skill levels in various trades. The first examinations, open to anybody in the trade, whether or not having followed any course, were held in September 1973, and consisted of written tests (2 to 3 hours according to the trade) and practical tests, varying from 3 to 10 hours.

These examinations provide the advantage of assigning to the graduates a recognized level of skill and accordingly the right to a certain level of wage.

In conclusion we may say that in-plant training provides some definite advantages, when it is institutionalized as described. The combination with technical courses, formal and non-formal, can be arranged, and makes it possible for such courses to be cheap, as the really expensive, special machines are available in the enterprise. The basic knowledge and skills can be furnished in the course, the specialization and practice in the industry, to the advantage of both.

F. CONCLUDING REMARKS

Is There a Shortage?

When trying to prepare the Tables on formal vocational training, we found that there were several contradictory statements in the replies which had to be threshed out as well as possible, and we are not fully sure that the figures even on formal vocational training are correct.

We did provide a Table on non-formal education, but warned that it was not more than the numbers of persons enrolled in programmes selected by the NLCs. Finally, we did not furnish anything at all on the "informal" system. What should then be said if one would, most reasonably, ask: "Is the actual vocational training system sufficient or not in the SEAMEO region?" We would be inclined to say: "Quantitatively perhaps, but qualitatively no."

Complaints in the replies that the quality of the instructors was not good enough were too numerous not to be convinced of this weakness. However, this lack of quality does not apply to all the countries, and there are many good and interesting projects everywhere. However, generally, the answer given above, may be correct.

One does not get the impression that there are anywhere intolerable shortages of trained personnel, although there may be general complaints about the level of training. Unemployment, also among youngsters with certain training and certificates, is still rampant. In the replies it was more than once said that it was difficult to find placement for the graduates, although the organizer may normally consider that this is not his problem. Indeed, in the objectives of many government sponsored projects it was stated that one of the aims of the project was to reduce unemployment by providing useful skills. From the point of view of the youngster, following a course may be postponing the moment of actual unemployment. It was a rather general impression – but not more – that many youngsters having left school (or dropped out) wanted to follow some course, without any special preference for one or the other, in order to improve their chances for employment. However, blue collar jobs are, even with often better pay, still the left-overs, very seldom the first choice. Secretarial courses are

abundant, whatever the job prospects may be.

As pointed out already, a well organized man-power assessment unit will be helpful to make it possible to furnish at least some basic information about job opportunities which could be passed on to labour exchanges, schools, the mass media, in order to inform people of the possibilities.

What about the Quality?

Clearly, there may exist side by side large-scale unemployment and scarcity of skilled labour. The general judgement of industry on the products of vocational schools is not too flattering. Obviously, the factory manager can hardly expect that a technical school would turn out precisely those graduates who happen to fit precisely into the vacancies he happens to have. Not seldom, therefore, may such complaints be less than fair.

Nevertheless, the lack of contact between instructors and factories which so often exists, is one of the reasons for the rather poor reputation of graduates of formal vocational schools; the instructors are not really aware of new production methods. Often also they have no opportunity of teaching up-to-date methods, since the machinery required simply is not available. Such equipment becomes more and more expensive, so that the technical school cannot afford to buy such machines.

It should not be said that the non-formal system therefore provides the solution. Very often – as we found – the non-formal course in the evening is given in exactly the same building by precisely the same instructors as was the case in day time, when the identical establishment was called a formal vocational school. The slight difference in easier access – no age limits, no educational certificates, etc. – to evening courses does not make the system suddenly good if it was poor in day time. Moreover, the lack of homogeneity in educational background among the participants in NFE makes teaching more difficult.

However, one sometimes finds a definite advantage which ought to be provided more often the possibility to break down a course into several short units, e.g. in a 2-year (2 x 42 weeks) car mechanics course, 3 hours per evening, it was possible to take separate units such as engine repairs (15 weeks), or engine diagnosis and tune-up (5 weeks), or spray painting (9 weeks) etc. This provides clear advantages to the car mechanic who would concentrate on one special part without being obliged to follow a full course. Such features are typical advantages of the non-formal system.

Is non-formal vocational training economical?

The argument that such courses are cheap, since they make use of existing equipment, is actually a half truth only. If the formal system would disappear, the non-formal schools would somehow have to find their buildings and equipment and would be equally expensive. Obviously, using existing facilities more than before is always a good thing, but at present it is usually so that the non-formal course is cheap *because* the formal school exists. Even if rent is paid, it is then a matter of economizing on existing opportunities, as the non-formal system is not inherently much cheaper, although further economizing is also made by simplifying and shortening the existing curriculum. However, this does not make it cheap. Unless, of course, the non-formal system (and the formal as well) turns to industry to bear the cost of the equipment. This indeed is the present trend.

G. RECOMMENDATIONS

1. Non-formal education has great potentials in vocational/technical skill development, but the most important problem is the determination of the types of vocational and technical training required. Since each country has its own characteristics of economic development, a serious effort should be made to find out the real needs of each country in non-formal vocational/technical training. In order to know the needs for training more precisely, there should be established as far as this has not yet been done, a manpower assessment and planning unit.

2. Because of non-formal education in vocational/technical training being administered by a variety of agencies and, moreover, poorly documented, it is recommended that each country should make a serious effort to make an inventory at least of the projects or activities catering for a large clientele. By doing so it will help to provide information as a base of sound policy decisions.

3. It is agreed that vocational/technical training is not the responsibility of governments alone. Business and industrial enterprises which will use the greater part of the graduates of the training should also be responsible. The recommendation is to invite business and industrial enterprises to involve in non-formal education, especially in vocational/technical training which seems to have a close relation with their interests. Their involvement could be in the form of financial support like the SENA scheme in Brazil, or SENATI scheme in Peru, or in terms of providing facilities like the supervised apprentice schemes of some SEAMEO countries, or in any other form, already existing in some SEAMEO countries.

4. The ideal vocational and technical skill training should be a combination of a (non)-formal course and in-plant or on-the-job training in actual working activities. By this arrangement it is possible to bridge the gap between the shortcomings existing in "formal training" and "on-the-job-training" alone, for institutional training tends to be too academic and does not provide the right type of experience while in-plant-training only often is too narrow.

5. It is undeniable that non-formal technical education, using existing personnel and facilities in many cases, can be relatively cheap. However, this should not be a reason to presume that it can thrive on next to nothing. The information provided showed that the large majority of "difficulties" experienced could be summarized as lack of sufficient funds, and it is recommended that governments, desirous to provide good quality non-formal opportunities in technical and vocational education, should consider the possibility of increasing the funds set aside for this purpose.

6. It was observed as the most difficult problem to provide equipment and facilities needed in the training. But it is also evident that there are still many facilities left idle in certain periods of time, be they in schools, factories, or military bases. If an organized scheme for using those idle facilities could be provided, it no doubt will create a great opportunity for learning vocational and technical skills without making too expensive investment.

7. It is evident that the next difficult problem is the inadequacy of material supplies used for training. It is recommended, therefore, to consider how far a type of training using abundant local materials such as training in craft industries, would be economically feasible.

8. Lack of qualified instructors willing to accept a relatively low payment is another high ranking problem. It may be worthwhile to explore the possibility of using technical university students, as a part of their extra-curricular activities. The first step should be to prepare a "training-package" containing the clear-cut learning objective (s) in behavioural terms, course content, method used and evaluation procedure. The next step is training the students as how to carry out such a training package. The second possibility is to use armed forces personnel in the same manner as involving university students.

Chapter Six

MASS MEDIA IN NON-FORMAL EDUCATION

A. THE LIMITATIONS OF THE MASS MEDIA

If it is agreed that training and extension programmes aiming at improving the level of knowledge and skills of the population cannot reach all those many millions requiring this improvement, then there is no other possibility left than to use the mass media of communication. They should support the face-to-face contact, and are sometimes the only possibility of communication in isolated areas.

If one considers the fact that it is no exception that agricultural extension services cannot afford to appoint more than one technician to serve several thousand farmers, that, moreover these farmers are - at least in a number of cases - living in small villages or hamlets which in certain periods of the year cannot easily be reached due to lack of good roads, it follows that direct contacts which are valuable cannot be established with more than a few hundred people.

Valuable contacts are those which bring about a measure of confidence on the part of the farmer in the innovation promoted by the extension worker, so that he would be willing to try it. This means that such contacts should be relatively numerous, and, if not individual, at least in such small groups that questions can be asked, objections can be raised and problems be discussed. Besides, it should appear from experience in the past that the extension man really gave valuable advice, so that he deserved to be trusted, and that therefore his views should be taken seriously also in the future.

Could any of the mass media take over such a task? The answer simply is: no. However, this does not mean that the heavy task of the extension worker cannot be made somewhat lighter, or, in other words, the reach of the service can be made wider, and its influence more effective, by making judicious use of the mass media.

However, it would be unusual for any farmer to switch to a new seed variety, or for any house-wife to start boiling drinking water, just because the radio said it was wise to do so. They should have seen the advantages of such measures, discussed them with neighbours who actually tried them, be convinced by an extension worker or somebody in the village influenced by him, to adopt an innovation. After all, this is the real purpose of extension: being the bridge between research and practice. Research should be used.

B. THE POSSIBILITIES OF THE MASS MEDIA

What then could be expected of the conventional mass media? From the information received it can be stated that at present television can be practically ruled out for the rural areas of the SEAMEO countries. Not altogether, for it appeared that in Vietnam more than 3,000 sets had been distributed in villages, but also that, because of the war situation and problems of maintenance, many were out of order. In fact, all the other countries (except Laos¹) use television, but in many cases the network is not dense enough, nor would the large majority of the population have the money to buy TV sets. Still, in urban areas television can certainly be used.

The prospects of the use of radio are bright: all the SEAMEO countries possess the necessary "hard ware" to reach practically all their provinces. Moreover, the use of transistor radios is so widely spread that one may argue that there are no serious technical problems – generally speaking to use the radio as a genuine means of mass communication. The actual number of sets per thousand of the population is not a very valid indicator, since it is quite normal that, if there is interest, far more people listen than the number of sets would suggest.

As regards newspapers, their use is far more limited. With the exception of Malaysia and particularly Singapore, the circulation figures are relatively low, while the readership is to a large extent – but certainly not fully – limited to urban areas. Still, specially prepared pamphlets, provided they are good and printed in sufficient copies, could be a most helpful means of communication, even if the percentage of illiteracy – of course, particularly in rural areas – is still rather high in some of the countries.

Granted, therefore, that press and radio could practically be used, how could they assist extension work in rural areas?

The Use of Radio

One can say that, considering first the possibilities of the radio, these are particularly in the following fields:

a. **Providing news.** This may be of most different nature, of course, but all closely related to the direct interest of rural people, such as the prices of commodities which would help the farmer, or fisherman or craftsman – as well as the chairmen and secretaries of their associations and co-operatives – to determine at what prices they should sell their produce, or buy supplies.

But the news would also give information on the weather expectation, and how far it would be advisable to start already certain tasks. It would contain items on the spread of diseases of plants and animals, and the places where one can obtain the necessary protection. Such rather detailed and nearly local information is not impossible if one considers that all the larger countries possess several transmitters which can be used to adapt the information to the needs of their particular area.

¹In Laos television is not yet available, but is in preparation to be used for non-formal education.

b. **Creating interest in innovations.** Although it is clear that a mere radio broadcast will not result in achieving many new adoptions of innovations, it can easily create interest. Any farmer who hears that somewhere -- it should not be in Mexico or Japan, but in his own country, and preferably in his own province -- a rice yield has been harvested twice as high as his own, will be interested in hearing more about it. When the message is given by a great national or local authority known to practically everybody, this will certainly add to its credibility, even if the authority concerned does not know the subject very much himself.

Obviously, sensational improvement possibilities are rare, but others may be equally interesting provided they are definite improvements and can be brought within the reach of the farmer. Such short success stories may be repeated from different places, all known to the listeners.

c. **Giving further details about innovations.** Once interest has been created, more details can be given about the innovation, how precisely it should be applied, what are the costs of the supplies required, etc., preferably told by somebody who has done it himself, giving practical details and speaking his own version of the national or local language, provided it can be assumed that he will be understood by all for whom the broadcast is meant.

If at this time the extension worker, or his local contact man, would organize a demonstration of the innovation, it is pretty certain that the number of farmers present will be much greater than if the radio had not done its preparatory work by creating interest in, and already some knowledge of, the innovation concerned.

Obviously, all this requires careful timing. Agricultural work is closely limited to certain periods of the year, the availability of irrigation water, etc. which are not exactly known in advance, nor the same all over the country, or even often within the broadcasting area. Nevertheless, with careful planning, reasonable co-ordination between the broadcasts and the actual farm demonstrations can be achieved.

The advantage of the preparatory work of the radio obviously is that the explanations can be relatively short, the farmers already know about the innovation and have discussed it among themselves. Questions can be asked about the possibility of individual application under particular soil and water conditions, objections can be raised concerning the cost (or availability) of supplies needed, etc.

d. **Weekly courses.** Apart from these innovational ad-hoc talks to be held, of course, at the regular times of a Farmer's Hour well known to everybody having a receiver, some time may be reserved for a regular course which may not be about a real innovation, but a well known practice which is actually not very wide-spread for various reasons. Examples are kitchen gardening, poultry keeping and other small animals, better utilization of fishponds, avoiding soil erosion by various measures, etc. These are all subjects which are so large that they can conveniently be broken down into weekly talks, each separately useful, but still part of a larger programme.

Here again the direct influence of such a course may be not much more than creating a certain interest and knowledge, but it would be a useful basis from where to start direct discussions and demonstrations. Moreover, those who already follow the practice will find it useful to receive regularly fresh information which they can apply immediately, thus serving as demonstrators to those who have not yet taken this step.

e. **Feed-back programmes.** This type of radio programme may be of special interest, both to the listeners and to the broadcasting service. It is a major help to achieve the necessary feed-back from the audience, as it would be taped on the spot in one of the villages of the broadcasting area.

It is assumed that in most villages Farmer's Associations, co-ops, radio forums or any type of organization exists having as one of its activities—as in Indonesia, for instance—to listen in groups to farmers' hours, in order to discuss what was said and also the content of a pamphlet on the same topic. This demands a certain level of co-ordination and organization which, however, is not impossible to achieve. One of the tasks of the radio forum is to collect information from the members (who are usually "progressive" farmers) concerning their experiences with innovations or recommended practices. In some cases these experiences will be rather different from what was expected, both in the positive and the negative way. The leader of the group will write to the broadcasting or extension service, whichever organizes the activity, about the experiences and will receive a reply immediately, either to explain the special experience, or to say that it will be investigated, or that somebody will come to try to find out more about it.

In the latter case, the broadcasting service will come with the extension specialist to make a tape of the discussions, probably held on the field where the special experience occurs. They will use this opportunity to ask the group members and any other interested villagers about their problems and interests, and all this will be taped and used in one of the next broadcasts, as far as it would appear that the points raised are of more than strictly local interest.

Clearly, nobody would prevent the co-operating broadcasting and extension services to go to some village on their own initiative for the same purpose of finding out the type of problems and subjects which appear to be of special interest. In that way it will be possible to know what should be broadcast and also, in certain cases, what might be the problems to suggest for further investigation to the national or provincial research institute.

Obviously, the problems to be discussed should not be limited to agriculture in the narrow sense of the term; they will probably include irrigation, animal husbandry, farm credit, nutrition, education, health, family planning, village culture, or whatever the interests may appear to be in the wide field of rural development.¹

C. THE USE OF RADIO IN NON-FORMAL EDUCATION

a. In all the countries (except Khmer Republic) radio is used as a medium for rural development. Table 1 shows that Malaysia makes a very extensive use of this medium. As will be seen from the Table, the larger countries usually have more than one radio transmitter,

¹Such improvised, on-the-spot investigations cannot be a substitute for more thorough socio-economic and socio-cultural studies broadcasting and extension services may wish to undertake in order to know more precisely what the influence is of their combined activities, but could supplement them, or, in certain cases, actually instigate more precise studies.

Table 1: The Use of Radio for Rural Development in 1972

Country	ave. min / week for talks	No. of courses	ave. min / week for courses	ave. duration in weeks
Indonesia	145	12	29	47
Khmer Republic ¹	—	none	—	—
Laos	210	none	—	—
Malaysia	870	none	—	—
Philippines	321	1	15	12-16
Singapore	35	none	—	—
Thailand	415	—	—	—
Vietnam	55	none	—	—

Note . Indonesia indicated that there are 42 cities beaming out information for their own vicinity, besides the powerful national transmitter.

Philippines has 4 different systems broadcasting information to cover the whole country, especially Karlaon Broadcasting Systems (KBS) consisting of 13 provincial stations all over the Philippines.

Thailand categorized the sources of broadcasts as central, and local.

The other countries gave the average minutes per week as a whole.

¹Before 1970, the Khmer Republic had provided the programmes as such. However, due to war situation and political difficulty in the country, the programmes were dissolved.

sometimes several systems, some governmental, others commercial. This means that a number of listeners will be able to follow programmes from more than one system. The number of minutes indicated (average of all transmitters) does not take this into consideration, so that this should be regarded as the *minimum* available. In certain countries the national transmitter will be so strong that it can be received all over the country, but more detailed information is not available.

It is clear that the use of regular courses in rural development is limited to Indonesia and the Philippines only; the latter country providing just one course in 1972.

However, we are not sure whether our information is complete. A check carried out in Thailand indicated that various universities and provinces possessed their own broadcasting systems, producing from time to time quite substantial non-formal education programmes which were not included in the replies to our questionnaire. It is not impossible that such omissions also took place elsewhere.

To give an idea about the type of radio programmes in rural development that were given in Indonesia, some titles may be quoted: "Guidance in Fishery", "Water Distribution in Irrigated Rice Fields," "Kitchen Gardening" (including answers to letters received), etc. Laos mentioned "Livestock Breeding", "Water and Forestry", altogether a wide variety in the SEAMEO region.

Table 2: The Use of Radio for New Literates in 1972

Country	ave. min/ week for talks	No. of courses	ave. min/ week for courses	ave. duration in weeks
Indonesia	none	none	—	—
Khmer Republic ¹	none	none	—	—
Laos	75	1	90	8
Malaysia	85	2	30	30
Philippines	96	none	—	—
Singapore	none	none	—	—
Thailand	none	none	—	—
Vietnam	none	none	—	—

¹Before 1970, the Khmer Republic had provided the programmes as such. However, due to war situation and political difficulty in the country, the programmes were abandoned.

b. The use of radio for *literacy work* was limited to Laos, Malaysia, the Philippines as shown in Table 2. In fact, as was also proven when further clarification was asked in Thailand it is most probable that the programmes as such have very little to do with "literacy" work in the sense of follow-up work for new literates. It is rather so that programmes of general interest, such as "Rights and Duties of the Citizen," "Nutrition Programme," etc. are geared to the level of those whose educational level is very modest; or, as in Malaysia, a programme to help in obtaining a certificate in the national language. These courses do not pretend to be literacy-oriented, in the sense that they would discuss books or leaflets distributed by the Literacy Service, and in this way encourage new literates to read. It is probably safe to conclude that such programmes — combination of literacy follow-up and radio — do not actually exist in the region. However, Table 2 has been given following the indications in the replies.

c. As far as radio for *commercial/industrial workers* is concerned, Table 3 shows that here the large majority of countries used this medium (Khmer Republic and Laos excluded). It is clear that the radio does not lend itself easily to actual "technical" training.

However, there are broadcasts on broad subjects such as National Development, Social Security, Vocational Guidance, Commerce Talks, Co-operatives, Singapore and the Technological Age, etc.

d. **Socio-Cultural programmes** are provided by all the SEAMEO countries, and most of them devote the highest percentage of non-formal education programmes to this subject, as will be seen from Table 4, Malaysia and the Philippines both giving the largest share to "Rural Development".

However, there are also here problems of classification, e.g. a Nutrition and Health course may be somewhat unusual under the heading of socio-cultural broadcasts. Besides some language courses a regular item in all the countries, the list from Indonesia also includes subjects like "Mother as a Family Modernizer," "Fundamentals of Hindu Religion", "Etiquette in Eating" etc. Khmer Republic mentions radio dramas based on Khmer legends, Laos gave a

Table 3: The Use of Radio for Industrial/Commercial Workers in 1972

Country	ave. min/ week for talks	No. of courses	ave. min/ week for courses	ave. duration in weeks
Indonesia	31 ¹	6	21	37
Laos	270	none	—	—
Malaysia	60	none	—	—
Philippines	45	none	—	—
Singapore	1074	2	30	9
Thailand	169 ²	—	—	—
Vietnam	none	none	—	—

¹There were 42 cities beaming out the information.

²The figure represented the average of minutes per week beamed by main central and local stations.

historical radio play over 6 weeks and folk songs, while other countries did not mention special titles.

e. **Number of Listeners.** It is remarkable that the estimates of the audiences, if given, appear to be very precise, e.g. 15,650 for the Fishery course in Indonesia. Generally, the estimates are rather low for non-formal education broadcasts, from 1,450 listening to a course on "flower planting as a hobby" to 177,520 interested in the rural programmes, broadcast by 23 capital cities of provinces. But the figures are mostly between 20,000 and 30,000, while the audience in Singapore for rural broadcasts is estimated at 50,300. (Given the small number of farmers, this means about 100% coverage.) The largest audience in the Philippines of 1.8 million is to a programme produced by the government, and broadcast simultaneously by all the radio stations in the country, every day from 6.30 – 7 a.m., which is entitled "Development of the Country". Some other national programmes reach from 300,000 to 700,000, but most of the programmes seem to be followed by relatively small audiences, around 20-40,000, at the regional and local levels.

This would have the advantage that the feedback becomes relatively easy, but organizing it, in a way that it works well, is relatively expensive. In countries where the commercial radio prevails (the Philippines and Thailand), one cannot expect that a station will spend much money to get the feedback it would need for organizing a good educational programme. On the other hand, the countries with principally or only government or semi-government stations can only hope for more funds in most cases, when they produce better programmes. Nevertheless, it would seem that if a good co-operation between the respective ministries could be established, resulting in more funds for non-formal education radio broadcasts, a larger audience could be reached with, thanks to the feedback, more appropriate programmes which, in their turn, would attract more listeners.

As mentioned before, the "hard-ware" appears to exist; Vietnam reported that, besides sufficient transmitter capacity, there were no less than 5 million receivers which, for a population of approx. 18 million, means saturation. Here opportunities for the use of radio in non-formal education are clearly enormous.

Table 4: The Use of Radio for Socio-cultural Development in 1972

Country	ave. min/ week for talks	No. of courses	ave. min/ week for courses	ave. duration in weeks
Indonesia ¹	480	13	17	25
Khmer Republic	315	4	150	5
Laos	1065	4	56	8
Malaysia	300	2	30	30
Philippines ²	224	4	22	42
Singapore	1152	1	30	10
Thailand ³	340			
Vietnam	110	1	25	weekly

¹For Indonesia, the figure represents the average number of minutes per week broadcast by radio stations in 42 centres.

²Four nation-wide systems exist in the Philippines.

³The average figure of minutes per week for Thailand was derived from the central and local stations.

D. THE USE OF TELEVISION

There is no doubt about much more forceful possibilities of television as compared with radio as a medium of communication. However, it is equally clear that it is much more expensive, not only because of the numerous relays it requires for the farther broadcast of its signals, the far higher cost of receivers, but also the inherently high expenditure required for the production of programmes.

Nevertheless, also in the SEAMEO countries television becomes more and more popular, although understandably mostly in large cities and their immediate surroundings. Vietnam reported that there are 500,000 privately owned TV sets:

a. Notwithstanding the obvious limitations of television, the *audiences* are in general considerably larger than those for radio. Estimates in Indonesia¹ vary between 100,000 and 1.3 million, with most around half a million. Religious features are least popular: Protestant, Catholic and Buddhist programmes all remain well below 100,000. English and Indonesian language courses have close to one million viewers, while a course for manual work, Transistor Repairs, attracted nearly as many. Since TV is largely a city feature, it is understandable that a "Practical Guide to Use Pesticides" found less than 70,000 interested persons.

¹The estimates in Indonesia take apparently into consideration that there are normally several viewers per TV set, since the total number of sets (December 1973) was 270,000, more than half of these being in Jakarta.

It is surprising, therefore, to see that an equally agricultural programme "The Problem of Rice Shortage" had an audience of very nearly 1 million. It is possibly because city dwellers, as consumers are as much interested as the producers. The Philippines, Singapore and Vietnam¹ all report approximately the same size of audience, with differences according to the programme, but mostly around half a million—the other countries did not produce estimates.

First of all, we should realize that the same size of audience in the countries just mentioned, actually indicates a tremendous difference in the present potential of television to reach the population. Half a million viewers means for Singapore 50% of the adult population, but it represents not even 1% in Indonesia, and again 4% in Vietnam and 2% in the Philippines.

Secondly, it is remarkable that even now, when television has, so to say, just started in the SEAMEO countries, its audiences are already roughly ten times as large as those for similar radio programmes. This is not true for certain special radio programmes, e.g. the Development Programme in the Philippines which has an even larger audience (1.8 million) than any TV programme, but in general it is true. For instance, a radio course in English in Indonesia has an estimated audience of 10,500, but there are 810,000 people interested in a similar television course.

This would seem to show that the medium as such is more attractive, particularly since a language course can be given just as well without pictures. Therefore, one has to recognize the fact that television is more powerful as a means of communication.

Thirdly, the fact that television is naturally connected with urban centres provides a new danger of further disadvantages for the rural areas. As it was seen in Chapter III, there is a continuous disadvantage for the rural areas as to the level of literacy. At present, most governments have decided to follow a policy of systematically setting up reading centres in as many villages as possible. One would wonder, whether it would not be possible to have this policy expanded to include television sets, as it has been done in Vietnam. It is clear that the cost involved is high, since it would require 1) an increase in the number of transmitters, 2) provision of television sets in thousands of villages and 3) a maintenance service to keep the sets in good repairs. However, it would mean that the inherently advantageous position of cities would for once be counter-balanced by similar facilities in rural areas.

b. As was pointed out already, television is not extensively used in *rural development*: besides the two courses in Indonesia already mentioned, there is only one weekly 10-minute programme for farmers; in Malaysia, however, 2½ hours are available, but no regular courses, which are not given either in Thailand (40 minutes) or in Vietnam (90 minutes), the only countries using television for this aspect of non-formal education. It requires little imagination, however, to see how much could be achieved if television would be available to strengthen agricultural extension and other rural services in their efforts to spread knowledge about useful innovations.

In this respect it is interesting to note that Vietnam already offers 90 minutes of television time for farmers, and only 55 minutes of radio time, notwithstanding the relatively small number of TV receivers in rural areas.

¹ Vietnam reported no figures but indicated that 77% of the population prefer television to radio. High usage is therefore probable.

c. As far as television programmes for *literacy teaching*, or for *new literates* are concerned, these are hardly conducted. Indeed, Khmer Republic mentions some programmes, but they seem rather to refer to regular school television programmes. From the Philippines 4 programmes are reported, but here again it is indicated that they are not specifically organized to help new-literates in reading; the titles would indicate that these are general programmes at a level understandable to everybody. The one hour weekly "literacy programme" of Malaysia is more particularly meant for those who became literate in the national language; they may have been literate in another language already. Nevertheless, this would seem the only case of television in the service of spreading literacy, since also the Thai report rather referred to programmes of the same nature as those in the Philippines.

It would seem, therefore, that in none of the SEAMEO countries, with the exception of Malaysia, television is systematically used to impart literacy, or to encourage new literates to use further their newly acquired abilities. This is understandable insofar illiteracy is generally low in urban areas, where television has its most immediate impact. Nevertheless, if it is believed that it is worthwhile to make use of this medium to improve the literacy level — including arithmetic, a most needed knowledge, certainly in towns — it may be considered to use television.¹

d. Television programmes for *industrial/commercial workers* were produced, according to the replies, by Malaysia, Singapore and Thailand. However, we cannot say for certain that these programmes were particularly meant for industrial or commercial workers to improve their skills. The questionnaire may not have been clear enough in this respect. Malaysia gives "as and when necessary" newsreel coverage and magazine items referring to the subject, but no special courses. Singapore lists 7 programmes, two of which—according to the titles—are connected with industrial workers: "Our Worker" (once in two weeks) and "Vocational Guidance" which is probably rather meant for young people than for established, or young already specialized workers. Thailand indicates that every week 26 minutes are given to vocational/technical subjects.

On the other hand, although Indonesia does not transmit special programmes for a special group of workers, it did indicate some real vocational training programmes, probably meant exactly for the non-specialist who wished to learn how to repair transistor radios. Other courses were "How to keep bees properly" and "How to preserve fruit"—perhaps not special vocational training, but courses useful to anybody interested.

It would appear, therefore, that one should conclude that regular television courses in vocational/technical training either to show innovations in the work procedure, useful for established workers, or to undertake or assist the training of new comers is not common practice in the area.

¹ A special issue of *Literacy Discussion*, (Vol. I No. 2, 1970), was devoted to the use of radio and television in teaching literacy. This appeared to be particularly helpful when use could be made of monitors, since even with television it would be hard for an illiterate to become literate.—*Literacy Discussion* is published (in English and French) by the International Institute for Adult Literacy Methods, P.O. Box 1555, Teheran, Iran.

Table 5: The Use of Television for Socio-cultural Development

Country	ave. no. of min./week for talks	No. of courses	ave. no. of min./week per courses	ave. duration in weeks
Indonesia	240	18	20	27
Khmer Republic	60	none	—	—
Malaysia	300	3	30	26
Philippines	375	none	—	—
Singapore	230	5	20	31
Thailand	116	—	—	—
Vietnam	130	1	20	weekly

Note: The cities of Jakarta, Jogjakarta and Medan are the places for telecasting in Indonesia.

e. Far more popular are *socio-cultural television* programmes, as shown in Table 5. The Khmer Republic provides a variety of subjects over the School Television Programme (one hour per week), but this programme finds audiences outside the schools as well.

The subjects are naturally of great variety: Indonesia provides various language courses, as do most other countries, Singapore particularly concentrating on English (in fact, 4 out of the 5 courses mentioned, the fifth providing guitar lessons); Malaysia offers courses in Art Drawing, Chess for Beginners and Folk dancing, while Vietnam produces a course in social studies. The other countries do not give special titles.

A glance at Tables 6 and 7 will show that television, even more than radio, concentrates on socio-cultural programmes, which will not surprise anybody. Again, it is remarkable that a course which might usually not have a tremendous appeal, like "Psychology for You" (Indonesia) is estimated to be followed by 270,000 viewers. Even "Vocal Music Lessons" (also Indonesia) draw a 135,000 audience. More than half a million followed a course in Family Planning.

f. **Use of Books along with Radio/TV Courses.** Before closing this section, it may be of interest to summarize the replies received to the question how far books were used in combination with radio/television courses. Out of the 31 radio and 22 TV courses mentioned by Indonesia, this was done in the case of 6 courses: 4 language courses (Bahasa Indonesia, English Conversation course, a course in German and a course in French) and besides in an Educational Administration and a New Mathematics course.

The use of books may be a sort of test on the seriousness with which the course is followed: the participant has been willing to buy the book and is apparently determined to complete the course, taking the trouble to study the material. The number of participants varied from 1,600 to 10,500. Laos mentioned the use of books in connection with school radio, but here it would seem that we are dealing with a reinforcement of the formal educational system. In Vietnam a printed guide was used for a radio course in English, while in Singapore in the first two parts of the 4 series TV course "English for Everyone" as well as in the Guitar series books were used. Moreover, in the 3 "life audience" radio courses, organized in 1971, 1972 and 1973 and discussing "Singapore and the Technological Age", "Improvement of Manage-

Table 6: Time Use by the Central and Local Radio Systems in Various Fields of Non-Formal Education, 1972

(in percentages of NFE time)

Country	New Literates	Rural Develop.	Ind./Comm.	Socio-Cultural
Indonesia	none	22	5	73
Khmer Republic ¹	none	none	25	75
Laos	5	13	17	65
Malaysia	6	61	4	29
Philippines	19	43	1	37
Singapore	none	2	47	51
Thailand ²	43	26	10	21
Vietnam	none	33	none	67

¹Actually 5 hours school radio, but with an estimated audience of at least as many out-of-school listeners.

²The programmes are intended to be general knowledge for the new literates, not literacy courses.

Table 7: Time Used by the Central and Local Television Networks for Programmes in Non-formal Education, 1972

(in percentages of NFE time)

Country	New Literates	Rural Development	Industrial Commercial	Socio-Cultural
Indonesia	none	4	8	88
Khmer Republic ¹	none	none	none	100
Malaysia	11	25	11	53
Philippines	31	none	none	69
Singapore	none	none	19	81
Thailand ²	63	9	6	22
Vietnam	none	40	none	60

¹Actually school television

²The programmes are intended to be general knowledge for the new literates, not literacy courses

ment Skills", and "Singapore on the change" respectively, the participants in the life courses (around 200) received a synopsis before each talk was given. However, this is obviously not equivalent to a course book, to be used as necessary complement to the course. The other countries did not mention the use of printed material along with such courses.

It would seem to be good practice to combine the written and the spoken word, and the remaining effects of any course will obviously be much longer and complete if books are used, which, long after completion of the course, can always be consulted again.

E. THE PRESS AND NON-FORMAL EDUCATION

a. Newspapers are still the cheapest reading material available and moreover a continuing source of informal education. As such they are excellent as follow-up to literacy courses, although it is not certain if these courses really bring people at the level that they can read newspapers with comprehension. Nevertheless, this seems the level such courses should aim at: if the language used in newspapers is too complicated, the course has failed to achieve its purpose: to bring the illiterate - or poor-reader - at a level of reading and understanding that he can follow at least the main news items and features.

This is in fact a relatively high level, even if one would not expect that all the parts of a paper, such as business and commercial items, are clear to the general reader. However, it would certainly be useful if literacy courses would use newspapers as reading material towards the end of a course. This would accustom the neo-literate to the special language of headlines, abbreviations and telegram style often used. More important still, it would accustom him to find his way in the various pages to pick those items which are of interest to him.

In certain literacy courses mock-papers are issued, in bolder type than normally used, but having several features of the real papers, to accustom the participants to this rather particular type of reading material. It also happens that actual newspapers reserve a corner for neo-literates, again in bold type and in simple sentences, but still carrying the major news items. However, it was not reported that such an assistance to neo-literates was provided by any of the newspapers in the region.

Besides their important task of informal educators, newspapers often also assume the task of non-formal educators, carrying particular columns on political, economic, social, medical or other problems, or corners for special groups of readers, usually with an educational purpose, but obviously avoiding to assume a "teaching" style, since the purpose always remains to provide interesting and possibly pleasant reading.

When asked whether an estimate could be made of the "educational content" of the major newspapers, most respondents have been kind enough to oblige, although no definition had been given of the term. This had purposely been omitted, for the same reason as no definition had been given of the term "literacy": it seemed better to leave this to each country to decide. However, the respondent for Singapore rightly replied that this question could not be answered, since no definition had been given, and sent sample copies of various papers, leaving it to the research team to judge for themselves. In fact, leaving aside pure news items, advertisements, pure entertainment, commercial and business news, we thought that the Singapore papers carried approximately 8-10% "educational content". This was not very far from what our respondents from other countries considered to be educational content, the range being in Thailand 5-10%, somewhat higher in Laos, Malaysia and the Philippines (10-30%) and lower in Indonesia (3-6%), while the other countries did not give estimates. One may conclude that, educationally speaking, a newspaper is a good buy.

b. Much of their influence obviously depends on the *circulation* of the newspapers. As in the audiences of radio and television, the actual figures were in some countries not too far apart, e.g. 30,000-80,000 in Malaysia, Thailand, Singapore and Vietnam, with a higher

issue of the Straits Times published both in Malaysia (137,000) and Singapore (138,000) and the Sunday Times (150,000, a weekly obviously) in the latter country, and in Thailand Daily News (138,000) and Thai-Rath (320,000). Much smaller editions were issued in Laos (2,000-5,000), while in Indonesia the 32 papers had a wide range from 2,500 to around 100,000 (Kompas and Merdeka) with an average of about 29,000.

As pointed out earlier, the similarity actually means dissimilarity, since one has to take into consideration the number of literate inhabitants and of newspapers. Most reporting countries mentioned 5 to 8. Total circulation in relation to population clearly is highest in Singapore (550,000) which—as Malaysia—publishes papers not only in the national language but also in Chinese and English, followed by Malaysia (470,000), Thailand (620,000) Vietnam (163,000), Indonesia (935,000) and Laos (13,000).

For newspapers the same remark can be made as for television: the clientele is urban, not exclusively, but nearly so. Newspapers are still a rare commodity in villages, partly because of less interest—but villagers also like to listen to the radio news, although it is true that in general this interest is relatively less than in cities—partly because the price is for the generally poorer villagers relatively high and particularly, it is, in many countries, practically impossible to organize a more or less satisfactory delivery service. However, a newspaper in a village may be read by quite a number of people. A solution may perhaps be found in making weeklies available at probably subsidized rates in village libraries, or reading centres. However, it should be stated that even in urban areas, except in Singapore, newspaper circulation is relatively low in the SEAMEO countries.

c. No questions were asked about book production, but respondents could provide information on the use made of *leaflets, brochures*, etc. by the various extension services. This was indeed generally done, although we have no figures about the actual number distributed. Such materials should obviously be available in *village reading centres*. Thailand plans to have 7,000 of them by 1976, and in Indonesia many are functioning already. Most countries recognize the importance of such centres of information, and it is not seldom the rather modest school library where such materials are kept, along with children's books and anything else which can serve as reading material.

Obviously, a separate reading and information centre would be desirable and may not be beyond the financial capacities of most countries, if the villagers themselves were interested to help construct it.

As to the leaflets themselves, it is obviously important that they should be attractive to read. Unfortunately, this is not always the case, although we have already mentioned, in a different context, the picture-oriented leaflets used to overcome possible reading flaws with the clientele.

Government services must always be careful to keep expenses low, but the difference in cost between a well produced and pleasant pamphlet and a dull one is insignificant. So why not use attractive material to "sell" a good thing?

F. GROUP USE OF THE MASS MEDIA

a. **Advantages of such Groups.** Group use of mass media, be it radio listening, television viewing or reading has definite advantages, apart from the first and obvious advantage of

economic use of hardware. It may be one of the immediate purposes of a farmers' association; otherwise would there be any real programme for regular meetings?.

Secondly, the exchange of experience in a natural discussion of the programmes or the brochure read, leading to real involvement rather than passive attention.

Thirdly, the social status the participants will acquire by joining the "club". This will more or less oblige them, thanks to the social control within such a usually rather small group (10-20 would probably be the best size), to carry out the new practice if the group agreed that it would be worthwhile trying (and the extension services concerned had indeed helped to see that the physical requirements were available).

Fourthly, such groups as stated above, would be helpful as feed-back units to broadcasting services, but also to extension services which would be their counterparts in the person of the leader of the group.

Fifthly, reading a brochure - perhaps on the same subject as the radio talk which obviously would be an ideal combination, but requires excellent organization and co-ordination - is a natural follow-up activity for new literates. In fact, in Indonesia the Panti Musjawarah Pembangunan (Discussion groups for Development) is such an organization. A sample survey carried out in West Java by the Provincial Office of Community Education showed that there were indeed encouraging results: increase in reading ability and more demand for reading material, but also increase in adoption of new farming techniques and more demand for agro-chemical products.¹

Finally, organizing such groups creates a certain demand for leadership which will be useful in other respects as well.

b. **The Training of Monitors.** How far do such groups exist in the SEAMEO area, and do they function well? In Indonesia such groups are apparently useful, and also exist in a different form of radio forums, getting together in a community centre, where the radio has been placed, all the services of rural development have made available their pamphlets, and where the village library is located.

Here we find an example of real co-operation between services which appears to have excellent results: The groups are usually under the leadership of a "contact farmer" a man who has received a short training and acts as the counterpart of the extension worker as described earlier in Chapter IV. His group of "progressive farmers" indeed helps to create an atmosphere of purposeful activity in the village in various aspects of rural development.

Similarly, in Khmer Republic and Laos such groups exist, both countries reporting monitors, but those in Laos being trained.

Although in Malaysia—as is well known—Farmers' Associations are playing a most useful role, according to the report there were no monitors of radio listening groups at all and were not felt to be needed.

¹P.S. Martadidjaja: "A New Approach to Adult Literacy", Literacy Discussion, Vol. II, No. 1, Winter 1971, p. 93 ff.

As regards the Philippines, it was reported that trained monitors were available for the government sponsored broadcast for Adult Education and Out-of-School Youth Groups. There were none for the listening groups of non-commercial private network broadcasts.

Singapore had both trained and untrained monitors, but Thailand and Vietnam practically had no monitors at all, since in the latter countries group listening hardly occurred. This is understandable taking into consideration the very large number of radio sets in these countries.

All the countries using monitors felt that their further training was needed, and this indeed would be an excellent way of bringing about the "multiplier" effect one always hopes to achieve in training.

The task of the monitor is not only that of organizing and leading his group. He should be able to report on the discussions, at least when they should lead to conclusions the broadcasting system or the extension service ought to know. Besides, he should make plans for action of the members of the group and be able to be the link between them and the central organization.

Much depends, therefore, on them and their training is of great importance to the group, but also to the good functioning of the broadcasting system and extension service. It should not be forgotten that nearly all the staff - certainly of networks - consists of city people. The man who produces the broadcasts for farmers is no farmer himself, nor the author of the agricultural pamphlets. They may have had some rural experience, but they may not realize that this experience is no longer as valid as they believe. Constant contact, therefore, with actual rural life is needed for those who produce the advice. They cannot go to the village all the time—but they should at least now and then—and the contact with farmers groups will be an absolute "must" for them to remain up-to-date.

G. COMMENTS OF THE RESPONDENTS

The questionnaire requested the respondents to give their comments on a) the role of the mass media in their country, b) problems connected with a possible lack of trained personnel and c) problems concerning the use of the mass media for non-formal education.

When summarizing the replies, we should like to state again our gratitude to the respondents for their often elaborate and thoughtful answers.

a. Opinions differed as regards the role of the mass media, some respondents felt that, with all their problems, radio, television and press were doing a decent job (Khmer Republic, Malaysia, the Philippines), or on the contrary, were not performing as they should (Thailand, Vietnam), while the others made no comments or stated the objectives. These were described by the respondent from Indonesia to be to provide information, education and healthy entertainment. However, lack of facilities (only 270,000 TV sets) was one of the draw-backs. Moreover, lack of co-ordination of services made it impossible to draw up an integrated plan for educational radio and television. He suggests that the educational activities in all the ministries should be co-ordinated in a new Directorate General of Educational Broadcasting.

Thailand's respondent is very critical of the radio/TV system as a whole: the mass

media are just advertising media; moreover, there is lack of co-ordination between the government agencies. Facilities are plenty, in fact too many networks exist.

In Vietnam the basic problem is that the country is at war, which means that more time is devoted to national defense than education over the networks. Similarly, he doubts the educational value of the newspapers as well; rather informative than educational. Articles intended to be educational are taken over from foreign papers and hardly apply to the situation in Vietnam:

b. Training problems were experienced in most countries, with the exception of Malaysia, and, to some extent, Thailand. In both countries training facilities are available, however, in Thailand the networks, even if occasionally employing graduates from the several universities offering courses, do not give them the opportunity of putting into practice what they have learned. The training, it is felt in Indonesia, concerns the programme production personnel particularly, less so the technical personnel. This is also keenly felt in Khmer, Laos and the Philippines. The latter country, however, mentions with satisfaction that the networks, both governmental and commercial, have played a positive role in promoting the Masagana'99 programme for higher rice production; it was possible to achieve a helpful feedback by inviting the farmers to mention their problems in writing to the networks where they then were discussed during the first 15 minutes of a regular farmers programme. Nevertheless, there is lack of trained personnel for non-formal education which should be able to better plan, produce and evaluate their programmes.

In Singapore one needs special personnel: educational broadcasters, film producers, broadcasting engineers, mass media specialists, behavioural science specialists, specialists in retrieval and field specialists in the mass media.

The respondent for Vietnam states that lack of trained personnel¹ is a *major* drawback, especially in planning. Hardly any analysis of feed-back is being done.

c. The use of mass media in non-formal education in development. The comments made here may be summarized by quoting a statement made by the respondent from Vietnam: "The most significant task should be a *concrete approach* at governmental level, to be adopted for the promotion of non-formal education which seems to be another facet of national investment in which the mass media should be considered national *resources* as often recommended by Unesco. A conceptual approach should be adopted so that the objectives of the project on the use of the mass media for non-formal education may be clearly defined." Only then would an evaluation be possible.

In the Philippines the problem of co-ordination between the numerous government services dealing with development on the one hand, and the government and commercial networks on the other, appears to be the major problem, quite apart from that of finance, a difficulty obviously mentioned more than once. Let us conclude this section with a pertinent description given by the respondent from Singapore:

The establishment of the regional Centre for Production and Training for Adult Education Television (CEPTA) in Singapore in November 1973 may solve some of the major problems felt: training for TV programme production personnel. The working papers discussed at the founding meeting may already constitute valuable material. See Proceedings of CEPTA TV Association Inaugural Meeting, CEPTA, Singapore.

"To gain maximum results in the quickest possible manner in the shortest time available with highest efficiency and effectiveness with minimum cost";

H. STUDIES ON MASS MEDIA

Studies on the way in which the mass media can serve non-formal education were reported from Indonesia and Thailand. The findings of one of the Indonesian studies were summarized and showed that rural educational radio broadcasts in the Semarang and Jogjakarta regions (Java) in 1972 were particularly appreciated if the subject was of direct interest to them, and the presentation was then less important. Obviously, lively presentation is better liked than a long dull speech, but a subject of little genuine interest could never be saved by excellent presentation. People liked to hear about new developments and innovations. Clear information on what will be broadcast is definitely necessary, and it is important to do it at a time convenient to the audience.

The Directorate of TVRI (Televisi Republik Indonesia) conducted an enquiry about the effectiveness of the television programmes in 1972 and 1973 the main findings of which were that 70% of the audience followed TV programmes for at least 2 hours per day; that the best time was 9-10 p.m., the audience consisted mostly of teenagers (18 years) and young adults (25 years) and the programmes best liked were English lessons, news items and dramas with an educational purpose.

In Thailand an audience survey was carried out by the National Statistical Office (1968-1969) on radio and television, and a Directory on Mass Communication (1970-1971) was prepared by the School of Journalism and Mass Communication, Thammasart University. More studies are to be expected in the course in the current year.

Last year a case study was conducted by the School of Public Relations on the Receptiveness to Mass Media of the Thai People in a Rural Community, (in Ban Rai Sub-district, Suphanburi Province, approx. 150 km. northwest of Bangkok). It was a large village of 9116 inhabitants (1120 households), and a sample of 168 households was taken, one adult per household (90 males and 78 females). No less than 92% were living on farming, and a little more than half the sample had finished lower primary school (4 years). It was found that 71% had a radio receiver in the household and 63% listened almost everyday, and only 4% never listened. Favourite programmes were apparently strongly divided: 29% preferred news, 17% music and 13% Northeastern native songs. The percentage of those reading newspapers, at least now and then, was high: 49%, but this area has an easy road connection with Bangkok.

As regards the reliability of the source of information, 63% of the respondents said that information received from the sub-district head or village head was reliable, while 11% (mostly males) preferred radio broadcasts. It should be added that the educational background of the villagers is below average, since many of them come here as migrants from the Northeastern area where educational facilities are less developed.

One study carried out in Vietnam by the Alexandre de Rhodes Educational Television Centre, Saigon (1971), should also be mentioned. It was reported that the Research Department visited, early 1970, more than 60 hamlets in 5 provinces to collect information on interest in educational television programmes and potential teleclub leaders. This interest appeared to exist and one started work against the background of more than 60% of the population having

had less than three years of elementary schooling, one third of the primary school children out of school (at the time of the study) and illiteracy being higher than 40%.

Four series of programmes were prepared: one for children, one on health, the third on nutrition, and the last series depicting the life story of a lower middle class family and their problems having become refugees. The series consist of 20-26 programme features, based as carefully as possible on the existing situation and so conceived that the lessons are applicable. E.g. the series on nutrition does not require much additional time or expenditure to prepare the food. In this way it is hoped that, with the help of the teleclubs, the programmes will be effective.

In the context of how mass media may help to promote innovations—an important part of non-formal education—the Development Support Communication Service (DSCS), a UNDP/UNICEF centre in Bangkok, should be mentioned. This service is meant to be used by governments planning to introduce major changes, such as resettlement projects. DSCS would study the existing situation, as well as the circumstances in the new area, identify the problems as well as the advantages probably involved in the change. Similarly, the administrative set-up is studied, in order to know the organizational structure. Then communication materials are prepared with the assistance of national specialists who, wherever available, should also conduct the sociological-economic study of the communities concerned.

The communication material is pretested and, after adjustment, the messages are delivered using the media most likely to have the desired impact, to prepare the population concerned for the changes which will occur.

I. CONCLUSIONS AND RECOMMENDATIONS

1. Although it appears that television is a most powerful means of communication, preferred to radio, it is at present only of minor interest for non-formal education in rural areas (except Singapore), since the reach is too limited, and not only in the geographical sense, as TV sets are too expensive for the large majority of persons in need of non-formal education.

However, in certain SEAMEO countries coverage is already wide; in such cases, and whenever the reach of television becomes large—and electricity is available—village television sets should be provided by the government on easy terms, preferably to Farmers' Associations, for use in a community centre. There should also be available brochures, newspapers, or weeklies, along with books in the village library, so that various types of information are available in the same place.

2. Group use of mass media would seem to have considerable advantages and should be encouraged in order to facilitate the work of the various extension services, to make the messages from these services, broadcast or printed, more effective, and to promote reading ability and interest. However, training of leaders of such group should not be neglected, as they have to play an important role in extension as well as in feed-back.

3. The choice of the mass media, at present largely limited to radio and print, should generally not be one of either or, but rather be found in a judicious combination of both. This will require a great deal of careful co-operation and co-ordination of services, in

which commercial networks should also be involved. It would seem that generally the "hardware" for satisfactory radio broadcasts does not provide a major difficulty.

4. Lack of co-ordination is felt to be one of the major hindrances of efficient and effective functioning of broadcasting systems along with extension services. It would seem that, in order to make co-ordination possible, a new high-level organization should be created, recognized by all services concerned, public and private.

5. The problem of lack of trained personnel in various branches of networks, but particularly in planning and producing as well as evaluating programme material, calls for serious consideration by the governments of the countries where this need is felt. It will be unavoidable to find funds to undertake such training, since extension services alone, even when well organized and making use of trained "contact men" or similar persons providing a multiplier effect, will not be able to function well without the assistance of the mass media.

6. Should radio networks function well, then, they should be well acquainted with the socio-cultural and economic situation, the needs and possibilities of the groups of the population they intend to serve. Studies should be undertaken wherever feasible, and visits be paid by the broadcasting and extension personnel, to discuss on the spot special successes or problems. Besides the necessary feed back, this will also provide interesting programme material.

7. In order to achieve a better understanding of the effectiveness of the mass media as a support of non-formal education activities, evaluation studies should be undertaken, preferably at the same time as the learning activity begins. This will have the advantage that a proper basis is established for the operation of the extension service, as well as a base-line is produced from where any change can be measured. In this respect the possibility of requesting, particularly when major changes are considered, the co-operation of the UNDP/UNICEF Development Support Communication Service, Bangkok, may be considered.

8. Although newspapers have a limited or even very small circulation and are, in all respects, city-centred, they do provide cheap and interesting reading material which would be welcome in every village library or community centre. However, distribution difficulties may make wide circulation in rural areas difficult, if not impossible. In such cases weeklies, whose educational content tends to be higher than that of dailies, may still be provided. To enable rural people to make real use of such publications, they should be provided free or at a special rate, while organizers of literacy courses should aim at enabling their clientele to read these publications.

9. Specially produced brochures issued by extension services should be written in a clear, simple style, well produced with pictures where useful in order to be attractive, possibly in the style of comics. Similarly, the language and style of special rural broadcasts should be adopted to the audience and may mix entertainment with the message, using popular heroes or folklore figures or whatever is appropriate to make the message interesting.

10. Providing healthy entertainment in rural areas is not the easiest but certainly one of the most valuable tasks of the mass media which should help to make life more interesting and enjoyable to people who suffer many disadvantages. If mass media concentrate more on village culture, rural people may become better aware of the values of their own culture and take pride in it.

Chapter Seven

CONCLUSIONS AND RECOMMENDATIONS

The study on non-formal education in the SEAMEO Region was conducted with the aim to gather information on significant on-going programmes/projects in non-formal education and to identify problems as well as potentials of the broad spectrum of non-formal education activities in the region with a view toward recommending subsequent regional and/or national actions.

The study cannot claim to be as thorough and complete as one might wish. Available information was abundant on certain details yet frequently shaky on major issues, thus, unmanageable. For an extremely complex and elusive subject as non-formal education, an inquiry can only be at best incomplete. In fact, the results raise more questions than what the inquiry attempts to answer. At most, the present study as an exploratory venture can only be a modest attempt to scratch the surface of a vastly complex subject enmeshed in kaleidoscopic settings and cultures of the SEAMEO region. It can be said with confidence, however, that the study is fairly comprehensive, having concentrated on the principal facets of non-formal education in three urgent areas of concern, namely, literacy, technical/vocational training, and rural development, including certain relevant aspects of mass media.

The following are significant features of the findings of the study:

a. The changes in the economy in the SEAMEO region as a whole are marginal, although some countries have shown definite progress or improvement. Educationally, it follows that some countries are hard put to increase the percentage of children going to school, while in others all children have that opportunity. There are, if any, little extra resources left to upgrade the poor quality of school education. Facing this common problem, it is a natural course for the countries of the region to search for a more relevant and economical alternative. Non-formal education, thus, is being examined with the prospect of offering answers to the problems being faced.

b. A more critical look at the existing formal systems of education in the region reveals unrealistically huge expense, huge wastage in some countries and, of special significance to our study, a huge proportion of young people outside the school who command no particular skills to earn a living besides traditional farming. Worse is the fact that, once literate, a large proportion of them relapse to being illiterate. Income gap, communication gap, and many other disadvantages and social ills naturally follow the course. The total situation again points to the pressing need for the SEAMEO countries to drastically reform their education systems (formal and non-formal), one aspect of which is, for some of the countries, to increase the percentage of the budget for education.

c. There have existed in all SEAMEO countries some kinds or forms of non-formal education during the past decades. However, such educational activities were not recognized as NFE in its broader sense as is currently viewed. The sponsors of these activities were merely responding to challenging opportunities and situations, without the thought that what they were doing, in fact, was quite relevant to the needs of their clientele and, probably, a tremendously powerful means to enhance the development of their country. The modern concept and the value of non-formal education was only recently invigorated. However, one should take care not to regard it as the solution to all educational problems.

d. Non-formal education activities in the SEAMEO countries are undertaken in a milieu of great social and cultural diversity. The success or failure of any non-formal education programme/project depends quite significantly upon how well it has been conceived and how well it is conducted and administered to suit the social and cultural peculiarities existing in each country.

e. There is a rich variety of ideas and practices of non-formal education going on in the SEAMEO countries, ranging from adult literacy courses to extension projects of high yield rice production, to courses in modern management techniques, etc.¹ In any case, non-formal education programmes were launched to meet the needs both of the people and the country. Naturally, the varieties are more than what are actually offered in the formal education system, simply because most non-formal education programmes are need-oriented as well as action-oriented.

f. There are also a great many agencies and organizations taking part in offering non-formal education activities with different degrees of intensity and/or coverage. Normally, NFE activities by government authorities predominate while those undertaken by private agencies of various kinds to play significant roles though many of them are rather obscure in some instances. Consequently, there are endless varieties of programmes—all suggesting the great dynamism and unlimited scope of non-formal education.

g. It is generally accepted that the non-formal mode of education is cheaper than the formal one. Evidence in our inquiry suggests that this is particularly true because the non-formal system utilizes existing facilities, usually created for schools. It can be inherently cheaper only if it is better organized, i.e. if it is more precisely geared to the real needs of the many groups of learners and continues to use existing facilities in schools or factories, or wherever they may be found.

h. The survey of the existing programmes/projects suggested that there are a number of programmes/projects with high potential or special features (See Chapters III, IV and V) which could be further developed and also provide helpful guidance for other SEAMEO member countries.

Notwithstanding the above significant features, a number of crucial questions remain unanswered, and in the opinion of the Research Team these would provide challenges for those involved or interested in non-formal education to delve further into them. These questions are:

¹See Part II Project Identification and Project Summaries

1. Do we believe that non-formal education can truly help solve the educational crisis we are now facing? If so, to what extent?
2. How could we avoid overestimating and/or underestimating the potentialities of non-formal education?
3. How do we conceive, plan, and implement any non-formal education programme in the light of its true nature on the one hand and the prevailing socio-economic circumstances in the country on the other?
4. How should we organize and operate a non-formal education programme without over-organization or over-institutionalizing, and as such, formalizing it?
5. In the selected areas of this study, namely, literacy, rural development, and technical/vocational training, to what extent can non-formal education be used, and how can the mass media best be utilized in this respect?
6. It is clear that there is overlapping between these areas which would require close co-operation between the ministries concerned. How could this be achieved, and who should be the co-ordinating authority?
7. How can we be sure that in offering non-formal education we are not giving inferior skills and knowledge to the less fortunate people as a consolation to their failures? How can we be sure that the skills and knowledge they will receive from the non-formal channel will not work out in favour of their social and economic superiors?
8. In some countries there is clear evidence of a thorough dissatisfaction with the actual educational system as a whole. In what way does one expect to achieve genuine improvements?

With a view to formulating recommendations for subsequent action at the national as well as the regional level, a Conference of the Chairmen of the National Liaison Committees, members of the Research Team, and SEAMES officials was convened in May, 1974. The Conference examined the report and findings of the study and formulated the following recommendations:

At the National Level

1. In the SEAMEO countries as a whole actions related to non-formal education are carried out by a great number of agencies: governmental, semi-governmental and private. The member countries are therefore urged to constitute a national committee for non-formal education which should comprise representatives of all agencies which have responsibilities in conducting non-formal education. A more definite composition of this coordinating body is the responsibility of each country and should be in conformity with her own administrative policies. Under the umbrella of this coordinating committee, sub-committees could be established to deal with various aspects/areas of non-formal education.
2. There is a need for further research in and evaluation of non-formal education programmes in each member country, since there are many aspects of non-formal education

which deserve systematic research and evaluation. Provisions should be made for research projects to be carried out by the respective countries in the SEAMEO region. The results of the findings should be made available to SEAMEO countries as well as the interested agencies.

3. The importance and necessity of non-formal education should be made more widely known to the public by different means available (e.g. mass media, seminars, etc.).

4. Non-formal education should rightly continue to rely heavily on competent part-time staff. Therefore, opportunities should be created for part-time staff to receive appropriate professional training. The success of non-formal education programmes, however, depends largely upon well-trained full-time professional staff. Their training in the methodology of non-formal education, such as the psychology of adults, is of great importance.

5. There is currently no systematic collection of information on non-formal education, particularly information of a statistical nature. As the collection of such information is vital to the planning of non-formal education programmes, it is recommended that a body responsible for non-formal education information be established in each member country.

6. Despite the general awareness of the important role of non-formal education in national development, budgetary support from the government in most countries is not commensurate with the needs. The findings of this study indicate great potentialities for non-formal education. The Government must be convinced that non-formal education should receive greater support.

At the Regional Level

1. Since in several of the SEAMEO countries, resources, either human or material, for non-formal education are limited, it is recommended that SEAMEO study the possibility of providing the member countries, upon request, the services of consultants, and support requests made by the member countries to international and/or regional organizations for assistance to non-formal education programmes.

2. Follow-up studies should be undertaken to maintain the continuity of the SEAMEO Non-Formal Education Study. For example, priority projects on non-formal education existing in member countries should be classified and selected for further studies. Such studies could be undertaken either by each member country or by SEAMEO upon request, and SEAMEO could publish and disseminate the findings to member countries.

3. Evaluation seems to be a major problem of non-formal education activities. A workshop or other forms of actions could be organized to discuss and formulate evaluation instruments in order to enable member countries to undertake evaluation of their non-formal education programmes. The results of good evaluation will help the personnel concerned to plan their programmes more effectively.

4. The availability of full-time staff, with the necessary training in non-formal education, is important in the development of non-formal education and should be given high priority. SEAMEO is urged to look into the feasibility of establishing a regional mechanism for the training of key personnel in non-formal education.

5. Provisions should be made for the exchanges of personnel engaged in non-formal education programmes so that they may study, on the spot, significant on-going projects in the SEAMEO countries.

6. SEAMEO could promote the exchange of information and experiences among member countries by serving as the coordinating body in providing information by way of gathering and disseminating information on non-formal education activities from all the member countries. Exchange of publications and audio-visual materials should also be encouraged.

7. Since it was not possible for this study to treat the financial and personnel aspects of non-formal education programmes/projects, it was recommended that a cost study be conducted to measure more accurately the financial feasibility of the significant programmes/projects. It might be desirable, however, that the inquiry should be carried out with a different methodology from the one adopted for the current study. On-the-spot inquiry, in close collaboration with the national authorities concerned, would be a desirable approach.

8. There is a need for top administrators of non-formal education programmes to meet in order to review and discuss, in depth, the policy, methodology, strategy and problems of implementation. Also, a meeting or workshop of professionals for programme development is necessary so that appropriate steps may be taken to further develop non-formal education programmes. It was recommended that the administrators and the professionals from different ministries and/or agencies could meet at one and the same meeting, to which three participants from each member country might be invited.

PART TWO

INTRODUCTION

The purpose of this part is to present significant non-formal education projects existing in the eight SEAMEO countries. These projects are identified by the National Liaison Committee of each country in the replies to the Study's questionnaires.

First, the projects are listed country by country and classified into three areas, namely literacy, rural development and vocational/technical skill development.

Next are the priority rankings of significant projects in the light of the established criteria. The National Liaison Committees were so kind to make an extra effort to do the rating, the result of which was recorded and analyzed here.

In order to give general information about the non-formal education projects in these countries, a short description of each project selected from the project case studies sent to the Research Team is subsequently presented in the form of Project Summaries. Some projects which are identified on the list are not described in the Project Summaries simply because of the lack of detailed information. At the same time, it should also be noted that some projects described in the Project Summaries are not identified on the list of significant projects, i.e. Agricultural Development in the Rural Villages of Chainat and Uthai-Dhani by the Foundation for Thailand Rural Reconstruction Movement. Most of these projects are conducted by private agencies; the information was sent to the research team in addition to those collected by the National Liaison Committees. In the case of the projects which are operated under the same principle with the difference only in location, only one summary is given.

It is hoped that this inventory will be valuable to the readers who might want to have a brief account of the existing non-formal education undertakings in this region and also those who wish to use the information as a clue for further investigation.

I. SIGNIFICANT PROGRAMMES/PROJECTS IN NON-FORMAL EDUCATION

INDONESIA

Programme/Project	Officer/Address
LITERACY	
1. Basic literacy courses	Directorate of Community Education, Ministry of Education and Culture.
2. Post-literacy activities	- do -
3. Follow-up courses for the after-care of new literates	- do -
4. Production of reading materials for new literates	- do -
5. People's libraries	- do -
6. Community service centres for family life education	- do -
7. Introductory courses for community development	- do -
8. Socio-economic adult courses	- do -
9. Family life education courses	- do -
10. Functional literacy experimental pro- jects	- do -
11. Training of personnel in literacy	- do -
12. Training of personnel in community development	- do -
13. Literacy campaign by KOWANI through PKK (preparatory stage)	In cooperation with the Directorate of Community Development and the Di- rectorate of Social Guidance. KOWANI (The Indonesian Women's Congress).

RURAL DEVELOPMENT

PROGRAMME I: Increase of Rice, Secondary Crops and Horticultural Production	Director-General of Agriculture
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Programme/Project	Officer/Address
Projects	
1.1 Plant Protection	Pasar Minggu, Jakarta
1.2 Seed Production and Distribution	-- do --
1.3 Fertilizer, Soil Productivity and Agricultural Mechanization	-- do --
1.4 Development of Agricultural Extension	-- do --
PROGRAMME 2: Increase of Animal Husbandry Production	Director-General of Animal Husbandry
Projects	
2.1 Development of Animal Husbandry Production	Jalan Salemba 16, Jakarta.
2.2 Animal Protection	-- do --
2.3 Animal Husbandry Extension	-- do --
2.4 Poultry Promotion	-- do --
PROGRAMME 3: Increase of Fishery Production	Director-General of Fisheries
Projects	
3.1 Development of Inland Fisheries	Jalan Salemba 16, Jakarta
3.2 Development of Sea Fisheries	-- do --
3.3 Pest and Disease Control	-- do --
3.4 Fishery Education	-- do --
PROGRAMME 4: Increase of Estates and Small Holdings Production	Director-General of Estates and Small Holdings
Project	
Small Holdings Extension	Directorate of Small Holdings Extension, Jalan Letjen S. Parman, Jakarta

VOCATIONAL TECHNICAL SKILL DEVELOPMENT

PROGRAMME 1: General Rural Development, Cross Sectoral Development	Dr. W.P. Nagitupulu
Project	
Mobilizing Manpower Volunteers to Promote Reform and Development	Jalan Halimun 4, Jakarta
PROGRAMME 2: Vocational Training Centre	Mr. Harsono
Project	
Industrial Vocational Training Centre	Pasar Rebo, Jakarta
PROGRAMME 3: Manpower Building	Mr. Djarot Duriat
Project	
Agricultural Skill Training	Jalan Tumapel, 45 Singosari, Malang, Jawa Timur.

KHMER REPUBLIC

Programme/Project

Officer/Address

LITERACY

- | | |
|---|--|
| 1. Literacy Campaign | Permanent National Committee for the Literacy Campaign |
| 2. Libraries in Communities | - do - |
| 3. Publication of illustrated magazines indicating literacy activities and the results of functional literacy | - do - |
| 4. Instructive entertainment for educational and vocational purpose | Directorate-General of Education (DEMEP) |
| 5. Functional Literacy | National Committee for Non-Formal Education (CONENF) |
| 6. Women's Education | National Committee for Non-Formal Education (CONENF) |
| 7. Literacy for out-of-school youth | Directorate-General of Education (DEMEP) |

RURAL DEVELOPMENT

- | | | |
|---------------------|---|--|
| PROGRAMME 1: | Farmers Agricultural Bank | Mr. Sem Phum |
| Project | Rural Credit and Farmers Association | |
| PROGRAMME 2: | Directorate of Rice Production (DPR) | Mr. Kong Sam Ol |
| Projects | 2.1 Extension of fertilizer utilization in rice production | Directorate of Agriculture, 210 BD 9 Tola, Phnom Penh. |
| | 2.2 Banan Pilot Station of Irrigated Crops (Battambang) (Improved irrigation and crop diversification in a 300 ha. rice area) | Mr. Chhieu Nam

Banan Station |
| | 2.3 Prek Thnot Farm Research (Improved irrigation and crop diversification) | Mr. Loy Sim Chheang

Prek Thnot Research Station |

VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

- | | | |
|---------------------|--|--|
| PROGRAMME 1: | Professional and Technical Training Centre | Mr. Prom Lay |
| Projects | 1.1 Small Motor Repairs | Centre de formation et d'apprentissage professionnel |
| | 1.2 Auto Mechanics | |
| | 1.3 Electricians | |

Programme/Project		Officer/Address
	1.4 General Mechanics	
	1.5 Electronics	
PROGRAMME 2:	Training and Refresher Courses for Personnel of E.D.C. (Electricity Generation of Cambodia)	
Project	2.1 Training Course for Technical Personnel in Electro-mechanics	Centre de formation et de perfectionnement du personnel d'electricite du Cambodge
	2.2 Training and Refresher Courses for Qualified Workers in Electrical Wiring, Diesel Mechanics, Electricians.	-- do --
PROGRAMME 3:	Technical Teacher Training Centre	Mr. Phlong Chhat
Projects	3.1 Electricity	Centre de formation et de perfectionnement technique et pedagogique, Sras Chak, Phnom Penh
	3.2 General Metal	
	3.3 Sheet Metal & Welding	
	3.4 Wood Work & Construction	
	3.5 Auto Mechanic	
	3.6 Applied Chemistry	
	3.7 Industrial Drawing and Architectural Drawing	
PROGRAMME 4:	Foundry Shop and Electricity Shop in the School of Industrial Arts	Mr. Ok Haeun
Project	Training students to be employed in industries	Faculte des arts et metiers, Phnom Penh.

LAOS

Programme/Project	Officer/Address
LITERACY	
1. Functional literacy programme for farmers	Direction de l'enseignement primaire et de l'education des adults.
2. Development of Rural Libraries	National Committee for the Development of Rural Libraries.
3. Family Planning	Direction de la protection maternelle et infantile.
4. Training of farmers	Sub-Directorate of Agricultural Extension.
RURAL DEVELOPMENT	
PROGRAMME 1: Rice Production	Tao Somsavath Vong Koth, Director of Agriculture.
Projects	Salakham Rice Experimental Station.
1.1 Salakham Rice Experimental Station.	
1.2 Rice Cultivation Techniques	
1.3 Rice Seed Technology and Seed Production	
PROGRAMME 2: Intensified Agricultural Production	Mr. Oroth Chounlamounry, Hat Dok Keo Pilot Project
Project Irrigated Crop Production	
PROGRAMME 3: Credit and Marketing Organization	Mr. Boun Nong Sipa, ADO Manager.
Projects	ADO Vientiane
3.1 Agriculture Loan and Savings Association	
3.2 Fertilizer use	Salakham Rice Experimental Station
PROGRAMME 4: Livestock	Dr. Houane Sihamagna Livestock Veterinary Service
Projects	Don Dok Pigs Farm Provinces
4.1 Pigs Production	
4.2 Poultry Production	
4.3 Pasture Techniques	Napheng Pasture Farm
VOCATIONAL/TECHNICAL SKILL DEVELOPMENT	
PROGRAMME 1: Rural Development	Mr. Oui Khounkham
Project Ban Amon	Ministry of Rural Affairs, Vientiane, Laos.
PROGRAMME 2: Professional Training of Government Employees and USAID Local Employees	Mr. D. Maxwell
Project USAID Local Training Centre	USAID Vientiane, Laos.

MALAYSIA

Programme/Project

Officer/Address

LITERACY

- | | |
|--|--|
| 1. Basic Literacy Classes (Adult Education Classes) | Ministry of National and Rural Development |
| 2. National Solidarity Classes Programme | National Goodwill Office |
| 3. Community Development (Romanized Literacy Classes) | Ministry of National and Rural Development |
| 4. Remedial Education Programmes in Welfare institutions | Ministry of Welfare Services |

RURAL DEVELOPMENT

- | | | |
|---------------------|--|---|
| PROGRAMME 1: | Training of Farmers and Youths at Rural Agricultural Training Centres (RATC's) | Director, Agricultural Extension, Kuala Lumpur, and State Directors of Agriculture. |
| Project | 20 RATC's in 11 states in Peninsular Malaysia | |
| PROGRAMME 2: | Farm Mechanization Training for Farmers and Youths | Director of Agricultural Mechanization |
| Project | Seven Farm Mechanization Training Centres in Peninsula Malaysia | |
| PROGRAMME 3: | Padi Mechanization Training Centre (PMTC) | Director of Agricultural Education |
| Project | Padi Mechanization Training Centre | Bumbong Lima, Penang State. |
| PROGRAMME 4: | In-Service Training of Staff for Padi Farm Mechanization | Director, Agricultural Education and Training |
| Projects | 4.1 7 FMTC's (as per programme 2)
4.2 1 PMTC (as per programme 3) | |

VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

- | | |
|---------------------|---|
| PROGRAMME 1: | MARA Vocational Institute (M.V.I.) |
| Projects | 1.1 M.V.I. Kuala Lumpur
1.2 M.V.I. Sungai Getani
1.3 M.V.I. Malaka
1.4 M.V.I. Petaling Jaya (Radio & TV)
1.5 M.V.I. Alor Star
1.6 M.V.I. Johor Bharu |
| PRO | |

Programme/Project

Officer/Address

1.7 M.V.I. Petaling Jaya (Tailoring)

PROGRAMME 2: Youth Training Centre

Project

Training of Perlis Youth as Sugar
Plantation and Factory Workers

Youth Training Centre,
Dusunua, Ulu Langat,
Selangor.

PHILIPPINES

Programme/Project	Officer/Address
LITERACY	
1. Functional Literacy Drive	Bureau of Public Schools (Adult and Community Education Division), Manila.
2. Community development including literacy-teaching	Philippine Rural Reconstruction Movement.
3. Literacy programmes in minor Languages	Summer Institute of Linguistics.
4. SALAM	Bureau of Public Schools (Adult and Community Education Division), Manila.

RURAL DEVELOPMENT

PROGRAMME 1:	Agricultural Extension Training Programme	Francisco F. Saguiguit, Director, Bureau of Agricultural Extension, Diliman, Quezon City, Philippines
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- | | |
|-----------------|---|
| Projects | 1.1 Extension Service in Agriculture and Homemaking |
| | 1.2 Rural Youth Development through 4-H Clubs |
| | 1.3 Agricultural Cooperatives |
| | 1.4 Information and Public Relations |
| | 1.5 Leadership Training |

PROGRAMME 2:	Training Programme in Forestry	Jose Viado, Director, Bureau of Forestry, Manila
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- | | |
|-----------------|--|
| Projects | 2.1 Reforestation and Soil Control |
| | 2.2 Leadership Institute in Forestry Extension |
| | 2.3 Teachers' Institute in Forestry Conservation |
| | 2.4 Multiple-Use Forest Management |
| | 2.5 Training Seminar for Forest Guards and Scalers |

PROGRAMME 3:	Agricultural Research Programme	Eliseo Carandang, Director,
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Programme/Project	Officer/Address
	Bureau of Plant Industry, Manila, Philippines.
Projects	
3.1 Rice and Corn Production Programme	
3.2 Feed Grains Production Programme	
3.3 Vegetable Production	
3.4 Green Revolution	
3.5 Coconut Rehabilitation and Development Programme	
3.6 Seed Production, Procurement and Distribution Programme	
3.7 Pest and Diseases Control Programme	
3.8 Development of Export Crops Programme	
PROGRAMME 4: Applied Nutrition Programme	Liceria B. Soriano, Director, Bureau of Public School, Manila, Philippines
Projects	
4.1 Establishment of ovens in selected provincial and city divisions	
4.2 Feeding of school children to balance nutritional needs	
4.3 Raising of crops and animals in schools and in the home of pupils to improve nutrition of the family.	
4.4 Department of Education Project No. 72-4-12 in cooperation with the German Government for the proper utilization of school ground for food production.	
PROGRAMME 5: Training in Rural Cooperatives and Rural Credit in Fishery	Felix R. Gonzales, Director, Bureau of Fisheries, Manila, Philippines.
Projects	
5.1 Peace Corps Volunteers Programme	
5.2 Mobile Technical Assistance Team	
5.3 Japan Overseas Crops Volunteers	
5.4 Brackish Water Fertilization Training Programmes	
5.5 Management Seminar for Middle Line Supervisors	

Programme/Project	Officer/Address
5.6 Eucheima Seaweeds	
5.7 Fish Farming Training Programme	
5.8 Pond Fisheries Extension Training Programme	
PROGRAMME 6: Adult Training Programme	Fernando Bernardo, Dean, College of Agriculture, UPLB, Laguna, Philippines.
Projects	
6.1 Farmers' Associations	
6.2 Rural Youths Development	
6.3 Training for Rural Women	
PRO	
6.4 Teachers' Training for Elementary Agriculture	
6.5 Out-of-School Youth Training	
6.6 Barrio Development	
6.7 Forestry Development	
6.8 Dairy Training Programme	
6.9 Adult Farmer's Home Development Organization	
PROGRAMME 7: Food Production/Nutrition	
Projects	
7.1 Food and Nutrition	Roberto Fronda, Executive Director, NFAC, Department of Agriculture and Natural Resources, Quezon City, Philippines.
7.2 Extension Service	
7.3 Other NFAC Projects	
7.4 Infrastructure	
7.5 Research	
7.6 Farm Credit	
PROGRAMME 8: Green Revolution	Napoleon D. Dignadice, Assistant Director, Bureau of Vocational Education, Manila, Philippines
Projects	
8.1 Vegetable Production (FAHP)	
8.2 Vegetable Seed Production	
8.3 Short Course (Rice Production) for Out-of-School Youth	
8.4 Raising Vegetables, Fruits, Poultry and Swine and other Livestock	
PROGRAMME 9: Agricultural Leadership Training	Pedro L. Esteban, Chief, Agricultural Education Division,

Programme/Project	Officer/Address
	Bureau of Vocational Education, Manila, Philippines.
Projects	
9.1 Seminar-Conference on Revised Secondary Agriculture Curriculum	
9.2 Future Farmers of the Philippines Youth Development Programme (FFP)	
9.3 Clothing Shops (FAHP)	
VOCATIONAL/TECHNICAL SKILL DEVELOPMENT	
PROGRAMME 1: Opportunity Vocational/Special Trade Courses in Public Trade Technical Schools.	Mr. Florencio M. Apolinar, Chief, Trade and Industrial Education Div. Bureau of Vocational Education, Manila, Philippines
Projects	E. Amang Rodriguez, Institute of Science and Technology, Nagtahan, Manila.
1.1 Special Trade Courses (day)	
1.2 Opportunity Vocational Courses (Evening Programme)	Undertaken in 11 public trade technical schools
PROGRAMME 2: Skill Training in Home Industries	Mr. Conrado de los Reyes, Chief, Home Industries Division, Bureau of Public Schools, Manila, Philippines.
PROGRAMME 3: Special Vocational Courses (day and evening)	Mr. Julian Yballe, Director, Bureau of Private Schools, Manila, Philippines These are undertaken in evening and day programmes in 610 private schools scattered throughout the country.
PROGRAMME 4: Apprenticeship in Various Trades	Mr. Narciso Alban, Director, Bureau of Apprenticeship, Department of Labour, Manila, Philippines. These are undertaken in various industrial establishments with re- gistered apprenticeship programme.
PROGRAMME 5: National Electrical Trade Training Programme	Mr. Ruperto S. Romero, Project Director, NETTP.

Programme/Project

Officer/Address

PROGRAMME 6: Vocational Training for the Rehabilitation Programme of the Disabled

National Manpower and Youth
Council,
Department of Labour,
Quezon City, Philippines

The Director,
Bureau of Vocational Rehabilitation,
Department of Social Welfare,
Manila, Philippines

SINGAPORE

Programme/Project

Officer/Address

LITERACY

Literacy in a second or third language

Adult Education Board and other adult education agencies

RURAL DEVELOPMENT

PROGRAMME 1: Extension Service

Director of Primary Production Dept.
Ministry of National Development.

Project Farmers Project

PROGRAMME 2: Fishery Training

Project Fishery Training Course

Fishery Training Centre,
Changi Point,
Singapore 17.

VOCATIONAL/TECHNICAL SKILL DEVELOPMENT

PROGRAMME 1: Pre-Vocational Training

Mr. Koh Ham Yam:
c/o Adult Education Board,
126 Chairnhill Road,
Singapore 9.

Project Vocational Preparatory Courses for Primary School Leavers

- (1) Kim Keat AEB Centre,
Jalan Ampase,
Singapore 12.
- (2) Mountbatten AEB Centre,
Dakota Crescent,
Singapore 14.
- (3) Bukit Batok AEB Centre,
Jalan Jurong Kechil,
Singapore 21.
- (4) Parry Avenue AEB Centre,
Parry Avenue,
Singapore 19.
- (5) Bukit Ho Swee AEB Centre,
Jalan Bukit Ho Swee,
Singapore 3.
- (6) Newtown Secondary School
Centre,
Queensway, Singapore 3.

PROGRAMME 2: General Management Courses

Mr. John Tan

Projects 2.1 Courses in the Modern Management Technique

Lorong Langsir, Singapore 10.

2.2 Induction Courses for New Entrants to Civil Service

Programme/Project	Officer/Address
2.3 General Management Courses	
2.4 Leadership Training Courses for Civil Servants	
PROGRAMME 3: Commercial/Vocational Education for Women	Mr. Fong Weng Kee, c/o Adult Education Board.
Project Commercial/Vocational Education Courses for Women	Hai Sing Dewasa Institute, 49 Holland Road, Singapore 10.

THAILAND

Programme/Project	Officer/Address
LITERACY	
1. Fundamental Education	Adult Education Division, General Education Department in cooperation with government and non-government agencies
2. General Education levels 1 and 2 (School Equivalency Programme)	- do -
3. Functional Literacy and Family Life Education	- do -
4. Public Libraries	Adult Education Division, Private Organizations, Municipality
5. Local Reading Centres	- do -
6. Production of Wall-Newspaper	Adult Education Division, University Women's Association.
7. Production of Readers for New Literates	- do -
8. Functional Literacy Programme	Foundation for Thailand Rural Reconstruction Movement
9. Literacy Classes for Prisoners	Prisons Department, Ministry of Interior.
RURAL DEVELOPMENT	
PROGRAMME 1: Agricultural Training Centre	Department of Agricultural Extension, Ministry of Agricultural and Cooperatives, Rajdamnern Ave., Bangkok, Thailand
PROGRAMME 2: Farm Mechanization Training	Department of Agricultural Techniques, Ministry of Agriculture and Cooperatives, Bangkok, Thailand.
PROGRAMME 3: Home Economics in Farm Families	Department of Agricultural Extension, Ministry of Agriculture and Cooperatives, Bangkok, Thailand.
PROGRAMME 4: 4-H Clubs (Yuwa Kasetakorn)	- do -
PROGRAMME 5: Farmers Groups	- do -
PROGRAMME 6: Cooperative Education and Training	Training Division,

Programme/Project	Officer/Address
PROGRAMME 7: Summer Training Courses for the People	Cooperative Promotion Department, Extension and Training Office, Kasetsart University.
VOCATIONAL/TECHNICAL SKILL DEVELOPMENT	
PROGRAMME 1: Mobile Trade Training Schools Programme	
Project: Mobile Trade Training Schools	Adult Education Division, General Education Department, Ministry of Education, Bangkok, Thailand.
PROGRAMME 2: Adult Vocational School Programme	-- do --
PROGRAMME 3: Adult Vocational School Programme (Night class)	-- do --
PROGRAMME 4: Polytechnic School Programme	Technical School Division, Department of Vocational Education, Ministry of Education, Bangkok, Thailand.
PROGRAMME 5: Private Schools	
Project: Soraya Dressmaking Institute	190-192 Siam Square, Rama I, Pratumwan, Bangkok, Thailand.
PROGRAMME 6: Short Course Training	
Project: Travel Industry and Hotel Management	Bangkok Technical Institute
PROGRAMME 7: Socially Handicapped Women	Public Welfare Department, Ministry of Interior.

VIETNAM

Programme/Project LITERACY

Programme/Project	Officer/Address
1. Literacy courses	Ministry of Culture, Education and Youth
2. Literacy courses for children	Ministry of Rural Development
3. Literacy courses for adults	- do -
4. Adult education for ethnic minorities in the local language	Ministry of Ethnic Development
5. Rehabilitation programmes for prisoners	Ministry of the Interior
6. Advanced courses for new literates	Ministry of Culture, Education and Youth
7. Local Reading Clubs	Information Service
8. Training Courses for Literacy Instructors	Ministry of Culture, Education and Youth

RURAL DEVELOPMENT

PROGRAMME 1: Training Programme of Cooperatives, Farmers' Associations of Agriculture, Forestry, Fishery and Animal Husbandry. Mr. Bui Tien Khoi, Director of Agricultural Training Centre, 85 Le-Van-Duyet, Gia Dinh, Vietnam.

- Project**
- 1.1 In-service Training of Managers of Farmers' Associations & Cooperatives
 - 1.2 In-service Training of Accountants of Farmers' Associations & Cooperatives, In-service Training of Farmers' Associations Cadres.
 - 1.3 In-service Training of Cooperatives Administrators and Supervisors.
 - 1.4 Coordination and Guidance Training Courses for MOA Officials
 - 1.5 Cooperative Education for Members of Farmers' Associations and Cooperatives.

PROGRAMME 2: Agricultural Technique Guidance Programme

- Mr. Vu Dinh Thang, Chief of Agricultural Technique Guidance Service, 28 Mac Dinh Chi, Saigon.
- Projects**
- 2.1 Extension project of high yield rice production 48 Agricultural Services throughout the country.
 - 2.2 Extension project of sorghum 6 Agricultural Services: An-Giang, Chau-Doc, Sodec, Kien-Giang, Kien-Phong, Phong-Dinh.
 - 2.3 Extension project of corn and oil plant (soy bean, peanut) growing techniques. 48 Agricultural Services throughout the country.

Programme/Project		Officer/Address	
	2.4	Extension project of pig and chicken self-sufficiency raising techniques	
	2.5	Extension project of livestock disease prevention techniques	
PROGRAMME 3:		Young Farmers 4T Programme	Mr. Nguyen-Phuc-Luong, Chief of 4T Bureau, 12 Mac-Dinh-Chi,
Projects	3.1	4T and special activities training for leaders, members and local voluntary cadres.	48 Agricultural Services throughout the country
	3.2	Inter-provincial member exchange project: observation tours.	
	3.3	Agricultural techniques training project for 4T members	
PROGRAMME 4:		Home Economics Programme	Miss Phung-Thi-Bach, Chief of Household Activities Service, 12 Mac-Dinh-Chi, Saigon.
Projects	4.1	Nutrition and Food Training	48 Agricultural Services throughout the country
	4.2	Training in Hygiene	
	4.3	Training in Tailoring and Handicrafts	
PROGRAMME 5:		Fishery Training Programme	Director of Fisheries Directorate, Saigon.
Projects	5.1	Project for inland fishery promotion	Mr. Nguyen-Van-Thuong, Chief of Fishery Promotion Bureau, Directorate of Fisheries, 116 Phan-Dinh-Phung, Saigon I.
	5.2	Sea Fishery Project	Mr. Van-Huu-Kim, Chief of Fishery Technique Bureau, Directorate of Fisheries, 116 Phan-Dinh-Phung, Saigon I.
PROGRAMME 6:		Agricultural Training Programme for Ethnic Minorities.	Mr. Hoang-Kim-Cuong Chief of Pre-and-In-Service Training, Ministry of Ethnic Development.
Projects	6.1	Practical Agriculture Training for cadres	Director of National Cadres Training Centre in Pleiku.
	6.2	Agricultural extension courses for ethnic minorities	Ethnic Development Services throughout the country.
VOCATIONAL/TECHNICAL SKILL DEVELOPMENT			
PROGRAMME 1:		The Society of Popular Centres	Mr. Cung Dinh Thanh.

Programme/Project		Officer/Address
		No. 7 Phan-Ke-Binh Street, Saigon.
Projects	1.1 Popular Polytechnical Schools in Saigon, Cholon and Gia-Dinh	
	1.2 Literature and Applied Arts Centre.	
	1.3 Popular Polytechnical Schools in other cities and towns around the country.	
PROGRAMME 2:	Private Technical Vocational Schools	Mr. Ly Kim Chan, Director of the Directorate of Technical Vocational Education.
Projects	2.1 Private Technical-Vocational Schools in Saigon & Cholon	2 Phan Dinh Phung Street, Saigon.
	2.2 Private Technical-Vocational Schools in Gia-Dinh	
	2.3 Private Technical-Vocational Schools in other cities and towns around the country.	
PROGRAMME 3:	Technical-Vocational Schools of the Ministry of Veterans & the Ministry of Defence	National Rehabilitation Institute, 70 Ba Huyen Thanh Quan Street, Saigon
Projects	3.1 Technical-Vocational Centre for Disabled Soldiers, Veterans & Soldiers' Widows in Saigon.	National Rehabilitation Institute, 70 Ba Huyen Thanh Quan Street, Saigon.
	3.2 Technical-Vocational Centre for Disabled Soldiers, Veterans and Soldiers' Widows in Thu-Duc, Gia-Dinh.	Disabled soldiers village in Thu-Duc, Gia-Dinh, Saigon.
	3.3 Technical-Vocational Schools for Army Specialists at Saigon Army Base	Number 40 Army Base for Technical Forces at Tran-Hung Dao Street, Saigon.
	3.4 Technical-Vocational Schools for Navy Specialists at Saigon Naval Base.	Naval Base at Cuong-De Street, Saigon.
PROGRAMME 4:	Technical-Vocational Schools for Workers	The Head Service of the Technical and Vocational Training Service of the Ministry of Labour.
Projects	4.1 Technical-Vocational Schools for Workers in Saigon.	459 Tran-Hung-Dao Street, Saigon,
	4.2 Technical-Vocational Schools for Workers in Gia-Dinh	947 Le-Van-Duyet Street, Gia-Dinh, Saigon.

II. THE PRIORITY RANKINGS OF SIGNIFICANT PROJECTS IN SEAMEO COUNTRIES

As a follow-up to the collection of questionnaires from SEAMEO member countries, the National Liaison Committee of each country was asked to scale the projects they submitted as well as those they considered significant according to a number of criteria:

- I. relevance to the needs of the people
- II. large number of people or clientele being reached
- III. available resources to support the programme
- IV. response from the people
- V. efficiency of organization and operation
- VI. multiplier effect
- VII. degree of urgency
- VIII. degree of support from the authorities concerned.

A five-point scale, from 5=highest to 1=lowest, was used for each.

If equal weight is assigned to each criterion, then a scale value for each programme / project may be computed by simply summing the scales for each criterion and dividing by 8. A priority ranking based on these scale values can then be established. It must be noted however that the ranking must be read subject to the following qualifications. First, the assignment of scale values to each criterion is largely subjectively determined by the National Liaison Committees. The exception is Thailand, which lists clearly the rationale for their scaling procedure. Equally arbitrary perhaps is the use of equal weights for each criterion in deriving project scale values, nor indeed can it be asserted that the eight criteria above are exhaustive. But in the absence of more information, exploration of alternative weighting schemes is likely to be a futile exercise. Fortunately, it is possible to check for consistency of priority rankings and scale values, and this matter will be the subject of the next analysis. Thirdly, there are projects which do not fall easily into the areas rural development (RD), literacy (L) and vocational/technical skill development (VT); they cover two or more areas. No attempt is made to force these programmes into any area of activity in the following tables.

The priority ranking list of every country is largely self-explanatory. The following brief remarks may however be useful. In Indonesia, it is difficult to say which area has priority, especially since a number of projects/programmes cover several areas e.g. socio-economic adult courses, student service programmes. In Malaysia, the same appears to be true, though there is a slightly greater emphasis on rural than on vocational training or literacy. The Philippines has a fairly even distribution of subject areas over the rankings, though the emphasis on rural development, with rankings of one and two, is quite obvious. The predominance of, and the priority accorded, vocational/technical skill development programmes are understandable in highly developed Singapore, where agriculture is relegated to the lowest rank. Functional literacy and family life education receives the highest ranking in Thailand, but a wide spectrum of subject areas is distributed over the rankings. Scale values decrease quite evenly down the ranks. For Vietnam, the emphasis on agriculture is clear as we proceed down the list.

INDONESIA

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Development of Agricultural Extension	RD	1	4.00
Socio-Economic Adult Courses	-	2	3.87
Student Service Programme	-	2	3.87
Training of Community Development Personnel	-	2	3.87
Agricultural Skill Training	RD	3	3.75
Training of Personnel in Community Development	-	3	3.75
Agricultural Skill Training	VT	4	3.62
Field Seminar For Functional Literacy	L	4	3.62
Reading Materials for New Literates	L	4	3.62
Mobilizing Manpower Volunteers	RD	5	3.50
Family Life Education Courses (Penteraya)	L	6	3.37
Community Source Centre for Family Life Education	L	6	3.37
Functional Literacy Experimental Projects	L	6	3.37
General Rural Development, Cross Sectoral Development	RD	6	3.37
Manpower Building (Agricultural Skill Training)	RD	6	3.37
Extension of Animal Husbandry Increase	RD	7	3.12
Fishery Extension	RD	7	3.12
People's Libraries	L	7	3.12
The Literacy Campaign by Kowani through PKK	L	8	2.87
Training of Personnel in Literacy	L	8	2.87
Vocational Training Centre	VT	8	2.87
Basic Literacy Courses	L	9	2.62
Follow-up Courses for the Aftercare of New Literates	L	9	2.62
Introductory Courses for Community Development	-	9	2.62
Post Literacy Activities	L	9	2.62

KHMER REPUBLIC

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Extension of Professional and Technical Training Centre	VT	1	4.00
Technical Teacher Training Centre	VT	1	4.00
Agricultural Projects after war	RD	2	3.75
Rice Production (DPR)	RD	2	3.75
Foundry Shop and Electricity Shop in the School of Industrial Arts	VT	3	3.62

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Training Courses for Personnel of E.D.C. (Electricity of Cambodia)	VT	3	3.62
Prek Thnot Farm Research	RD	4	3.37
Extension Project in Animal Husbandry	RD	5	3.25
Banan Pilot Station of Irrigated Crops	RD	6	3.12
Literacy for Out-of-School Youth	L	7	3.0
Farmers Agricultural Bank	RD	8	2.62
Libraries in Communities	L	9	2.5
Instructive Entertainment for Educational and Vocational Purpose	L	9	2.5
Literacy Campaign	L	10	2.0
Functional Literacy	L	11	1.75

LAOS

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Rice Production	RD	1	4.25
Livestock Programme	RD	2	4.12
Training Course for Agricultural Extension Workers (Intensified Agricultural Production)	RD	2	4.12
Development of Rural Libraries	L	3	4.0
Radio broadcasting for animators in remote areas	L	3	4.0
Credit and Marketing Organization	RD	4	3.87
Functional Literacy for Farmers	L	5	3.62
Rural Development (Ban Amone)	VT	5	3.62
Professional Training of Government Employees (USAID Training Centre)	VT	6	3.0

MALAYSIA

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Community Development	L	1	4.62
National Solidarity Classes Programme	-	2	4.12
Small Holdings Extension	RD	2	4.12
Functional Literacy Training Programme	L	3	3.62
Extension Literacy Scheme	L/RD	3	3.62
Fruit Replanting and Rehabilitation	RD	3	3.62
MARA Vocational Institutes (M.V.I.) Short Courses only	VT	4	3.50

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
In-land Fishery Training Centre	VT/RD	5	3.25
Padi Mechanization Training	RD	6	3.12
Remedial Educational Programme in Welfare Institutions	"	7	2.75
Social Education	"	7	2.75
Youth Training Centre--Training for Perlis Youth as Sugar Plantation and Factory Workers	VT/RD	8	2.50
Training for Farmers in Poultry Husbandry	RD	9	2.38

PHILIPPINES

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Green Revolution: Raising Vegetables, Field Crop., etc.	RD	1	5.00
Short Courses in Rice Crop Production	RD	2	4.25
Social Laboratory: Rice Production through the Institutional Approach (Action Research)	RD	3	4.12
The Functional Literacy Drive	L	4	4.00
Apprenticeship in various trades (undertaken in various industrial establishments)	VT	5	3.87
Opportunity Vocational Courses (Evening Programme undertaken in public trade - technical school)	VT	5	3.87
Vocational Training for the Rehabilitation Programme of the Disabled	VT	6	3.75
National Electrical Trades Training Programme (NETTP, National Manpower and Youth Council)	VT	6	3.75
Agricultural Leadership Training	RD	7	3.62
Green Revolution: Tool making establishment of nursery seed bank, etc.	RD	7	3.62
Special Trade Courses (E. "Amang" Rodriguez Institute of Science & Technology)	VT	7	3.62
Selective Food Production Projects	RD/VT	7	3.62
Seminar, Conference on Rev. Ag. HS Curriculum	RD	7	3.62
Specialized Vocational Skills Training in Handicraft (School for Philippine Craftsmen)	VT	7	3.62
Manpower Training for the Manufacture of Sinamay cloth (Roxas City School for Philippine Craftsmen)	VT	7	3.62
Extension Training in Sewing (Merida School of Home Industries)	VT	7	3.62
Training Programme for Rural Women	RD/VT	7	3.62

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Vegetable Production (FAHP)	RD	7	3.62
IRRI Multiple Cropping Training Course	RD	8	3.50
The Philippine Rural Reconstruction Movement Special Vocational Courses (evening and day programme in 610 private schools)	RD	8	3.50
The Summer Institute of Linguistics	VT	8	3.50
Training for Older Rural Youth	-	8	3.50
Training Supervised Credit Technicians for Rural Banks	RD/VT	8	3.50
	VT	9	3.37

SINGAPORE

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
General Management Courses	VT	1	4.62
Vocational Preparatory Courses for primary school leavers	VT	2	4.25
Literacy in a Second Language	L	3	3.62
Commercial/Vocational Education for Women	VT	4	3.50
Extension Service: Farmers Project	RD	5	2.25
Fishery Training Course	RD	6	1.88

THAILAND

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Functional Literacy and Family Life Education	L	1	4.25
Agricultural Training Centre	RD	2	3.62
Production of Wall-Newspaper	L	2	3.62
Functional Literacy Programme (Thai Rural Reconstruction Movement)	L	2	3.62
Summer Training Courses (organized by Kasetsart University)	-	3	3.50
Extension Education: Farmer Groups	RD	3	3.50
Adult Vocational Technical Programme (Night Class)	VT	4	3.37
Local Reading Centres	L	4	3.37
School Equivalency Programme (Adult Education Division)	L	4	3.37
Home Economics in Farm Families	RD	5	3.25
Public Libraries	L	5	3.25
Short Course in Co-operative Management	RD	5	3.25
Farm Mechanization Training	RD	5	3.25
Polytechnic School Programme	VT	6	3.12

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Production of Readers for New Literates	L	6	3.12
Vocational Private Schools	VT	7	3.00
Youth Farmers Programme (4-H Club)	RD	7	3.00
Mobile Adult Vocational Schools	VT	7	3.00
Mobile Trade Training Schools	VT	8	2.87
Short-Course Training in Travel Industry and Hotel Management	VT	9	2.62
Literacy Classes for Prisoners	VT	9	2.62

VIETNAM

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Competition in HYV Demonstration Farming	RD	1	4.62
Farmer Association Development	RD	2	4.25
Seafishing Technical Training for Fishermen	RD/VT	2	4.25
Fishery Development	RD	3	4.12
Training Managers of Associations and Cooperatives	VT	4	4.00
Growing Crops	RD	5	3.87
Technical Guidance	RD	5	3.87
Training for Farmers	RD	5	3.87
Animal Husbandry (4T)	RD	5	3.87
Chicken Farming (4T)	RD	5	3.87
Reeducation Programmes for Prisoners (Ministry of the Interior)	VT	5	3.87
Training Local Voluntary Cadres	-	5	3.87
Development of Farmers Association— Observation Tour	RD	6	3.62
Training Agricultural Cadres and Specialists	RD	6	3.62
Advanced Courses for New Literates	L	7	3.50
Literacy Courses (Ministry of Culture, Education and Youth)	L	7	3.50
Literacy Courses for Adults (Ministry of Rural Development)	L	7	3.50
Literacy Courses for Children (Ministry of Rural Development)	L	7	3.50
Popular Polytechnical School in Saigon, Cholon and Gia-Dinh	VT	7	3.50
Pilot Agricultural Villages	RD	8	3.37
Private Technical Vocational School	VT	9	3.25
Popular Polytechnic Schools in other cities and towns around the country	VT	9	3.25
Tailoring Courses	VT	9	3.25

Programme	Area	Priority Ranking	Scale Value (5=Highest; 1=Lowest)
Local Reading Clubs (by the Information Service)	L	10	3.00
Adult education for ethnic minorities in the local language	L	11	2.75
Food Improvement	RD	12	2.62
Food Nutrition	RD	13	2.37
House Betterment	RD	14	2.25
House Repair and Improvement	RD	14	2.25
Literature and Arts Practical Centre	-	14	2.25
Technical Vocational Schools for Army Specialists at Saigon Army Base	VT	14	2.25
Technical Vocational Centre for Disabled Soldiers, Widows in Thu-Duc, Gia-dinh	VT	14	2.25
Technical Vocational Schools for Army Specialists at Saigon Army Base	VT	15	2.00
Technical Vocational Schools for Navy Specialists at Saigon Naval Base	VT	15	2.00
Technical Vocational Schools for Workers in Saigon	VT	15	2.00
Technical Vocational Schools for Workers in Gia-dinh	VT	15	2.00

CHECKING OF CONSISTENCY OF PRIORITY RANKINGS

Whatever the limitations, an analysis of priority rankings is nevertheless useful not only as a guide to the effectiveness of certain programmes but also as a check on the consistency of the scale values adopted. On the basis of the eight criteria above, at least *four* propositions can be established.

1. The Degree of Urgency and the Degree of Support from the Authorities (VII vs VIII)

For a programme to be effective and useful, the extent of support from the authorities should be greater the more urgent the Programme is. This implies that there should be reasonably close matching in the scale values assigned to these criteria. This is indeed the case generally. However, there are certain instances where a departure from this is indicated. Table 1 shows the number of programmes where the difference in scale value between the two criteria is two or more:

Table 1: Differences in Scale Value between Urgency and Support from Authorities

Country	No. of Programmes where the difference: Scale (Urgency)–scale (Support from Authorities) is					
	-4	-3	-2	+2	+3	+4
Indonesia	0	0	0	14	1	0
Khmer Republic	0	0	1	2	0	0
Laos	0	0	0	1	0	0
Malaysia	0	5	4	0	0	0
Philippines	0	0	0	3	1	0
Singapore	0	0	0	0	0	0
Thailand	0	0	0	4	0	0
Vietnam	5	0	0	5	4	0

Since the difference taken is scale (VII)–scale (VIII), positive differences imply that the degree of urgency is not matched by sufficient support from the authorities. This appears to be the case of most of the programmes reported in Table 1, with Indonesia and Vietnam having respectively 15 and 9 programmes falling in this category. Negative differences on the other hand indicate the converse, that authorities are supporting programmes of little urgency. This is possible but not likely in LDC's and a plausible explanation must be made in terms of inconsistencies in the scaling process.

2. Degree of Urgency and Response from the People (VII vs IV)

A measure of the 'urgency' of a programme can be obtained from the response it elicits from its intended clientele. The implication is that the more urgent the programme, the greater the response from the people. Table 2 shows the number of programmes which deviate from this expected correlation.

Table 2: Differences in Ranking between Urgency and Response from People:

Country	No. of Programmes where the difference: Scale (urgency)–scale (Response from People) is			
	-2	+2	+3	+4
Indonesia	0	14	1	0
Khmer Republic	0	1	0	0
Laos	0	0	0	0
Malaysia	3	0	0	0
Philippines	0	4	1	0
Singapore	0	1	0	0
Thailand	1	1	0	0
Vietnam	0	4	1	1

Since the difference is taken as scale (VII)–Scale (IV), positive differences indicate that the authorities/NLC's have erred somewhat in considering programmes that elicit little response from the people urgent. Negative differences may be interpreted to mean that those programmes to which more people respond have not in fact been considered urgent by the authorities/NLC's. The possibility remains of course, that provision of attractive incentives would induce better response from the clientele. However, it is difficult still to see why a programme not considered urgent should contain more attractive incentives.

3. Large Number of People Reached and Multiplier Effects (II vs.VI)

Unlike the first two propositions, the third and fourth propositions do not necessarily entail any basic inconsistency on the part of the authorities/NLC's, but points to sub-optimal

Table 3: Differences between the Number of People Reached and Multiplier Effects.

Country	No. of Programmes where the difference: Scale (Multiplier Effect)–Scale (Large No. of People Reached) is				
	-3	-2	+2	+3	+4
Indonesia	0	0	5	0	1
Khmer Republic	0	0	1	0	0
Laos	0	0	0	0	0
Malaysia	0	0	0	0	0
Philippines	0	0	2	0	0
Singapore	1	0	1	0	0
Thailand	0	3	2	1	1
Vietnam	0	1	4	0	0

strategies instead. Ideally, coverage of a programme is maximized when that programme not only reaches a large number of people but also, in doing so, has high multiplier effects. Programmes reaching many people but with low multiplier effects will have slow rates of growth, while programmes with high multiplier effects but reaching relatively few people will remain small in coverage for some time. From table 4, it would appear that among those programmes which deviate from the desirable correlate above, the majority are those reaching few people but with high multiplier effects. It must be stated, however, that this is not intended as a criticism, since some of these may be high potential programmes in their earlier stages of development.

4. Efficiency of Organization and Operation and Multiplier Effects: (V vs VI)

Finally a close positive correlation is desirable between efficiency of organization and operation and multiplier effects. This makes for overall effectiveness of non-formal education programmes. Deviations among programmes from this desirable pattern are few (Table 4).

Table 4: Differences between Organizational and Operational Efficiency and Multiplier Effects

Country	No. of Programmes where the Difference: Scale (Efficiency)–Scale (Multiplier Effect) is		
	-2	+2	+3
Indonesia	0	2	0
Khmer Republic	5	0	0
Laos	1	0	0
Malaysia	0	5	2
Philippines	0	1	1
Singapore	0	1	0
Thailand	0	1	0
Vietnam	1	1	0

Since the difference between the two criteria is taken as Scale (V)–Scale (VI), positive differences show that efficient programmes are usually those with low multiplier effects. Seven such cases are encountered in Malaysia, but in general there are few programmes belonging to this category. There is one programme in Vietnam, five in the Khmer Republic and one in Laos where the differences are negative. This means that the high multiplier effect of the programme is somewhat diminished by low efficiency.

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PROJECT DETAILS

INDONESIA

AGRICULTURAL-ORIENTED FUNCTIONAL LITERACY EXPERIMENTAL PROJECT

Project Leader/Informant : Mr Achjar Yessi,
District Inspectorate for Community Education

Programme : Functional Literacy

General Information

Clientele : Illiterate farmers

Objective(s) : To support the programme for the improvement of agricultural techniques (BIMAS)

Method : Group discussion and practical work

Duration : -----

Other Information

The project is conducted in rural communities in Subang. Classes are held six months per year during the farming season so that learning can take place in a real working situation. Subjects taught are reading, writing, arithmetic, and agricultural knowledge and skills. The results of reading and writing test were not quite satisfactory; however, improvement in agricultural knowledge and skills could be observed.

AGRICULTURAL SKILL TRAINING

Project Leader/Informant : Djarot Duriat,
Director of the Agricultural Skill Training Center,
Regional Institute for the Manpower Building,
Agricultural Training Center,
Jalan Tumapel 45, Singasari, Malang.

Programme : Manpower Building

General Information

Clientele : Technicians, young and adult farmers, retired soldiers

Objective(s) : To develop technical skills in crop farming, cattle breeding, fishery, horticulture

Method : Training, mobile farmer-training

Duration : Farmer training is 210 hrs.; cadre training is 2100 hrs.

Other Information

This is a multi-purpose training facility for various clientele who want improved technical skills in modernizing agriculture. In some instances, training is provided to farmers by a mobile training unit.

About 295 trainees completed courses offered by the project.

BIMAS (Mass Guidance)

Project Leader/Informant : Drs. B. Syahrial Wahab,
Head, Office of Supervision and Students, Dedication,
Directorate of Higher Education,
Jalan Proklamasi 17-A,
Jakarta, Indonesia.

Programme : Student Service Programme

General Information

Clientele : Students/graduate volunteers; farmers

Objective(s) : To provide extension service to rural areas by means of student volunteers

Method : Training and farmer extension

Duration : -----

Other Information

BIMAS began in 1963 at the Institute of Agriculture at Bogor as an agricultural extension programme in the field of rice production, using students in an intensive way as village level extension workers.

In the past ten years, many students (mostly from agricultural faculties) have spent six to nine months living and working in the villages, facing the challenge of increasing production in Indonesia's staple food crop.

From the original idea of an extension service by students, BIMAS has developed into a new form of farmer assistance which includes credit in the form of seeds, fertilizer, tools, farm chemicals and cash, along with the technical services of extension agents and student volunteers.

BUTSI (Indonesian Board for Volunteer Service)

Project Leader/Informant : Dr. W.P. Napitupulu,
BUTSI Secretary/Director,
Directorate of Manpower Development and Job Opportunities,
Department of Manpower,
Transmigration and Cooperation,

Jalan Halimun 4,
Jakarta, Indonesia.

Programme : Student Service Programme

General Information

Clientele : Student volunteers; village youngsters, village mothers, peasants, etc.

Objective(s) : (a) To train and utilize unemployed graduates for village development
(b) To impart to the village community new skills, knowledge and aspirations to raise its standard of living.

Method : Training of volunteers; farmer extension

Duration : 1-2 weeks training, followed by 3 months to 2 years work in the villages.

Other Information

BUTSI (Badan Urusan Tenaga Kerja Sukarela Indonesia) was begun in 1968 as an experiment to seek an answer to two major problems facing Indonesia: a large number of unemployed graduates and semi-graduates, and a great shortage of village extension workers for rural development.

Areas of activities in BUTSI include agriculture, arts, economics and cooperatives, education, forestry, etc.

In this project the Manpower Volunteers (graduates and undergraduate students) conduct training courses in the village community to raise its level of knowledge and aspirations. The villages where the volunteers are placed are the relatively poor regions far from the city.

The village courses usually consist of a few hours of lectures and followed by daily practice for one to two weeks. The follow-up activities are fieldwork or practice in the houses of the participants and additional discussions after the courses.

The volunteers are given transportation and maintenance allowances. About 14,992 farmers and 420 volunteers participated in the project in 1971 and 1972. The project plans to reach 500,000 village people this year.

No information on any systematic evaluation of this experiment is available.

EROSION CONTROL--ORIENTED FUNCTIONAL LITERACY

Project Leader/Informant : Mr. R.D.J. Koesoemohadipranoto,
District Inspectorate for Community Education,
Temanggung, Jalan Jendral S.
Parman 33, Temanggung, Indonesia.

Programme : Functional Literacy

General Information

Clientele : Rural people in seven villages in the Temanggung Sub-district
Objective(s) : To enable the clientele to improve technical skills for erosion control and to increase their income
Method : Group discussion and field work
Duration : From 1971 to 1976

Other Information

The classes are conducted in the slope area of the Sumbing Mountain; therefore, the project lends itself well to the purpose of teaching about erosion control. 1659 illiterate and semi-literate rural people have participated in the project. The content covers such topics as religious education, civics, national language, arithmetic and relevant vocational skills.

EXTENSION OF ANIMAL HUSBANDRY PRODUCTION INCREASE

Project Leader/Informant : Mr. Achmad Sugama,
Head of the Production Techniques Section,
Animal Husbandry Service,
District Tasikmalaya, West Java.

Programme : Increase of Animal Husbandry Production

General Information

Clientele : Village officials, teachers, local leaders, military people, farmers
Objective(s) : To increase the production of livestock, both in quantity and in quality.
Method : Farmer extension
Duration : Continuing; short course, about a week

Other Information

This project was started to assist the participants in acquiring general knowledge and skills to raise cross-bred chickens in 4 sub-districts of Tasikmalaya. The courses are conducted in village schools, village centres, and even in religious schools.

About 1,756 participants attended the short courses in 1971 and 1972. Places for 3,000 participants can be made available yearly.

FISHERY EXTENSION

Project Leader/Informant : Mr. Maksum, Head of the Extension Section,
Inland Fishery Service,
District Tasikmalaya,
Programme : Increase of Fish Production

General Information

Clientele : Fish farmers
Objective(s) : To increase the knowledge and skill of fish farmers concerning
(a) selection of good fish breeders
(b) selection of good fishfarm location, and
(c) better fish fry production.
Method : Farmer training and extension.
Duration : Training is 3 months; extension, continuing.

Other Information

This project was started in 1971 to increase fish fry production in three sub-districts. The training course is conducted in the village schools or village centres, usually in the afternoon.

In 1972, a more intensive course was offered to would-be contact fish farmers (lay leaders). About 1,378 fish farmers participated in this project in 1971 and 1972. The project plans to accommodate about 1,200 participants yearly.

INCREASE OF FOOD CROP PRODUCTION

Project Leader/Informant : Mr. Sabinu,
Head of the Agricultural Service,
District Klaten, Central Java.
Mr. Kurniaatmodja, Head of the Extension Section,
Agricultural Service, District Tasikmalaya, West Java.
Programme : Development of Agricultural Extension

General Information

Clientele : Agricultural village workers and farmer leaders
Objective(s) : To up-grade the technical competence of village workers and farmer leaders with regard to pest control, fertilizer use, and study-tours
Duration : 3 days, about 21 contact hours.

Other Information

This training programme has been conducted in five Agricultural Extension Centres since 1969, primarily to up-date the village workers and farmers leaders in the new ways of

cultivating the high yielding varieties of rice.

About 882 trainees have participated in the project in 1971 and 1972

INDUSTRIAL VOCATIONAL TRAINING CENTRE

Project Leader/Informant : Mr. Harsono,
Assistant Director for Operation,
Pasar Rebo, Jakarta, Indonesia

Programme : Vocational Training

General Information

Clientele : Unemployed youth, workers, university students

Objective(s) : To provide technical training in industry.

Method : Demonstration, practical work.

Duration : The project was started in 1956; on-going

Other Information

This project is organized by the Ministry of Manpower, Transmigration and Cooperatives. Courses offered are in carpentry, electronics, automechanics, etc. A proficiency certificate is awarded upon completion of the specific trade course. The number of participants was 514 in 1972 and 754 in 1973.

SMALLHOLDINGS EXTENSION

Project Leader/Informant : Mr. K. Suganda,
Head of the Service,
Smallholdings Service,
District Tasikmalaya,
West Java.

Programme : Increasing Production of Commercial Crops.

General Information

Clientele : Smallholders farmers of commercial crops, about 159,160 people

Objective(s) : To increase production of commercial crops by the use of technology and efficient farm management.

Method : Farmer extension

Duration : On-going

Other Information

This project is intended to serve the smallholders whose access to new technology, credit facilities and opportunities to secure better prices for their crops are quite limited.

Better rubber production methods, rejuvenation of coconut farms, cultivation of other commercial crops, etc. are the main emphases of the extension activities.

STUDENT SERVICE PROJECT (KULIAH KERJA NYATA; K.K.N.)

Project Leader/Informant : Drs. B. Syahrial Wahab,
Head, Office of Supervision and Students' Dedication,
Directorate of Higher Education,
Jalan Proklamasi 17-A, Jakarta.

Programme : Student Service Programme

General Information

Clientele : Post-graduate or undergraduate students
Objective(s) : To raise the quality of higher education
Method : Training for students and placement in rural work
Duration : Training involves 28 lecture hours; students serve 3-6 months in the rural areas

Other Information

The project held the view that neither lectures nor practice in the university itself guarantees maturity in the student's way of thinking either as a generalist or as a specialist. In this view, students have to learn outside the university to be able to know, understand and compare what they have learned in the university with what exists outside. It is intended that the project will serve three-fold purposes:

- 1) as a kind of feedback upon which the university can improve its curricula to make them relevant to rural development;
- 2) to make students more familiar with the life of the village people and development;
- 3) to assist and promote the village development itself.

TRAINING FOR FUNCTIONAL LITERACY INSTRUCTORS

Project Leader/Informant : Mr. R.M.S. Sindowidjojo,
Provincial Inspectorate of Community Education,
Gentengkali 33, Surabaya,
Indonesia.

Programme : Functional Literacy

General Information

Clientele : Selected members of the community who will serve as functional literacy teachers
Objective(s) : To give training to teachers to enable them to teach functional literacy classes

Method : Lecture, group discussion, demonstration
Duration : Six days, 17 to 22 September 1973

Other Information

This project was conducted in East Java to take initial steps in providing functional literacy programmes with teaching personnel. Twenty persons (school teachers, farmers, village officials, religious teachers, etc.) participated in the training. Many government and non-government agencies cooperated in the training by means of providing facilities, learning materials and technical guidance (local administration, Coordinating Board for Family Planning, Indonesian Association for Family Planning, etc.)

KHMER REPUBLIC

AGRICULTURAL TRAINING PROJECT OF THE IRRIGATION SYSTEM OF PREK THNOT

Project Leader/Informant : Mr. Loy Sim Chheang,
Director,
Station Experimentale du Reseau d'Irrigation de Prek Thnot,
Direction de l'Agriculture,
Khmer Republic,

Programme : Rational Use of Water from an Irrigation System

General Information

Cientele : 65,000 farmers in the Prek Thnot area, mostly non-literate.
Objective(s) : To promote the rational use of irrigation network to develop a high production potential, water supplied area.
Method : Farmer extension; individual and group contacts, conferences, visits, excursions, result demonstration, magazines, leaflets, radio are used.
Duration : On-going, began in 1967.

Other Information

The project was conducted in response to a situation in which, inspite of torrential rains, there is an acute shortage of water for permanent irrigation. The objective is to make 70,000 ha. of rice land more productive.

Complementary to the irrigation system, factors such as extension services on new seeds, fertilizers, multiple cropping, livestock raising, farmer organization, buying and marketing, etc. are introduced.

The project began in a small village of 16 families, and the results were good. The number of villages served was increased; in 1972, 22 villages with 821 families were covered by the project. In June 1973, the security situation in the area was critical; consequently, the extension personnel were transferred to another area.

DEVELOPMENT OF STOCK RAISING

Project Leader/Informant : Mr. Chau Khim,
Docteur Veterinaire,
Doyen de la Faculté des Sciences Veterinaires et
Sous Directeur Technique,
Direction de la Production et Sante Animale,
70 Moha Vithei Pracheathippatei, Phnom Penh,
Khmer Republic.

Programme : Vaccination and Stock Raising Campaigns

General Information

Clientele : Farmers, members of farmers associations, family animal raisers,
commercial raisers.

Objective(s) : To protect and develop the livestock industry.

Methods : Mobile veterinary teams; extension services are integrated with
veterinary services to protect livestock from disease outbreaks.

Duration : 3 to 4 months; services threatened by war.

Other Information

The project promotes the development of livestock raising by information campaigns on the danger of destruction caused by certain contagious diseases, by forming farmer's associations, by campaigns on vaccination, and by introducing new methods of raising animals. The introduction of new and better breeds of animals is also part of this project.

The project was set up in 1966 in the northern provinces of Lompong and Siemreap where cattle pestilence was prevalent, causing great losses to the farmers. With the assistance of FAO experts, a campaign for general vaccination of livestock in the entire country was launched. In addition to veterinary services, activities such as the introduction of new practices and better breeds, improvement in feeds and feeding, and organization of trade and marketing of animals and animal products were undertaken.

There are post-war plans for the expansion of the project.

LITERACY CAMPAIGN

Project Leader/Informant : Mr. Mai Lon, Director,
Services Pédagogiques,
274 Pracheathippatei Bd.,
Phnom Penh, Khmer Republic.

Programme : Literacy Campaign

General Information

Clientele : Illiterates throughout the nation

Objective(s) : To enable illiterates throughout the nation to read and write

Method : Classroom work
Duration : Six months

Other Information

This project was organized by Permanent National Committee for Literacy in 1964. It was reported that 61,539 people passed the course in 1969. However, the project failed to continue its full activities after 1970 due to financial problem and the war.

PILOT PROJECT FOR THE DEVELOPMENT OF IRRIGATED CULTURES AT BANAN

Project Leader/Informant : Mr. Chhieu Nam,
Director,
Direction de la Station Pilote de Banan,
Battambang, Khmer Republic.

Programme : Exploitation of Battambang Area

General Information

Clientele : Farmers and members of irrigation committee in the Battambang area

Objective(s) : This is an applied research which verifies hypotheses concerning types and methods of cultures, irrigation methods, materials to be used, and the organization of professional structures.

Method : Action research and farmer extension and training

Duration : On-going since 1967.

Other Information

The project is implemented by the Khmer Government assisted by UNDP/FAO for the exploitation of the Battambang area. The project is aimed at the development of an area of about 300 ha., named Zone du Perimetre de Cultures irriguees de Banan (area of irrigated cultures at Banan). Applied research and farmer training involve five villages in the area. It is expected that the project will be expanded to 80,000 ha. of the Battambang plain.

Aimed at area development, the project activities are closely linked to the efficient use of irrigation structure complemented by HYV seeds, fertilizers, other farm chemicals, improved agronomic practices, farmer organizations, etc.

PROJET DE DEVELOPPEMENT DE LA PRODUCTION DU RIZ (Rice Production Development Project)

Project Leader/Informant : Mr. Kong Sam Ol,
Engineer of Agricultural Work,
Directorate of Agriculture,
Phnom Penh,
Khmer Republic.

Programme : Fumure Minérale du Riz (Utilization of Fertilizers for Rice)

General Information

- Clientele : Farmers, chairmen of villages and rural cooperatives, etc.
Objective(s) : To increase agricultural production, raise living standards of farmers, community development by helping farmers.
Method : Farmer training and extension
Duration : On-going; farmer training is about 7 days

Other Information

Begun in 1966, the project has been known as "Brigade d' Action Rurale" (Brigade for Rural Action). It consisted of one week training of all government officials concerned with rice production. In 1968, due to the lack of volunteers, the Provincial Committee for Popular Assistance and Aid decided to train model farmers or cattle breeders (2 per village). The training was conducted by officials coming from provincial services in Agriculture, Cooperatives, Veterinary, Civil Engineering and Health. Since 1971, this training was entrusted to the Rural Pre-training Centre.

The project activities were conducted in small groups with similar interests and led by officials from competent services and members of instruct committee for rural development. Discussions were followed by demonstration.

About 530 farmers participated in the training (about 20 contact hours) in 1970 and 1971.

Farmer extension was used to popularize the efficient use of chemical fertilizers, HYV rice seeds, and other agronomic practices.

TECHNICAL, VOCATIONAL & PROFESSIONAL TRAINING SCHOOL FOR TEACHERS IN JUNIOR HIGH SCHOOLS

- Project Leader/Informant : Mr. Phlong Chhat, Director,
Technical Teacher Training Centre,
Corner of Vithei Mat Chrouk and Hing Pen,
Phnom Penh, Khmer Republic.
Programme : Training of Technical Teachers

General Information

- Clientele : 1) Elementary School Teachers with 5 years of teaching experience
2) Holders of Higher Technical Diploma from various technical universities
Objective(s) : To train technical and vocational teachers in various fields of specialization
Method : Lectures, seminars and practical training in industries
Duration : 2 years

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Other Information

This project is organized by Ministry of Education supported by BGI (Brasseries & Glacière de l'Indochine, a private institution and SNA (Société Nationale d'Assurance) a semi-government institution. The government provides the building, personnel and funds for the operational costs, while BGI and SNA provide the equipment for the project. The project is located in the middle of Phnom Penh near the industries of the city.

After the training, the majority of graduates become teachers of technical courses in junior high schools.

The project started in 1973 with 60 participants.

TRAINING CENTRE OF THE CAMBODIA ELECTRICITY COMPANY

Project Leader/Informant : Meas Mercredi,
Chef de Service Pédagogique,
C.F.P.P. Electricité du Cambodge,
B.P. 45, Phnom Penh,
Khmer Republic.

Programme : Training of skilled workers in electromechanics

General Information

Clientele : 1) Workers of the Company
2) Students with lower secondary school qualifications

Objective(s) : To provide the company with skilled employees

Method : Theoretical & practical instruction

Duration : On-going; course lasts approximately 11 months (May–October;
November–April)

Other Information

This project was established for the benefit and interest of the Cambodia Electricity Company and the Khmer Republic. The Company set up the training centre to create its own pool of skilled electro-mechanical workers. The project is independent of state control and is organized in collaboration with experts from the Electricity Board of France.

Initially the centre was located in the compound of the "Direction-Generale" in Phnom Penh. It was later transferred to larger quarters at Tuk Thla.

The centre trained 74 participants and 86 in 1972 and 1973 respectively. The Company pays a small allowance to the trainees during the period of training.

THE TRAINING OF SKILLED WORKERS AND APPRENTICES

Project Leader/Informant : Mr. Prom Lay,
Centre d'Apprentissage Professionnel,

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35 Vithei Chuon Nath, Phnom Penh,
Khmer Republic.

Programme : Extension of Technical/Vocational Training

General Information

Clientele : Primary and secondary school drop-outs
Objective(s) : To provide basic vocational and technical training in different trades
Method : Practical training
Duration : 8 months

Other Information

This is a government project organized by the Directorate of Vocational Studies, Université Populaire. There are two kinds of Programmes involved in this project, namely Apprentice Training (CAP and Vocational Training CEP).

The number of trainees was 242 in 1972 and 289 in 1973. Thirty-five percent of the trainees receive allowances from the government while undergoing training. After the final examination, the successful trainees are awarded certificates.

UNDP/TA. 119-2-C-2-1
KMR 70/006-KMR 68/003

Project Leader/Informant : Mr. Touch Puyeto, Director,
Centre de Formation des Cadres Techniciens et de
l'Accroissement de la Productivité,
Phnom Penh (Training Centre for middle level technicians)

Programme : Rural and Industrial Vocational Training

General Information

Clientele : Adults and youths
Objective(s) : To provide vocational training for young people and adults
Method : Theoretical and practical instruction
Duration : The project was introduced in 1963; on-going, approximately 1,200 hours of instruction per year.

Other Information

This is a government project organized by Ministry of Labour supported by United Nations Development Programme (UNDP). The courses in vocational/technical education cover general mechanics, auto mechanics, agricultural mechanics, electricity and electro-mechanics.

The staff of the project comprises of five foreign experts and some instructors recruited locally.

The project started in 1963. The number of participants in 1973 was 157. Some of the participants received monthly allowance from the government.

LAOS

AGRICULTURAL SUPPLY

Project Leader/Informant : Mr. Boun Nong Sipha,
Agricultural Development Organization Manager,
Agricultural Development Organization (ADO),
Vientiane, Laos.

Programme : Credit and Marketing Organization

General Information

Clientele : ADO staff and farmers

Objective(s) : To increase crop production by
(a) using better seeds,
(b) using agricultural chemicals such as fertilizers and insecticides, and
(c) providing services and credit.

Method : Staff training and farmer extension

Duration : On-going

Other Information

This project is a joint venture between the Royal Lao Government and the USAID to promote agricultural development by means of providing agricultural chemicals, seeds, animal feed, and farm tools on credit to farmers. ADO is the only agency in Laos which deals with agricultural inputs and provides production credit in kind (sometimes, in cash) to farmers.

Training for the project personnel and other interested persons is available at the training branch in the central office in Vientiane. About 69 participants attended the training (a month duration) since 1971; the training can be made available to about 80 to 100 participants each time if funds, facilities, personnel, etc., are available.

Farmer extension on agricultural supply is country-wide.

Note: *The ADO was replaced in 1974 by the Rice Office to which the government has given 500,000,000 kips for use.*

FOOD PRODUCTION

Project Leader/Informant : Mr. Oroth Chounlamounry,
Director of Hatdokkeo Pilot Project,
Direction de l'Agriculture,
Vientiane, Lao.

Programme : Food Production Programme

General Information

Clientele : Extension agents and research technicians, rural affairs agents, fundamental educators and farmer leaders.
Objective(s) : To increase food production by training and extension.
Method : Training of technicians and farmer extension
Duration : Training: 3 months; farmer extension: continuing

Other Information

The training course is for agricultural extension workers in irrigated crop production and for those who are going to train other people in the skills and techniques of crop production. The course involves subjects in agriculture such as: agronomy, crop science, crop protection, soil science, cooperation, credit and marketing, and socio-economics. Training facilities include classrooms, dormitory, kitchen, and the experimental farm.

About 150 trainees attended the course in 1971 and 1972; training for 120 participants were available last year.

FUNCTIONAL LITERACY PROGRAMME FOR FARMERS IN THE PLAIN OF VIENTIANE

Project Leader/Informant : Mr. Bounthong Vixaysak,
Director of Primary and Adult Education,
Ministry of Education,
Vientiane, Laos.

Programme : Functional Literacy Programme

General Information

Clientele : Illiterate farmers in the Plain of Vientiane
Objective(s) : To teach reading and writing in order to enable them to improve agricultural techniques and their living conditions
Method : Group discussion
Duration : Course is run eight months each year.

Other Information

The project was begun in 1970 and will be completed in 1975 (in the Vientiane Plain). It is operating in 65 villages (71 classes) of the Vientiane Plain, seven villages (seven classes) in the Houei Sai Province, and in thirty villages (thirty classes) in Phone Hong and Ban Keune Regions. The project is organized by the Directorate of Primary and Adult Education in collaboration with the Ministry of Rural Affairs and sub-Directorate of Agricultural Extension.

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NATIONAL CENTRE FOR RURAL DEVELOPMENT OF BAN AMONE

Project Leader/Informant : Mr. Oui Khounkham,
Director of the Centre for Rural Development,
Ministry of Rural Affairs,
Vientiane, Laos.

Programme : National Economic Development Plan

General Information

Clientele : Males and females selected by the provincial administration

Objective(s) : 1) To produce a pool of labour force orientated towards professional tasks.
2) To raise the living standards of the rural people

Method : -----

Duration : Two kinds—one lasting two months and the other lasting five months

Other Information

This Training Centre has been operating since 1967 among others which are outside the framework of the national development plan. It receives assistance from USAID and JOCV. The aim of the Centre is to create diversified skills among the rural people. The participants of the centre can be any person regardless of their sex and social status.

There are two kinds of programmes, lasting two months and five months respectively. Subjects taught in the centre are carpentry, rattan work, metal work, welding, and sericulture. Needle work, hair dressing and weaving will be introduced within five years.

The training centre is located in Ban Amone, an abandoned refugee resettlement village

RICE PRODUCTION

Project Leader/Informant : Mr. Oroth Chounlamounry,
Director of Hatdokkeo Pilot Project,
Direction de l'Agriculture,
Vientiane, Laos.

Programme : Rice Production

General Information

Clientele : Agricultural agents (technicians) who worked in a rice programme; trainees train selected farmers.

Objective(s) : To meet self-sufficiency in rice; to have well-trained people; and to provide better seeds.

Method : Residential training; farmer extension.

Duration : 6 months

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Other Information

This is a 6-month training course at the Salakham Rice Experiment station to train rice technicians and specialists in rice seed technology, including rice cultivation, field inspection, seed testing, and seed certification.

It is expected that the trained personnel could help popularize the planting of new HYV rice seeds and that there will be substantial increase in the rice production of the country.

Assisted by USAID, the project has already trained about 50 technicians in 1971 and 1972. If funds, facilities, personnel, etc. are available, the project can accommodate about 200 to 300 trainees in a year.

USAID LOCAL TRAINING CENTRE

Project Leader/Informant : Dayton L. Maxwell,
American Embassy,
USAID, Vientiane, Laos.

Programme : Human Resource Development

General Information

Clientele : USAID local employees and Lao government employees in the 20-40 age group. (A high percentage of ethnic minorities is included.)

Objective(s) : To train local employees of USAID mission and government employees in technical and administrative skills.

Method : Workshop, seminars and practical exercises.

Duration : 1) full-time 3-6 months for field and pre-service employees
2) full-time 5-8 days seminars for supervisory programmes
3) half-day 1-2 year programmes for advanced accounting and administrative courses

Other Information

The project has been set up primarily to meet the needs of the USAID mission which expanded its staff from 160 in 1965 to about 4,800 at the present.

To overcome the shortage of suitably qualified and skilled local technicians, clerical and administrative personnel, USAID uses its training centre in Vientiane to teach at basic level, subjects ranging from English shorthand & typing, plumbing and driving and at the advanced level, subjects such as English writing, business English, accounting and supervisory management, etc.

The project forms a part of USAID policy to train Laotian personnel in sufficient numbers to enable it to reduce the large number of foreign nationals (about 500) who have been recruited to fill in jobs requiring skills unavailable in the local labour market.

The project also trains Laotian government officials in the same technical and administrative skills as part of the various USAID technical assistance programme.

The project commenced in 1965. In 1972 there were 1350 participants while in 1973 the number fell to 1175. This is so because more and more of the staff requirements have been satisfied. There are plans to gradually phase down the project from its present level.

It is possible that there are secondary benefits accruing from this project.

MALAYSIA

BASIC LITERACY CLASSES

Project Leader/Informant : Mr. Abdul Samad b. A. Rahman,
Community Development Officer,
MMA Building, 4th Floor, Jalan Pahang,
Kuala Lumpur, Malaysia.

Programme : Eradication of Illiteracy

General Information

Clientele : Illiterate adults in villages, especially women.

Objective(s) : To enable the participants to read and write the national language in the Romanized script.

Method : Classroom work with student participation

Duration : Approximately three years (January 1972–October 1974)

Other Information

Informal classes are held three times a week in the evenings to teach village adults who are not familiar with the Romanized script to read and write in that script. This enable them to receive information and news from written mass media, which use the Romanized script. Classes are conducted in easily accessible community centres. Since the project is expected to end in October 1974, not many more people will be served by this project, which is organized by the Ministry of Rural Development. It is a basic literacy course involving the 3R's only.

IN-LAND FISHERIES TRAINING CENTRE

Project Leader/Informant : Mr. Lou Su Ji,
Fishery Officer (Extension of Freshwater Fisheries),
Fishery Division (Headquarters),
Jalan Swettenham,
Kuala Lumpur, Malaysia.

Programme : Freshwater Fish Culture Development

General Information

- Clientele** : Mainly farmers who operate fish-ponds as part of a mixed farming operation; settlers in Felda schemes; members of youth land schemes; trainees mostly have Malay Standard 6.
- Objective(s)** : To increase fish production by improving the skills and knowledge in fish culture.
- Method** : Residential training course
- Duration** : 3 weeks

Other Information

The training course consists of lectures and practical sessions on all aspects of fish culture including pond construction and maintenance, pond management, breeding techniques. It also includes films on fish culture and outside visits to commercially-run fish ponds.

This course is intended to assist farmers in increasing their fish production to meet shortages as well as to increase the fish yields of in-land fish ponds.

There are 11 courses per year, and each course caters for 20 trainees from all over Peninsular Malaysia, selected from those who are operating fish ponds or who intend to start fish culture.

The training course is run by the Freshwater Fisheries Extension Section, Fisheries Division in the In-land Fisheries Training Centre, Bt. Tinggi, Pahang. The Centre has a dormitory, dining-hall, classroom, lounge and recreation facilities. Transport to and from the Centre is arranged for the trainees.

This project also includes fishery extension to small holders fishpond owners.

MARA VOCATIONAL INSTITUTE

Project Leader/Informant : Abdul Shukor Mohamed,
Chief Development Officer,
MARA Headquarters,
232, Jalan Tuanku Abdul Rahman,
Kuala Lumpur, Malaysia.

Programme : Vocational Training

General Information

- Clientele** : Bumiputras (indigenous people) who have had a minimum nine years education and are interested in becoming skilled workers.
- Objective(s)** : To impart skills to Bumiputra Youths to enable them to operate and service machinery and tools relevant to their future vocations

Method : Theoretical and practical instruction; on-the-job-training.
Duration : On-going

Other Information

The project started in 1970. It is a quasi government institute assisted by Japan Overseas Volunteers, German Volunteer Service, American Peace Corps Volunteers and British Overseas Development Agency.

The number of its participants was 69 both in 1972 and 1973. The number increased to 200 with the establishment of the project in permanent quarters in 1974.

PADI MECHANIZATION TRAINING

Project Leader/Informant : Abu Bakar bin Mahmad,
Director, Agricultural Education,
Department of Agriculture,
Swettenham Road,
Kuala Lumpur,
Malaysia.

Programme : Extension Programmes for Farmers and Youth

General Information

Clientele : In-service extension staff; farmers and youth; students
Objective(s) : To develop proficiency in padi mechanization
Method : Shop training
Duration : 30 days; 242 contact hrs.

Other Information

This is a joint project between the Government of Malaysia and Government of Japan for promoting double cropping in padi areas by mechanization. The training course is intended to up-grade the skills of extension technicians as well as suitable farmers and other clientele.

The project is conducted at the Padi Mechanization Training Centre at Bumbong, Lima. The trainees are recruited for practical residential courses at the Centre. Facilities provide accommodation, board and lodging, workshop, field practice, and transportation for study-tours.

About 630 trainees completed the course in 1971 and 1972. The Centre can handle 360 trainees each time.

Subjects such as internal combustion engines, use of tools and adjusting equipment, operation and maintenance of power tillers, methods and techniques of soil preparation, trouble shooting are taught. A systematic evaluation is conducted for every course.

TRAINING FOR FARMERS IN POULTRY HUSBANDRY

Project Leader/Informant : n.a.,
Pengarah Latihan Pembangunan Ternakan,
Jabatan Perkhidmatan Haiwan Malaysia,
Ibu Jabatan Haiwan, Kuala Lumpur,
Kementerian Pertanian & Perikanan,
Kuala Lumpur, Malaysia.

Programme : Rakyat Training Centre

General Information

Clientele : Farmers and youths from various youth clubs; minimum grade qualification is Standard Six, maximum is Form Five, e.g., students who are normally waiting for School Certificate results.

Objective(s) : To increase the productivity and development of the livestock industry of the country.
To train 'rakyat' especially those who are from the rural areas in the use of modern technology on poultry husbandry.

Method : Resident training. The project covers both theoretical and practical aspects of poultry husbandry and management. The theoretical part is taught from a syllabus hand-in-hand with practical training. Each trainee is given 50 day-old chicks to rear from the time he arrives at the project centre till the end of the course. The trainee is also expected to look after growers and layers, including practical training in vaccination, medication, and other disease/pest prevention and control practices in poultry. Instruction is in Bahasa Malaysia.

Duration : 42 days; the project began in 1967; on-going.

Other Information

The project is intended to equip the rural people with knowledge on poultry husbandry. The participants are selected from all over West Malaysia and undergo the six-week course conducted in Selangor where they have the opportunity to visit advanced commercial poultry hatcheries and farms.

The project was undertaken to raise the standard of living of the rural people to approach that of the urban dwellers, to lessen the acute shortage of animal protein in the people's diet, and to help combat the ill-effects of inflation.

The trainees normally stay in the project centre which has board and lodging, recreation facilities, etc. About 665 participants attended the course from 1971 to 1973.

TRAINING OF YOUTH AS SUGAR PLANTATION AND FACTORY WORKERS

- Project Leader/Informant** : M. Subhi B.M. Sayuti,
Youth Training Centre,
Dusun Tua, Ulu Langat,
Salangor, Malaysia.
- Programme** : Training of Youth (in the state of Perlis) as Sugar Plantation & Factory Workers.

General Information

- Clientele** : Unemployed Youths in the State of Perlis
- Objective(s)** : To prepare unemployed youths for eventual employment in the two Sugar Cane Corporations in Perlis.
- Method** : Lectures, discussion, visits and community work.
- Duration** : 110 training hours.

Other Information

This is a short project which lasted approximately two weeks (15/12/73-30/12/73). It was organized by the Ministry of Youth, Sports and Culture to train unemployed youths in the State of Perlis for employment by the two sugarcane corporations operating in the state, and which were facing difficulties in staffing their factories and plantations.

The Ministry of Agriculture, the Public Services Commission, the Ministry of Labour, Department of Information and the Police Department cooperated with the organizers of this project.

One hundred and ninety-three youths participated in the course.

PHILIPPINES

ADULT LITERACY CLASSES

- Project Leader/Informant** : Miss Jean Shand,
Summer Institute of Linguistics,
Box 1270, Manila,
Philippines
- Programme** : Summer Institute of Linguistics

General Information

- Clientele** : Minority communities not yet assimilated the national language and culture
- Objective(s)** : To help minority communities read and write using the national language.

Method : Classroom and practical work
Duration : Summer Institute of Linguistics began in 1956. Project expected to end in 1980.

Other Information

This project is organized by the Summer Institute of Linguistics to enable participants to read fluently in the national language. Civics, family life education, health and sanitation, agriculture are among the subjects taught as well. Schools, churches and community buildings are used for these projects. Most projects coincide with the school year, and sessions are held for one hour a day, five days a week, with two cycles a year. About 200 literate are produced every year.

AUTOMOTIVE APPRENTICESHIP TRAINING

Project Leader/Informant : Mr. Jose S. Carillo,
Training Manager,
Mercedes-Benz Commercial Motor Corporation
Technical Training Centre,
Pasig, Rizal,
Philippines.

Programme : Apprenticeship in various trades

General Information

Clientele : _____
Objective(s) : To prepare trained personnel with highly technical skills on Mercedes-Benz products.
Method : Lecture, demonstration and on-the-job training.
Duration : 50 weeks

Other Information

The project operates a comprehensive apprenticeship course known as "Automotive Apprentice Training Scheme" which equips the trainees with specialized and highly technical skills in demand in the motor industries. Graduates from this course are expected to be able to transfer their know how to other fields.

Three agencies are involved in this project. Their contribution is as follows:—

- | | | |
|------------------------------|---|---|
| 1. Daimler Benz A.G. Germany | — | Training Models & Instructional materials |
| 2. German Development Aid | — | Financial support |
| 3. Commercial Motors Corp. | — | Building, Equipment & Personnel |

The training centre has been in operation since September 3, 1973 and is an on-going project.

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CLOTHING SHOPS (FAHP)

Project Leader/Informant : Mr. Pedro L. Esteban, Chief,
Agricultural Education Division,
Bureau of Vocational Education,
Arroceros Street, Manila,
Philippines.

Programme : Agricultural Leadership Training

General Information

Clientele : Girls of 13-18 years old

Objective(s) : 1) To develop manipulative and managerial skills of girls specializing in clothing.
2) To develop the initiative of girls in supplementing family income through sewing.

Method : Demonstration and practical instruction

Duration : Ten months

Other Information

This project is a business related to specialization courses in clothing offered by the school. All the girls (in the third and fourth year at secondary school) specializing in clothing are involved in the project which helps them set up a shop within the school compound or within walking distance of the school.

The shop is run by the girls with the aid of a teacher and a manager who is a graduate of the school. It provides ample opportunities for the girls to apply their basic knowledge of clothing and which ultimately will aid them in setting up their own dress shops or in getting employment in established shops.

This project is administered by the Bureau of Vocational Education which provides the teachers, facilities and equipment. It is financed by a revolving fund. This project was started in 1968 and by 1972, there were 180 participants.

COURSES FOR BOYS' TRADES, GIRLS' VOCATIONAL AND BUSINESS EDUCATION

Project Leader/Informant : Mr. Pedro R. Abon,
Assistant Principal, Boys' Trades Department,
Eulogio "Amang" Rodriguez,
Institute of Science & Technology,
Philippines.

Programme : The special two-year and one-year short unit vocational secondary curriculum for non-formal day school.

General Information

- Clientele** : School drop-outs of 16 years and above, unemployed adults, housewives and domestic helpers.
- Objective(s)** : To provide pre-service training for job seekers wishing to gain employment in a trade, industry or business.
- Method** : Lectures, demonstrations and individualized instruction.
- Duration** : One year for the vocational courses; two years for the technical courses.

Other Information

This project is financed by the government of the City of Manila. The schools and private industrial organizations are also involved. Tuition is free. Courses are conducted 5 hours a day, 5 days a week. A proficiency certificate is issued upon completion of a specific course.

The project serves people who are mainly from the low income group. Some are school drop-outs who have little interest in academic subjects; some are adults (especially housewives) who wish to augment family income by acquiring self-employment. It is worthwhile to note that it even serves unemployed college graduates.

In 1973, there were 1070 students enrolled.

DRESSMAKING AND TAILORING

- Project Leader/Informant** : Mr. Ricardo M. Ornedo,
Home Industries Training Supervisor,
Bataan National School for Filipino Craftsmen,
Orani, Bataan, Philippines.
- Programme** : Skill Training in Home Industries

General Information

- Clientele** : Out-of-School Youths and Adults
- Objective(s)** : To provide opportunity to trainees to acquire sewing skills for either self-employment or employment elsewhere
- Method** : Practical instruction
- Duration** : Four to five months

Other Information

This project is an extension class of the Bataan National School for Filipino Craftsmen.

Its primary role is to help the people to improve their lives by being able to augment the family income either through dressmaking or tailoring skills. This project employs special crafts instructors to teach the principles and fundamentals of dressmaking and tailoring.

There are various similar projects in the different municipalities of Bataan. Very often they are set up at the request of the municipal mayor or the barrio captain.

The project started operations in 1971.

EVENING OPPORTUNITY CLASSES

Project Leader/Informant : Mr. Robinson N. Ylagan,
Superintendent,
Marikina School of Arts and Trades,
Marikina, Rizal,
Philippines.

Programme : Evening Opportunity (Vocational Courses) Classes

General Information

Clientele : Unemployed adults, out-of-school youths, employees who wish to change trades, employees who wish to widen their horizons.

Objective(s) : To provide opportunities for unemployed adults and out-of-school youths to acquire employable skills needed in the industries.

Method : Lectures, demonstrations, production and exercises.

Duration : Minimum attendance of 270 hours in one semester.

Other Information

The evening opportunity classes are short-unit vocational courses ranging from one to four semesters, depending on the nature and complexity of the subject involved. The project is conducted in the Marikina School of Arts and Trades. These evening classes utilize the existing tools, machines, equipment and other training facilities used by the regular day classes. These evening classes are financed jointly by the government and the participants, with an approximate contribution of 10% of the costs by the former and 90% by the latter.

EVENING PROGRAMME FOR BOYS AND GIRLS

Project Leader/Informant : Mr. Hilario G. Nudas
President,
Eulogio "Amang" Rodriguez Institute of Science & Technology,
Nagtahan, Manila,
Philippines.

Programme : Opportunity/Vocational Classes

General Information

Clientele : Out-of-school youths (of 16 years and above) and adults.

Objective(s) : To provide pre-service training in the trade, industrial or business occupations and to provide extension courses for the upgrading of existing skills of the students.

Method : Lectures, demonstration and practical work

Duration : One year.

Other Information

This project is an extension programme of the Eulogio "Amang" Rodriguez Institute of Science and Technology in Manila. It is under the jurisdiction of the government of the City of Manila. All courses are conducted free of charge.

This project aims to meet the needs of school dropouts and youthful job-seekers in addition to serving employed workers who wish either to upgrade their skills and knowledge or to have a change of occupation.

There are twelve courses available (printing, diesel mechanics, industrial electricity, etc. for boys; dressmaking, cosmetology, secretarial skills etc. for girls). The students provide their own materials for instruction. An interesting feature of this project is its flexibility in staffing, i.e. in the absence of qualified teachers for certain courses, men from the industries are recruited to do the teaching.

The project was first established in 1946. The number of participants was 1248 in 1972 and 1070 in 1973.

EVENING PROGRAMME ON SKILL TRAINING

Project Leader/Informant : Mr. Florencio M. Apolinar,
Chief,
Trade and Industrial Education Division,
Bureau of Vocational Education,
Department of Education and Culture,
Arroceros Street, Manila,
Philippines.

Programme : Evening Opportunity Vocational Courses

General Information

Clientele : 1) Employed workers wishing to upgrade their existing skills
2) Unemployed youths and adults

Objective(s) : To accelerate skill training and development through non-formal vocational education programme.

Method : Practical instruction including lectures and demonstrations

Duration : Two years, on-going.

Other Information

This project offers courses which are so designed that they can be completed within two years. Each course is divided into blocks which consist of the teaching of cluster skills which ultimately fits the learner for specific operation in an occupation. Facilities and in-

structors in the day classes are utilized for the evening opportunity classes.

This project meets an urgent need especially in urban communities where changes in occupational skills (as a result of technological advancement) have made it necessary to retrain workers. This project is conducted at the Cebu School of Arts and Trades in Cebu City which is the commercial, trade and industrial centre in Southern Philippines. It is a joint effort between the mentioned school and the Bureau of Vocational Education, Manila. The former provides its own budget, training facilities and staff while the latter provides administrative support.

EXTENSION TRAINING IN SEWING

Project Leader/Informant : Mr. Nestorio T. Bago,
Home Industries Training Supervisor,
Merida School of Home Industries,
Merida, Leyte, Philippines.

Programme : Skill Training in Home Industries

General Information

Clientele : Out-of-school youths, employable adults, housemaids and house-boys.

Objective(s) : 1) To develop a pool of young technicians or skilled workers in sewing industries.
2) To provide sewing practice preparatory to factory system

Method : Theoretical instruction and practical work

Duration : Twenty weeks.

Other Information

This project provides courses in the fundamentals and principles of dressmaking and tailoring. Most of the personnel employed as Special Craft Instructors are qualified people who have had specialized training in dressmaking or tailoring.

This project is one of the many which are conducted in the neighbouring towns and big barrios of Merida.

It is reported that the clientele of the project do receive higher wages and have better chances of promotion after having successfully completed the course.

FUTURE FARMERS OF THE PHILIPPINES YOUTH DEVELOPMENT PROGRAMME (FFP)

Project Leader/Informant : Mr. Jose S. Mendoza,
Vocational Education Supervisor,
c/o Bureau of Vocational Education,
Arroceros Street, Manila,
Philippines.

Programme : Agricultural Leadership Training

General Information

Clientele : Students of Vocational Agriculture; out-of-school youth
Objective(s) : To develop leadership among the youth members by undertaking supervised farming programmes.
Method : In-school extra-curricular activities
Duration : Continuing

Other Information

The project is an extension of school instruction to practical farming situations in the community. This project is undertaken in all agricultural schools.

All boys enrolled in agricultural schools are members of the organization (FFP). Each school has a chapter which is composed of sub-chapters represented by each curricular year. Each chapter formulates its own programme of work for one year to be implemented by the members. The programme of work covers the following areas: supervised farming, conduct of meetings, scholarship, recreation, public relations, and information. Periodic evaluations of all activities are undertaken. The organization has a membership of 20,029 and 18,820 in 1971 and 1972 respectively.

INCREASED RICE PRODUCTION THROUGH THE INSTITUTIONAL APPROACH (ACTION RESEARCH)

Project Leader/Informant : Dr. Pelagio S. Fajardo,
Assistant Professor,
Department of Agricultural Education,
College of Agriculture, UPLB,
College, Laguna,
Philippines.

Programme : SEARCA-UPCA Social Laboratory Training Programme

General Information

Clientele : Village farmers in the Social Laboratory
Objective(s) : To teach the farmers how to increase rice production from 50 to 100 cavans (44 kgs/cavan) per hectare through the institutional approach.
Method : Training and farmer extension via farmers' associations
Duration : On-going

Other Information

This project is designed to teach farmers to increase rice production by institutional

means, i.e., farmers' associations. It is through these associations that technical guidance is provided to the farmers, along with the complementary inputs such as HYV rice seeds, fertilizers, pesticides, power tillers, etc., obtainable from the cooperating rural banks. The research aspect of this project is the documentation of the interaction process among the village technician (extension agent), farmer association officials, individual farmers, and representatives of institutions which have been cooperating in the project.

The site of the project is in villages of Pila, Laguna; which is about 30 minutes drive from the campus of the University of the Philippines at Los Banos.

MANPOWER TRAINING FOR THE MANUFACTURE OF SINAMAY CLOTH

Project Leader/Informant : Mrs. Basilisa L. Astronomo,
Roxas City School for Philippines Craftsmen
Loctugan Old Airport,
Roxas City, Philippines.

Programme : Skill Training in Home Industries.

General Information

Clientele : Secondary students of the school, and out-of-school youth.

Objective(s) : 1) To train participants in the proper care and maintenance of Sinamay Cloth.
2) To teach the art of dyeing abaca cloth.
3) To teach simple maintenance in the operation of cottage industry.

Method : Demonstration and practical work

Duration : 300 hours.

Other Information

The project not only trains secondary students of the school but conducts classes every Saturday for school drop-outs. As the area in which the project operates abounds in abaca (which is the raw material for sinamay cloth), loom weaving of sinamay is an important source of family income or side income. The project teaches the students how to produce sinamay which is widely used in the manufacture of export-orientated handicrafts such as bags, placemats, wall decorations etc. It also teaches the fundamentals involved in setting up a cottage industry.

The Crafts Education Demonstrators involved in the project are qualified personnel from the Home Industries Division and other institutions sponsored by the Bureau of Education.

This project has been in operation since 1972 and is an on-going project.

PROJECT VEOSFY (ACTION RESEARCH)

Project Leader/Informant : Dr. Vicente A. Quiton,
Assistant Professor,

Department of Agricultural Education,
UPLB, College, Laguna,
Philippines.

Programme : Agricultural Education for Rural Development.

General Information

Clientele : Out-of-school farm youth, age 12-25 years.

Objective(s) : To develop approaches to effective vocational education for out-of-school youth (VEOSEY) programmes in agriculture.

Method : Action research and training

Duration : On-going, tentatively set for 3 years.

Other Information

This is an action-research project designed to develop and conduct a pilot vocational training programme for out-of-school farm youth in order to gain more understanding of the out-of-school youth and his family, and to discover and develop effective approaches in training these youths.

The pilot training programme includes training in agriculture (primary emphasis), home making, handicrafts and related trades, and citizenship training. The training methods include group instruction, instructional follow-up through home farm visits, supervised farming and group projects.

The project is conducted at Barrio Pinagbayanan, Pila, Laguna, a village which is about 30 minutes drive from the University of the Philippines at Los Banos. This is a joint programme between the UNICEF and the UP College of Agriculture.

The project, begun in 1972, serves 60 out-of-school farm youth.

RAISING VEGETABLES, FIELD CROPS, FRUITS, POULTRY AND SWINE, OTHER LIVESTOCK, AND FISH

Project Leader/Informant : Mr. Andres B. Fernandez
Supervising Education Specialist I,
Bureau of Vocational Education,
Department of Education and Culture,
Manila, Philippines.

Programme : Green Revolution

General Information

Clientele : School pupils, students and members of their families

Objective(s) : To develop self-sufficiency in food, improved nutrition, and the right attitudes towards work; to develop incentives to make the Green Revolution a way of life among Filipinos.

Method : In-school programme
Duration : Continuing

Other Information

This project is a food production campaign which involves all schools, colleges, and universities in vegetable gardening, field crops and fruit production, raising of poultry and swine, other livestock, and fish. This activity is expected to develop interest and right attitudes of the youth towards work, while increasing food production and improving the nutrition of the people.

The gardens and animal pens are conducted in the home lots and in the school compound. More than nine million participants were involved in the project in 1972.

SALAM (SPECIAL ACTION FOR LITERACY ADVANCEMENT OF MUSLIMS)

Project Leader/Informant : Mr. Carlos B. Olano
Chief, Literacy Section,
BPS-DACE Bureau of Public Schools,
Manila

Programme : Adult Literacy for Muslims

General Information

Clientele : Muslim population of the four ethnic groups, namely: Maguindanao, Maranaw, Tausug, and Samal.

Objective(s) : To make functionally literate 35,000 to 85,000 illiterate Muslim adults within the age-group of 15 to 35 years old every school year.

Method : Organized and quarterly classes

Duration : Year-round integral project of the public school

Other Information

Conformably to Executive Memorandum No. 57, dated April 5, 1973, the SALAM Project was launched when a seminar for the training of trainers from thirteen Muslim school divisions and cities in Mindanao was conducted at the Mindanao State University in Marawi City on May 14, 1973. Thirty-one delegates from Cotabato 1, Cotabato 2, Cotabato 3, South Cotabato, Lanao del Sur 1, Lanao del Sur 2, Lanao del Norte, Sulu 1, Sulu 2, Zamboanga del Sur, Basilan City, Marawi City, and Pagadian City, participated in the said seminar. This seminar was followed by a series of division echo seminars which were conducted in each of the participating school divisions for the training of SALAM teachers to teach SALAM classes. A total of 1,017 Muslim teachers and lay leaders were trained and equipped with knowledges and skills in functional literacy teaching in four languages—Maguindanao, Maranaw, Sinama, Tausug—with the use of the Arabic script. These trained teachers, who are paid a monthly honorarium of sixty pesos (P60.00) each, are to hold and have been holding quarterly classes in functional literacy education for Muslim illiterate adults, 15 years old and over, with first priority on the 15-35 years old group.

The SALAM project was launched as a means of informing the seemingly troubled Muslim population regarding governmental programmes, policies and decisions in the New Society. It uses two approaches, as of the present, namely: the functional literacy programme for adults, as has so far been described herein; and the second approach or programme is the use of the Arabic language in Grades I and II in the formal education of the public schools. This second approach or programme which started on August 9, 1973, is in compliance with Department Order No. 25, s. 1973. In the said order, grades I and II teachers who know Arabic are asked to teach Arabic as a language subject to their classes until such time as it can be used as a medium of instruction in the said grades as envisioned by law. Under this programme, grades I and II teachers who cannot teach Arabic are given off-school-hour opportunity to learn the language under the instruction of Ustads and Olamahs who are hired by the Bureau to conduct evening or Saturday classes on the subject for those teachers.

SELECTIVE FOOD PRODUCTION PROJECTS

Project Leader/Informant : Mr. Manuel T. Manuel,
General Education Supervisor II,
Philippine Applied Nutrition Programme,
Bureau of Public School,
Arroceros Street,
Manila, Philippines.

Programme : Philippine Applied Nutrition Programme

General Information

Clientele : Teachers, pupils, and people in the schools and community

Objective(s) : To strengthen teacher competence in teaching selective food production and to increase production of nutritious food in schools and in homes.

Method : On-the-job training, lectures and field visits

Duration : On-going since 1964

Other Information

The occurrences of malnutrition and under production of food in the country are important considerations in undertaking this project of which main objective is to produce an adequate food supply in the homes of school pupils.

The project is mainly conducted in schools since most of the people involved are teachers and their pupils. However, home projects are part of the school activities. In 1972, about 260,400 trainees participated in the project. The UNICEF, FAO, UNESCO and the Government of the Philippines provide experts and funds to the project.

SEMINAR-CONFERENCE ON REVISED SECONDARY AGRICULTURE CURRICULUM

Project Leader/Informant : Mr. Pedro L. Esteban,
Chief, Agricultural Division,

Bureau of Vocational Education,
Arroceros St., Manila,
Philippines.

Programme : Agricultural Leadership Training

General Information

Clientele : Agricultural school officials and teachers
Objective(s) : To orientate school officials in the new secondary vocational agriculture curriculum, and to discuss ways of implementation.
Method : Seminar-conference
Duration : 16 contact hours.

Other Information

This project is intended to orientate and familiarize agricultural school officials and teachers with the revised secondary vocational agriculture curriculum. The participants are expected to know their respective roles and functions in regard to the effective implementation of the curriculum. Problems related to programming, budgeting, scheduling, and personnel, etc., are threshed out.

The seminar-conference involves the following aspects: the objectives and core of the new programme, ways and means of implementation, and definition of the specific roles and functions of each of the school constituent in the effective implementation of the curriculum.

In this particular case, the seminar-conference is utilized to spread information quickly for immediate action.

SHORT COURSE (RICE PRODUCTION) FOR OUT-OF-SCHOOL YOUTH

Project Leader/Informant : Mr. Manuel G. Dulnuan,
School Farming Co-ordinator,
Ifugao Agricultural and Technical College,
Nayon, Lamut,
Ifugao, Philippines.

Programme : Green Revolution

General Information

Clientele : Out-of-School youth who are engaged in rice farming
Objective(s) : To teach new-rice technology to out-of-school youth who are engaged in rice farming
Method : Training and extension
Duration : On-going

Other Information

The project involves the training of out-of-school youth in the new technology including farm managerial aspects of rice production. The training requires the student to cultivate at least 1,000 sq. m. of rice land, 2 croppings a year in the school farm. The trainees get 75 per cent of the crop as his share.

Trainees who come from remote villages are housed in the school compound; those who live near the school conduct their projects in their respective home farms. About 203 trainees participated in the project.

This project is conducted by the Bureau of Vocational Education and has received technical assistance from the Presidential Arm of Community Development and other agencies.

SPECIAL TRADE CLASSES, PANGASINAN SCHOOL OF ARTS AND TRADES

- Project Leader : Mr. Fortunato G. Ferrer,
Principal,
Pangasinan School of Arts and Trades,
Lingayen, Pangasinan,
Philippines
- Programme : Evening Opportunity (Vocational Courses) Classes

General Information

- Clientele : Out-of-school youths, the majority of whom are high school graduates
- Objective(s) : 1) To develop the human resources with particular reference to manpower needs and active social participation
2) To provide opportunity to the out-of-school citizens to acquire employable industrial skills.
- Method : Lectures, demonstrations and on-the-job training
- Duration : Two years, on-going

Other Information

This project is an extension of the regular programme of the Pangasinan School of Arts and Trades. It follows what is often called "The two-year Special Trade Curriculum". Although the project uses the existing facilities of the school, the funds for its operational expenditures are derived entirely from the collection of tuition fees.

There is very close cooperation between the school and the auto and metal industries in the area, with the latter providing opportunities for on-the-job training for the students. Significantly, they very often absorb the participants as regular workers even before they graduate.

The programme is compartmentalized to allow short periods of specialized training thereby allowing students to come and go for upgrading. Courses offered are auto-diesel mechanics, machine shop practice and radio mechanics. The teachers are usually members of the regular programme as well.

SPECIALIST COURSE IN CROPPING SYSTEMS

Project Leader/Informant : Mr. Manuel C. Palada,
Research Assistant and Training Co-ordinator,
Cropping Systems, International Rice Research Institute,
College, Los Banos, Laguna,
Philippines.

Programme : IRRI Multiple Cropping Training Programme

General Information

Clientele : Key personnel of agencies undertaking cropping systems research,
at least B.S. or Ir. degree required.

Objective(s) : To up-date technical competence of specialists in the latest
advances in cropping systems research

Method : Specialist training

Duration : 5 months, just begun

Other Information

This is a 5-month training course conducted by the International Rice Research Institute (IRRI) for cropping systems research and extension specialists in Southeast Asian countries. After completing the course, the participants are expected to (1) identify and provide for the cultural requirements of crops used in the cropping systems, (2) select crops suitable for cropping systems in given environmental conditions, and (3) design cropping patterns suited to given locations.

At present there are six participants from Indonesia, two from Thailand, three from the Philippines, one from Korea, and one from Israel. Twenty trainees are considered optimum each time the course is offered.

SPECIALIZED VOCATIONAL SKILLS TRAINING IN HANDICRAFTS

Project Leader/Informant : Mrs. Belen M. Samson,
Vocational Education Supervisor and Officer-in-charge,
School for Philippine Craftsmen,
Polanqui, Albay,
Philippines.

Programme : Skill Training in Home Industries

General Information

Clientele : 1) Out-of-school youths, unemployed adults & laymen
2) Other professionals who wish to upgrade their skills
3) Farmers who want to augment their incomes.

- Objective(s) : 1) To increase the income of the people in rural areas in the Bicol region
 2) To utilize idle manpower in productive ventures
 3) To create and revitalize income producing industries
 4) To provide wholesome and profitable leisure time activities
- Method : Lectures, demonstration, group and individualized instruction.
- Duration : Approximately two to four months

Other Information

The project is one of the many organized by the School for Philippine Craftsmen—Bureau of Public Schools to provide specialized vocational skills training in rural areas. It is part of the Philippine government's efforts to promote rural development. It also aims to exploit the human and natural resources in rural areas for optimum utilization so that the urban-rural drift can be minimized.

The project offers extension training courses in wood-bamboo crafts, coir and locoshell crafts, fiber crafts, loom weaving, ceramics and basketry. Extension training is conducted in the different provinces of the Bicol region.

Such a project is usually introduced at the request of a cooperating agency. The training site for the project remains the responsibility of the Requesting Agency.

TRAINING FOR RURAL WOMEN

- Project Leader/Informant : Prof. Fe A. Cagampang,
 Assistant Professor,
 College of Agriculture,
 College, Laguna,
 Philippines.
- Programme : SEARCA Social Laboratory Rural Training Programme

General Information

- Clientele : Rural women in the Social Laboratory villages; no schooling or age specifications
- Objective(s) : To train rural women to augment farm income and to improve home and family life.
- Method : Training and home extension
- Duration : On-going, started in July, 1972 and completion is expected in 1975.

Other Information

The project trains rural women in many phases of home living and income-generating

activities which utilize family labour and other available resources in the home and farms. Present training activities are in the following areas: clothing construction, handicrafts, food and nutrition.

About 56 farm housewives and unemployed rural women have been served by the project since July 1972.

The services of experts are provided by SEARCA, a SEAMEO Agriculture Project Centre, and the University of the Philippines at Los Banos; financial assistance is received from Philippines Business for Social Progress and the Australia Freedom from Hunger Campaign.

TRAINING OF SUPERVISED CREDIT TECHNICIANS FOR THE RURAL BANKS AND THE PHILIPPINE NATIONAL BANK

Project Leader/Informant : Dr Vicente U. Quitana,
Director and Professor,
Agricultural Credit and Cooperatives Institute,
UPLB, College, Laguna,
Philippines.

Programme : Supervised Credit Programme Through the Rural Banking System

General Information

Clientele : Prospective rural credit technicians of the Central Bank of the Philippines and the Rural Banking System

Objective(s) : To prepare trainees to become effective farm credit technicians

Method : Residential training

Duration : One month

Other Information

This course is a pre-service training for newly recruited agriculturists who will be hired by the rural banks participating in the supervised credit programme and an in-service training for personnel of the Philippine National Bank.

The course is conducted in the Agricultural Credit and Cooperatives Institute on the campus of the University of the Philippines at Los Banos. The training involves the following topics: an overview of the NFAC food production programme, land form, technical and production aspects of different agricultural commodities, farm management principles, agricultural and non-agricultural cooperatives, extension principles and methods, supervised credit, case studies and practicums, etc., including an examination and other forms of evaluation. The Institute draws additional expertise from the university staff resources to teach the foregoing topics.

The trainees stay most of the time in the Institute which has dormitory and library facilities; the trainees have access to the university libraries, recreational and cafeteria facilities.

The agency-sponsors of the trainees contribute to the cost of the training programme. About 1,000 trainees have completed the course since 1971.

TRAINING PROJECT FOR OLDER RURAL YOUTH (ACTION RESEARCH)

Project Leader/Informant : Miss Blanda R. Sumayao,
Instructor,
Department of Agricultural Education,
UPLB, College, Laguna E-109,
Philippines.

Programme : Social Laboratory Rural Training Programme

General Information

Clientele : Rural youth between 15-25 years old; completion of at least primary schooling.

Objective(s) : To assist the farm youth to get started and established in farming to develop systematic vocational education programmes for farm youth.

Method : Training and extension

Duration : On-going, 2 years for each batch of trainees.

Other Information

The project is an action-research which develops two-year terminal training course for out-of-school farm youth, with emphasis on mastery of technical skills and in the development of managerial abilities.

The trainees are required to spend a major portion of their time in well-planned home projects to be carried out in two years under the close supervision of the agriculture teacher. Production loans (without collateral) are made available to finance the projects of the trainees. The idea is to assist (unemployed/underemployed) farm youth to get started and established in farming while undergoing training.

The project serves 20 participants in Barrio Linga, Pila, Laguna, a village which is 30 minutes drive from SEARCA and the University of the Philippines at Los Banos, College of Agriculture, the co-sponsors of the action research.

VEGETABLE PRODUCTION

Project Leader/Informant : Mr. Pedro L.-Esteban,
Chief, Agricultural Education Division,
Bureau of Vocational Education,
Department of Education and Culture,
Manila, Philippines.

Programme : Green Revolution

General Information

Clientele : Members of FAHP, girls enrolled in agricultural high schools

Objective(s) : To increase vegetable production for the home and market
Method : In-school extra-curricular programme
Duration : Continuing, 10 months each time

Other Information

This is an in-school project of Future Agricultural Homemakers of the Philippines members, either as an individual project undertaken in the homes of members or as group activity in the school. The advisers (teachers) of the FAHP take charge of this project and give the necessary assistance to the girls. All facilities of the school such as water, buildings, equipment, etc. are available for this project.

Funds to finance the project either come from the student or from loans obtainable from the organization and from the rural banks.

About 20,800 10-month man-years were involved in the project in 1971 and 1972.

VEGETABLE SEED PRODUCTION

Project Leader/Informant : Mr. Pedro L. Esteban,
Chief, Agricultural Education Division,
Bureau of Vocational Education,
Department of Education and Culture,
Manila, Philippines.

Programme : Green Revolution

General Information

Clientele : Teachers of agriculture

Objective(s) : To up-grade technical competence of trainees in seed production; establish seed centres, and attain self-sufficiency in vegetable seeds in schools.

Method : Training

Duration : 12 days; 96 contact hours

Other Information

This project involves the training of agriculture teachers to up-grade their technical competence in seed certification including handling, processing, testing, packaging and storing of seeds. The participants in the project are expected to produce vegetable seeds to alleviate shortages in seed supply not only in the school gardens but also among truck and commercial vegetable gardens. This project is also expected to reduce seed importation from abroad.

In 1972 and 1973, 42 trainees participated in the project. Participating agencies were the Bureau of Vocational Education, Bureau of Plant Industry, Bureau of Agricultural Extension, and CARE-Philippines.

SINGAPORE

COMMERCIAL/VOCATIONAL CLASSES FOR WOMEN

Project Leader/Informant : Mr. Fong Weng Kee
Assistant Director,
Adult Education Board,
126 Cairnhill Road,
Singapore 9

Programme : Commercial/Vocational Classes for Women

General Information

Clientele : Young women who have completed their secondary education
Objective(s) : To train students to embark on commercial/vocational careers
Duration : One year

Other Information

This project is jointly sponsored and operated by the Adult Education Board and the Franciscan Missionaries of Mary at the Hai Sing Dewasa Institute.

The Institute conducts full-time courses for young women who have completed their secondary education. These courses conducted in English and Chinese, include Account Clerk Course, Advanced Accounts Course, School Certificate of Commercial Education Course, Secretarial and Advanced Secretarial Course and Dressmaking/Tailoring Courses.

This project started operations in 1967. The number of participants was 654 in 1972 and 650 in 1973. Ninety-six percent of the project budget comes from the participants and 4% from the government.

FARMERS PROJECT

Project Leader/Informant : Mr. Woon Lin Ching,
Senior Primary Production Officer,
Primary Production Department,
National Development Building,
5th Floor, Maxwell Road,
Singapore 2,
Republic of Singapore.

Programme : Extension Service

General Information

Clientele : All farmers
Objective(s) : To increase production and income of farmers
Method : Farmer extension
Duration : On-going

Other Information

This is an extension project which serves farmers in the different areas of activities such as intensive livestock production, intensive horticultural production, intensive fishery production.

In addition to assisting the farmers, the extension agent also collects farm statistics, data on farm prices and other information needed in agricultural census and surveys. He is also involved in farm licensing. Each extension agent serves as many as 600 farmers.

FISHERY TRAINING COURSE

Project Leader/Informant : Mr. Ng Chee Kian,
Project Co-Manager of Fishery Training Centre,
Primary Production Department,
Fishery Training Centre,
Changi Point, Singapore 17,
Republic of Singapore.

Programme : Fishery Training Course

General Information

Clientele : Secondary school leavers and local fishermen

Objective(s) : To improve the fishing industry of Singapore by producing qualified personnel to operate modern fishing vessels and gear to exploit the off-shore waters and increase the fish production of the country.

Method : Residential training. The trainees are taught basic navigation, marine engineering, net-making, seamanship, etc. After the first 6 months, the trainees are grouped as either deck or engine trainees where they will be taught more intensively the relevant deck or engine subjects. Practical training is provided in the workshops and in two training vessels. On board the vessel the trainees receive about four months of practical experience taught by skilled navigators and skilled engineers.

Duration : One year; short courses for local fishermen are also available.

Other Information

This is a UNDP assisted project set up at Changi Point, Singapore to develop the fishery industry to meet the needs of the densely populated island.

The Government of Singapore provides land, buildings, staff, trainees' allowances, a small training vessel, equipment, maintenance and operating costs of the project, including a contribution to UNDP for local operating costs. UNDP, on the other hand, supplies expert services, fellowships, a large training vessel, equipment, and supplies. Upon termination of UNDP assistance (March, 1974), the Government of Singapore continued the project on the same lines as before.

About 93 trainees attended the course in 1972 and 1973; the Centre can accommodate about 60 trainees each time.

GENERAL MANAGEMENT COURSE FOR PERSONNEL OFFICERS

Project Leader/Informant : Mr. John Tan,
Head,
Staff Training Institute,
4 Lorong Langsir,
Singapore 10

Programme : Management Training

General Information

Clientele : Division I (senior) Officers
Objective(s) : To expose the officers to various Personnel Management concepts & techniques
Method : Lectures and session, syndicate work, written exercises and case studies.
Duration : On-going; course lasts approximately one week.

Other Information

The courses began in 1972 with 18 participants. The number of participants was 19 in 1973. The lecturers were drawn from private organizations and the University of Singapore

The course was designed to give senior officers, who are engaged in personnel work or have responsibility for personnel administration in their organizations, an understanding of the principles and practice of management and an appreciation of modern management techniques. Officers attending the course were on full-pay. After completion of the course, their attendance was recorded on their service cards which would be taken into consideration for promotion purposes.

The project is organized by the University of Singapore, a semi-government institution, and the Centre for Applied Behavioral Sciences-a private institution.

VOCATIONAL PREPARATORY CLASSES

Project Leader/Informant : Mr. Koh Han Yam,
Assistant Director,
Adult Education Board,
126 Cairnhill Road,
Singapore 9

Programme : Vocational Preparatory Classes

260

250

General Information

- Clientele : Primary School leaving examination failures.
- Objective(s) : 1) To provide boys & girls who were unsuccessful in the Primary Six Leaving Examination with a further two years of continuing technically biased education.
- 2) To provide the students an opportunity to acquire some basic training in crafts skills and be better equipped to seek employment in industries.
- Method : Lectures and practical work.
- Duration : Two years

Other Information

The Board's Vocational Preparatory Class programme started in 1969. The programme provides overaged boys and girls of 14 plus who have not been successful in their Primary Six Leaving Examination with a further two years of continuing education with a technical bias. The technical subjects taught include wood work, metalwork, technical drawing, electricity and related industrial orientation areas for boys and cookery and needlework for girls.

There are six centres within this project, namely Kim Keat AEB, Mountbatten Adult Education Board, Parry Avenue Adult Education Board, Newtown Adult Education Board and Bukit Ho Swee Adult Education Board. The number of participants was 5,564 in 1972 and 5,010 in 1973.

This project is managed by a semi-government agency. 68.6% of its budget comes from the government and 31.4% from participants.

THAILAND

AGRICULTURAL DEVELOPMENT IN THE RURAL VILLAGES OF CHAINAT AND UTHAI-DHANI

- Project Leader/Informant : Mr. Kitchamnong Watanachinda,
Field Director, TRRM,
Field Operation Headquarters and National Training Center,
Chainat, Thailand
- Programme : The Four-Fold Programme of the Foundation for Thailand Rural Reconstruction Movement.

General Information

- Clientele : 10,000 farmers in 30 villages of 10 sub-districts, 5 districts.
- Objective(s) : The project has the following objectives:
- a) Increasing rice production in the project areas;

- b) Earning supplementary income of farmers through other secondary crops;
- c) Prevention of animal diseases and plant protection.

Method : Extension and farmer training, e.g., demonstration is done by the extension workers; after the short-course training, discussion with a few farmers and asking them to apply the new method follows. The advantages are explained. Short-course training has been found to have particularly good results.

Duration : On-going

Other Information

This is a village approach to rural development which focuses on four critical areas, namely, increasing income of the farm family, health, literacy education, and civics. In addition to technical assistance to the farm families, the extension or field worker serves as liaison between the villagers and the government officials or other agencies to promote mutual understanding so that useful services to the community or villages can be rendered.

The project helps farmers improve their income by increasing their agricultural production. This help continues until the farmers can help themselves, after which the field worker is withdrawn from the village.

AGRICULTURAL TRAINING CENTRE

Project Leader/Informant : Mr. Kasem Jariento,
Second Grade Officer,
Department of Agricultural Extension,
Ministry of Agricultural and Cooperatives,
Bangkok, Thailand

Programme : Agricultural Extension

General information

Clientele : Technicians and other extension officials

Objective(s) : To improve the efficiency of extension workers by upgrading their technical competence.

Method : Training

Duration : 3 months.

Other Information

This project includes three kinds of training: pre-service training, in-service training, and task force training to serve extension personnel which number about two thousand now. Training activities are conducted in Bangkok, Khonkaen, and Kalasin. Such training includes technical skills in agriculture, understanding agency policy, attitudes and behavioural changes, human relationships, etc.

EDUCATIONAL REGION II FUNCTIONAL LITERACY PILOT PROJECT

Project Leader/Informant : Mr. Mohd. A. Kadir,
Office of Education Region II,
Yala, Thailand.

Programme : Functional Literacy and Family Life Programme

General Information

Clientele : Illiterate adults between 15-45 who do not speak the national language

Objective(s) : To help these people learn, develop their intellect, and adapt themselves to the changing society.

Method : Discussion and project committee

Duration : 2½ years (February 72-August 74).

Other Information

The project is organized by the General Education Department to enable the illiterates to use the national language and hence to participate in the development effort. It is sited in Sano, (Pattani Province), with a population of 1,900, and about 700 out-of-school adults are illiterate. The programme, which covers such topics as civics, health, home economics, has already had 245 persons while another 500 remains to be served. For the entire region the prospective clientele is reported to number 200,000.

FARM MECHANIZATION TRAINING

Project Leader/Informant : Mr. Paitoon Nagalak,
Division of Agricultural Engineering,
Department of Agricultural Techniques,
Ministry of Agriculture and Cooperatives,
Bangkok, Thailand.

Programme : Agricultural Engineering.

General Information

Clientele : Young farmers, 18-25 years old; average education, primary schooling (4 years)

Objective(s) : To develop skill in performing basic operation, maintenance and repair of farm machines.

Method : Shop training

Duration : Approximately 375 contact hrs. spread over a period of 47 to 53 days.

Other Information

This project is not only for the farmers and their children but also for government

officers who are involved in farm mechanization. The training center is in Patumtanee province, Central Thailand. The trainees stay in the training center where they receive instruction as well as food.

Some of the topics in the training course include: principles of engines, field practice in operating farm machines, workshop practice in maintenance and repair of farm engines, introduction to modern farming, etc.

A total of 406 trainees completed the course in 1971 and 1972.

FUNCTIONAL LITERACY AND FAMILY LIFE PLANNING PROJECT

Project Leader/Informant : Dr. Kowit Vorapipatana,
Adult Education Division,
General Education Department,
Ministry of Education,
Bangkok, Thailand

Programme : *Functional Literacy and Family Life Planning*

General Information

Clientele : Rural people
Objective(s) : To raise literacy levels, provide working skills and help improve the quality of life of rural people.
Method : Group discussion and individual practice.
Duration : On-going

Other Information

This project is organized by the Adult Education Division with financial and technical assistance from World Education, a non-profit private organization, and is intended to enable rural people to participate in development efforts. Agriculture, health, economics and civics are taught in the evenings. Approximately 2½ hours per day are devoted to these sessions, which occur 3-4 days a week. 12,000 persons have participated since the beginning of the project in 1971.

MOBILE ADULT VOCATIONAL SCHOOL

Project Leader/Informant : Mr. Swai Phongon
Principal,
Mobile Adult Vocational School,
Muang District, Chandhaburi,
Thailand.

Programme : Vocational Education

General Information

Clientele : People of both sexes with at least grade 4 of Primary Education or are sufficiently literate.

Objective(s) : To give vocational training to interested youth and adults
Method : Practical training
Duration : Three months

Other Information

This project offers courses for people in the form of classes. All interested groups can select their own kind of training as long as there are more than 15 persons in a group. The courses cover dressmaking, beauty culture, hairdressing, auto repair and agriculture.

About 70% of its participants are people who have occupations already but want to upgrade their abilities. The other 30% of the graduates either run their own shops or are employed in the existing establishments.

The project started in 1955. At present, there are 77 schools of this kind in 31 changwats.

MOBILE TRADE TRAINING SCHOOL

Project Leader/Informant : Mr. View Phao Santisamphan,
Principal,
Mobile Trade Training School 35,
Amphur Maesod, Tak,
Thailand.

Programme : Vocational Education

General Information

Clientele : People of both sexes with at least grade 4 of Primary Education or are sufficiently literate

Objective(s) : To provide training in different vocational/technical skills

Method : Practical training

Duration : Five months

Other Information

The project is organized by the Adult Education Division, General Education Department giving vocational courses to rural people in different vocational skills. The courses are conducted in three shifts providing that there are enough participants enrolled.

The project will be moved to another place when there are not enough participants to make up new classes. The project started in 1960.

The General Education Department plans to expand this kind of school to every province.

PITSANULOK ADULT VOCATIONAL SCHOOL

Project Leader/Informant : Miss Oratai Chansathaporn,
Principal,
Pitsanulok Adult Vocational School,
Pitsanulok, Thailand

Programme : Adult Vocational Education Programme (night class)

General Information

Clientele : Students, housewives and trainees

Objective(s) : To provide training in clothing and dressmaking, Thai and English typing

Method : Theory and practice

Duration : Six months, on-going

Other Information

The project is organized by the Adult Education Division. The courses offered are dressmaking and Thai and English typing.

The project started in 1969 with the dressmaking course only. Later in 1973 the typing course was offered. The number of participants was 120 in 1972 and 127 in 1973.

SHORT COURSE IN COOPERATIVE MANAGEMENT

Project Leader/Informant : Mrs. Manit Kamolvej,
Deputy Director,
Institute for Cooperative Studies,
Training Division,
Department of Cooperative Promotion,
Ministry of Agriculture and Cooperatives,
Bangkok, Thailand.

Programme : Cooperative Education and Training

General Information

Clientele : Managers and assistant managers of agricultural cooperatives with at least Matayom 3 education.

Objective(s) : To train present and prospective agricultural cooperative managers in cooperative management.

Method : Training

Duration : 10 weeks

Other Information

This is a 10-week course in cooperative management, particularly in topics such as cooperative philosophy, principles of management, marketing accounting, agricultural credit, cooperative regulation and laws, etc.

The training is conducted at the Cooperative Training Center. Facilities such as classrooms, auditorium, working offices, dining rooms are available. The trainees are billeted in hotels.

About 65 percent of the 10-week period is scheduled for lectures, 15% for field work, 10% for discussion, and 10% for examination. Trainees who attend at least 80% of the time receive diplomas.

SOCIALLY-HANDICAPPED WOMEN

Project Leader/Informant : Public Welfare Department

Programme : Public Welfare

General Information

Clientele : Women who are committed to the care and protection of the Social Welfare Department, those who enroll voluntarily or are enrolled by parents and relatives.

Objective(s) : To provide treatment and skill training for ex-prostitutes.

Method : Practical and theoretical instruction in technical/vocational subjects.

Duration : The duration of the training is dependent upon the ability and aptitude of the individual trainee.

Other Information

This project is organized by the Department of Social Welfare to assist the women who like to change their profession from being prostitutes. The project provides medical care in venereal diseases and others and training for different occupations. Courses offered are in dressmaking, typing, cooking, hairdressing, etc.

The project is located in Park-Kret district, Nonthaburi which is the suburb of Bangkok Metropolis.

SORAYA DRESSMAKING INSTITUTE

Project Leader/Informant : Mr. Samran Vichuckana,
Director,
190-192, Siam Square 1,
Rama I, Pratumwan,
Bangkok, Thailand.

Programme : Private Schools

General Information

Clientele : Unemployed youths, students, tailors and dressmakers
Objective(s) : To train students in dress-making
Method : Theory and practice
Duration : Six to eight months

Other Information

This project is organized by a private institution which gives courses in pattern making, design, sewing, and the usage of all instruments used in tailoring and dress-making. It is located in Pratumwan district, one of the business centres in Bangkok.

It is reported that 80% of the graduates get work in different industries and business and the rest either operate their own shops or teach in other dressmaking schools.

The project began in 1972 with 300 participants. The number of participants rose to 400 in 1973.

SUMMER TRAINING COURSES FOR PEOPLE

Project Leader/Informant : Mr. Vichit Awakul,
First Grade Officer,
Extension and Training Office,
Kasetsart University,
Bangkok, Thailand.

Programme : Training Courses

General Information

Clientele : People who are interested in the courses offered
Objective(s) : To extend knowledge and technology to the people
Method : Lecture, demonstration, practice
Duration : One month

Other Information

This project makes use of existing facilities in the university to extend new knowledge to farmers, housewives, teachers and others who are interested. In 1974, 19 courses with 20 students each are offered. Students pay fees for classes in which they enroll (ranging from 75 baht to 150 baht). The courses in 1974 are in sericulture, plant protection, automechanics, graphic art, cooking, flower arrangement, orchid growing, orchards, fertilizers, poultry production, fish raising, mushroomculture, business administration, business and public relations, typing (Thai), food processing, public speaking and conference organizing, cloth dyeing and printing. 398 and 613 persons enrolled in this project in 1971 and 1972 respectively.

THONBURI POLYTECHNIC SCHOOL

Project Leader/Informant : Mr. Pirot Klangsin,
Principal,
Thonburi Polytechnic School,
Chiengmai Road, Klongsan,
Bangkok, Thailand.

Programme : Vocational (Short course) Training.

General Information

Clientele : Members of both sexes aged 15 years and above
Objective(s) : To provide training in different vocational/technical skills
Method : Theory and practice
Duration : 225 hours.

Other Information

The Thonburi Polytechnic School offers an extensive range of short training courses in vocational and technical subjects. The subjects range from mechanics, electricity, accountancy, typing to dressmaking, beauty culture and cookery.

It is reported that the majority of the graduates in such courses either work independently or are employees of the government and private agencies.

TRAVEL INDUSTRY AND HOTEL MANAGEMENT

Project Leader/Informant : Mrs. Suranee Srichan,
Chief of Business Department,
Bangkok Technical Institute,
Soi Suanplu, Toong-Mahamek,
Yannawa, Bangkok,
Thailand.

Programme : Short course training

General Information

Clientele : Males or females of at least 17 years of age with secondary school education.
Objective(s) : To provide skilled personnel for the travel and hotel industry.
Method : Lectures and on-the-job training.
Duration : Nine months

Other Information

The project is organized by the Tourist Organization of Thailand in cooperation with Thai Hotels Association, the Erawan Hotel and the National Education Council.

The course consists of three main sections:—

- I) Hotel Operation
- II) Food and Beverage Preparation
- III) Tourism

The course first introduced in 1969 had a four-month curriculum. In 1973, the curriculum was modified to incorporate seven months of theory and training at the Institute followed by two months of practical work in hotels.

YOUNG FARMERS (4-H CLUB) PROJECT (YUWA KASETAKORN)

Project Leader/Informant : Miss. Patchanee Natpracha,
Second Grade Officer,
Department of Agricultural Extension,
Ministry of Agriculture and Cooperatives,
Bangkok, Thailand.

Programme : Agricultural Extension

General Information

Clientele : Out-of-school rural youth, ages 10 to 25.

Objective(s) : To train rural youth to become progressive farmers in the future.

Method : Training through club work

Duration : Continuing

Other Information

This project is an extension work addressed to young people in the villages. The educational work is done through the motto "learning by doing". The club is formed and a committee is created to run the club. Each member has to carry out at least one agricultural or home economics project.

Half of the volunteer workers assist in this project are teachers and the rest are village headmen and other interested local leaders.

VIETNAM

DA NANG TECHNICAL, VOCATIONAL AND COMMERCIAL SCHOOL

Project Leader/Informant : Mr. Phan Cong Han,
11 Phan Chau Trinh Street,
Danang, Vietnam.

Programme : Technical, vocational and commercial programme

General Information

Clientele : War Veterans, disabled soldiers, adults, widows and orphans

- Objective(s)** : 1) To train participants in different up-to-date technical and commercial skills
 2) To help solve the unemployment problem
- Method** : Theoretical and practical instruction
- Duration** : 500 training hours.

Other Information

This project is organized by a private institution offering different kind of courses such as motor bicycle repairing, home electrical installation, electronics, car driving, accounting, typing and food preparation.

The graduates of the school are often employed by industrial firms while others try to set up their own shops.

There are other six significant projects of the same kind reported, namely Quang Trung Radio School in Vinh Loug, Chan Minh Vocational School, Technical School for Radio and Electronics, Popular Polytechnic Schools, Nguyen Van Ngo Typing, Accounting and Short-hand School and Nguyen Vc Typing and Accounting School in Saigon. The six projects have about 2,880 participants in 1972 and 2,600 in 1973.

EDUCATION PROGRAMME FOR RURAL WOMEN

- Project Leader/Informant** : Miss Bui Van Phep,
 Vung Tau Province Educational Service,
 171 Nguyen Thai Hoc Street,
 Vung Tau, Vietnam
- Programme** : Illiteracy Eradication and Family Improvement for National Development

General Information

- Clientele** : Illiterate rural women aged 15 to 50
- Objective(s)** : To teach reading, writing basic computations, civics, sanitation, and home economics.
- Method** : Classroom work
- Duration** : On-going; Course lasts 3 months

Other Information

The project is organized by the Government Health, Agriculture, Information and Education Services to educate poor illiterate rural women. Sessions are conducted in the evenings 6 days a week, 3 months per cycle, 3 cycles a year. Each session lasts 1½ hours and is conducted at communal schools, pagodas and temples. 250 trainees have participated in the project.

271

261

FARMERS ASSOCIATION DEVELOPMENT

Project Leader/Informant : Mr. Nguyen Phuc Chan,
Service Chief,
Training Center,
Ministry of Agriculture,
255 Le Van Duyet,
Gia Dinh, Vietnam.

Programme : Farmers Association Development

General Information

Clientele : Farmers

Objective(s) : To teach farmers how to organize farmers' associations and co-operatives

Method : Farmer classes and extension

Duration : On-going: 1 week per class

Other Information

With the assistance of extension agents, membership education and training activities are conducted by officials of farmer associations and cooperatives to help local farmers understand the role of associations and cooperatives in the development of agriculture. Production aspects in crops and livestock as well as information on rural banks and credit are also discussed in the farmer classes.

ILLITERACY ERADICATION /74

Project Leader/Informant : Mr. Nguyen Duc Chinh,
Chief of Educational Service,
Long Khanh Province,
Vietnam

Programme : Illiteracy Eradication

General Information

Clientele : Illiterate farmers aged 15 and above

Objective(s) : Eradication of illiteracy among farmers

Method : Strict teacher-pupil relationship

Duration : Six months (March 74-September 74)

Other Information

This project is organized by the Government and uses classroom facilities of village (primary) schools in the evenings. Dates for sessions remain flexible, since farmers work even during the off season. For this reason and also because of the lack of transport facilities, only 400 out of an estimate 3,000 farmers have participated in the project.

LITERACY TRAINING FOR ETHNIC MINORITIES

Project Leader/Informant : Mr. Y-Blieng-Hdok,
1 Lam Son Street,
Hué, Vietnam

Programme : Literacy Training for Ethnic Minorities

General Information

Clientele : Ethnic minorities

Objective(s) : To teach ethnic minorities to read, write and to follow further courses

Method : Classroom work

Duration : Eight months (June 1973–February 1974)

Other Information

The project was organized by the Ethnic Development Service and Local Authorities to educate the mostly illiterate ethnic minorities. It was set at two villages of Taran 1 and Taran 2, and there were 82 participants. Sessions were conducted in the evenings.

MOBILE LITERACY COURSE

Project Leader/Informant : Mr. Huynh Dinh Dan,
Chief,
Ba-Xuyen Rural Development Cadres Province Team,
Ba-Xuyen,
Vietnam.

Programme : -----

General Information

Clientele : Farmers and Labourers

Objective(s) : To teach reading, writing, arithmetic and civics

Method : Classroom work

Duration : On-going; Course runs from March to May each year.

Other Information

The project is organized entirely by the government in Ba-Xuyen Province where the bulk of the population consists of illiterate farmers. Three kinds of courses are taught i) literacy courses (8 localities), ii) popular education courses (5 localities) and iii) adult education courses (3 localities) 640 persons have participated in the project.

NATIONAL REHABILITATION INSTITUTE

Project Leader/Informant : Dr. Lam-Van-Thach,
70 Ba Huyen Than Quan Street,
Saigon, Vietnam.

Programme : National Rehabilitation and Vocational Training for Disabled Citizens

General Information

Clientele : Disabled war veterans, civilian war victims, and other disabled citizens.

Objective(s) : To rehabilitate and train disabled citizens in vocational skills

Method : Demonstration and practical instruction.

Duration : Six to twelve months.

Other Information

This project is organized by the Ministry of War Veterans of Vietnam. It offers courses in different vocational and technical skills for the disabled and the blind.

The project is supported by USAID, the Canadian government, World Rehabilitation Fund, other Vietnamese Ministries such as Ministry of Labour, Ministry of Social Welfare and some other international organizations.

There are five similar projects in the country. Two are sponsored by the Ministry of War Veterans. Two by the Ministry of Labour and one by the Ministry of Social Affairs. The five projects have about 4,030 participants in 1972 and 4,290 in 1973.

PILOT AGRICULTURAL VILLAGES

Project Leader/Informant : Mr. Tran Ai Quoc,
Chief,
Directorate of Agricultural Promotion,
28 Mac Dinh Chi,
Saigon, Vietnam.

Programme : Agricultural Promotion

General Information

Clientele : Farmers in agricultural villages

Objective(s) : To develop and assist farmer organizations for village development.

Method : Farmer extension

Duration : On-going. 274

Other Information

The project includes extension work in modern agricultural techniques, utilization of family labour and in developing and assisting farmers' association and cooperatives.

About 90 pilot agricultural villages are planned by the project at present.

PRACTICAL ARTS AND CULTURAL CENTRE

Project Leader/Informant : Mr. Cung Dinh Thanh,
7 Phan-ke-Binh,
Saigon, Vietnam.

Programme : -----

General Information

Clientele : Youths and adults from all walks of life
Objective(s) : 1) To develop arts and culture in the country
2) To help adults and youths have a profession in order to earn a living
Method : Theory and practice
Duration : 100 training hours

Other Information

This project is organized by a private institution offering courses in painting, sculpture, photography, music and dancing.

When it began in 1972, there were 668 participants, but in 1973 the number had grown to 913. Most of the participants were women. The graduated participants apparently could make their own living or could easily get a job.

Although it is a private project, there are a lot of government employees, by one way or another, contributing to the project.

SEA FISHING TECHNICAL TRAINING FOR FISHERMAN

Project Leader/Informant : Mr. Van Huu Kim,
Chief of Technical Bureau,
Directorate of Fishery,
116 Phan Dinh Phung,
Saigon, Vietnam.

Programme : See Fishing Programme

General Information

Clientele : Fishing boat owners and fishermen, aged above 15
Objective(s) : To improve fishing techniques

Method : Training, mobile training bus fully equipped with teaching aids.
Duration : 2 to 4 months

Other Information

Mobile training units move to local fishing centres and fishing boat stations and provide training to the clientele in the following topics: operation and maintenance of boat motors, construction and operation of modern fishing equipment, operation of fishing machinery and sea navigational techniques. The number of training courses offered depends on the demand for such training and on the available budget of the project.

About 264 and 160 trainees attended the course in 1971 and 1972 respectively. These trainees receive about VNĐ 300 per day for meals. The project can train 500 participants yearly.

SHORT-TERM TRAINING FOR FARMERS

Project Leader/Informant : Mr. Le Ba Dap,
Head of Agricultural Promotion Section,
Gia Dinh Agricultural Service,
11 Hung Vuong, Thi Nghe,
Vietnam.

Programme : Agricultural Promotion

General Information

Clientele : Farmers
Objective(s) : To improve the competence of farmers in the following subject-matter areas: animal husbandry, fish breeding and farming techniques, efficient use of farm machinery, equipment, and farm chemicals such as fertilizers.
Method : Training
Duration : 2 to 3 hours each time.

Other Information

This project is aimed at changing the attitudes of farmers and to let them acquire new knowledge in the various areas of agriculture and in the advantages of the adoption of modern farming techniques.

The farmers are gathered at public places such as the village or hamlet offices, communal temples, churches, schools, etc., to attend "short-term" courses lasting from 2 to 3 hours on some brief topics or problems which are relevant to farming activities in the locality.

TRAINING ACCOUNTANTS FOR FARMER ASSOCIATIONS AND COOPERATIVES

Project Leader/Informant : Mr. Nguyen Phuc Chan,
Training Service Chief,
Training Centre,

Ministry of Agriculture,
255 Le Van Duyet Street,
Gia Dinh, Vietnam.

Programme : Rural Development.

General Information

Clientele : Accountants of farmer associations and cooperatives
Objective(s) : To up-grade the competence of accountants of farmer associations and cooperatives
Method : Residential training
Duration : 6 months

Other Information

The training course is intended to provide comprehensive background information on farmers associations and cooperatives to accountants who are working with these farmer organizations, and to stimulate an exchange of field experiences among these professionals.

Some of the topics included in the training are: farmer association/cooperative movements, organization of farmers associations and cooperative duties of accountants, etc.

The trainees stay at the training centre where training and boarding facilities are available; the trainees also have the opportunity to visit and see for themselves some farmers associations.

Each course serves 25 official participants, and the others are auditors or observers. In 1973, 54 trainees attended the course.

TRAINING AGRICULTURAL CADRES AND SPECIALISTS

Project Leader/Informant : Mr. Phan Huu Trinh,
Center Director,
Agricultural Improvement Centre
(Directorate of Agricultural Promotion),
28 Mac Dinh Chi Street,
Saigon, Vietnam.

Programme : Agricultural Promotion

General Information

Clientele : Cadres and Specialists
Objective(s) : To provide pre-service and in-service training for cadres and specialists in agricultural extension work in the villages.
Method : Training
Duration : 2 weeks

Other Information

As part of the agricultural promotion programme this project consists of training agricultural cadres and specialists aimed at up-grading the participants' technical competence both in theory and in practice, particularly in rice production.

The training is conducted at the Agricultural Improvement Centre in Saigon and in the rice fields in Bien Hoa (30 Kms. from Saigon).

The training is specifically intended for professional agents such as engineers, technicians who graduated from specialized schools and extension agents (or cadres) who have not been trained in any specialized school but have some practice and field experience. About 494 trainees completed the course in 1971 and 1972.

TRAINING IN TAILORING

Project Leader/Informant : Miss Huynh Thi Kim Ngoc,
12 Mac Dinh Chi Street,
Saigon, Vietnam.

Programme : Home economics

General Information

Clientele : Youth and adults (especially rural women)

Objective(s) : To train youths and adults in tailoring and dressmaking

Method : Practical work

Duration : Two to five months

Other Information

This project is organized by Directorate of Agricultural Promotion. The aim of the project is to help the rural people to acquire tailoring and dressmaking skills either for their own benefit or as commercially viable skills which will give them extra incomes. In addition to this project there are other significant ones located in different provinces, but, owing to insecurity caused by the war, some of them could not continue their activities.

There are also similar projects established by private institutions. Among others is the Hoa Phung Tailoring School in Gia-Dinh.

TRAINING LITERACY TEACHERS

Project Leader/Informant : Mr. Huynh Trung Nghia,
Chief,
Bac-Lieu Educational Service.

Programme : Illiteracy Eradication

General Information

Clientele : Teachers of literacy
Objective(s) : To teach literacy personnel adult education strategies
Method : Part practical, part classroom work
Duration : On-going

Other Information

This government-sponsored project organizes intensive 15-day training courses during the summer vacation for literacy teachers. Seven hours are spent per day, six days a week. Each course has 30 participants.

TRAINING MANAGERS OF FARMERS ASSOCIATIONS AND COOPERATIVES

Project Leader/Informant : Mr. Nguyen Phuc Chan,
Training Service Chief,
Training Center,
Ministry of Agriculture,
255 Le Van Duyet,
Gia Dinh, Vietnam.

Programme : Training Managers of Farmers Associations and Cooperatives

General Information

Clientele : Officials of local farmers associations and cooperatives
Objective(s) : To improve the managerial skills of officials of farmers' associations and cooperatives
Method : Residential training
Duration : Three months

Other Information

This course is intended to equip the officials of farmers associations and cooperatives with the knowledge and skills necessary for the post of manager. The course is conducted at a training centre which has teaching and boarding facilities for the participants; the centre has access to pilot sites for practice and observation by the participants.

In 1973, about 120 officials of farmer organizations participated in the course.

APPENDIX

INSTITUTIONS AND AGENCIES CONDUCTING
NON-FORMAL EDUCATION ACTIVITIES

INDONESIA

Name of Institution	Type	Non-Formal Education Activities
Department of Religious Affairs	Governmental	Personnel upgrading, Community development
Department of Home Affairs	"	Personnel upgrading, rural community development
Department of Justice	"	Guidance
Department of Public Health	"	Personnel upgrading, public health centre and family planning
Department of Finance	"	Upgrading, courses for treasurers, finance administration and book-keeping courses
Department of Manpower, Transmigration and Cooperatives	"	Upgrading of personnel, work training centre, Mobile Training Unit, and Cooperatives
Institute of State Administration	"	Upgrading and training courses on administration and management
Department of Foreign Affairs	"	Courses for personnel
Department of Education and Culture	"	Illiteracy-combatting campaign, courses for administrative staff and senior administrative staff, youth and scout movement, sports, courses in home economics, upgrading of personnel, community leadership training, vocational and technical training for rural people
Department of Information	"	Upgrading of personnel
Department of Trade and Commerce	"	Upgrading of personnel
Department of Industry	"	Courses/training
Department of Agriculture	"	Upgrading of personnel, counselling, courses for farmers, publications (brochures/pamphlets, etc.), rural broadcasting programmes through Radio Republic of Indonesia.
Department of Social Affairs	"	Social vocation courses, rural social institutions, efforts for promotion of family nutrition, family planning

Name of Institution	Type	Non-Former Education Activities
Department of Defence and Security	Governmental	guidance effort, courses for puppet performers and artists Community development and literacy campaign for the very remote areas, vocational/technical courses for the military personnel who will soon be pensioned.

Note: *There are also private institutions conducting non-formal education activities (general, vocational, religious, art, etc.), but detailed information is not available.*

KHMER REPUBLIC

Name of Institution	Type	Non-Formal Education Activities
National Committee for Non-Formal Education (CONENF)	Governmental	Functional literacy, women's education
Directorate-General of Education (DEMEP)	"	Literacy for out-of-school youth, instructive entertainment for educational and vocational purposes
Ministry of Community Development	"	Community development activities
Centre of Vocational Apprenticeship	"	Extension of centres of vocational/technical training
Directorate of Agriculture	"	Agricultural training and agricultural promotion
Faculty of Arts and Trades	"	Training students to be employed in industry
C.F.P.P. Electricité du Cambodge	Private	Training courses for personnel

LAOS

Name of Institution	Type	Non-Formal Education Activities
Alliance Française	Private	Language courses
Lao-American Association	"	Language courses
British Council	"	Language courses
USAID	Foreign aid	Technical training
National Committee for Functional Literacy	Governmental	Functional Literacy
Community Education Rural Centre	"	Fundamental Community Education

Name of Institution	Type	Non-Former Education Activities
Pagodas (Temples)	Religious	Fundamental religious and moral education
Asian Christian Services	"	Language and technical training courses
Lao Family Welfare Association	Semi-private	Family Planning
Community Training Center of Ban Amone	Governmental	Vocational training & literacy
Lao National Broadcasting	"	Hygiene, health, rural & primary education programme
Rural Affairs Commissariate	"	Vocational & technical training
Direction of Adult Education	"	Literacy
School for Home Economics	"	Home economics
Public Health	"	Hygiene
Federal Highway Administration	Government & USAID	Technical training
Lao Police Training Centre	Governmental	Technical training
Customs Assistance	"	Technical assistance
Army	"	Literacy
Sub-Dir. of Agricultural Extension	"	Farmers training
Ministere des Affaires Rurales	"	Professional training
Public Administration	"	Technical training
Hat Dok Keo Agricultural Pilot Project	"	Technical training

MALAYSIA

Name of Institution	Type	Non-Formal Education Activities
Malaysian Centre for Development Studies	Governmental	Seminars
Training Division, Manpower Department	"	Industrial training
Prisons Department	"	Industrial and Vocational training to inmates

Name of Institution	Type	Non-Formal Education Activities
Services, Rehabilitation and Care Division, Ministry of Social Welfare	Governmental	Remedial and Vocational Training to the handicapped, women, girls and the aged.
Culture Division, Ministry of Culture, Youth and Sports	"	Culture training, courses and talks
Youth Division, Ministry of Culture, Youth and Sports	"	Leadership and vocational training
Sports Division, Ministry of Culture, Youth and Sports	"	Sports training
Training Division, Federal Land Development Authority	Semi-Govt.	FELDA settlers' training
Mother and Child Health Unit, Ministry of Health	Governmental	Health programmes for mothers and children
Further Education Unit, Ministry of Education	"	General Education
Community Development Division, Ministry of Rural Development	"	Community development and skill training courses for people in rural areas, religious education (Islam), Home economics, Literacy
Department of Cooperative Development	"	Education and training for all types of Cooperative Societies
Council for the Indigenous People (MARAs)	Semi-Govt.	On-the-job training, Vocational training in institutions
Department of Information	Governmental	Civics assemblies and talks to identifiable target groups
National Productivity Centre, Petaling Jaya.	Semi-Govt.	Courses in management, finance etc. to managers, supervisors in industries and commerce
Goodwill Division, Ministry of National Unity	Governmental	National unity classes
Agricultural Division, Ministry of Agriculture and Fisheries	"	Education of farmers in, modern methods of agriculture
Fisheries Division, Ministry of Agriculture and Fisheries	Governmental	Marine and fresh water fishing, courses for fresh water fish farmers
Veterinary Division, Ministry of Agriculture and Fisheries	"	Training of the rural population in improved techniques of livestock and poultry husbandry
St. John's Ambulance Brigade	Non-Governmental	Public Service Education to Youth

Name of Institution	Type	Non-Formal Education Activities
4B Youth Movement	Non-Governmental	Education to Youth
Malaysian Trades Union Congress	"	Trade Union Education
Malaysian Youth Council	"	Education and welfare of youths
Council of Churches, Malaysia	Religious	Religious Education
Malayan Association for the Blind	Non-Governmental	Education and training for the blind
Home Economics Association of Malaysia	"	Promotion of Home Economics Education
Association for Retarded Children, Penang	"	Education of retarded children
Association for Retarded Children, Selangor	"	Education of retarded children
Association for Spastic Children, Johore	"	Education and training of children
Association for Spastic Children, Penang	"	Education and training of children
Association for Spastic Children, Selangor	"	Education and training of children
National Union of Malaysian Students	"	Education of students through Seminars, Conferences, Work Groups, etc.
National Association for the Deaf, Malaysia	"	Education and training of the deaf
Malaysian Red Cross Association	"	Public service education
Girl Guides Association	"	Education and training in citizenship
Boy Scouts Association of Malaysia	"	Education and training in citizenship
Federation of Family Planning Associations, Malaysia	"	Family Planning Education
Y.M.C.A.	"	Education and Welfare of its members
Y.W.C.A.	"	Education and Welfare of its members
Persatuan Silat Gayong Malaysia	"	Education in martial arts
Tae Kwan Do Association	"	Education in martial arts
Judo Club	"	Education in martial arts

Name of Institution	Type	Non-Formal Education Activities
PERKIM (National Association of Islam, Malaysia)	Religious	Religious education to Muslims and Muslim converts
Muslim Women's Welfare Board, Peninsular Malaysia	Non-Governmental	Education and Welfare of Muslim women
National Council of Women's Organization	"	Education and welfare of women
Malaysian Buddhist Association	"	Education and welfare of Buddhists
Maktab Federal	"	Formal Education subjects (Correspondence Education)
Institute Pimpinan Dinamis	"	Formal Education subjects-Malay medium (Correspondence Education)
Institute Malaysia Gaya Pos	"	Formal Education subjects-English & Malay (Correspondence Education)
Yayasan Arda Gaya Pos	"	School Certificate and Higher School Certificate Examination subjects-Malay medium (Correspondence Education)
Associated Educational System Gaya Pos	"	Secondary level education (Correspondence Education)
Yayasan Pendidikan (Gaya Pos) Malaysia	"	School and Higher School Certificate subjects-Malay (Correspondence Education)
Maktab Adabi (Gaya Pos) (Cawangan Timor)	"	School and Higher School Certificate subjects-Malay (Correspondence Education)
Raj Correspondence College	"	School Certificate subjects (Correspondence Education)
Malayan Correspondence College	"	Formal Education from Lower to Higher School Certificate examinations (Correspondence Education)
Cambridge Correspondence School	"	Formal education from Lower to Higher School Certificate examinations (Correspondence Education)
Stamford College (Not registered in Malaysia)	"	Formal, Secretarial, Accountancy, Commercial Education (Correspondence Education)

PHILIPPINES

Name of Institution	Type	Non-Formal Education Activities
Civil Service Commission	Governmental	In-Service Training (Orientation, Employee Development, Supervisory/Exec., Prof./Technical)
National Manpower & Youth Council	"	Training of out-of-school youth and unemployed adults, Upgrading industrial skills-basic skills development
Department of Commerce & Industry, Bureau of Printing	"	Apprenticeship training for prospective employees
Bureau of Forestry & the Reforestation Adm. of the Dept. of Agri. & Natural Resources; Bureau of Public Works, Telecommunications and Public Highways of the Dept. of Public Works & Communications	"	Apprenticeship programme for professional, technical & sub-professional skills
Bureau of Vocational Rehabilitation, Department of Social Welfare	"	Settlement Food Programme, Socio-Eco. Advancement Programme, Sheltered Employment Programme for drug addicts, released prisoners, handicapped, both physically & mentally & other special groups
Bureau of Youth Welfare, Department of Social Welfare	"	Mini-Agri business, small-scale home industries as bag making, mat weaving, ceramics, pottery, rattan & bamboo crafts
Productivity & Development Centre of the NEDA	"	Providing member organizations with more comprehensive knowledge in techno-managerial techniques through seminars & workshops
Forest Products Research & Industries Development Commission, National Science and Development Board	"	Providing training for technician in different skills in the field of forest products as veneer & plywood technology, wood identification, & dry kiln operation
National Institute of Technology National Science and Development Board	"	Technical Laboratory Training Program on-the-job training for new graduates in the physical and biological sciences and engineering fields
Philippines Atomic Energy Commission, National Science	"	a. short-term post-college training in various fields of nuclear

Name of Institution	Type	Non-Former Education Activities
and Development Board		<p>science, offering basic skills on radio-isotope techniques for researchers, educators, doctors; conducting skills upgrading for science faculties, providing advanced courses in nuclear techniques for use in industry, health, medicine, power, agriculture & chemistry.</p> <p>b. Apprentices training</p> <p>c. Special classes-lectures & laboratory demonstrations given to various school-university groups or classes on special topics</p> <p>d. In-service training--short courses for technical and non-technical personnel and weekly seminars given by PAEC scholars & researchers</p>
The Philippine Textile Research Institute Programmes	Governmental	<p>Courses related to technical aspects of Textile Industry--quality control, machine operation, maintenance mechanics, finishing & textile design</p>
Metals Industry Development Center	"	<p>Giving seminars on metals to subscriber-industries in their individual plants upon request, focusing on modern technology of the metals industry</p>
National Water & Air Pollution Control Commission	"	<p>Seminars aimed at creating interest in air and water pollution control, specifically to safeguard health of human beings and to counter-act the hazards of air and water pollution.</p>
All Vocational Schools under the Department of Education & Culture	"	<p>Extension Service on food preparation, meal management & baking, short vocational courses (60 hr. courses) for out-of-school youths</p>
St. Scholastica's College, Manila	Private, religious	<p>Classes for housewives where rudiments of housekeeping, sewing,</p>

Name of Institution	Type	Non-Formal Education Activities
St. Rita's College, Manila	Private, religious	instant care are taught. Weekly informal classes with beggars
Mt. View College, Bukidnon; Maguiniao Academy, Davao; Silliman University, Davao City; Xavier Univ., Davao City; Mindanao Univ., Davao City; Cebu Institute of Medicine, Cebu City; Maryknoll Academy, Davao; Southwestern University, Cebu City; St. Louis University, Ba- guio city.	Private	Community extension programme the main target of which is the advancement through literacy classes, agricultural projects, health & sanitation programmes of out- of-school youths
La Concordia College, Manila	Private,	Manpower & Vocational Programme in Automotive, Garment Produc- tion, Cosmetology
Sta. Isabel College, Manila	Private, religious	Adult education for the indigents as part of the practicum require- ment in the education course
Marian School, Manila	Private	Health Education given to mothers on pre & post natal visits.

SINGAPORE

Name of Institution	Type	Non-Formal Education/Activities
National Library	Governmental	Talks, forums, reading groups
Institute of Education	"	In-Service training
Staff Training Institute	"	In-service training
Police Academy	"	In-service training, languages, Gen- eral education
Adult Education Board	Statutory	Language Studies Courses, General Education, Commercial Education, Further Education, Vocational/ Technical Education, Vocational Preparatory Courses
Extra-mural Studies Department	"	Various types of courses at tertiary level
National Productivity Board	"	Management Courses
Public Utilities Board	"	In-service courses
Port of Singapore Authority	"	In-service courses
People's Association	"	Vocational/Cultural/Social activities

Name of Institution	Type	Non-Formal Education Activities
Economic Development Board	Statutory	In-service courses
National Youth Leadership Training Institute	"	Leadership courses
Singapore Institute of Management	Professional	Management Courses
Singapore Institute of Personnel Management	"	Management Courses
Singapore Planning & Urban Research Group	"	Talks and research
National Trades Union Congress	Voluntary	Skill training and trade union courses
YMCA	"	Commercial/cultural courses
YWCA	"	Recreational courses
Malay Youth Literary Association	"	Talks
Ramakrishna Mission	"	Language courses
Religious Groups	Religious	Cultural/religious courses

THAILAND

Name of Institution	Type	Non-Formal Education Activities
National Security Council	Governmental	Youth training in vocational skills, public library services
Bureau of National Statistics	"	Training in Basic Statistics
Public Relations Department	"	Training of public relations personnel
Chulalongkorn University	"	Special lectures, training courses for government officials in computer science, education administration, etc.
Public Service Division, Prime Minister's Office	"	Special training courses for administrators
National Youth Commission	"	Youth training programme
Fine Arts Department, Ministry of Education	"	Museums and library services for the public
Thammasart University	"	Summer courses, special lectures, dissemination programme in Social Studies, Humanities
Public Welfare Department, Ministry of Interior	"	Vocational training programme for women under confinement, vocational training for youths and the physically handicapped, youth centers, public library services

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Name of Institution	Type	Non-Formal Education Activities
Labor Department, Ministry of Interior	Governmental	Pre-service and in-service training programmes
Penitentiary Department, Ministry of Interior	"	Trainings, both academic and vocational, for state prisoners, youth center and library services for state prisoners.
Community Development Department, Ministry of Interior	"	Vocational training programme, library services
Local Administration Department, Ministry of Interior	"	Training of youths, adolescents and voluntary personnel
General Education Department, Ministry of Education	"	Adult schools both in academic and vocational streams, mobile and stationary vocational training schools
Fine Arts University	"	Summer courses
Religious Affairs Department, Ministry of Education	"	Religious Education Programme for the public
National Library, Ministry of Education	"	Public libraries service
Teachers' Council (Kurusapha)	"	Summer Education Programmes for teachers
Court for youths and adolescents, Ministry of Justice	"	Training programme in academic and vocational education for those under confinement
Department of Technical and Economic Cooperation, Office of the Prime Minister	"	Training in English for government personnel expected to go abroad
Agricultural Promotion Department, Ministry of Agriculture and Cooperatives	"	Vocational Training Programmes for the general public, public education programmes such as special lectures, panel discussions, etc.
Department of Agriculture, Ministry of Agriculture and Cooperatives	"	Training in specialized skills such as sericulture, cotton storage, rubber growing, etc.
Industrial Promotion Department, Ministry of Industry	"	Training in specialized skills such as pottery, handicrafts, etc.
Commercial Relations Department, Ministry of Commerce	"	Training for small industry business

Name of Institution	Type	Non-Formal Education Activities
Health Promotion Department, Ministry of Public Health	Governmental	Training in hygienes, library services in the health centers
Land Transport Department, Ministry of Communication	"	In-service training for public trans- portation service personnel such as drivers, fare collectors, inspectors etc.
Education Section, Bangkok Metropolis	"	General education programmes for adults, library services, public educa- tion programmes such as special lectures and panel discussions
Public Services Section, Bangkok Metropolis	"	Public education programmes
Social Welfare Council	Private	Youth centers, public education programmes, radio and television programmes
National Council for Women	"	Vocational training for the general public
War Veterans Association	"	General education programmes for adults in conjunction with the Adult Education Division
The Foundation for Thailand Rural Reconstruction Movement	"	Community development, agricul- tural extension service, functional literacy classes

VIETNAM

Name of Institution	Type	Non-Formal Education Activities
Ministry of Culture, Education and Youth	Governmental	Literacy, cultural complementation, adult vocational training
Ministry of National Defence	"	Cultural complementation for ser- vicemen, vocational training for servicemen.
Ministry of Social Welfare	"	Vocational training for war victims
Ministry of Labour	"	Vocational orientation and training for workers
Ministry of Agriculture	"	Promotion of agricultural develop- ment (Guiding farm techniques)
Ministry of Ethnic Development	"	Cultural complementation and voca- tional training for ethnic minorities
Ministry of War Veterans	"	Vocational training for physically

Name of Institution	Type	Non-Formal Education Activities
Caritas Centre	Non-Governmental	unfit servicemen (Class 2) before their discharge, discharged servicemen, lightly disabled servicemen, war orphans and widows, government officials' orphans.
Alexandre de Rhodes Centre	"	Cultural complementation, vocational training.
Vietnam Association for Popular Education (Hoi-Giao-Duc Binh-Dan)	"	Cultural complementation, mass media
Association of Popular Culture (Hoi-Van-Hoa Binh Dan)	"	Establishing schools, free or partly-free complementary courses, publishing books and magazines, organizing lectures and educational plays
Association for the Promotion of People's Intellectuality (Hoi Dan-Tri)	"	Polytechnical courses, libraries, publishing house
Literature and Fine Arts Centre (Trung Tam Van-Hoc Nghe-Thuat)	"	Publishing books and magazines, organizing cultural complementation courses
Association of Military Writers and Artists	"	Cultural and artistic complementation for the masses
Vietnamese Scout Association	Non-Governmental	Training in culture and arts
Association for Drug Eradication	"	Scouts programmes
Association for Pre-marriage Education	"	Drug prevention, abstinence and eradication
Workshop and Welfare Centre for Re-claimed Women	"	Preparatory education for prospective husbands and wives
Re-education Centre for Juvenile Delinquents	"	Prostitute re-education
		Re-education of juvenile delinquents

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