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THE FIRST DECADE OF SEAMEO IN REGIONAL CO-OPERATION

A REPORT ON THE EVALUATION OF SEAMEO UNITS

BY

A TEAM OF EXTERNAL EVALUATORS

BANGKOK, THAILAND

AUGUST 1976

Letter of Transmittal

7 August, 1976

The Council of the Southeast Asian Ministers
of Education Organisation (SEAMEO)
Darakarn Building, 920 Sukhumwit Road
Bangkok
THAILAND

(Through the Director, Southeast Asian Ministers
of Education Secretariat)

Your Exellencies:

Pursuant to Resolution No. 15, approved by the Council at its Tenth Conference, authorizing an external evaluation of all SEAMEO units, namely, BIOTROP, INNOTECH, RECSAM, RELC, SEARCA, TROPMED and the Secretariat, I have the honour, on behalf of the team of experts who carried out the evaluation, to submit, in two volumes, the accompanying Report on the External Evaluation of SEAMEO Units. All other records concerning the evaluation have been deposited with the Secretariat.

In asking your Exellencies to accept assurances of our highest esteem, may we, at the same time, express our sincerest thanks for having been accorded the honour of serving the Council and also our best wishes for the continuing fruitfulness of your regional co-operation in advancing the cause of education in Southeast Asia.

Respectfully yours,

Gerardo Flores
Leader of the External
Evaluation of SEAMEO Units

TABLE OF CONTENTS

	Page
FOREWORD	xiii
ACKNOWLEDGEMENT	1
CHAPTER 1 RATIONALE FOR THE EVALUATION AND TERMS OF REFERENCE	3
1. The Mandate	3
2. Purpose and Scope of External Evaluation	3
2.1 Rationale	3
2.2 Scope	4
3. Intended Audiences	5
4. Assumptions and Constraints	5
Footnotes	7
CHAPTER 2 PROCEDURES - PLANNING AND INITIATION	9
1. Planning by the Secretariat	9
2. Procedures for Planning	10
3. The Evaluation Team's Plans	11
4. Inputs (by Directors and Others)	12
5. Instrumentation and Implementation	13
Footnotes	15
CHAPTER 3 REGIONAL CENTRE FOR TROPICAL BIOLOGY	17
1. Introduction	17
1.1 History	17
1.2 Goals and Purposes of BIOTROP	18

1.3 Relationships 21

1.4 Funding 22

1.5 Organization and Administration 22

1.6 Physical Facilities 24

2. Procedures for the Evaluation 25

2.1 Data Sources 25

2.2 Data Collection 26

3. BIOTROP Programmes 27

3.1 Tropical Pest Biology 27

3.2 Tropical Forest Biology 31

3.3 Tropical Aquatic Biology 35

3.4 Clearing House 37

4. General Observation and Comments on BIOTROP 39

5. Recommendations 41

Footnotes 47

References 49

CHAPTER 4 REGIONAL CENTRE FOR EDUCATIONAL INNOVATION AND TECHNOLOGY (INNOTECH) 51

1. Organization and General Orientation of INNOTECH (Historical Background) 51

1.1 Creation of INNOTECH 51

1.2 From Singapore to Saig n to Bangkok 52

2. Procedures for the Evaluation 55

2.1 Design 55

2.2 Data Sources 56

2.3 Data Collection 57

3. Research Programmes 57

3.1 Completed Research Programmes 57

3.2 RIT (Reduced Instructional Time) 60

3.3 On-going Research Activity (IMPACT) 62

4. Training Programmes 67

4.1 Objectives 68

4.2 Implementation 68

4.3 Outcomes 69

4.4 Discussion 70

4.5 Recommendations 76

5. Publication, Information and Special Services . . . 78

5.1 Clearing House and Information 78

5.2 Publications 80

5.3 Special Services 82

Footnotes 85

References 97

CHAPTER 5 REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS 101

1. Introduction 101

1.1 Purpose 101

1.2 Location 101

1.3 History 101

1.4 Functions 102

1.5 Relationships with Other Institutions . . . 103

1.6 Funding 104

1.7 Administrative Structure 104

2. Procedures for External Evaluation Study 106

2.1 Design of the Study 106

2.2 Collection of Information 106

2.3 Analysis of the Information 107

2.4 Discussion of the Study 108

3. Programmes 108

3.1 Philosophy and Goals of RECSAM 108

3.2 Training, Development and Research Programmes 109

3.3 Information Services 150

3.4 Special Services 155

4. Other Issues 159

4.1 Continuing Evaluation 159

4.2 Living and Recreational Facilities 162

5. General Observations 163

Footnotes 165

CHAPTER 6 REGIONAL ENGLISH LANGUAGE CENTRE 169

1. Introduction 169

2. Procedure for Evaluation Study 172

2.1 Design 172

2.2 Data Sources 173

2.3 Data Collection 173

3. Training Programmes 178

3.1 Objectives 178

3.2 Implementation 188

3.3 Outcomes 181

3.4 Discussion 182

3.5 Recommendation 186

4. Research 188

4.1 Objectives 188

4.2 Implementation 188

4.3 Outcomes 188

4.4 Discussion 189

4.5 Recommendations 191

5. Instructional Materials Development 191

5.1 Objectives 191

5.2 Implementation 192

5.3 Outcomes 192

5.4 Discussion 192

5.5 Recommendations 194

6. Regional Seminars 195

6.1 Objectives 195

6.2 Implementation 195

6.3 Outcomes 195

6.4 Discussion 196

6.5 Recommendations 197

7. Library and Information Centre Services 197

7.1 Objectives 197

7.2 Implementation 198

7.3 Outcomes 198

7.4 Discussion 198

7.5 Recommendations 199

8. Publication Programme 199

8.1 Objectives 199

8.2 Implementation 199

8.3 Outcomes 200

8.4 Discussion 200

8.5 Recommendations 201

9. Technical Assistance to National Programmes 201

9.1 Objectives 201

9.2 Implementation 201

9.3 Outcomes 202

9.4 Discussion and Recommendations 202

10. General Comment: RELC and the Concept of a Regional Centre of Excellence 203

Footnotes 205

CHAPTER 7 REGIONAL CENTRE FOR GRADUATE STUDY AND RESEARCH IN AGRICULTURE 211

1. Introduction 211

2. Methods and Scope of Evaluation by the SEARCA Sub-team 212

2.1 Collection and Analysis of Information for Evaluation 216

3. The Objectives of SEARCA 217

4. Reflections on SEARCA Procedures 222

5. Results of Interviews and Questionnaires 224

5.1 Suggestions and Recommendations Made by Scholars, Alumni, Faculty and SEARCA Staff 224

5.2 Responses to Questionnaires 226

6. Institutional Relationships and Linkages 226

6.1 SEARCA/UPLB Relationships 227

6.2 SEARCA/Member Country Relationships 230

6.3 Other Institutional Linkages 232

7. General Observations and Comments 235

Footnotes 237

CHAPTER 8 REGIONAL PROJECT FOR TROPICAL MEDICINE AND PUBLIC HEALTH 239

1. Introduction 239

2. Methods and Procedure 241

2.1 Approach 241

2.2 Sources of Information 242

3. Organization and Administartion of the TROPMED Project 244

3.1 The Mandate of TROPMED 244

3.2 The Central Co-ordinating Board 252

3.3 The Central Office 254

3.4 The National Centres for Tropical Medicine and Public Health 259

3.5 Budget and Finance 263

3.6 Recommendations 266

4. Planning and Development of the Programme/Activities 268

4.1 Planning 268

4.2 TROPMED Training Programmes/Activities 273

4.3 Research 293

4.4 Exchange of Personnel 299

4.5 Consultantships 303

4.6 Regional Meetings 307

4.7 Publications 312

4.8 Clearing House 316

5. General Comments 319

CHAPTER 9 REPORT ON THE SECRETARIAT 323

1. Introduction 323

1.1 Purposes 323

1.2 History and Location 324

1.3 Funding 325

1.4 Functions 327

1.5 Administrative Structure and Relationships 329

2. Procedure 331

2.1 Data Sources 331

2.2 Interview Schedules 332

2.3 Other Data Collection 333

3. The Secretariat as the Executive and Administrative Arm of the Council and Its Instrument for Co-operation 334

3.1 SEAMEO - A Unique Organization 334

3.2 The Preparation and Use of Legal Instruments 335

3.3 Maintaining and Increasing Membership 336

3.4 Implementing Council Resolutions 337

3.5 Co-operation with Other Agencies 337

3.6 Administration of the Centres 337

3.7 Administration at the Secretariat 338

4. Providing Professional Leadership 340

4.1 Activities and Outcomes 341

4.2 Discussion 342

4.3 Possible Directions 343

5. The Secretariat as a Fund Raiser and Fund Manager 344

5.1 Activities and Outcomes 345

5.2 Discussion 347

5.3 Recommendations 347

5.4 Comment 348

6. The Secretariat as a Provider of Service 348

6.1 Management of Council Meetings, CDM, FDM and Conferences 348

6.2 Service to the Centres 349

6.3 Service to Member States 350

6.4 Information Services 350

6.5 Discussion 351

6.6 Recommendations 352

7. Is the Present Organization of the Secretariat Appropriate in Discharging Its Functions? 352

8. General Observations and Comments about the Secretariat 354

8.1 What has the Secretariat Accomplished during the Last Ten Years? 354

8.2 How Much Has the Secretariat Cost SEAMEO? . . 356

8.3 Concluding Statement 356

CHAPTER 10 GENERAL OBSERVATIONS AND COMMENTS 359

Part 1 Major SEAMEO Concerns

1. Political Concerns 361

1.1 Inactive Member Countries 361

1.2 Withdrawal from a Major Project 362

1.3 SEAMEO and ASEAN 362

1.4 Member Country Contributions to Support the Secretariat 363

2. Concerns about Regionalism : Regional Co-operation for Educational Development of Member Countries 364

2.1 SEAMEO's Concern about Sharing of Resources in Training and Other Regional Schemes 364

2.2 Training Courses at the Centre to Complement, Not to Compete with or Duplicate Courses at National Institutions . 365

2.3 Location and Support of a Regional Centre . . 366

2.4 Some Principles/Strategies Regarding the Application of Regional Co-operation in SEAMEO Centres' Operations 367

2.5 Recommendations 367

3. Concerns about the Structure and Programme of SEAMEO . . 368

3.1 Need for Drawing Regional Centres more Closely to SEAMEO Central Leadership . . . 368

3.2 Vital Role of High Ministry of Education Officials in SEAMEO Central Leadership . . 369

3.3 Important Role of Centre Directors 370

3.4 The Essential Role of the Secretariat at Central Leadership Level 370

3.5 Suggestive Scheme to Make Goals, Programmes, Structure and Functions Fit One Another in a Coherent Whole 371

3.6 Proposal for an Executive Committee of the Council 371

3.7 For a SEAMEO Long-Range, Overall Programme . 372

3.8 Recommendations 375

3.9 The SEAMEO Affairs Officer 376

Part 2 Other SEAMEO Concerns

4. More Structure and Programme Concerns - "Models" . . 378

4.1 Associated National Centres 378

4.2 Grafting a Regional Centre to a large National Institution 378

4.3 A Regional Centre Not Tied to Any National Institution 379

4.4 Other Types 379

4.5 Are there Suggestions for SEAMEO to be Drawn from Its Experience with Different "Models"? 379

5. Some SEAMEO Financial Concerns 381

5.1 Some Financial Concerns on the Secretariat . 382

5.2 Some Centre Financing Concerns 383

5.3 Some Special Fund Concerns 384

5.4 Concern over Research Projects Funds . . . 385

5.5 Need for Curricular Material Development Funds 386

6. Productivity (Inputs and Outputs) - A Concern of the Whole and Its Parts 386

6.1 Financial Input - The Cost of SEAMEO . . . 387

6.2 SEAMEO's Output : Beneficial Results Obtained from Its Units 389

6.3 Recommendations 390

7. Concerns over the Projection of SEAMEO's Image of Usefulness : Information Dissemination and Public Relations 400

7.1 Clearing House Problems 400

7.2 Public Information 401

LOOKING FORWARD 403

FOREWORD

This report has been prepared for the Council of Ministers as their Organization enters its second decade. With this in mind the SEAMEO external evaluation team has examined the Organization and its units with a view to the future.

Each sub-team of two members has presented, in its section, issues which it feels are important. It is our hope that the issues which have given rise to the recommendations be seriously considered. To keep the report oriented towards the issues no summary, general conclusions, or separate list of recommendations, have been prepared. This procedure was designed to help direct attention to the issues and a discussion of them. Besides the specific recommendations, there are suggestions and alternatives presented in the text which are as important as the recommendations.

Efforts were directed towards obtaining an integrated report which was frank and to the point. An attempt was made to obtain integration through co-operative planning, the use of similar interview strategies and the acceptance of common guidelines for the preparation of each chapter. The team leader and assistant team leader spent a part of the time alloted to the visit of each Centre/Project to discussing with the sub-team, matters pertaining to the evaluation of the Centre/Project. In this way an integrative approach to the evaluation was achieved. Furthermore the team leaders noted issues of major concern to SEAMEO as a whole and to those that are found in the SEAMEO units. These concerns are dealt with in Chapter 10. Unfortunately, limited resources and time and the absence of a professional editor, precluded the preparation of a report that was stylistically consistent. Efforts were directed towards minimizing the length of this report without omitting what the team members considered worthy of comment. The specific selection of items represents the evaluating team's priorities in trying to treat each SEAMEO unit in one chapter. The results of this effort are embodied in Chapters 3 to 9 which constitute the main body of the evaluation report.

In sum it is felt that SEAMEO's record in the short period of ten years is an inspiring story of success in education through regional co-operation. In spite of obstacles and problems SEAMEO has convincingly demonstrated the fruitfulness of mutual sharing of resources and of tolerance and understanding; this is a remarkable

achievement of which its member states can justly be proud. To SEAMEO's associates and friends who have extended a helping hand belongs the satisfaction of having participated in a worthwhile venture for the cause of education.

Team Member	Evaluation Assignment
Gerardo G. Flores	Team Leader and Specialist for the Secretariat
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Widodo Talogo	Specialist for TROPMED

ACKNOWLEDGEMENT

To make a list of those to whom the team is grateful and wishes to express appreciation would be lengthy beyond belief. In its travels, the team has received hospitality and co-operation far beyond its expectations. This support was extended to the team up to the highest levels in the Ministries of Education and the Centres/Project in many ways. The team also appreciated the cheerful assistance of many people at all levels of the Organization who went out of their way to be helpful in providing the logistical and resource support needed by the team.

The team received a warm and sincere welcome at the Ministry of Education in every country. Ministers of Education spent time sharing their views regarding SEAMEO, and high officials found time to meet requests for interviews and information. Similarly Centres responded generously with their time and provision of facilities. The team wishes to acknowledge with deep appreciation the assistance which made this evaluation possible.

The team owes a special note of grateful acknowledgement to the Secretariat not just for the logistical support and co-operation that has been given but for having carried out the preliminary planning, and obtained the funds, support and staff for this exercise.

Beyond the help accorded the team in the Secretariat, the SEAMEO Centres and the co-operating agencies in the member countries is something more valuable-the cordiality which was received and the friendship found everywhere. SEAMEO's regional spirit was, indeed, truly revealed to all those who participated in the evaluation.

In conclusion, the team wishes to express its gratitude to those who gave its members the opportunity to participate in this external evaluation.

Members of the
SEAMEO External Evaluation Team

CHAPTER 1

RATIONALE FOR THE EVALUATION AND TERMS OF REFERENCE

In 1971 the Secretariat convened a Regional Educational Planning Seminar, and among the recommendations emerging from this seminar, was one for "an evaluation of the existing SEAMEO Project, the evaluation to begin as a form of self-evaluation by the Centres themselves according to criteria to be established by SEAMEO the second stage will be carried out by a team of experts."

Following this recommendation guidelines were prepared and the Centres began the process of self-evaluation. When the majority of these reports on this self-evaluation were completed the results were reviewed by a consultant and his report was presented to the Council of the Organization.

1. The Mandate

As a follow-up, the Director of the Secretariat and the Centre Directors met, discussed the Consultant's report and reported back at the Tenth Annual Conference of the Council. They made three recommendations all of which were later adopted as resolutions by the Council, the first two concerned self-evaluations and the third, regarding the external evaluation, follows :

> "That depending on the availability of funds, the first external evaluation of the Regional Centres/ Project (including SEAMES) be undertaken in FY 1975/ 76, the form and manner of the project to be determined by the Secretariat and the Regional Centres/ Project."[1]

2. Purpose and Scope of the External Evaluation[2]

In brief the external evaluation was intended to obtain an independent, candid and objective picture of the complete SEAMEO operation.

2.1 Rationale

The Regional Centres/Project had, for the most part, completed their self-evaluations. In order to consider these, with a view to determining what changes should be made concerning SEAMEO's units including the secretariat, it was deemed appropriate that a team of disinterested persons be called upon "to provide an additional, organised body of factual, interpretative and evaluative information.

It was expected that it would then be possible to determine to what extent the respective SEAMEO units have been functioning effectively and efficiently, and what and where the shortcomings are, if any, which need to be looked into and rectified".

2.2. Scope

The external evaluation team would then look at all aspects of programmes, activities and operations of the Regional Centres/ Project and also of the Secretariat. The basic frame of reference would thus have to be the purposes and objectives of SEAMEO as enunciated in the Charter.

"1. The purpose of the Organization is to promote co-operation among the Southeast Asian nations through education, science and culture in order to further respect for justice, for the rule of the law and for the human rights and fundamental freedoms which are the birthrights of the peoples of the world.

2. To realize this purpose the Organization will:

(a) Collaborate in the work of advancing the mutual knowledge and understanding of the peoples in Southeast Asia as well as the rest of the world;

(b) Promote and collaborate with the Member States, at their request, in joint projects and programmes of mutual benefit concerning education, science and culture and assist the members in the development of educational activities;

(c) Maintain, increase and diffuse knowledge;

(d) Assist in articulating education to the economic and social goals in the individual Member States.

3. With a view to preserving the independence, integrity and fruitful diversity of the cultures and educational systems of the Member States, the Organization is prohibited from intervening in matters which are essentially within their domestic jurisdiction."[3]

The specific purposes of the various Regional Centres/Project are outlined in their respective Enabling Instruments, however these could still be subject to review so as to ensure their consistency with, and relevance to, the Charter of SEAMEO.

To collect the necessary information in performing its assessment, the evaluation team considered a wide field of possibilities. Records and documents, both published and unpublished, represented one type of material. Participants, staff and trainees both past and present, members of Governing Boards, appropriate government officials, certain staff in related agencies and even staff in embassies of countries helping support SEAMEO activities were all considered as data sources legitimately within the scope of the evaluation.

3. Intended Audiences

At an early stage in its planning the team listed the various groups who might either be furnished a copy of this report by SEAMEO or who might request a copy from SEAMEO. After considering these various interested parties it was decided that since it was the Council that had authorized the evaluation, the Council itself should be considered as the intended audience. A decision such as this affects primarily the way in which ideas may be presented rather than the ideas themselves. It was, however, anticipated that besides those now working in the Centres and the Secretariat, certain officials of the Ministries of Education of member countries and representatives of various aid agencies and donor countries would be interested in seeing the report.

4. Assumptions and Constraints

All evaluation projects operate within certain limits of time, staff and resources. Furthermore the initial organization of the evaluation team must of necessity reflect some implicit assumptions and result in constraints in some form or other. The best example of this was the decision to assemble a team which had not been involved, and was not familiar, with SEAMEO. One consequence of assembling such an independent team was that its members had to spend a considerable amount of time familiarizing themselves with basic information about SEAMEO, its structure, the nature of its units, their organizations, programmes, operational procedures, financing and relationships.

Another constraint was placed on the evaluation activities by the size of the team and the fact that, due to circumstances beyond their control, some team members were delayed or had to leave team activities before their completion. This made some of the original plans for providing briefings unworkable and decreased the amount of time which the full team could spend together in general planning sessions. The decision to provide two experts per Centre/Project and to ask the team leader and assistant team leader to take the responsibility for evaluating the Secretariat, besides discharging co-ordinating duties, resulted in plans for an integrated working structure as compared to a fully unified approach to the task.

The team made some decisions which also carried constraints with them. For example, it was decided that the evaluation would not focus on Centre staff as individuals, but rather on the SEAMEO units themselves. Such an evaluation was not the place to focus on the strengths or weaknesses of SEAMEO units' staff as they were not being evaluated. Similarly it was decided, as much as possible, to avoid direct comparisons among Centres and among countries. Besides this it was decided to attempt to prepare a report that would be constructive and positive, a report that focused on what should be retained and/or reinforced and what should be considered for change in the future, taking into account, where possible, changing circumstances, as well as current situations.

The most important bias held the team is its belief in the importance of regional co-operation. Thus, to the team members, the future success of SEAMEO is important and their interest is in seeing a report that would help SEAMEO, no matter how good a job it is presently doing, to improve its future operations.

Finally it must be reported that the team believes evaluation can and should be a constructive continuing process. The Organization should use such devices as annual reports to critically examine the progress and direction of the various programmes of training, research, seminars and other activities. Moreover, the Organization should be willing to invest some of its time, energy and resources in both external and internal examinations.

FOOTNOTES

CHAPTER 1

1. SEAMEO Tenth Conference of the Southeast Asian Ministers of Education Council Final Report Proceedings Volume 1: The Organization, page 40, Bangkok 1975.

2. Much of the material for this section is based on an undated, mimeographed document entitled "External Evaluation of the SEAMEO Units". Prepared by the Secretariat in the latter part of 1975, this document outlines the project and also contains its tentative budget. This document, with minor revisions, was presented to the Council at its Eleventh Conference in January 1976 as SEAMES Working Paper MC - 11/WP/5.

3. Charter of the Southeast Asian Ministers of Education Organization; Article 1 : Purpose and Functions.

CHAPTER 2

PROCEDURES - PLANNING AND INITIATION

As was indicated in the previous chapter the plans and procedures of an evaluation are important because they impose directions and constraints which affect the report. It is the purpose of this chapter to give the reader a sense of how this preliminary part of the exercise proceeded.

1. Planning by the Secretariat

The Secretariat, following the council's decision, in 1975, to carry out an external evaluation in Fiscal Year 75/76 if funds were available, prepared a six-page outline of the proposed evaluation project. This document was made available to countries who were asked to help support this project through technical assistance and/or through financial contributions to the core budget. It was also made available to Southeast Asian member countries who also were asked to put forward members for the evaluation team. This document was presented to the Council at its Eleventh Conference, January 1976, as the Secretariat Working Paper MC-11/WP/5.

The key items of the plan are outlined below. The team was to consist of fourteen members : a team leader, an assistant team leader, two specialists for each of the five Regional Centres and two experts to evaluate all six TROPMED National Centres as well as its CCB (Central Co-ordinating Board). It was originally planned that the team leader and one of each pair of specialists would be a Southeast Asian, obtained on secondment from the member countries, and the other member of each pair as also the assistant team leader would be obtained from other countries through technical assistance. Aid was sought for the funding of the core budget and was obtained from two countries. With the exception of the TROPMED sub-team it was possible to meet the requirements : for this latter team the second member also had to be obtained from one of the member countries as the non-Southeast Asian expert expected to join the team could not do so.

The original schedule of activities called for the whole team to gather together in Bangkok for a four-week, initial planning session. The next three weeks were to be spent in Malaysia by the team leader, the assistant team leader, the two specialists for TROPMED and the two RECSAM specialists (during this time the remaining eight team members returned to their home bases). The next three weeks to be in Singapore with the team leader, assistant team leader, the two specialists for TROPMED, and two others for RELC. A similar pattern of three weeks was planned for Indonesia (TROPMED and BIOTROP), the next three weeks for the Philippines (TROPMED and SEARCA), and INNOTECH.

The last three weeks of the exercise was scheduled for the whole team to reassemble in Bangkok to prepare the final report. It was during these last three weeks that the team leader and assistant team leader were scheduled to undertake their evaluation of the Secretariat.

The final schedule saw several changes. The visits to INNOTECH and RECSAM were switched on the timetable because of INNOTECH's planned temporary transfer to the Philippines. The visits to the National Centres, by the TROPMED team were reduced to two weeks each by a decision of the sub-team. This allowed them more adequate time for CCB at both the beginning and end of their visits to the National Centres. Their schedule was planned, however, so that there always was an overlap in each country, between their schedule and that of the team leader and assistant team leader. In addition the plans were modified so that the team leader and assistant team leader would arrive in Bangkok a week earlier to prepare the initial ground work for the full team's month-long planning work. In addition these two scheduled their return to the Bangkok base one week sooner to enable them to prepare the section of the report dealing with the Secretariat.

2. Procedures for Planning

The revision in the plan which brought the team leader and assistant team leader to Bangkok a week early, ahead of the rest of the team, was a valuable change. The week began with a general briefing of these two persons by the staff of the Secretariat. The team leader and assistant team leader then proceeded to rapidly review documents supplied by the Secretariat in order to obtain an overview of the Organization before beginning preparatory work. Such preparatory work consisted of writing a series of working papers.[1] These papers were all labelled as "tentative" or "draft" and were designed for discussion with the team members, upon their arrival, in order to facilitate their task of planning the evaluation. They included such items as tentative timetables for the team to follow in carrying out its activities during the planning session, in the visits to Centres, and in the preparation of the final report. There was a list of background documents that were judged to be useful in providing general background information. Lists of issues to be considered in planning the evaluation were prepared; a suggested plan for an appropriate division of labour and a model plan of organization for the final report itself were also among the documents prepared. These materials were developed in the preliminary week, and made available to the team members when they arrived.

As indicated earlier a variety of difficulties prevented some of the team members from arriving on time. In spite of this complication it was decided to move ahead with a general briefing and overview of documents the first day. The remainder of the week was spent in reviewing the working papers discussing them, obtaining comments on ways of approaching the task and revising the tentative working papers so that they more nearly reflected the mode of operation which would be followed. As each one of the additional team members arrived they were given an extensive personal briefing by the team leader and/or the assistant team leader. The process seemed to work well, and team members began reviewing documents and planning their parts of the evaluation. Besides the briefing provided by the SEAMES staff, the Centre Directors or their deputies came to Bangkok during the third and fourth weeks to provide more specific information, assist in planning the logistics and answer questions relating to the many details of planning the actual implementation of the exercise. During the fourth week over a day was spent in outlining the process of work for the last three weeks, when the final report was to be prepared.

3. The Evaluation Team's Plans

The discussions among the team members during the first week led to decisions about the actual procedures which would be followed. There was the natural division of the team into seven sub-teams. As will be seen in the following chapters all sub-teams agreed to adopt similar plans so that, although details differed, there was a general cohesive framework. Some of the common elements will be briefly outlined.

Among the first decisions was that of taking a positive, forward looking posture in the evaluation and directing it to the Council itself as the audience. It was also decided that the evaluation would be institution-oriented, it would not be an evaluation of individuals. The existing self-evaluations would be studied and built upon, avoiding duplication as much as possible. Furthermore the self-evaluations reflected a detailed, almost encyclopaedic, evaluation of Regional Centres/Project so that it seemed proper to attempt to develop an approach that would provide more of a synthesis and overview to complement the existing data. Furthermore, although it was necessary to delve into the past, the thrust of the effort was forward-looking and directed towards finding effective means of dealing with problems. An attempt was also made to obtain a global picture of inputs and outputs of each SEAMEO unit as well as an understanding of the processes supplied to turn inputs into expected results. Finally some attention had to be focussed on the degree to which these "results" were capable of having the "multiplier effect" sought by SEAMEO.

The teams began to assemble lists of those whom they would interview and to develop questions to which they would seek answers. During the third and fourth weeks, as the sub-teams developed their interview schedules and questionnaires, they attempted to contact relevant key people such as members of the Governing Boards who were in Thailand. This was so valuable that every sub-team developed strategies to try to maximize their contacts with key people in every member country outside the host country of the Centre. Besides present staff and trainees at the Centres, certain sub-teams attempted to develop ways of contacting and interviewing, or reaching by questionnaire, some of the previous staff and course participants. There were a few sub-teams who had questions they wished answered by the SEAMEO affairs officer or other appropriate government official, as well as Governing Board members in the various member countries. The non-Southeast Asian team members for RELC and RECSAM were able to schedule one or more stops in member countries, for such interviews, as part of their travel back and forth. The Southeast Asian team member for INNOTECH arranged a special schedule to visit all member countries briefly to conduct appropriate interviews. The Southeast Asian team member for BIOTROP was able to visit member countries by especially planning and extending his travel schedule. The SEARCA sub-team was able to arrange a visit to a project site in Thailand. The RELC sub-team was able to make a brief visit to Kuala Lumpur from Singapore. Finally, every Southeast Asian team member utilized part of the time that he was in his home land, though not officially working on the project, to visit and interview past participants and/or other appropriate persons.

Team members attempted to use their informal discussions to help sharpen their definition of issues and to keep each other informed. In addition, near the end of the fourth week, one of the meetings of the full team was used to share general information about the status of each sub-team's plans. Thus all the team members had a general picture of the other sub-teams' activities.

4. Inputs (by Directors and Others)

The visit of the Director, or his Deputy, from each Centre was of value to the sub-teams as they moved into the final stages of their planning. Each Director, on his arrival gave a brief presentation regarding his or her Centre/Project. During the first week the team had agreed on a few general questions which had been forwarded to the Director. These provided the basis for the Director's presentation which was followed by questions from the team. Since the arrival of the Directors was staggered there was adequate time for this activity. Following the presentation, the sub-team members met with the Director concerned to discuss their plans. This gave the Director an opportunity to comment on these plans and make suggestions. It was clearly enunciated, however, that, as the team

was responsible for the evaluation, it alone would decide the manner in which these comments and suggestions would be taken into account. A further meeting with the Director, the sub-team and the team leader and assistant team leader was called to review logistics for the visit. The usual final step in the discussions was the identification of key people, especially in Ministries of Education, who would have to be seen so that appointments could be arranged in advance. The Directors or their deputies, without exception, were most helpful in clarifying procedures, protocol and other matters for the team members.

The Directors were not the only persons who provided help at the planning stage; the staff of the Secretariat were most co-operative in providing answers to questions regarding the Centres/ Project. Sometimes it was the Finance Division, at other times the Programme Division or the Documentation Officer that was able to assist. The Director and his deputy were of course approached at times and they gladly helped.

As implied earlier, the team members were co-operative, sharing their ideas and plans so that often a suggestion came from someone on another sub-team. The fact that the members of the team developed a co-operative stance was a factor which could have been easily overlooked or underemphasized.

5. Instrumentation and Implementation

During the first week, the team discussed a wide variety of issues to which answers could and should be sought. As these issues were discussed and sources of answers were considered the group began to formulate questions for use in interviews and questionnaires. For all interviews, open-ended questions were formulated although some sub-teams also developed questionnaires for completion before the interviews. Such a strategy was not feasible for some teams as it depended on the mails and a sufficient time interval before their visits to the Centre. Questionnaires were developed, in some cases, for collecting information from hard-to-reach groups such as previous students, people in other countries who could not be interviewed, as well as for a few large intact groups such as current scholars in the Centres. Although these interviews and questionnaires were focussed on similar issues they varied greatly in detail. Not only did the sub-teams have to take into account differences in the content of programmes; they also had to consider the length of courses, types of candidates for whom courses were designed, information from the self-evaluation exercise, the emphasis, or lack of it, on materials preparation, publication and research as well as such matters as the length of operation of the Centre and its physical facilities.

The "planning period" was also used to study available documents at the Secretariat. Such documents as the reports from Governing Board meetings, the Enabling Instruments, Annual Reports, Centre publications, relevant documents from the Council meetings were examined.

Thus by the end of the four-week "planning period" the sub-teams had not only laid down their plans but also were already implementing them. The relevant details are contained in the following Chapters which deal with the various centres. The information from the visits to Ministers of Education and their high officials is dealt with primarily in the chapter on the Secretariat.

FOOTNOTES

CHAPTER 2

1. Copies of the numerous working papers, their revisions and the additions to them have all been retained and deposited with the Secretariat. While these materials were an integral part of the development of the evaluation, to include them as an appendix would add little to the understanding of the report itself. The text will indicate briefly the nature of this material and the use to which it was put. It is hoped that these and other related materials will be available in the future to assist future external evaluators and facilitate their planning activities.

CHAPTER 3

REGIONAL CENTRE FOR TROPICAL BIOLOGY

1. Introduction

The basic purpose of this evaluation exercise is to assess the extent to which BIOTROP, one of the Regional Centres/Project, has been able to fulfil its purposes and objectives and whether changes concerning its programmes and activities should be made and new directions taken with a view to improving its programme activities and operations. This exercise is an attempt to determine to what extent BIOTROP has been functioning efficiently and effectively, to identify its shortcomings and deficiencies and, if possible, to recommend remedial measures and other appropriate actions.

The external evaluation will be in respect of the programmes, activities and operations of BIOTROP in relation to its stated purposes and objectives as defined in its Enabling Instrument and in the light of the aims and goals of SEAMEO as enunciated in the Charter.

The Centre for Tropical Biology (BIOTROP), is situated at Bogor, Indonesia, some 60 kilometers from Jakarta (Map I). It can be reached by road or rail from Jakarta.

1.1 History

BIOTROP was established in 1968 and was in its interim phase of operation until F.Y. 1972/1973. From F.Y. 1973/1974 BIOTROP entered its first 5-year period of permanent operation. Beginning with a consideration of its basic objectives and a number of its functional goals, BIOTROP proceeded to develop its programmes to meet these stated objectives and goals by instituting a series of national meetings in 1968, in an attempt to identify important biological problems of each member country.

During its early existence BIOTROP was "grafted on" to LBN, the Lembaga Biologi Nasional (National Biological Institute) of the Lembaga Ilmu Pengetahuan Indonesia (Indonesian Institute of Sciences). It was only from June 5, 1972 that BIOTROP was organizationally separated from LBN, although it continued to enjoy the use of the Laboratory I building of LBN.[1]

BIOTROP entered its first five-year period of permanent operation on July 1, 1973 and since then has expanded its professional staff. It also began its research projects and training courses in the programme areas of :

(a) Tropical Forest Biology
(b) Tropical Pest Biology
(c) Tropical Aquatic Biology.

1.2 Goals and purposes of BIOTROP

BIOTROP was established as one of SEAMEO's units with the following expressed purposes.[2]

(a) To assist Southeast Asian Region in identifying biological problems, the solution of which will enhance economic development in their respective countries, and to that end, to undertake research, publications, and training programmes and other related activities within and outside Indonesia.

(b) To further strive to achieve the aims of the Southeast Asian Ministers of Education Organization (SEAMEO) as laid down in its Charter.

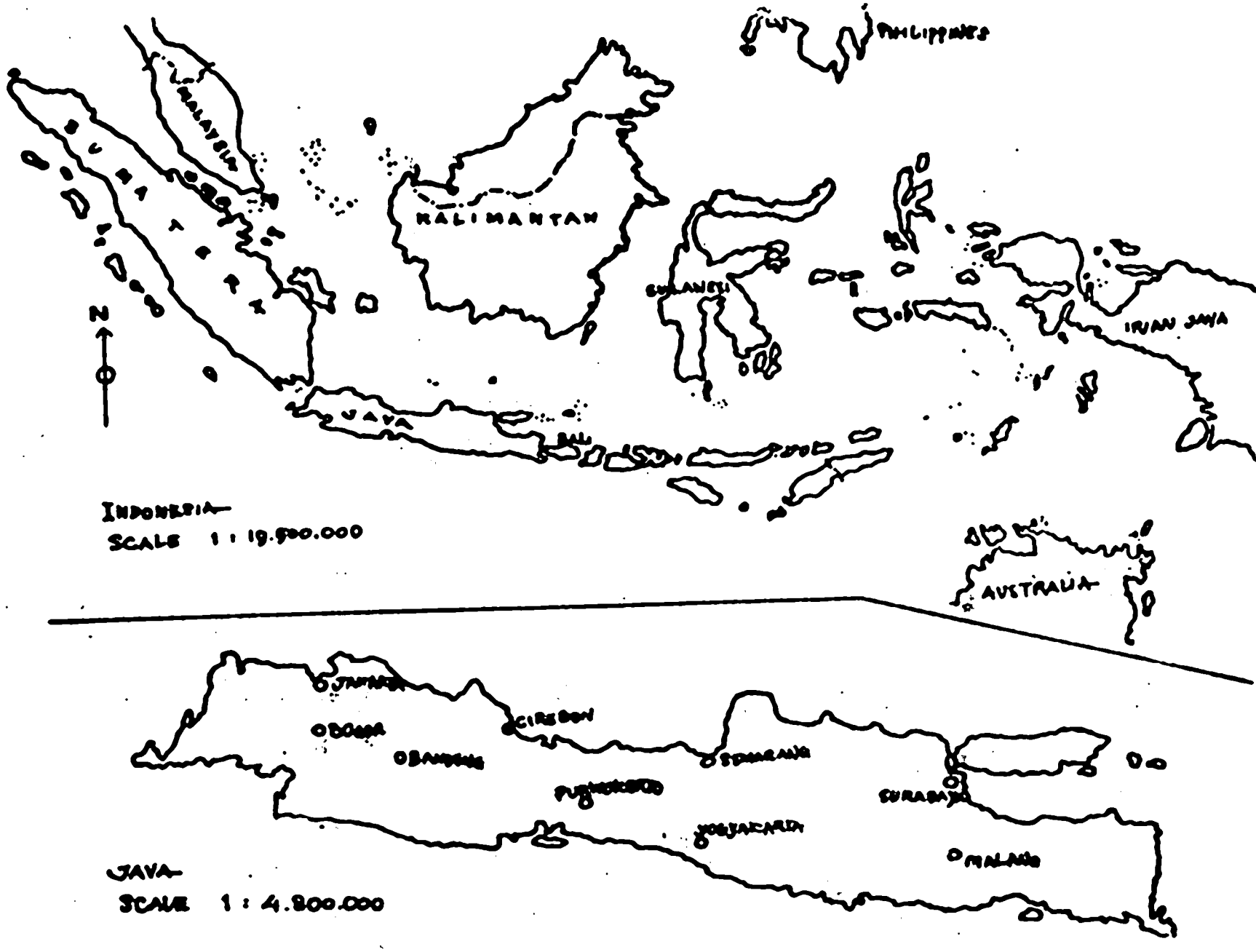
(c) To operate a non-profit making institution.

Accordingly BIOTROP should concentrate on research programmes and developing the tools and principles of research in its defined programme areas. It is further committed to teaching professionals in the region with the objective of stimulating further in-depth biological research in member countries; thus producing the maximum multiplier effect in the benefits derived from its programme. Dissemination of findings and results of tropical biological research, methodology development and experimentation is considered a critical aspect in helping BIOTROP attain its objective.

In addition BIOTROP is entrusted with the added responsibility of promoting co-operation among Southeast Asian countries through education and science and of contributing to the economic development of the region by solving critical biological problems.

Specifically BIOTROP has to assign priorities to the biological problems of the region and develop programmes that attempt to solve the most critical ones. The Centre also has to disseminate relevant information about the Centre, programmes and results (via scientific papers and seminars) to scientists, appropriate authorities, and personnel in key positions in the region. BIOTROP is also to act as a central clearing house for storage and exchange of tropical biological information within the region.

Map I : Indonesia (indicating the location of Bogor in relation to Jakarta)



BIOTROP also has to play a key role in developing a self propagating, professionally competent, organization containing a cadre of regional experts in the field of tropical biology, who should not only try to solve their national problems but also collaborate with international scientists, on an equal basis toward the solution of relevant international problems in their subject field.

Finally BIOTROP has to foster international co-operation, communication, and exchange of scientific information and professional services among biologists and other scientists interested in the tropical environment.

1.3 Relationships

Due to its peculiar set up and other constraints, BIOTROP has found it necessary to rely heavily on the assistance of other institutions, particularly those located in the vicinity of the BIOTROP office in Bogor, in implementing its programme.

To date, BIOTROP has depended much on assistance, both human and material resources, from the Institute Pertanian Bogor, the Lembaga Biologi Nasional and a few other institutions. So far formal institutional linkages have been established with the Faculty of Forestry, the IPB and the Lembaga Biologi Nasional.

The co-operation with the Institute Pertanian Bogor (IPB) and Lembaga Biologi Nasional (LBN) is extremely important and necessary at the present stage of BIOTROP 's development. Both Institutes to date play a major role in assisting BIOTROP achieve its stated objectives. They supply BIOTROP with the lecturers and research leaders necessary to implement BIOTROP's training courses. (Of course in return BIOTROP provides an opportunity for some to undertake advanced research work, for instance, studies in weed science). BIOTROP, being a centre of research and training for all Southeast Asia, might be functioning as an additional medium for contact between IPB and other institutions in the region.

Relationships with IPB and LBN to date are very good and it is hoped that such relationship can be maintained.

In general, many institutions are co-operative and willing to assist BIOTROP in most aspects of its work.

1.4 Funding

BIOTROP was heavily funded by the United States Government and to a lesser degree by the Government of Indonesia, during its interim period from 1968 to June 30, 1973. Small donations (moneys or in kind) were also received from other donors, government as well as private organizations (see Appendix 1).

The budget of BIOTROP is divided into 3 main components : Capital Funds, Operating Funds, and Special Funds. On July 1, 1973 BIOTROP entered its permanent phase and the start of its first Five-Year Period of Permanent Operation. During this period the capital and operating funds of BIOTROP will be shared equally by the United States Government and the Government of Indonesia. A Letter of Agreement with regard to the Five-Year Budget was signed on June 30, 1973 by the representatives of the Government of Indonesia, (GOI), Southeast Asian Ministers of Education Organization (SEAMEO) and the United States Government (USG).

In addition the yearly operations of BIOTROP were covered by an annual Letter of Agreement among GOI, SEAMES and the USG.

From 1978, when BIOTROP enters the second Five-Year Period of Permanent Operation, the total funding of BIOTROP operation will be the responsibility of the Government of Indonesia.

1.5 Organization and Administration

The legal authorities of BIOTROP are as stated in the Council - approved Enabling Instrument and other pertinent Council decisions. These are again reiterated in the Self-Evaluation Report of BIOTROP (1973). To be able to implement the objectives of BIOTROP, as stated in Section II of the Enabling Instrument, in Indonesia as well as in member countries, BIOTROP has an administrative structure as shown in Appendix 2.

The implementation of the activities of BIOTROP is entrusted to the Centre Director who is assisted by a Deputy Centre Director. To ensure that the technical activities are executed to satisfy international standards, while trying to meet the needs of the member nations, BIOTROP has a programme manager for each of its four programmes. Junior professional and technical staff are also made available for work therein. However, considering the mandate given to BIOTROP and the scope of its objectives the existing number of staff at all levels is very inadequate. The situation is worsened by the fact that there is a serious imbalance among its programmes as regards the provision of staff and funds. Indeed, with its present staff strength BIOTROP would not be able to conduct the activities outlined in its first Five-Year Development Plan which contains a very elaborate research scheme with a very large number of research topics. It is obvious that not everything that has been planned could

be realised in the time set for it. Nonetheless, the BIOTROP staff kept fairly well within the periods suggested in the plan.

Many courses on many subjects were organised. For leaders and lecturers of these courses the programme managers often had to lean very much on other organizations for support. The programme managers made many useful contacts with the nearby institutions such as the Bogor Agricultural University, the Pajajaran University Bandung, the National Institute of Biology, several agricultural experiment stations, the Research station for Inland Fisheries, and the Forestry Experiment Station. Also co-operation was established with institutions in the region and abroad.

In the first five-year programme it is stated that "Through this approach BIOTROP can restrict itself to a small, highly qualified senior staff, and yet obtain a multiplier effect for its programme via the contract mechanism". The senior staff is, indeed, very small but some members thereof are highly qualified. Junior staff members are often selected from the best participants. They may be trained further in foreign universities to improve their expertise. In this way, BIOTROP hopes to obtain their "highly qualified" scientists.

It is very difficult for BIOTROP to attract "highly qualified" scientists to its staff because these are already at work in the universities and research institutes which are often considered more attractive academically and more stable than BIOTROP. Specialists from member countries are difficult to persuade to come to work at BIOTROP because BIOTROP pays less attractive salaries and fringe benefits than other SEAMEO Centres.

1.5.1 Governing Board. The Governing Board of BIOTROP, established by the Council consists of two representatives from each member country, nominated by their respective Ministers of Education and appointed by the President of the Council. Each member of the Board is appointed to serve for a term of three years and is eligible for renomination.

The functions of the Board are as shown in Appendix 3.

1.5.2 Centre Director. The Centre is administered by a Centre Director under the overall policy guidance of the Governing Board. The Centre Director has the assistance of a Deputy Director, Programme Managers, and a Clearing House Manager. In addition there are junior professional and non-professional staff.

The duties of the Centre Director, Deputy Director, Programme Managers and Clearing House Manager have been spelled out in the Self-Evaluation Report of BIOTROP (1973). It should be pointed out that BIOTROP has not appointed a Programme Co-ordinator. However, it should be noted that increased activities have forced BIOTROP to re-organise its supporting staff, and the addition of some other employees is felt necessary to enable the Centre to properly discharge its responsibilities.

1.6 Physical Facilities

During its initial years BIOTROP was accommodated in the National Biological Institute (LBN) office.

In 1972 the Centre was moved into the new Laboratory I building which was originally designed for the Zoological collection of the LBN.

For its permanent operation the Centre will have its own new physical facilities, built in accordance with the Centre's objectives and goals. A site, about 3.5 hectares in area, to contain BIOTROP's own physical facilities has been provided by the Government of Indonesia (GOI). It is located at Tajur, about 5 km. from BIOTROP's present office.

Financial constraints required BIOTROP to assign priorities with regard to the construction of its physical facilities. Within the F.Y. 1973/1974 to F.Y. 1975/1976 the following physical facilities were to be constructed in two phases :

(a) Five staff houses
(b) Eight houses for trainees and scholars
(c) One unit for central dining and a recreation hall
(d) An administrative office.

Details of the above mentioned physical facilities are as shown in Appendix 4.

Phase I of the construction work at Tajur which has been completed, included :

(a) the renovation of the existing bridge;
(b) the construction of road and drainage;
(c) the construction of four houses for trainees and scholars;
(d) the construction of a greenhouse;
(e) the construction of a diesel electric generating house.

It appears that the construction work for Phase II is proceeding almost as scheduled.

2. Procedures for the Evaluation

Basically the framework for analysis advocated by Stake (1975) was adopted. The two major components in any evaluation exercises were critically looked into, these components being a description of the programme (project) and an accompanying judgement or evaluative comment. To describe the programme (project) the evaluation exercise must necessarily take note of its relevance to the stated objectives, and to carefully observe what actions are being taken. Evaluation comments are, likewise, classified into :

(a) terms of general standards of quality and
(b) terms that are specific to the programme in question.

In describing the programme and making evaluative comments attention was focussed on three main aspects, not necessarily independent of each other. These are :

(a) the set of conditions existing before the start of a programme;
(b) the implementation of the programme;
(c) the outcomes (results) of the programme.

Thus it can be seen that the descriptive component of Stake's evaluation model can be visualized as containing six cells :

(a)	anticipated and	(b)	observed prior conditions
(c)	anticipated and	(d)	observed implementation
(e)	anticipated and	(f)	observed outcomes (results).

Similarly, there are six cells in the evaluative component of the model. To complete the model there is a statement of the rationale of the programme.

2.1 Data Sources

The pattern or framework is a guideline for systematic data collection. In this particular exercise of evaluating BIOTROP the major data source is the people involved directly or indirectly with the Centre. These people are known to be knowledgeable about BIOTROP and the needs of the region. The persons interviewed for information can be classified into three broad categories, namely :

(a) Persons directly connected with BIOTROP,
e.g. the Director
Staff
Centre members (current participants).

(b) Persons with a direct association with BIOTROP,
e.g. Governing Board members
former staff
alumni (past course participants).

(c) Persons associated with BIOTROP (indirectly)
e.g. Ministry officials in member countries,
personnel from other institutions with or without formal linkage with BIOTROP.

2.2. Data Collection

Data were collected in three ways, as follows

(a) Interviews with selected persons.

(b) Examination and interpretation of documents written or produced by individuals, especially those having direct involvement with BIOTROP.

(c) Observations made during the visitation phase at BIOTROP.

For data from people, interviews were arranged with as many people in as many member countries as possible. Some views were obtained through questionnaires especially prepared for the exercise for certain categories of people.

The documents referred to in the exercise included information publications (like reports of Governing Board meetings, annual reports, reports of regional meetings, newsletters, and library publications); professional or technical publications (like reports on proceedings of regional seminars/symposia/workshops, research papers and monographs); a sample of instructional materials developed for use in BIOTROP, and a sample of research projects completed by course members and staff, including visiting professionals.

Data were also collected while at BIOTROP when the evaluation sub-team members were able to act as participant-observers in some of the activities of the Centre. They also attended seminars, joined in social and cultural activities, used the resources and facilities of the Library/Clearing House Service and generally lived in the BIOTROP "community" of staff and course participants.

3. BIOTROP Programmes

As one of the SEAMEO units, BIOTROP has been entrusted with research programmes and developing the tools and principles of research. In order to achieve this BIOTROP has organized itself into four main programme areas, namely, Tropical Pest Biology, Tropical Forest Biology, Tropical Aquatic Biology and Clearing House Programme. The position of each programme area is discussed later. BIOTROP has done its best to discharge its responsibility though it has become obvious that to date some programmes are better organized than others to fulfil BIOTROP's objectives. Nonetheless, efforts are being made so that BIOTROP will be able to achieve its designated objectives by rectifying the deficiencies in all programme areas.

The main lines along which research programmes are organized have been laid down in the first five-year plan. The research is done mainly by BIOTROP senior and junior scientists and by several scientists from abroad co-operating with BIOTROP. Also the participants of the 6-month courses contribute to the research results as they work under the direction of a research specialist. The only way to learn how to do research is to do it.

Because the Aquatic Biology Programme had such a low priority during the first years, most of the research has been done in the Pest Biology and Forest Biology Programme areas.

The research work has resulted in several publications and many reports. (Appendix 5).

3.1 Tropical Pest Biology

3.1.1 Objectives

(a) To identify and assign priorities of biological problems involved in pest biology in the region and to appraise the regional impact.

(b) To develop research techniques to enable the scientists to solve specific problems.

The topics chosen within the broad field of pests were restricted to weed science and to ectoparasites. Although specific weeds are studied incidentally at many agricultural institutions, work covering weed science as a whole is really filling a gap. Knowledge about ectoparasites in the tropics also has many gaps, especially in the study of the life cycle of species and the study of ectoparasites as vectors for bacterial diseases. Both topics are of regional importance.

3.1.2 Methodology. To achieve the objectives of the programme the Centre organised training courses; research projects, seminars, symposia, and workshops.

(a) Training Courses/Research Projects

In training courses, research activities, for the Tropical Pest Biology Programme BIOTROP conducts two types of training courses, one of six weeks duration and one of six months duration.

The six-week training courses are intended to distribute the knowledge of the biological background of the relevant chosen subjects to participants selected from the region. The training is meant for scientists in the region with the expectation that they will disseminate the knowledge obtained in their respective member countries.

The course content of lectures, demonstrations, and field work up to June, 1976 for the six-week training courses in Tropical Pest Biology is reported in Appendix 5. The number of participants in the six-week training courses are usually limited to 16 sometimes with a few observers.

The six-month training courses are designed to train young scientists from the region in conducting their own research in one of their fields of interest under the guidance of specialists. The research activity is normally conducted after a 2-to-3 week session of lectures. At the end of the research training period a report is usually submitted which has been prepared under the guidance of the supervisor, and often the results are discussed at a seminar together with fellow scholars and other invited scientists.

The selection of a research topic is usually determined by the supervisor after a discussion with the Programme Manager and after obtaining the approval of the Centre Director. The number of participants for the six months training course is usually 8.

In the case of Tropical Pest Biology the variety in the selection of research topics, so far, is based on the recommendations made under the first 5-year Development Plan for the Centre. Should there be any diviation from or modification of the proposals shown in this Development Plan it is implemented only after consultation by an especially convened Ad Hoc Committee and approval of the change by the Director.

Up to 30th June, 1976 the research activities carried out under the Tropical Pest Biology programme are presented in Appendix 5.

(b) Seminars/Symposia/Workshops

Tropical Pest Biology either sponsors or co-sponsors some Seminars, Symposia and Workshops at BIOTROP and other Centres as one of the means to achieve the objectives of the Programme. Seminars, Symposia and Workshops organized or co-sponsored under this Programme to June, 1976 are reported in Appendix 5.

3.1.3 Facilities

(a) Physical

At the moment where BIOTROP is situated, physical facilities are inadequate to a point that perhaps the courses and other activities conducted under this programme can make the scientists less convinced of the future role that this Programme can play in achieving BIOTROP's main objectives. However, realising the necessity to have a better and more congenial working atmosphere the management of BIOTROP has taken the initiative of relocating and constructing new facilities at Tajur where most of BIOTROP's activities will be conducted very soon. (See Appendix 4)

(b) Instructional

For all activities in this Tropical Pest Biology programme instructional resources are developed under the guidance of various course leaders after discussion and consultation with the Programme Manager. All relevant literature is consulted and also research findings and experiences obtained are utilized.

(c) Participants' Facilities

By June, 1976 participants have begun to use the new bungalows built at the Tajur compound and, as far as living quarters are concerned, facilities for participants are very satisfactory.

However, facilities for work and recreation need to be developed so as to motivate and maximize the potential of participants attending the courses organized by BIOTROP.

(d) Linkages or Relationship

As indicated earlier formal linkages have been made by BIOTROP with the National Biological Institute and also the Institute Pertanian Bogor. Assistance received from other sources are obtained through the co-operation of the various interested institutions and individuals either within or outside Indonesia. Here might also be mentioned the co-operation with universities in

the Netherlands (Leiden, Amsterdam and Utrecht), in France (Montpellier) with research societies and institutes in the United States, England, the Netherlands and Japan.

3.1.4 Constraints

(a) Resources

(i) Human BIOTROP suffers badly from the lack of trained manpower to perform and implement its programme effectively and it is not easy to point to the cause of this problem. The few that are now performing the activities of BIOTROP must be complimented for their dedication and willingness to shoulder the responsibilities entrusted to BIOTROP so as to fulfil its aspirations and meet the needs of the region in tropical biology. The present strength of the establishment in this programme is 12[3]. Work is also assisted by part-time staff members.

(ii) Materials Materials for instruction and other research activities are also found inadequate to meet regional needs. This is unavoidable, perhaps, due to the very fact that most research, literature and experience used in the training instruction and research courses are of Indonesian origin, and what is applicable and suitable for Indonesia may not necessarily be suitable to other nations in the region. However, subjects for research are chosen so as to give as much benefit as possible to member countries.

In addition, the supply of reading material for participants was also inadequate and often in Indonesian which is not readable by participants other than those coming from Malaysia, Indonesia and a few from Singapore. Materials in English were scarce but the situation is now improving.

(iii) Physical Up till now physical facilities are forming a very big handicap for the efficient implemantation of these projects designed to achieve the objectives of this Programme. In fact, the laboratories for both the scientists and participants of the research programme not only are poorly equipped but also tend to be too small and cramped. Facilities for field work are also limited and the use of whatever little they have depends principally on the goodwill and willingness of others in institutes within Bogor and surrounding areas. When the facilities in Tajur are fully available this situation will naturally improve.

(b) Participants' Background

This is a major factor affecting the efficiency of conducting all the programmes. Because of the varied background of the participants difficulties are bound to arise. Some participants are so advanced that they found the activities at too low a level to suit them. Others who have had no exposure to such a programme found the course too difficult. This creates the problem of finding a suitable instructional strategy. Another problem is that some participants are deficient in their ability to understand spoken English. Furthermore differences in their educational background pose still another problem. On the other hand some participants have found difficulties in understanding certain lectures because of the lack of fluency in English of some instructors.

(c) Diverse Needs of Member Countries

The various member countries of the SEAMEO region are at different stages of development and, therefore, the needs vary accordingly. Yet at a training course, the content of instruction has to try to meet the needs of all member countries. In such a situation the course instructors have been forced to devise a programme suitable and applicable to as many countries as possible. This is obviously difficult and quite often most instructors concentrate on what the host country needs.

(d) Deviation, Modification, Adaptation

These courses of action in the programme are a response to the situation in which the needs of the host country may become the focus of attention. It would seem that in the second 5-Year Development Plan where all funding, except for Special Funds, will be the responsibility of the host Government the situation is not foreseen to improve. Nevertheless, by judiciously choosing research topics relevant to the other countries' needs the results of BIOTROP's activities could have a regional impact.

3.1.5 Results

The results of all activities so far performed by BIOTROP are reported in Appendix 5.

3.2 Tropical Forest Biology

3.2.1 Objectives

1. To determine information/data in order to enable planning of the management of forest resources in Southeast Asia in the future, and to maintain a sustained yield.

2. To rehabilitate or use devastated forest areas.

3. To solve problems of production of seeds, seedlings and difficulties of seed storage.

4. To obtain information to enable BIOTROP to advise how to manage the rainforest, including natural reserves.

3.2.2 Methodology

(a) Training Courses/Research Activities

The course content of lectures/demonstrations or field work up to June, 1976 for the six weeks training course in Tropical Forest Biology is given in Appendix 5.

Research activities carried out by the Tropical Forest Biology Programme up June, 1976 are also in Appendix 5.

(b) Seminars/Symposia/Workshops

Seminars/Symposia/Workshops sponsored or co-sponsored by the Tropical Forest Biology Programme up to June, 1976 are shown in Appendix 5.

Generally, BIOTROP has been pressed to consider choosing subjects in this domain due to the importance attached to the forest and the contribution of forest resources to the economy and development of Southeast Asian countries. Urgency was also felt since forests are quickly disappearing in this region and they are often replaced by wasteland and eroded soil. In some member countries research has already been done at a fairly high standard, so BIOTROP has started to disseminate forestry knowledge in all Southeast Asian countries. This is done through exchanges and pooling of experience.

3.2.3 Facilities

(a) Physical

The same physical facilities as mentioned for the Tropical Pest Programme are applicable here.

However, this programme on tropical forest biology faced a more acute shortage of storage space for specimens in the form of leaves, branches, damaged or diseased tree stumps, etc. Notwithstanding the new facilities to be made available at Tajur no provision for this particular aspect of the programme has been made.

Fortunately, however, up to now, BIOTROP has been able to implement some of the activities in Tropical Forest Biology. This is mainly due to the generous assistance given by Institute Pertanian Bogor. The aid includes not only human resources but also physical facilities.

(b) Instructional

For all activities in the Tropical Forest Biology Programme instructional resources are developed under the guidance of various course leaders after discussion and consultation with the Programme Manager. Furthermore relevant literature is consulted and research findings and experiences are utilized.

Literature and up-dated information are obtained from staff members of the Faculty of Forestry. IPB in most cases participates in one way or another in the implementation of the various activities of this programme. This is a convenient though temporary arrangement but it has been followed solely because of the dearth of qualified staff in this programme at BIOTROP. To exist on the assistance and the goodwill of others cannot of course, assure that continuing success and effectiveness of any programme, particularly the biological programme, for biology is a very dynamic subject where change, advancement and development occur virtually daily.

(c) Participants' Facilities

Accommodation, work and recreational facilities are as already described.

In the case of the Tropical Forest Biology Programme BIOTROP should endeavour to have control of some "permanent" forest areas to conduct research and demonstration work. So far BIOTROP has managed to organize the practical part of this programme by utilizing areas belonging either to the state, or to the Institute Pertanian Bogor. In addition, this Centre should try to have its own well-established nursery, not simply for raising stock but also for experiments. The nursery now being established at Tajur may not be large enough to cope with the expected increase of work in the forestry domain. Participants would, therefore, be hindered in undertaking certain practical training, unless arrangements are improved accordingly.

(d) Linkages

As was mentioned under the section on the Tropical Pest Programme, BIOTROP in its Tropical Forest Programme also profits much from its formal linkages with LBN and IPB.

It should be specially noted here that a strong relationship now exists between BIOTROP, and the Faculty of Forestry, the Institute Pertanian Bogor and the Forest Research Institute at Bogor and the Herbarium Bogoriense. The co-operation of the University of Copenhagen, Denmark, should also be mentioned. These close links coupled with strong support, should be nurtured. Nevertheless, BIOTROP should aim at being able to organize the activities of its Tropical Biology Programme by employing its own staff for the purpose. Other informal connections are also in existence either on an institutional or a personal basis and again these relationships should be continued to obtain mutual benefits.

3.2.4 Constraints

(a) Resources

(i) Human Again one is referred to the statement made on the same topic in the discussion on the Tropical Pest Biology Programme.

The present strength of the Centre in this programme consists of four staff members. The work is also assisted by part-time scientists.

(ii) Materials Similar conditions exist in this programme as those referred to in the Tropical Pest Programme where materials for instructions and research activities are found to be inadequate to meet regional needs.

(iii) Physical One is again referred to the descriptive account made earlier on this particular topic under the Tropical Pest Biology Programme.

(b) Participants background

The remarks made on participants' background in the Tropical Pest Biology Programme are likewise applicable here.

Diversified interests of member countries are apparent in the use of forest resources, especially when most of the these countries are dependent on them as a rich source of foreign exchange earnings and national revenues. Consequently, the Tropical Biology Programme has the added difficulty of trying to meet diverse national needs and to take into account the emphasis on the revenue-oriented use by member countries of their forest resources. While the member countries are appreciative of the great benefit forests can give besides timber, their economic situation tends to override other considerations, such as soil erosion, floods, low quantity and poor quality of water, etc., which can be exceedingly difficult and expensive to remedy in the long run.

It is worthwhile for BIOTROP through this Programme to create awareness by member countries on the "other uses" of forests, not just as a source of timber for immediate exploitation and income to the nation.

(d) Deviation, Modification, Adaptation

The remarks made under the Tropical Pest Biology Programme regarding this topic are applicable here as well.

3.2.5 Results. The results of all activities so far performed by BIOTROP are indicated in Appendix 5.

3.3 Tropical Aquatic Biology

3.3.1 Objectives

- To develop techniques to increase fish supply and also to diversify the types of fish to be reared.

- To develop ways and techniques in the utilization of water resources.

Up to June, 1976 BIOTROP has given a low priority rating to this programme. Considering the present shortage of food and the great possibilities of obtaining food from aquatic and marine sources, it would seem necessary to give more attention to the aquatic biology programme. New courses should be organized on freshwater biology. Furthermore, techniques of improving marine biology studies and the utilization of marine resources should be started.

From the interviews one got the general impression that marine biology should be included as a research subject for BIOTROP to deal with in its forthcoming activities. The Marine Research Station in Jakarta is willing to provide assistance.

3.3.2 Methodology

(a) Training Courses/Research Activities

In training courses, and research activities for the Tropical Aquatic Biology Programme BIOTROP conducts two types of training courses of six weeks and six months duration.

The six-week training courses are intended to disseminate up-to-date knowledge in selected subjects to participants from the region.

The course content of lectures, demonstrations, and field work up to June, 1976 for the six-week training courses in Tropical Aquatic Biology is indicated in Appendix 5. The number of participants in each of these courses is usually limited to 16.

As regards the six-month training courses the training arrangements described under the Tropical Pest Biology Programme are applicable here. The number of participants for the Aquatic Biology course is limited to 8.

As in the case of Tropical Pest Biology the variety of the selection of research topics, so far, is based on the recommendation made under the first 5-year Development Plan for the Centre. Should there be any deviation from, or modification of, the approved proposals shown in this Development Plan it is implemented only after consultation by an especially convened Ad Hoc Committee and approval by the Director.

Up to June, 1976 the research activities carried out by Tropical Aquatic Biology programme are as shown in Appendix 5.

(b) Seminars/Symposia/Workshops

The Centre either sponsors or co-sponsors some seminars, symposia and workshops at its site, or elsewhere as one of the means of achieving the objectives of the programme. Up to June, 1976 the activities undertaken by BIOTROP under this programme are given in Appendix 5.

3.3.3 Facilities

(a) Physical

During its interim period (1968 - 1972/73) BIOTROP planned to develop studies on coral islands and man-made lakes, in addition to its Tropical Pest and Tropical Forest Biology Programmes. To assess and finally decide on the location where work can be carried out, field observations and surveys on coral inlands and man-made lakes were conducted by local and foreign expert consultants. For administrative simplicity the two fields of study were combined and renamed Marine and Fresh Water Studies. However, during the last year of the interim period, the two fields of studies were amalgamated and renamed Tropical Aquatic Biology, without removing any of the earlier designated objectives of the Programme. Moreover this Programme was assigned a low priority which did not reflect its potential benefit to the economic development of the region. This situation explains the low level of funds and staff assigned to the programme. Lacking the needed resources BIOTROP was obliged to negotiate for assistance and facilities for practical work in order to be able to conduct a few training courses.

(b) Instructional

In this particular field of biology, there are more difficulties to contend with than in other BIOTROP domains. There are very few specialists in aquatic biology, particularly in the member countries, for this particular discipline of work has not attracted enough attention in the region. Moreover, there are not enough reference works and professional literature to be consulted in the preparation of instructional materials. Assistance, though limited, has been obtained from the Research Institute for Inland

Fisheries at Bogor, the Department of Fisheries, Kasetsart University, Thailand, and the Malaysian Agricultural Research and Development Institute (MARDI) at Selangor, Malaysia. The staff faces a tremendous challenge in developing the aquatic biology programme to the level already attained in the other domains of BIOTROP.

(c) Participants' Facilities

Earlier remarks made under the Tropical Pest Biology Programme are applicable to the participants' facilities under the Aquatic Biology Programme.

(d) Linkages or Relationships

So far this programme has been able to receive assistance from other sources through the willing co-operation of personnel involved in this discipline of study either within or outside Indonesia. Such collaboration has since been established between BIOTROP and the Research Institute for Inland Fisheries in Bogor and the Marine Research Station (Pasar Ikan) in Jakarta which have shown willingness to provide assistance when needed. The relationship that has been made with the Faculty of Fisheries, Kasetsart University, Thailand, and MARDI, Malaysia, should be strengthened.

3.3.4 Constraints

(a) Human

The same situation exists here just as in the case of the Tropical Pest Biology Programme. There are only two staff members[3] assigned to the Aquatic Biology Programme.

(b) Material

The same remarks can be made as those that were given under the Tropical Pest Biology and Tropical Forest Biology Programmes.

3.4 Clearing House

3.4.1 Objectives

- To provide people from outside the Institute with information on the activities of the Centre.
- To find the best techniques of disseminating of information.
- To develop techniques for the effective use of facilities.

3.4.2 Methodology. To achieve the objectives the programme organises the following activities :

- Documentation
- Indexing
- Borrowing facilities
- Publications

(a) Documentation

Efforts are being made to use the facilities of other libraries. Photocopies of materials not available from the Centre's library are being made with the co-operation of libraries around the country. All internal BIOTROP publications have until lately, been dealt with in a haphazard fashion, but the situation is rapidly improving. The Centre intends to have a directory of programmes and participants.

(b) Indexing

Under the Clearing House Programme the Centre has embarked on implementing a proper indexing system so as to facilitate the flow of professional literature and also to check on the use of the available material. This is a very important sector of the programme for its is here that bottlenecks can arise in the use of the resources. BIOTROP is endeavouring very hard to ensure that this does not happen and so far it has succeeded. Proper key words and titles are being used so that the retrieval of information can be readily effected.

(c) Loan Service

To maximize the use of available literature arrangments have been made to lend books and other materials to staff and participants for specified periods of time. This loan service is not only confined to literature found in the library of BIOTROP. Current awareness and photocopy services have likewise been initiated.

A close co-operation is maintained with the Bibliotheca Bogoriensis, other libraries in Bogor and the National Documentation Centre in Jakarta within the inter-library loan scheme and network of information and documentation services in Indonesia.

In order that BIOTROP staff and participants can have a greater choice of journals, photocopies are made from Indices of the contents of selected journals available in the Bibliotheca Bogoriensis, those found suitable are marked for indexing, abstracting, translating or photocopying.

(d) Publications

The Centre, through its Clearing House Programme, publishes a newsletter, a bulletin, an annual report and the report of Governing Board Meetings. Further, at the end of each 6-month course the participants have to make a report on the work they have done. All these reports are presently kept in the BIOTROP library where they are catalogued. Recently the titles started to appear in the BIOTROP Newsletter which is distributed to all past participants and many institutes in the member countries. Anybody interested can ask for a copy or a photocopy of the report he wants. BIOTROP publications which appear in different journals are also mentioned in the Newsletter. In this way information on BIOTROP's research work is spread over the region. Judging by the number of copies which were ordered in the last months it seems that this system works well.

3.4.3 General Observations. The Centre's library has planned to expand and acquire new books. However, difficulties have occurred, e.g., books ordered through SEAMES took a considerable time to arrive. Furthermore, the available funds for new book acquisitions are limited and the physical facilities for this activity are inadequate. Nonetheless, soon after their arrival, the books are displayed not only for the staff but also for the participants to see; then they are made available for reference purposes. Similarly reports are displayed two weeks from the date of the publication and disseminated one year after the conclusion of the research study.

So far participants have been very co-operative in the use of the library and no serious problems have been encountered. The service provided by the Clearing House Programme can be considered satisfactory. It has offered facilities to help in staff development and such facilities are being utilized by the staff. One question raised is : What is the policy of SEAMES as regards staff development since up to date no staff member has been approved for advanced training under the SEAMEO Staff Development Programme? BIOTROP Clearing House is associated with AIBA and AGRIS and has also established good relationships with similar units of other SEAMEO Centres, particularly SEAPCA.

4. General Observation and Comments on BIOTROP

BIOTROP has been entrusted with responsibility of providing background information and knowledge in tropical biology so as to promote advancement in applied tropical sciences such as tropical agriculture, forestry and fisheries. This viewpoint cannot be overemphasized, as it is obvious, at times, that biology is wrongly considered as only a pure science yielding little of economic value. BIOTROP in this respect has done reasonably well to dispel this notion. Although it has just completed the third year of its First

Five-Year Development Plan, the Centre has succeeded creditably well with respect to the choice of biological subjects and to conducting various courses in such subjects. Important and meaningful results in biology cannot be expected within a short time span. Considered in this regard the results obtained by BIOTROP so far, though modest, have already contributed to the growing knowledge of tropical biology and have even been internationally recognized. It cannot be denied that BIOTROP has started moving along the right direction in attempting to become a viable and dynamic centre. BIOTROP can also be expected, with the co-operation of other Centres, to contribute much in achieving the objectives of SEAMEO.

The programme managers, with the guidance of the Centre Director and the Deputy Centre Director, have spent much of their energy in organizing courses, symposia, workshops and other activities notwithstanding the small size of the staff of scientists working with them. The courses have considerable value, according to the assessments made by participants and their superiors in their own countries.

With the completion of the new building and other facilities at Tajur, research and other work activities of the staff are expected to be greatly facilitated. This would lead to new and better results. If the projects to be undertaken in the Second Five-Year Development Plan are not going to be much different from those in the First Five-Year Development Plan, the experience gained therefrom would be consolidated; results can perhaps be obtained faster. Such a course of action would contribute towards increased appreciation of the value of biological studies in the member countries. But above all, close co-operation should be stressed with the different centres and useful contacts should be established and maintained with other scientific institutions in the member countries.

To progress further and faster BIOTROP should have more specialized staff members in its subject fields. Presently BIOTROP has to depend too much on the staff of other institutions for most of its activities. These scientists often took the responsibility for the way research was to be done and its orientation as well. In such a situation BIOTROP assumes a less active role in the eyes of some of the participants. It would be advisable therefore for BIOTROP to have its own specialists in each field of research to supervise the work of participants, who are presently being guided by staff from other institutions. In this way the participants will realise and appreciate much more the involvement of BIOTROP in their activities.

The research courses and other activities are considered successful; several good reports have been produced and the staff at BIOTROP has been very helpful and co-operative.

5. Recommendations

Mindful of the responsibility entrusted to BIOTROP in the search of new knowledge in tropical biology, the findings of which are visualized as being necessary for the betterment of the region, and after analysing the various programmes, their objectives, the Centre facilities, constraints, and results thus gained, the sub-team wishes to make the following recommendations :

5.1 That BIOTROP be developed to achieve the same level of status of premier institutions in the country. This would engender in the staff a stronger sense of dedication and commitment to BIOTROP and attract highly qualified scientists from the region to serve on its staff. Such drawing power of BIOTROP would be enhanced if the Agreement on its Second Five-Year Development Plan would be signed by the host Government.

5.2 That a compilation of the work done under various programmes should be undertaken to enable one to assess the progress made within certain periods of time. BIOTROP should regularly make an inventory, in its fields of interest, of important research carried out in the member countries. This should stimulate combined efforts to fill up gaps in tropical biological knowledge and encourage mutual assistance among the member countries.

5.3 That the relevance of courses and programmes be properly screened to meet the needs of the region. In so doing BIOTROP should avoid overlapping work with other centres, e.g. SEARCA. BIOTROP should increase its activities in tropical forest and tropical aquatic biology.

5.4 Courses

That the 6 weeks and 6 months courses be continued.

5.5 Participants selection

That the Director scrutinises carefully, together with the Programme Managers, the selection of participants in BIOTROP courses. Such care would ensure that those with the necessary academic background, work experience, and English language proficiency would be sent by member countries. The Director should be given the power to reject any nominated participant who does not meet the basic requirements for attendance at any course. It would be helpful if the Governing Board members would support fully the Director's decision.

5.6 Contacts

5.6.1 That participants and instructors/lecturers should have more personal contacts, while at the Centre. Among themselves lecturers should ensure rapport and dialogue in order that courses are maintained at a suitably high standard.

5.6.2 That BIOTROP should conduct courses only in those subjects in which at least one BIOTROP specialist is available. There should be an evaluation of the course content and the techniques of implementation. And if member countries feel that there are needs for certain courses, on topics for which there are no specialists working at BIOTROP, it is recommended that the Centre should try to acquire the services of such particular specialists.

5.6.3 That instructional materials be made regional in nature. This can be co-operatively achieved by Course Co-ordinators, Programme Managers or other instructors going around the Southeast Asian region to collect such materials. If funds were insufficient then instructional materials should be accumulated through correspondence with specialists in their respective fields within the region. Materials from developed countries should also be included.

5.6.4 That BIOTROP should engage only lecturers who are proficient in the English language, especially spoken English.

5.7 Research Topics

That BIOTROP should not diversify in its research topics, to cover a wide spectrum, as it is doing at present. It should be more selective in its project proposal, even though it is long-term. This would ensure that young scientists get the necessary training that would make them more serviceable in their own countries. Participants should not be allowed to prusue any project simply because they like it; they should accordingly be guided. BIOTROP should now develop a strategy to effect a consolidation among its research activities, keeping a very close watch to avoid overlapping. Finally BIOTROP should endeavour to increase co-operation and contact within or outside Indonesia.

5.8 Seminars

That BIOTROP continue its present arrangement of having participants conduct seminars at the end of each course. For this particular exercise not only staff members of BIOTROP but also other scientists who are involved in similar fields should be invited to participate in the seminars.

5.9 Relationships

That BIOTROP establish still better relationships and linkages with institutions both within Indonesia and in the region. This has the advantage that if good scientists are unable to come over to BIOTROP, at least, up-to-date information obtained by scientists scattered within the region could be passed on from one to the other.

5.10 University Staff

That BIOTROP consider providing facilities for university staff members, either from the region or outside, to come over to BIOTROP and conduct research work during their sabbatical leave.

5.11 Staff

5.11.1 That the existing staff, and those still to be recruited, should be more objective, innovative and articulate in outlook. Certain incentives should be given at BIOTROP so as to be able to attract reasonably good scientists to work at BIOTROP.

5.11.2 That the possibilities of using expertise from countries outside the SEAMEO region like CUSO, Peace Corps, etc. be explored.

5.12 5-Year Development Plan

That the Five-Year Development Plan be reviewed at least once after every 2 to 3 years for the purpose of making modifications therein to take into account advancements in science and technology, and also changing needs of the member countries.

That the Second 5-Year Development Plan continue most of the items approved in the First 5-Year Development Plan. This Second 5-Year Development Plan should avoid new proposals that are markedly divergent from those in the First 5-Year Development Plan.

5.13 Governing Board Members

That BIOTROP continue with its present structure of 2 members from each member country to serve in the Governing Board. However, once the activities of BIOTROP are placed on firmer ground, it is recommended that there should be only one representative from each nation on the Governing Board of BIOTROP. It is further recommended that a technical man with administrative experience be considered suitable for membership in the Board.

5.14 Marine Biology

That BIOTROP look into the possibility of including in its programme Marine Biology Studies, since marine biology can lead to the proper use of a great source of food supply.

5.15 Public Relations

That BIOTROP strengthen its public relations activity not only to upgrade its scientific and regional image, but also to help in the raising of funds to support its projects as well in attracting capable scientists to serve on its staff.

5.16 Publications

That BIOTROP send its publications to donors; that it makes full use of every suitable means of disseminating information such as science exhibitions, the mass media, slides and so on.

5.17 Clearing House

That under its Clearing House Programme BIOTROP produce good brochures which should contain material readily understandable to their target audience. It is further recommended that BIOTROP carry out research to determine the nature of literature that should be disseminated and the techniques of dissemination.

5.18 Project Manager's Report

That the BIOTROP Director should insist on being briefed by each Programme Manager, either by verbal or written report, at least once every six months. This is to ensure that not only all programmes are being attended to but also to ensure that the relevance and quality of performance be maintained.

5.19 Facilities

That facilities for work and recreation should be developed as soon as possible for the participants.

5.20 Transport

That BIOTROP look into its transport facilities critically so that it can implement its programme as effectively as possible, especially when it involves field work.

5.21 Programme Co-ordinator

That BIOTROP take immediate steps to fill the position of Programme Co-ordinator.

5.22 That BIOTROP explore the possibility that research work done by scholars be submitted as a thesis for a higher degree (Master's for example) which is acceptable to a recognized institution of higher learning.

FOOTNOTES

CHAPTER 3

1. BIOTROP : Annual Report 1973/1974 : BIOTROP, Bogor
2. SEAMEO : SEAMEO Charter; 1973 : SEAMEO, Bangkok
3. BIOTROP : Annual Report 1974/1975 : BIOTROP, Bogor

REFERENCES

CHAPTER 3

1. SEAMEO : Enabling Instrument for the Regional Centre for Tropical Biology, 1973; SEAMEO, Bangkok.

2. BIOTROP: Development Plan 1973-1978 for BIOTROP, Vols. I & II BIOTROP, Bogor

3. BIOTROP: Self-Evaluation Report, 1973 : BIOTROP, Bogor

4. STAKE, R.E. : The countenance of educational evaluation. In Wothen, B.R. and Sanders, J.R. Educational Evaluation : Theory and Practice : Worthington, Ohio, Charles A. Jones, 1975.

CHAPTER 4

REGIONAL CENTRE FOR EDUCATIONAL INNOVATION AND TECHNOLOGY (INNOTECH)

1. Organization and General Orientation of INNOTECH (Historical Background)

1.1 Creation of INNOTECH

After a rather long preliminary period, INNOTECH was set up in October 1969 by SEAMEO. Two essential documents, the Enabling Instrument and the Five-Year Plan, were the real point of origin of the Centre. They defined its objectives and activities.

According to the Enabling Instrument "The purpose of the Centre shall be to assist the member states in the identification and resolution of the basic educational problems".[1] This general purpose was translated in the first Five-Year Plan (1970-1975) into specific objectives as follows :

1.1.1 Create and develop new approaches to education - approaches which are particularly suited to Southeast Asia - deriving ideas from all possible sources;

1.1.2 Supply a broad range of facilities and professional resources, and provide an environment where selection, development, and testing of potentially valuable innovations can take place;

1.1.3 Attract to the Centre outstanding creative thinkers and innovators who will assist with research and experimentation in new educational systems and instructional media;

1.1.4 Promote and undertake research and experimentation dealing with common problems identified within the region, leading to the creation of prototype solutions which can be tested and adapted in the member countries;

1.1.5 Train selected, key personnel from member countries to implement (1) and (4) above through training courses, workshops and seminars;

1.1.6 Provide library and information services : collecting, classifying, screening and abstracting information and data relating to educational innovation and technology from world-wide sources, and disseminating to Ministries, agencies, institutions, and individuals within the SEAMEO region;

1.1.7 Establish model testing and evaluation procedures and standards; and

1.1.8 Co-ordinate activities with the member countries' national centres and programmes, and with related SEAMEO projects and projects of other agencies.[2]

One has to notice that although certain of the above-stated objectives refer only to the classical functions of an international institute of this type (objectives 6 and 8), or refer to the usual meaning of educational technology as technical media for educational purposes (objective 3), most of them, particularly objectives 1, 2 and 4 lead to a field much broader and much more ambitious, namely the definition and the promotion of innovation.

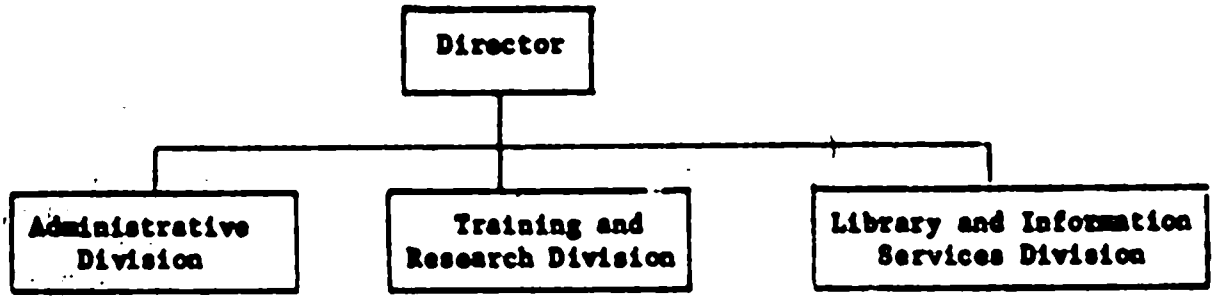
Following this statement, the Five-Year Development Plan dealt with a programme of activities. It has to be noted that this programme covered all but one part of the stated objectives. The training activities were minutely described but the research was briefly dealt within less than one page; moreover, the proposed training programmes were mainly concerned with educational planning as adapted to Southeast Asia, whereas three out of the four fields of research[3] implied an orientation towards studies of a very traditional type.

1.2 From Singapore to Saigon to Bangkok

At the end of the preliminary period, INNOTECH was to be established in Saigon. As the war in Vietnam went on, this decision had to be revised and in May 1970, INNOTECH was temporarily based in Singapore. During 1973, when the situation in Indochina gave some hope of appeasement, INNOTECH moved to Saigon and stayed there until the fall of the city in April, 1975. Although seemingly linked to external circumstances, these two successive locations have been at very different stages in the life of the institution and it is not really an exaggeration to say that they are, in fact, two phase which were very different in their orientation.

1.2.1 Singapore Era. The period in Singapore was mainly the normal operation of the setting up of the Centre; moreover, the personnel in charge showed a great caution, following closely the letter of the Five-Year Development Plan. Concerning the stated objective of fostering the renewal of the primary educational system, they conducted appropriate studies.

During that period the organizational structure remained the simple one provided for by the Development Plan which is as follows :

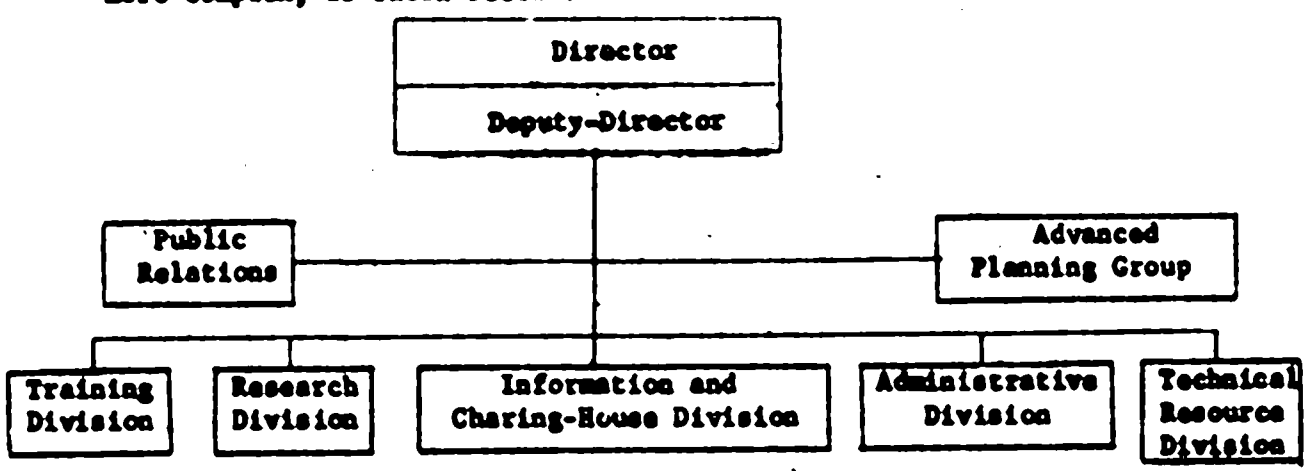


The staff increased slowly, as shown graphically in Appendix 4. It started with 21 persons, of whom only 9 were professional staff, and in 1972-73 it reached a total of 36 persons, including 18 in the professional staff. The increase was therefore progressive and remained even lower than what was provided for by the Development Plan, with most of the professional staff assigned to the training division.

As regards the budget,[4] the same cautiousness may be noted. From 1970 to 1973 the budgetary increase was not overly large from US$252,000 to US$265,000 and was not even what was provided for by the Development Plan. On the other hand, as might be normally expected, salaries of the full-time staff were the most important item, constituting 20% of the cost of operation in 1970-71 and 40% in 1972-73. A very large part of the resources, estimated at from 30% to 33% during the three years under consideration, were devoted to training. The funds allocated to research stayed, until 1973, at their lowest level which was less than US$20,000 per year.

The above data clearly revealed the policy lines adopted by the Singapore staff. It laid stress mainly on training; it provided for setting up information and clearing-house facilities; it limited research to studies of the traditional school.

1.2.2 Saigon: Before the Centre was transferred to Saigon a new Director was appointed. The organisational structure became far more complex, as shown below :



The staff became far more diverse and a massive increase thereof was made to reach a total of 70 positions in 1973-74 and 75 positions in 1974-75.

On the other hand, it should be noted that, whereas the three divisions in Singapore were more or less of the same importance, and well-balanced in their different functions, an entirely new situation occured. The administrative and information and clearing-house divisions were strengthened slightly, whereas the research division was greatly reinforced. Fifty per cent of the professional staff and 33% of the total staff were devoted to research.

Similar conclusions may be drawn from the budgetary provisions for the period under review. The yearly operating budget and the Special Funds amounted to US$457,000 in 1973-74 and to US$596,000 in 1974/75. For the fiscal year 1975-76 the total would probably approximate US$700,000, judging from the previous expenditures. This considerably increased budget representing nearly three times that for 1970-71 was partly the result of the increase in staff. It should be noted that training expenditures were increasing at a more moderate rate from US$95,500 in 1972-73 to US$136,000 in 1974-75 compared to research expenditures which rose from US$55,000 in 1973-74 to $113,000 in 1974-75, and would have reached US$180,000 in 1975-76, or nearly 1/3 of the financial resources.

These figures revealed a new policy. Endeavouring to implement the objectives set in the Development Plan, the staff in Saigon tried to promote large operational projects. Contrary to the trend in Singapore, this time the priority was given to innovative projects intended to change the traditional pattern of primary education. Projects IMPACT and RIT became the main concern of INNOTECH. Structures for these experiments were set up in different locations and all the Centre's other activities, including training and information, were and still are subordinated to this major thrust.

Such far-reaching changes necessarily implied a thorough revision of the programme of activities that was defined in the Five-Year Development Plan in 1970. Before the end of this Development Plan a new Five-Year Development Plan, was studied and later established at the end of 1974 for the 1975-79 period. The objectives and programme of activities were approximately the same. Two research projects, RIT and IMPACT, were included among the most important programmes.

1.2.3 <u>INNOTECH in Bangkok</u>. INNOTECH was wrecked by the turn of events in Vietnam in April, 1975. In a few days, all the organization painstakingly set up during the preceding years was destroyed. The Vietnamese professional staff members, comprising 1/3 of the staff in this category, and nearly all the support staff stayed in Saigon. All the facilities and nearly all such assets as

studies and documentation were left behind. Only the staff members from foreign countries escaped the disaster; a few of them gathered in Bangkok.

Thanks to the Secretariat and to the Royal Thai Government which provided material and moral help, a very simple organization was set up early in May 1975. With a staff of only 16 persons and, with limited financial means amounting to less than US$300,000 for the period from May to December 1975, INNOTECH managed to survive. The training activities as well as those regular activities for publications and information were resumed by July 1975. The ongoing research project IMPACT was salvaged.

The former Five-Year Development Plan in effect in Saigon was revised in Bangkok, in 1976 to meet the new situation. The new plan is not radically different from the old plan. The financial resources committed under the new plan amounts to US$2,481,800 for a period of five years with a total staff complement of 68 persons.

2. Procedures for the Evaluation

2.1 Design

Due to the unfortunate situation of INNOTECH the evaluation does not include the administrative and managerial aspects of the Centre but rather the activities which have been covered by INNOTECH so far. It is suggested, therefore, that an evaluation of the administrative and managerial aspects of INNOTECH be conducted in due course after INNOTECH has been fully in operation in Manila. In this regard, however, a few brief comments are included here in passing. It must be emphasized, however, that they are not the focus of attention in this evaluation.

Phrasing it differently, the evaluation at this juncture is more programme-oriented. It means that the evaluation is focused on the nature of INNOTECH's activities, their effectiveness and the response to them of the member states. The INNOTECH sub-team puts a heavy emphasis on the response from the member states since it is felt that the ultimate raison d'etre of INNOTECH lies in their assessment of INNOTECH's activities.

However, because INNOTECH is operating a very large, on-going research project, IMPACT, in both Indonesia and the Philippines, besides evaluating the nature of the research project itself, some observations on the administration of the project are included in this evaluation. These are based on the conviction that some useful administrative improvements concerning those involved in the project could be made.

2.2 Data Sources

In general the evaluation relies on two types of data sources: written documents and interviews. The written documents, which were consulted, include reports about INNOTECH concerning policy, administration and technical matters. A complete list of references is placed on pp. 97-99. Interviews were conducted intensively with senior officials of the Ministries of Education, Governing Board members, alumi of the INNOTECH training courses, participants of on-going training programmes and senior people of related teaching institutions in five member states. Firsthand information was collected from all INNOTECH's senior staff and several "key" former staff members. Special visits to the sites of the on-going research project in Indonesia and the Philippines were carried out. The International Development Research Centre (IDRC), the generous donor of funds supporting IMPACT, was consulted as well. During the evaluation more than 100 persons were consulted.

2.3 Data Collection

The first phase of the evaluation process was shared with the whole group in a planning session. Afterwards, the INNOTECH sub-team spent three weeks in the INNOTECH Regional Centre temporarily located in Bangkok. One member of the INNOTECH sub-team then travelled for about a month to Kuala Lumpur, Singapore, Manila and Jakarta. Also a special visit to Solo, Indonesia, and Cebu, Philippines, was made. Questionnaires were used for data collection. However, more insights were gained from frank discussions with the individuals concerned. Special meetings on IMPACT were conducted with IDRC in Manila and in Singapore.

3. Research Programmes

3.1 Completed Research Programmes

Completed research activities are mainly those which were conceived and carried out during the Singapore period, for only a few were completed in Saigon.

3.1.1 Objectives. Research activities were from the beginning considered to be one of INNOTECH's main tasks. But generally speaking, the Centre's objective was to carry out research projects which promoted innovative education. It is important to note that no research programme as a whole was set up and the Research Division seems to have worked project by project according to individual interests and without following any precise outlines.

This can be seen clearly in the brief review of the different projects which is presented in the Annex.

3.1.2 Implementation. With one exception, "Setting Priorities", which in fact was not INNOTECH's work but that of an Indonesian team, the research projects were established on INNOTECH's initiative. They were implemented by the Staff Members of INNOTECH, or handed over to certain specialists of the region chosen by INNOTECH, generally helped in both cases by the trainees who came to INNOTECH's headquarters either for three months or for twelve months. It appears that, in a certain number of cases, these research projects are less purely scientific works than practical training courses.

3.1.3 Outcomes. INNOTECH has completed seven large studies. The results of these studies have been published and sent to the member states. These studies are listed in the Annex. With the exception of one (Tech programme) which was immediately put into practice in the training of certain participants in English, none of the research projects has been applied in any of the member countries after its completion.

3.1.4 Discussion. In general, at least four out of the five member states felt that most of INNOTECH's activities in the field of research were relevant to their individual problems. However, this relevance seemed to prevail only on the surface and became less and less as the subject was treated in depth. One high official put it very succinctly when he said, "Though problems in the region may appear superficially common, they are very diverse when treated in depth, taking into account the causes and other related factors". Juxtaposing this statement with INNOTECH's function, as stipulated in the Enabling Instrument, to "identify and help solve common problems in the region and assist member states in the identification or solution of their individual educational problems", the situation, at least as far as the research activities are concerned, needs serious attention. Such attention is made more necessary by the fact that INNOTECH has done very little to help member states identify and solve their individual educational problems.

The member states felt that the identification of the common problems of the region must be logically started with the identification of the individual problems of each state. The evaluation sub-team concurs with this proposition and further suggests that INNOTECH should encourage the member states to exert efforts in this direction. INNOTECH should provide necessary facilities to be helpful in this respect. In so doing, the common points arrived at might eventually constitute an embryo for the body of common problems for the project to deal with.

As a corollary, INNOTECH should consider individual research proposals submitted by the member states within this framework. Even though not intentional, the notion that INNOTECH is the sole authority in preparing research proposals should be avoided. Review sessions should be taken more seriously with a minimum of political compromise. The evaluation sub-team members believe that the Governing Board should consider focusing attention on the basic policy of the programmes, leaving the technical details to the scrutiny of the Technical Working Group. This group consists of the relevant professionals, representing the member states, especially assembled for the purpose. This working arrangement could possibly be expanded to other INNOTECH programmes as well.

Needless to say, in the circumstances, the INNOTECH research findings did not reveal any significant impact of the project on the direction of educational development in the member states. Besides the elusiveness of the problem there were two other factors which complicated the outcome. First, some of the research reports published by INNOTECH did not always reach the appropriate people in the member states. The INNOTECH sub-team found that many people in charge of educational planning, research and development never heard of nor received such publications. This problem will be considered at greater length in the section on the Publications Programme. Second, as touched upon earlier, the "marriage" between research and training did not produce good results. Fortunately after the third interns programme this approach was abandoned. This meant the separation of the research function from the training function at least in regard to objectives and processes. The INNOTECH sub-team feels that this is a very wise decision since a high-quality research outcome cannot be expected from non-skilled researchers. Moreover, the objectives of the training programme would be jeopardized if the participants would devote much of their attention to actual research activities.

With respect to INNOTECH's research in the past it focussed attention on classroom problems. The member states felt that administrative problems in the educational systems should be taken into account as well. The evaluation sub-team supports the inclusion of administrative problems in INNOTECH research activities for two reasons. First, the solution of administrative problems would pave the way in speeding up educational development. Second, though not true in all cases, the solution of administrative problems tends to be less controversial than those of classroom problems. A change in the data reporting system, for example, will create fewer disputes than introducing a new teaching method. Furthermore, research in administrative problems is in general, less time-consuming and can be utilized more directly. In so doing INNOTECH can produce more timely solutions of specific problems which will serve the real needs of member states.

This leads to another discussion about the nature of the problems to be tackled by INNOTECH. The complete INNOTECH Self-Evaluation Report revealed that :

> ..... There are rather wide differences of opinion among members of the Governing Boards concerning interpretation, particularly the nature of the problems involved. The extremes of difference are represented on the one hand, by those who see INNOTECH's task as the production of quick solutions to specific, limited problems within the currently operating conventional systems and on the other hand, by those who believe that INNOTECH should concern itself with the more general problems through the development of one or more objectives which may or may not be the same as those for the present system.

From discussions with high officials of the member states, including the Governing Board members, the evaluation sub-team found that their views concerning this matter were not "either or" but a combination of the two. The sub-team also believes that the two objectives should be pursued simultaneously. This combination in the long run may be proven conducive to strengthening INNOTECH as a regional institution. In order to be strong INNOTECH has to be supported by the member states. This support will come naturally if INNOTECH proves her worth in serving their real needs. By relying only on the outcomes of the solutions of fundamental problems, which are time-consuming and likely to be more controversial, INNOTECH chooses a rather risky strategy. On the contrary, by proving her worth, through a series of activities yielding a less remote pay-off in benefits, INNOTECH will be able to maintain the support of the member states. Having achieved this support, then, INNOTECH can afford to embark on more risky and ambitious business.

3.1.5 Recommendations.

(i) A systematic attempt in identifying the common problems of the region should be carried out by involving member states in identifying their own problems. This identification should not stop at the delineation of the problems in broad terms but should include more specific definitions for operational purposes and an elaboration of the methods of solving these problems. Eventually, complete research proposals should be produced from this exercise which should be carried out on a gradual basis. INNOTECH should provide necessary services in initiating, encouraging, and co-ordinating activities and giving technical and necessary assistance therewith. By following this process a cluster of similar problems might be found. Interested member states may wish to develop further their own approaches in dealing with particular problems. Several principles, if possible, could be prepared as guide in developing research proposals. It would of course, depend upon the member states themselves to work out their own research proposals. Again INNOTECH should provide advice and necessary aid.

(ii) These research proposals should be reviewed in principle by the Governing Board. However, the technical details should be left to the Technical Working Group which is created specifically for this purpose. Based on the conclusions made by the Governing Board and the Technical Working Group then a decision should be made about what kind of assistance can be rendered by INNOTECH : expert service, materials, and so on. A detailed programme has to be worked out within an appropriate time span.

(iii) It is understood that any member state, not affected by common problems, would at its own choice propose a research project. In this regard, INNOTECH should also consider extending aid to them on the same basis as above.

(iv) The problems should cover instructional and administrative areas. They may deal with fundamental as well as immediate problems of the member states. In general INNOTECH should try to diversify its research activities. Comparative studies involving countries inside and outside the region should be conducted as well.

(v) Research activities should be separated from training activities. Feedback information on research outcomes should be related to the training materials. It does not seem advisable that participants in training courses have to engage in actual, research projects for which they have not acquired research skills.

(vi) In providing expert assistance INNOTECH should rely more on regional resources. For this reason INNOTECH should first make an inventory of regional experts in various subject fields and initiate arrangements to have them serve on short-term consultancy basis. Such an inventory should be linked to a forward-looking plan of INNOTECH activities.

3.2 RIT (Reduced Instructional Time)

Due to the seemingly insurmountable educational problems in most of Southeast Asian countries, especially with regard to the effects of the population explosion coupled with limited resources, the future development of educational systems in the region lies in two directions : (1) to increase the effectiveness and efficiency of the traditional system and (2) to develop new alternatives which differ drastically from the traditional system. INNOTECH has launched experiments in these directions through the RIT and IMPACT research projects. The former is aimed at the first direction and the latter, at the second.

3.2.1 Objectives. The RIT project does not break with the traditional organization of teaching as regards students and teachers, classes and schools. The initial evidence is that the efficiency of this organization is weak. On the one hand, the teacher wastes a lot of time either on non-teaching tasks or in teaching tasks for which a continuous interaction between teacher and pupil is not necessary; on the other hand, the pupils also lose a lot of time because learning processes are inefficient, and there is a common neglect of the possibilities of self-instruction in certain types of skill learning. The basic assumption of the RIT project is that, if it was possible through proper methods and programme to reduce these time-consuming activities, both the quality and efficiency of learning would be improved. The time spent by the same teacher with a fixed number of students would then be reduced; therefore, the cost of teaching per student would also be reduced.

3.2.2 Implementation and Outcomes. The project was carried out in South Vietnam in four stages including a preliminary phase, a try-out phase, a phase for re-designing and re-scheduling of the primary curriculum, and an experimentation phase. Due to the emergency transfer of the Centre to Bangkok the project had to be temporarily suspended.

3.2.3 Discussion. The first results of the try-out were lost in South Vietnam and the preliminary trials in Saigon, have no statistical value. It must be stressed that the authors themselves did not envisage them as statistically reliable, but thought of them as mere laboratory trials, enabling them to further their methodical research.

In spite of this limited information the evaluation sub-team feels that the RIT project has some favourable features.

The problem was clearly stated, which is to reduce the "time in school"; the ways and means chosen to reach this objective are pedagogically justifiable; by improving the methods of primary education, one can hope to reduce the cost thereof, while maintaining the level of learning.

The methodological effort of the Saigon staff was exemplary. The whole planning of the project is quite good, particularly in so far as its preparation and control are concerned. In addition the pragmatic approach adopted for each of its segments can be appreciated. The technique is basically programmed learning, but the application is quite flexible and for each pedagogical objective, the best way (or ways) of teaching was sought without any dogmatism or prejudice.

From a sociological point of view, the project is adopted for implementation in an existing school, and is spite of its drawbacks, such an approach is acceptable to, and even requested by, urban and rural communities.

In this respect, setting up RIT creates fewer problems than some of INNOTECH's other projects.

3.2.4 Recommendations

(i) The sub-team feels that INNOTECH's present Governing Board has been well advised to retain RIT project in its new five year plan in order to implement it in another country; the sub-team supports this action.

(ii) The sub-team feels that, in the implementation of a new RIT project, two elements, left aside in Saigon, should particularly be taken into account. These are the reorientation of teachers and the use of complementary pedagogical means, mostly audio-visual.

3.3 Ongoing Research Activity (IMPACT)

3.3.1 Objectives. The main objective of IMPACT is to develop an economical and effective delivery system for mass primary education. It is an alternative to the traditional educational system from which it differs drastically in its process of instruction and management.[4]

3.3.2 Implementation. IMPACT has been implemented since 1974 in Solo (Indonesia) and Cebu (Philippines). The project is being executed by the host countries through joint effort with INNOTECH as regards financial arrangements, professional guidance and administrative support.[6,7]

3.3.3 Outcomes. The project will be completed in June 1978. At present all the features of IMPACT are still being developed and perfected.

3.3.4 Discussion. IMPACT can be envisaged as a system which aims at economizing the primary educational process while maintaining its effectiveness through the following modes : (i) reduction in the teacher-student ratio where, in the existing system, teachers' salaries constitute 80 to 90 per cent of the educational expenditures; (ii) reduction in the utilization of classroom space where the erection of new buildings for incoming students constitutes a significant capital investment; (iii) reduction of time in the learning process from the original six or seven year schooling; (iv) utilization of the resources available within a community by promoting social participation in the educational process; and (v) utilization of the modular approach in teaching.

IMPACT, seen from these five perspectives, is described as follows : First of all, an instructional supervisor replaces the traditional teacher. The instructional supervisor will act as a manager of learning and thus eliminate the traditional roles of the teacher. Instead of teaching some 40 to 50 students as in the traditional school the instructional supervisor will manage the instruction of up to 200 students. He will act as well as an organiser of the community resources used in the educational process. Recent developments of IMPACT in the two sites showed that the ratio of 1 to 200 was far from being achieved. According to the Report of the INNOTECH Task Force which conducted an evaluation in February 1976, the instructional supervisor student ratio in Cebu was 1:50 and in Solo was 1:49.[8] In both sites the instructional supervisor is helped by instructional supervisor aides, a new feature which could not be found in the original plans. This situation raised questions about the economy feature of the IMPACT system. The role of the instructional supervisor was quite different from the traditional teacher's. However, no explicit performance criteria for the instructional supervisor have been developed so far.

IMPACT changed the notion of the traditional school having classrooms and offices to a community learning centre where the latter could reduce the capital and maintenance costs substantially. However, no prototype has been developed and studied in either site. This prototype is necessary if IMPACT is to be taken seriously since it relates to many factors. First, what should be the physical arrangements of a community learning centre if it is more economical than the traditional layout? Second, what are the impacts of the physical layout to student performance considering the fact that conditions of desk and tables, for example, will influence writing performance? Third, where are the students to learn : is it inside the community learning centre or anywhere they like? Cebu chose the former and Solo chose the latter. Both have their own rationale. However, the INNOTECH sub-team believes that in choosing either one, the following factors must be taken into account : firstly, the assumption about the learning motivation of the children. Do they need to be controlled in their activities? Or could the instructional supervisor let them alone to study wherever and whenever they like? Of course, in this respect, the role of the parents should be taken into account also. Secondly, the effectiveness and efficiency of the instructional supervisor in managing a large number of children must be taken into account.

The reduction of time in the learning process was to be a result of the modular approach which is utilized by IMPACT as a teaching method. Such expectation remains to be seen, but the development of modules for the experiment is very encouraging in that among the IMPACT activities it has been the most successfully carried out. However, the evaluation sub-team concurs with the INNOTECH Task Force's finding that the qualify aspect in the development of modules should be given more attention.

Community participation in the educational process, in the eyes of the evaluation sub-team, represents a major problem which needs serious study. The underlying question of the IMPACT system is : Does the community, comprising parents, tutors, peer learners and other voluntary persons, have the necessary motivation to engage in the IMPACT process? The answer to this question leads to several consequences. First of all, if the motivation is not yet there then what does it imply and, more importantly, what should be done about it? Should voluntarism prevail or should some kind of incentive be devised? What kind of incentives : monetary or non-monetary? What are the impacts of monetary incentives on the basic principles and objectives of IMPACT? If the incentives are non-monetary, what are they? From what premises should they be derived?

The evaluation sub-team believes that these questions must be resolved. Discussions were conducted during the evaluation with all parties concerned, viz. the INNOTECH staff, field researchers, key people of the host countries and donors. The sub-team feels that a scientific study to devise an intervention strategy, using the behavioural approaches to promote social participation in the IMPACT process, should be carried out. Approval for this proposal has been given by the people in Cebu. The evaluation sub-team is happy to note that, as a result of the discussions with appropriate persons, IMPACT in Solo has included in its Proposed Plan of Operation Up to 1976, the behavioural study mentioned in the preceding paragraph as well as the development of a physical prototype of a community learning Centre.

Besides the matters mentioned above there are other aspects of IMPACT which need further inquiry. For example, does IMPACT aim at economizing the educational process while maintaining its effectiveness, or is IMPACT working at increasing its effectiveness while at the same time aiming at economizing the educational process? From the discussions with INNOTECH staff, field researchers and key people of host countries the INNOTECH sub-team found no consensus about this matter, although one agreement prevailed to the effect that IMPACT must be directed towards achieving existing educational objectives. The INNOTECH sub-team believes that it is more realistic to expect IMPACT to realize the same effectiveness while economizing on the process, rather than "to shoot two birds at the same time", viz., to increase effectiveness while economizing on the process. An external evaluation conducted in Solo and a self-evaluation conducted in Cebu showed that IMPACT students' performance was about the same level or slightly better in comparison with that of the traditional school learners. The conclusion seems to support the above suggestion to restrict the objective of IMPACT.

In the Memorandum of Grant a condition was stated to the effect that one objective of the IMPACT project was to develop the most cost-effective means for teaching the national language in the early grades. The evaluation sub-team believes on the one hand that this is important, since teaching the national language is a paramount task, not only in the light of educational objectives,

but also in the wider context of the national objectives; on the other hand, not enough attention has been given recently in the two sites to this essential requirement. In Indonesia, for example, the cumulative dropout in the primary schools is up to 65 per cent and one of the major reasons for this wastage is the ineffective teaching of the Indonesian national language. This ineffectiveness results in a high rate of repetition and consequently decreased efficiency of the primary school system. Serious attention has been given by the Government of Indonesia concerning the teaching of the Indonesian national language in order to solve the dropout and grade-repetition problems. The INNOTECH sub-team believes that IMPACT's effort in this respect may prove to be productive and significant to educational development.

IMPACT in Solo, has deviated from the original plan, and included out-of-school children to the IMPACT population. This step was taken in line with the national policy of providing education for all children in the community. Many important questions should be raised concerning this change. For example, who are considered as out-of-school children? Are they primary school-age children who are not enrolled for formal schooling? Or, are they drawn from the general population regardless of their age?

These questions bear serious consequences. For example, if IMPACT includes out-of-school people, regardless of their age, then what are the educational objectives for this population? Are we going to aim at the same educational objectives for the population groups at different age brackets? From discussions with field researchers and key people of the host country, one agreement emerged. IMPACT should include only out-of-school children within the primary school-age bracket so that the educational objectives for both in-school and out-of-school children will be the same. The non school-age population enrolling in IMPACT will do so on a purely incidental basis, since IMPACT is not in a position to reject them. The evaluation sub-team is satisfied with this restriction since the project would be unmanageable if IMPACT choses to do otherwise.

There are other technical concerns of IMPACT which need further attention. They are centered on the major problems already discussed. It should be emphasized that the evaluation sub-team does not pretend to know the answers. The answers should come as a result of deliberations; where necessary, they should be supported by research. The evaluators saw their responsibility, as a "search for the forest, not the trees", in the hope that major problems could be identified. From this perspective the sub-team makes the following observation : The IMPACT concept is not a finished product; it is still being developed although some of its foundations have been laid down. There is nothing sacred about it; it can be expanded, or reduced, as long as it satisfies two prerequisites. First, changes must be carried out on the basis of scientific findings. Second, changes must not be done merely for the sake of economizing the educational process without due regard to the quality of instruction.

In this respect, the field researcher should be given a free hand, but at the same time have appropriate technical assistance from INNOTECH.

Keeping in mind the complicated nature of IMPACT, review sessions should be conducted regularly in which INNOTECH staff and field researchers in Cebu and Solo as well as appropriate people in both host countries should participate. The INNOTECH sub-team believes that the field researchers should play a greater role in the future planning, programming and budgeting work concerning IMPACT. The evaluating sub-team wishes to express its satisfaction in being informed that one such exercise was conducted in Bangkok in June 1976. Prior to this meeting the sub-team had an opportunity to have consultations with all the parties concerned the results of which were forwarded to the new Directors of INNOTECH to be used as appropriate.[9] A self-evaluation as well as an external evaluation of IMPACT should be conducted periodically. Review sessions should take into account the findings of the evaluations. In so doing a balanced and more reliable perspective can be maintained.

Both field researchers in Cebu and Solo complained that little technical assistance had been given by INNOTECH. The evaluating sub-team believes that technical assistance from INNOTECH is a prerequisite for the success of IMPACT. Such assistance should be given in the form of training, consultancy services and provision of reference materials.

The field researchers also complain about late reimbursements of expenses, a deficiency which often hampered this project activities. The evaluation sub-team suggests the creation of a revolving fund, in which the auditing process does not create delays. The amount of the fund should conform with that previously agreed upon for a given fiscal year. It should be emphasized, however, that control procedures should remain.

3.3.5 <u>Recommendations</u> It is recommended that :

(i) The motivation and aspirations of the people in Solo and Cebu along with the socio-economic structure of the community be studied by the field researchers of IMPACT. Based on their findings the researchers should develop an intervention strategy to seek the people's participation in the IMPACT process.

(ii) A realistic instructional supervisor-student ratio and performance criteria for the Instructional Supervisor be developed by the field researchers of the IMPACT project based on a thorough review of the project.

(iii) The field researchers of the IMPACT project take steps to enhance the quality of modules in terms of structure, content and presentation. Pedagogical research to insure effective learning process should be conducted as well.

(iv) INNOTECH give special attention to the development of the most cost-effective means of teaching the national languages in the early grades.

(v) INNOTECH provide technical assistance covering project evaluation, cost-effectiveness analysis, modular writing, intervention strategy using the behavioural sciences in promoting the people's participation in the educational process, and development of a prototype community learning centre.

(vi) Conduct an overall cost-effectiveness study of the IMPACT system every time there are some changes in its structure. Indeed, conclusions seen from the results of cost-effectiveness studies would justify whether those changes should or should not be embodied in the IMPACT structure.

(vii) Conduct periodically a self-evaluation and an external evaluation of IMPACT. Based on its findings a review of IMPACT should be held in which participants may be drawn from INNOTECH staff, Cebu and Solo staff and appropriate people in the host countries. The field researchers should be given a greater role in the future planning, programming and budgeting work concerning IMPACT.

(viii) INNOTECH set up a revolving fund to replenish expenditures made by field researchers who should not be made to wait for the completion of the auditing of reimbursement claims; provided control procedures should remain.

(ix) Priority be given to the completion of the research at the two sites. The project should not be expanded to include a third site until then.

4. Training Programmes

From the start, one major concern for INNOTECH was to provide training activities in line with the objectives set forth in the Development Plan of 1970. Behind this seemingly simple statement is a complex reality. The organisation of training courses, with appropriate objectives and content, underwent changes during these last six years, mostly in relation to the evolution of the Centre itself.

4.1 Objectives

Four types of training courses, with different objectives, were implemented by INNOTECH. These are discussed in the succeeding paragraphs.

4.1.1 Twelve-month Interns Courses. (From 1970 to 1972) The objective of training was far from being clear.[10] The trainees, integrated into the Research and Training Division, had, as their main activity, participation in on-going studies, such as Project Progress, Action, and Clear in 1970-71 and Objectives of Primary Education Project in 1971-72.

4.1.2 Three-month training courses. Usually given twice a year its objective was in the beginning, not very different from that of the interns course. Its objectives were defined more precisely in 1972 as follows :

(i) General Purpose - To provide key educators of the region with skills and knowledge necessary for educational planning, decision making, and application of realistic change strategies.

(ii) Specific Purposes - After the three-month training programme, each participant should be able to:

- Construct educational planning system model for appropriate use in the educational systems found in the region.

- Utilise the systems approach in decision-making applied to educational planning; and

- Apply innovative change strategies in solving regional, national and on-the-job educational problems.

4.1.3 Short training courses. Set up, starting in November 1974 in Saigon, each course had a content limited to the study of very definite technical subjects.

4.1.4 A nine-month training course. This training course (the only one held was that in Saigon) was intended for high-level key personnel to expose them to theoretical and applied research in education.

4.2 Implementation

4.2.1 Recruitment of Trainees. Since INNOTECH is a regional centre, the recruitment of trainees has been, for obvious reasons, geographically balanced, i.e. the eight countries, until 1975, have been participating in these different courses with more or less equal number of participants. Much more meaningful is the

professional background of the trainees. There are no complete statistics for all the courses, so the sub-team made a sample survey of 90 trainees who participated in the 3-month training courses in 1974. From the data analysized the following conclusion could be drawn : More than 45% of the trainees came from the central administration of their respective countries; half held a high-level position; more than 35% were administrators of education in the field; classroom teachers, such as those in charge of training teachers of primary education, were few, and the specialists of new educational media, particularly audio-visual teaching, were likewise small in number. It should be noted also that only one trainee could be classified as not belonging to the traditional educational system. This analysis makes the intention of the INNOTECH staff clear. In order to promote the ideas of INNOTECH concerning primary education the main task is to create an awareness of such ideas among the key educators of the educational systems in Southeast Asia.

4.2.2 Methodology of teaching. Leaving aside the work of the trainees during the year 1970-72, since this work is in fact parts of the diverse projects referred to above, one has to take a thorough look at the methodology established in 1972-73 by the INNOTECH staff, this being an original effort of great interest. The fundamental orientation of INNOTECH's policy was methodically broken down into a certain number of simple elements, e.g., "the needs of innovative approaches to education in Southeast Asia", or "technology of education and the process of learning". Each element is the subject matter of a learning unit called a "module". In each module a problem is presented, followed by a detailed analysis with a self-evaluation questionnaire to provide feedback for each part of the analysis. The set is completed by a post-module exercise. This method consists of two well-known pedagogical techniques, namely, programmed teaching and self-instruction.

4.3 Outcomes

The results of the training courses can be partially appraised by the number of trainees participating in the different types of training courses organized by INNOTECH. Data which were made available to the sub-team in the earlier stages of the evaluation have been summarized below :

Year	Interns	Three months	Two weeks	Nine Months	TOTAL
1970-71	7	-			7
1971-72	14	46			60
1972-73	13	45			58
1973-74	-	87			87
1974-75	-	77	26	16	119
1975-76	-	79	25	-	104
TOTAL	34	334	51	16	435

4.4 Discussion

4.4.1 Interns Training Programme. The activities of the Interns Training Programme are based on the philosophy of linking research and training activities. It is expected that an acceptable quality of research can be produced while the interns, who are involved in the activity, receive training in conducting research at the same time. This objective could be achieved if the interns could satisfy two requirements : (i) they have sufficient background in research, and (ii) they have an adequate command of the English language. It implies that internship is a more advanced type of training than basic training. However, it was revealed that these requirements were not met by a considerable number of the interns.

The qualifications set up by INNOTECH for incoming interns, of having "a bachelor's degree or better" with "interest in research"[11] were ill-suited to this kind of activities. On the one hand, these requirements did not meet the qualifications for advanced training. On the order hand, the modus operandi of the programme of exposing the interns to "learning by doing", through simulation exercises and group discussions while lectures were held to a minimum, was hardly suitable for basic training.

Another problem faced by INNOTECH in all training programmes, including that for the interns and the three-month training programme was the inability of the member states to send training participants who satisfied the requirements of the respective training courses.[12] The wide range of the trainees' backgrounds was reflected in the heterogeneity of the participants of the second Interns Training Programme where 8 out of 18 interns had great difficulty in understanding written and spoken English as well as in speaking and writing English. Only 7 out of 16 interns had previous training in statistics

and 10 out of 16 interns scored poorly in test results.[13] It was not surprising then that interns devoted much of their time in studying statistics.[14] This situation was exacerbated by the unstructured nature of the training,[15] the counter productive effect of linking research and training functions labeled as "training-through participation",[16] and the shortage of professional staff.[17] The alumni throughout the member states corroborated these criticisms during the interviews.

After the third training programme this internship course was terminated. As a replacement a new six-month training programme on educational research is projected for the future. In the original Five-Year Development Plan the duration of training was nine months but it had been shortened to six months in the revised plan due to financial considerations.[18] The evaluation sub-team feels that the period of training should be extended to one full academic year. Affiliation with a reputable teaching institution should be worked out to give the training a proper academic accreditation. INNOTECH should study the possibility of offering a degree course in the form of a tailored programme suited to the needs of the region. The sub-team found that the INNOTECH Director, certain individuals in the Member States and some INNOTECH alumni were quite receptive to this idea.

4.4.2 Three-Month Training Programme. In general the alumni and the participants of the ongoing 11th three-month training programme expressed their satisfaction with the training endeavour. An analysis of the evaluation sheet of the 10th training programme showed that 17 out of 23 participants felt that the objectives of the training had been achieved. Only two participants checked "no" and the rest checked "almost". A similar analysis of the evaluation sheet of the 9th training programme revealed roughly the same picture.[19] This conclusion was further strengthened by discussions held with the participants of the engoing 11th training course and the alumni throughout the member states. The evaluating sub-team found that as a whole the objectives of training programme had been achieved.

The mastery of the course subjects was quite satisfactory. Most of them rated "well" or "very well" except in evaluation.[20] A close look into the training modules convinced the sub-team that improvement should be worked out in this subject. This desired improvement should have a broad coverage to include the nature, approaches, methods and techniques of evaluation.

Despite the overall encouraging results of the training programme the evaluation sub-team feels that some amelioration should be worked out. First of all the scope of the systems approach, the basic tenet of the programme, should be broadened. The training content should be expanded to cover its ontological, epistemological and axiological platforms so that the participants can appreciate the real implications of adopting such an approach. This does not

imply that the training activity should be changed into an academic and philosophical forum. It is far from that. A six hours introductory lecture, given by a very able person, would be adequate. The notion that the systems approach is a panacea must be avoided. The systems approach should be presented in the light of both its virtues and its shortcomings. The sub-team would like to emphasize that the systems approach, a way of thinking that has been advocated by INNOTECH, is not merely "an approach"; it also represents a contemporary philosophical thought. By having an insight into its platforms, especially in the light of its recent historical development, INNOTECH could hopefully produce "a good systems thinker" and not "a systems cultist". Furthermore, the training content on the systems approach should be expanded to cover recently developed managerial techniques which apply the systems approach. Such course content includes, for example, systems analysis, cost-benefit analysis, cost-effectiveness analysis, planning-programming-budgeting systems, PERT/CPM and operations research. Many recent developments on their applications to educational enterprises should be added to the training content.

The strategy for change should be given more emphasis as well. In promoting innovation in this area, one should note that human engineering is as important as systems engineering. Experience in many countries has shown that an intention to innovate through a transplant of technology per se, without support by a strategy for implementation based on psycho-social orientation, would result in failure. In order to be successful in innovation, the mastery of an intervention strategy must be on a par with the mastery of sophisticated technology. From recent examination of training content, the sub-team is convinced that the modules on "designing strategies for change" should be expanded considerably by including newly developed intervention methods, for example, organization development, institution building and communication theory. A complete understanding on the inter-relationship of human motivation, socio-economic structure and organisational scheme is deemed necessary.

More importantly, all the subjects of the training activity should be put together in a synthetic way. A schema of knowledge in which all the subjects are held together should be the "grand finale" of the training session. What are the relationships between managerial processes and managerial technology? What are the relationships between innovation in managerial technology and intervention strategy?

A modular approach in the form of self-instructional materials was used in the training.[21] The alumni and the participants of the ongoing training programme were satisfied with this approach and found it very effective. They preferred the modular approach to the traditional lecture method. According to them, the modular approach enabled them to progress at their own speed which made it possible for the training activity to cope with participants with diversified backgrounds, abilities and preferences. Another psychological virtue, as one alumnus put it, is "It treats us like an adult person." The general

feeling can best be expressed by one participant of the 10th three-month training programme who wrote on his evaluation sheet :

> My experience has been most stimulating, encouraging and challenging to say the least. Working with self-instructional materials independently at my own unique style of learning, pacing and rate has been a wonderful experience; indeed, it has developed my self-confidence and initiative.

However, the alumni and participants of the on-going training programme felt that the modular approach should be complemented by occasional lectures. While agreeing with this suggestion, the evaluation sub-team would like to point to an earlier suggestion on the necessity of giving an introductory lecture, prior to the treatment of the technicalities of the subject. Furthermore there should be a synthetic summary after the trainees' work in all the subjects. In our judgement, such an introduction and summing-up could be given in the form of lectures by knowledgeable persons either from, or outside of, INNOTECH's training staff.

With its present capacity, the training staff members act as resource persons giving feedback on, or explanations of, the training materials. The evaluators believe that the trainees should be given more. The alumni and the participants of the on-going training course revealed an eagerness to have more information and explanations beyond those covered in the training modules. It seems that many of the incoming trainees have some background in the subjects covered in the INNOTECH course. Undoubtedly, they would expect more than the issues contained in the basic training modules. The sub-team believes that the existing training staff should be strengthened. Ideally, staff members should have an academic background in management science, with special application to social problems, as well as a background in behavioural sciences with special application to social and organizational change.

Evaluative processes in the training should be improved. The evaluators found that the encounters between the training staff and the trainees to discuss post-module works, on which the training staff's evaluation of the trainees was based, did not occur in a productive way.[22] It is suggested that post-module work be regarded as serious business; more attention should be given to it. Intellectual encounters should be encouraged. In this respect, the training staff should be ready to give new information and insights on relevent problems. Evaluation, by its very nature and in its process, should be educational.

Concerning the training duration of three months, the alumni and the participants of the on-going training programme considered it as unnecessarily long and suggested that it be shortened. In principle the sub-team supports this suggestion but at the same time suggests that a decision be made after a careful study of the matter which should take into account other recommendations concerning the training programme.

The three-month training programme was designed for "key educators" and in the recent Revised Five-Year Development Plan the target has been changed to "senior personnel involved in educational management". The sub-team feels that some clarification of this term should be made. First of all, from the discussions with key people and the alumni in the member states, a conclusion was drawn to the effect that key educators are not a realistic target for future training. On the one hand, it was very unlikely that they could leave their posts for a long period of training; on the other hand, theoretically, there would be no more key educators around, still to be trained, now that training courses have repeatedly been conducted by INNOTECH. It is suggested, therefore, that the training programme should aim instead at middle-level administrators. Consequently, the programming aspect of the training scheme should be more emphasized. Programming here means the derivation of a course of action from a given political decision. This emphasis on programming is in line with the main function of middle-level administrator who does not make decisions on policy matters but develops operational plans to put into action, given political decisions. Accordingly, important people from the teacher-training institutes and relevant agencies outside the Ministries of Education should also be invited to attend the training programme.

After returning to their home countries, the impact of the training acquired by trainees would depend mainly on their opportunities to utilize the new knowledge in day-to-day work activities. This implies that trainees with the appropriate positions on the middle level would benefit the most from their training. These are the people who are mostly responsible for conceptualizing developmental work in various branches of the Ministries of Education. Likewise the training obtained by trainees with teacher-training assignments would yield benefit if they are allowed to apply what they have learned in training teachers. The recruitment of trainees, therefore, will have a determinant influence on the effectiveness of INNOTECH training in each member country. The sub-team believes that by designing future training to suit middle-level administrators and teacher-trainers its effectiveness will be increased. In order to secure "appropriate" trainees INNOTECH must send, long in advance, the qualifications required for the training courses. Some member countries complained that in the past they had to make nominations of trainees at short notice.

4.4.3 Short Training Programme. In general the response to the short training programme was very positive. The participants in the programmes felt that the courses were relevant, the proceedings were satisfying and the duration was just right. The results of the last INNOTECH short course conducted in Bangkok in October 1975 on Project Design and Evaluation were very encouraging. Twenty out of the 25 participants agreed that the course was useful to their work. The materials given during the training were very useful. The language spoken by the lecturers was precise enough and easy to understand. All but five participants felt that the number of exercises was adequate. All the participants agreed that twenty-five was just the right number to form a group of learners in the course. However, 16 participants felt that the duration of the training, which lasted only five days, was too short.

The overall evaluation was that the course was successful. The participants concluded that the course was either good or very good. All but four participants suggested that this type of training should be arranged in the future.[23]

The above account shows that a short training course on a well-selected subject and conducted by an able training staff is beneficial. From discussions held in member states the evaluation sub-team concludes that the short training programme is ideal for senior administrators and teacher-educators. One advantage of this type of training is the fact people, who find it almost impossible to leave their posts for a considerable length of time, can attend and benefit from course.

A short training course can also be designed for middle-level people. Whereas, for the senior people, the training course should place more emphasis on its cognitive and affective aspects, the training course for the middle-level people should focus on its cognitive and skill-development aspects. The duration of training for the middle-level people should be from one to two weeks. For the senior people it should be shorter, not exceeding one week.

The content of this training could include new ideas, new approaches, new technology or conventional knowledge which, however, should be updated. Nevertheless, the scope of the course must be limited and it should have a very clear objective. To obtain good results the main training materials should be sent well in advance to trainees so that they can be properly prepared. This preparation is necessitated by the short duration of the course.

4.5 Recommendations

4.5.1 General Recommendations. It is recommended that :

(i) the training programmes should continue to consist of the three existing types, short-term, medium-term and long-term. The existing three-month training programme, however should be studied with a view to shortening its duration. The long-term (covering an academic year) should be a tailored programme leading, if possible, to an academic degree. This programme would have to be operated jointly with a well-regarded teaching institution. The forthcoming six-month training programme on educational research should be elevated to this category and should be designed for senior professionals in the Ministries of Education. In general the key people from teacher-training institutions and relevant entities, such as national planning and research agencies, should be invited to attend the training courses. Furthermore, part of this training could be decentralized. It would be conducted by INNOTECH in the form of in-country training administered jointly with the host countries.

(ii) the recruitment of trainees should be conducted as thoroughtly as possible to obtain trainees with the required qualifications. This being a decisive factor INNOTECH should send, as early as possible, to the member states the necessary informational material. It should contain a detailed description of each course, the qualifications required of participants and the course requirements, including the necessary materials to be prepared by them prior to the course.

(iii) research and training functions which are now separate should remain separate. Concerning the linkage between research and training, INNOTECH's research findings can be used as illustrations in the training process. One cautionary note, however, should be made : the focus of attention should be on the logical analysis of the research procedure rather than on the analysis of the research content. Too much time spent on whether one research project is theoretically justified with respect to its substance should be avoided (the evaluating sub-team feels that such a thing happened to some extent in the three-month training programme). If the trainees need field practice to get a feel about the educational research course, they can be engaged in an on-going INNOTECH research project as trainees and not as research staff members. The trainees' participation in the research projects should be temporary. Their activities should be an integral part of the training process and not as a part of the actual research endeavour.

4.5.2 Recommendations on the Interns Training Programme. The training on educational research as a replacement for the interns training programme should be expanded to one full academic year. An affiliation with a reputable teaching institution should be considered for the purpose of working out a degree programme. This programme should be tailored to suit the needs of the region in the field of educational research.

4.5.3 Recommendations on the Three-Month Training Programme.

(i) The programming aspect of the course should be emphasized. Programming here connotes deliberations leading towards the development of courses of action in achieving the objectives derived from certain political decisions.

(ii) The course subject, Systems Approach Strategies for Change and Evaluation, should be improved.

(iii) Emphasis should be given to having meaningful introductory statements, prior to discussions, in a given course as well as to a summing-up afterwards of the interrelationships among the subjects covered by the course.

(iv) The modular approach should continue but it should be complemented by occasional lectures to be given by knowledgeable persons. These lecturers might come from INNOTECH's training staff or elsewhere.

(v) A study should be conducted as to whether the duration of three months could be shortened after taking into account all suggested improvements concerning the three-month training programme.

(vi) The training staff should be more active in providing new information and explanations beyond areas covered by the training modules. The existing INNOTECH training staff should be strengthened by the addition to it of persons with a background in management science having a special application to social problems. Further, they should have had training or experience in the behavioural sciences with special application to social and organizational change.

(vii) The evaluation in the form of a post-module practicum should be improved. The intellectual encounter part of such practicum should be encouraged and the training staff take initiatives along this line.

4.5.4 Recommendations on the Short Training Programme.

(i) The short training programme should cover significant new ideas, new approaches and new technology. It should also be concerned with a constant updating of conventional knowledge. However, the scope of the course should be limited and the course should be so structured with a very clear objective.

(ii) The programme should be designed for senior education ministry personnel. It could also be designed for professionals in middle-level positions. The former programme should place emphasis on the cognitive and affective aspects of the course whereas the latter should lay stress on cognitive and skill-development aspects.

(iii) The duration of training for middle-level professionals should be from one to two weeks and for the senior people it should not exceed one week.

(iv) The main materials to be used in the training course should be sent to trainees long in advance, so that the participants would be appropriately prepared.

5. Publications, Information, and Special Services

5.1 Clearing House and Information

5.1.1 Objectives. This INNOTECH division has a double objective. It is expected to provide information to member countries about research, innovations, educational experimentation, and utilization of educational technology in progress within and outside the region. They also are to establish linkages between the regional Centre and national centres, institutions, agencies and individuals within and outside the region.

5.1.2 Implementation and Outcomes. First of all, it is worth noting that the resources allocated to the Division of Clearing House and Information has been very limited until 1975. For example, in the 1973-74 budget, this division was alloted the sum of $24,000 which was less than 7% of the operational costs. Its staff was limited to six persons all together as shown in the Saigon staff chart.

As regards information, the emphasis has been put essentially on disseminating the basic ideas of the INNOTECH concept and on their dissemination through a monthly publication entitled "INNOTECH Newsletter" which has been published since 1972. It is a newspaper of about 10 pages, generally containing basic papers on the INNOTECH viewpoints, status reports on the ongoing projects (IMPACT, RIT). Educational projects under study or being implemented, in the various SEAMEO countries, might suggest topics that could be published in the newsletter. Exceptionally interesting educational projects in other parts of the world might be published in the Newsletter. About 2,000 issues of this publication are distributed in SEAMEO countries.

The communication effort was very limited. The collection and classification of information have not been systematically organized. However, INNOTECH did exchange information with some educational institutions, agencies and organizations, both national and international. A certain amount of information was stored in its Saigon clearing house library but it was not clear whether a methodical procedure to move this information has been adopted to benefit member countries.

5.1.3 Discussion. Following research and training, information is considered by the member states as the third most important programme activity of INNOTECH. They expect to be informed about the latest educational developments inside as well as outside the region. The area to be convered should include new ideas, new approaches, new technology and new practices of educational endeavour. Reprinted materials could be sent by INNOTECH to the member states. Other INNOTECH media for dissemination purposes include a journal, a review, a newsletter, monographs, and occasional papers.

Concerning education in the region, some member states had expressed their desire to have more information about major educational research and developments in the other states. The evaluation sub-team feels that this objective can be attained if appropriate experts to write a special report for INNOTECH could be invited to do the task. In the past, materials such as Self-Help Barrio High School, Setting Priorities among Educational Objectives, etc. were published. The former dealt with innovation in managing barrio high schools in the Philippines and the latter dealt with a method of setting educational priorities in Indonesia.

The INNOTECH Newsletter was published with the following objectives : First, to collect and disseminate information on new educational developments in the region; second, to disseminate information on relevant new developments outside the region; third, to inform educators in the region of INNOTECH's new concepts and activities; finally, to promote awareness and credibility of INNOTECH. At present the INNOTECH Newsletter is the only periodical which INNOTECH uses as a medium of communication with educators in the member states. Unfortunately, the readers of the INNOTECH Newsletter felt that the first and second objectives have never been satisfactorily attained. Since these objectives are important from the information dissemination perspective the evaluating sub-team suggests that more attention be given in that area by INNOTECH.

Another important facet of the INNOTECH Newsletter was the mailing list. The first edition of the Newsletter was published in 1972 with 1,500 copies. The peak of circulation was reached in 1973 with 5,000 copies. However, out of the 1,700 copies of the January 1976 edition 500 copies were found undistributed. This large left-over is due to the use of an incomplete mailing list, the old mailing list having been left in Saigon.

Publication and information exchanges with relevant institutions should be increased, for example, with UNESCO - APEID and the International Bureau of Education (IBE) in Geneva. UNESCO - APEID in Bangkok has just finished an inventory of educational innovations in India, Indonesia, Japan, the Republic of Korea, Nepal, the Philippines and Thailand. Approximately a dozen more national inventories are being prepared. The IBE and, expecially, the International Educational and Reporting Service work extensively on educational information exchanges. Another similar activity is done by ERIC in the United States.

5.1.4 Recommendations. INNOTECH should endeavour to :

(i) Publish occasional papers, reviews, monographs, etc., as media of communication in disseminating information about the latest educational developments inside or outside the region.

(ii) Publish special reports on major educational developments in the region by inviting for this purpose appropriate experts from the member states.

(iii) Give more attention to the first two objectives of the INNOTECH Newsletter and reconstruct the mailing list.

(iv) Establish working relationships on information and publication exchanges with relevant entities such as UNESCO-APEID, IBE, IERS and ERIC.

5.2 Publications

5.2.1 Objectives. The main purpose of Publications was to publish, on one hand, the results of INNOTECH research studies, and on the other, INNOTECH's essential ideas regarding the renewal of education in Southeast Asia.

5.2.2 Implementation and Outcomes. INNOTECH published :

- The weekly Progress Report of the Activities of Centre.
- The final Reports of Research Projects.
- Reports on seminars meetings or workshops.
- Books on studies and conferences about educational problems (for example Clear) : selected educational projects in SEAMEO Countries.

Apart from periodical reports, 26 separate publications were produced from 1970-1976 and distributed to the member countries.

5.2.3 Discussion. The evaluating sub-team found that part of INNOTECH publications did not reach some interested readers as also appropriate end-users in the member states especially those in charge of educational planning, research and development. After being shown the list of INNOTECH publications, most of these people said that they had never heard of or received the publications. They, however, expressed their wish to have them. The sub-team feels that this situation is unfortunate and that the present procedures for disseminating publications should be improved.

Under the present system INNOTECH communicates directly with the Ministries of Education of the member states. Six copies of research reports are sent to the offices of the Ministers to be used as appropriate. Ideally, these offices should distribute them to the relevant people, but since six copies are not enough the publications could be reproduced if so desired. The sub-team found that none of the member states had done this. Finally even the six original copies of the reports sent out often did not reach the interested people.

Some interviewees feel that INNOTECH publications should be sent not only to the decision-makers in the government but also to the academic people in the relevant teaching institutions such as teacher training institutes. These are the people whose actions can influence changes and innovations.

The importance of establishing relationships with teaching institutions is obvious in relation to the requirement stipulated in the Five-Year Development Plan that INNOTECH will publish bulletins, journals and/or occasional papers. The success of INNOTECH's new publication venture will depend very much on how well INNOTECH is establishing working relations with academic people to obtain from them materials for publication.

INNOTECH findings should be sent to international, regional and national journals of the member states to effect a more widespread dissemination. Needless to say the INNOTECH journal is the appropriate medium for this purpose. It should be emphasized, however, that a careful mailing list should be prepared in order to guarantee the journal's wide circulation.

5.2.4 Recommendations.

(i) In addition to sending publications to the Ministries of Education such publications may be sent directly to appropriate people and institutions throughout the member states. The target audience include decision makers, administrators, and professionals in Ministries of Education, especially those who are responsible for planning, research and development in education. Important research and teaching institutions, including teacher-training institutions, should be added to the INNOTECH mailing list. The sub-team had discussed this idea with the key people in the member states and it

had been well received. However, many technicalities have to be worked out on such matters as protocol and quotas. It is suggested that this question be reviewed in a Governing Board Meeting.

(ii) INNOTECH should established working relationships with important and well-regarded teaching institutions by regularly sending them INNOTECH publications. Their feedback should be sought as well as their contribution in the form of articles for publication.

(iii) INNOTECH should publish reports on INNOTECH work in appropriate international, regional and national journals in the member states as well as in other relevant scientific media.

5.3 Special Services (Seminars, Conferences and Meetings; Technical Assistance; etc.)

5.3.1 Objectives. Seminars and conferences of INNOTECH have naturally been focussed on problems related to INNOTECH activities. Some dealt with issues of conceptual development as well as with research and development plans.

INNOTECH's main purpose is to provide assistance, as regards the development of education and technical innovation in member countries, either by lending qualified staff, or by providing advisory services.

5.3.2 Implementation. The seminars and conferences were conducted on the initiative of either the Secretariat or INNOTECH. The approach was quite pragmatic without any systematic order. Within five years there were no less than 10 meetings which included a small workshop to a large seminar with more than 50 participants. Two of these meetings have been of the greatest importance to the evolution of INNOTECH's educational concepts namely, the Regional Practicum on Alternatives in Education in 1972 and Delivery of Mass Primary Education in 1973.

During its six years of existence, INNOTECH has occasionally provided technical assistance of a functional character. In this respect, one can note, in fact, fewer instances of technical assistance than the frequency of participation of INNOTECH staff members in seminars or workshops organized by member countries.

The member states felt that only limited technical assistance was given by INNOTECH in the past. They have expressed a desire to have more assistance in the future, especially on national educational problems and on developing research proposals. INNOTECH assistance was also requested in in-country training schemes and in the evaluation of research projects.

5.3.3 Discussion. Exchanges of personnel are also viewed as very desirable. They should include study visits to major research and development projects in other member states. Provisions for some personnel exchanges are financed by Special Funds.

5.3.4 Recommendations.

(i) Notices for meetings and important materials to be discussed at such meetings should be sent as early as possible to the member states.

(ii) INNOTECH should provide consultancy services on technical materials to the member states in the fields of identification of national educational problems, conducting of in-country training schemes and evaluation of research projects.

(iii) INNOTECH should arrange for more personnel exchanges, utilizing Special Funds for the purpose.

FOOTNOTES

CHAPTER 4

1. The Constitution of the Regional Centre for Regional Education and Technology.
   (First Meeting of the INNOTECH Interim Governing Board, October 1969)

2. In Proposed Development Plan, KUALA-LUMPUR, January 1970 - p.7

3. Teacher Training and Development Methods, Evaluation and Institutional Media.

4. These figures include only the total of operating funds and special funds and exclusive the capital cost: by the reason of the successive changes in the location, this cost shows meaningless variations from one year to the other.

5. The overall objectives of IMPACT are outlined in the following documents:

   Research Planning Document: Setting Priorities for INNOTECH Research on the Delivery of Mass Primary Education, INNOTECH, Singapore, April 10, 1973

   Technical Proposal: Delivery of Mass Primary Education in Rural Southeast Asian Communities. SEAMEO, September 10, 1973.

   Project IMPACT: Initial Planning Document, INNOTECH, Saigon, December 14, 1973.

   where the main characteristics of IMPACT can be summarised as follows:

   (1) Education is based in a Community Learning Centre in each village.

   (2) Community resources are effectively utilized in the learning and managerial process.

   (3) Teachers are replaced by Instructional Supervisors to manage Community Learning Centre activities.

   (4) Student-teacher ratio is expected to reach as high as 200 : 1.

(5) Learning primarily is achieved through a variety of activities with minimum teacher involvement (including self-instruction, peer-group learning, teaching of special skills by community members and tutoring as well as programmed-teaching by older students.)

(6) Learning is modular and self-paced.

(7) Parents are given the responsibility for insuring that their children undertake appropriate learning activities.

6. In the Memorandum of Agreement between INNOTECH and the Government of Indonesia the managerial arrangement is stipulated as follows :

(1) Both administratively and technically the project will be managed jointly by BP3K and INNOTECH through their duly appointed officers.

(2) The Surakarta project PAMONG budget shall be planned jointly by INNOTECH and BP3K. INNOTECH shall notify the Project Director of the approved budget. BP3K shall be informed of funds transfers from INNOTECH to project PAMONG.

(3) BP3K shall consult INNOTECH on major technical decisions and through its duly authorized officer shall give direction, supervision, and monitoring on the project in light of decisions agreed by both parties.

(4) The project Director shall send the report on the project directly to both BP3K and INNOTECH.

(5) The Project Director is responsible to BP3K and INNOTECH.

(6) The Ministry of Education and Culture of the Repu lic of Indonesia agrees to:

a. Insure that the Republic of Indonesia act as a host country to the SEAMEO INNOTECH Project IMPACT.

b. Assist in recruiting for INNOTECH two senior persons to serve as Project Director and Project Associate.

c. Provide a minimum of nine full-time professional staff member paying base salaries of said members and insuring that they continue to enjoy the basic priviledges/rights, salary, tenure, promotion, etc. provided under existing civil services laws and regulation. Professional staff members will be released from other duties to serve the project full-time. The areas of expertise and the duties of the various professional staff member shall be arrived at by common agreement and, as such, need not be specified in this Agreement.

d. Assist in the selection of supporting and secretarial staff.

e. Provide adequate office space, furnishings, maintenance, utilities and telephone for the professional and support staff.

f. Provide gasoline and oil for the operation of project vehicle(s).

g. Assist in the selection of, and co-ordination with, rural communities as sites for Project IMPACT development and tryout.

h. Act on behalf of the Project in securing the understanding and assistance of local, regional and national offices and authorities.

i. Pay all host country costs associated with the functioning of the Steering Committee.

j. Use its offices to facilitate duty and tax free purchase or equipment.

(7) The INNOTECH agrees to:

a. Secure necessary funding and develop and maintain a project budget.

b. Pay full salaries of the Project Director, the Project Associate and the supporting and clerical staff.

c. Pay honoraria to professional staff members seconded to the project by the Department of Education e.g. teachers, consultants, administrators and others as agreed upon by both parties.

d. Pay for equipment and vehicle(s) purchased for the project.

e. Pay for necessary supplies, publication costs, communications and shipping and travel of project and INNOTECH's staffs.

f. Pay for equipment repair and maintenance.

(8) Additional support may be provided by the Department of Education or INNOTECH without Amendment to this AGREEMENT.

(9) INNOTECH shall be informed by the Project Director of supports from the host country (financial, services, equipment, accommodation, etc.)

7. In the Memorandum of Agreement between INNOTECH and the Government of Philippines the managerial arrangement is stipulated as follows:

(A) The Department of Education agrees to:

(1) Insure that the Republic of the Philippines act as a host country to the SEAMEO INNOTECH Project IMPACT.

(2) Assist in recruiting for INNOTECH two senior persons to serve as Project Director and Project Associate.

(3) Provide a minimum of nine full-time professional staff members, paying base salaries of said members and insuring that they continue to enjoy the basic privileges/ rights, salary tenure, promotion, etc. provided under existing civil service laws and regulations. Professional staff members will be released from other duties to serve the project full-time. The areas of expertise and the duties of the various professional staff members shall be arrived at by common agreement and, as such, need not be specified in this Agreement.

(4) Assist in the selection of supporting and secretarial staff.

(5) Provide adequate office space, furnishings, maintenance, utilities and telephone for the professional and support staff.

(6) Provide gasoline and oil for the operation of project vehicle(s).

(7) Assist in the selection of, and co-ordination with, rural communities as sites for Project IMPACT development and tryout.

(8) Act on behalf of the Project in securing the understanding and assistance of local, regional and national offices and authorities.

(9) Pay all host country costs associated with the functioning of the Steering Committee (see article VII).

(10) Use its offices to facilitate duty and tax free purchase of equipment.

(B) The SEAMEO INNOTECH Centre agrees to:

(1) Consult with appropriate Department of Education officials on major policies or decision related to the project.

(2) Provide technical supervision of the project.

(3) Secure necessary funding and develop and maintain a project budget.

(4) Pay full salaries of the Project Director, the Project Associate and the supporting and clerical staff.

(5) Pay honoraria to professional staff members seconded to the project by the Department of Education.

(6) Pay for equipment and vehicle(s) purchased duty and tax free.

(7) Pay for necessary supplies, publication costs, communications and shipping travel of project and INNOTECH staffs.

(8) Pay for equipment repair and maintenance.

(C) Additional support may be provided by the Department of Education or INNOTECH without Amendment to this Agreement.

8. The Report of INNOTECH Task Force of Evaluation on IMPACT (Bangkok; INNOTECH, April 1976)

9. Attached here the letter from the INNOTECH sub-team to INNOTECH Director prior to the re-planning exercise conducted in Bangkok from 16 to 19 June 1976:

June 15, 1976

Dr. Liceria B. Soriano
The Director of INNOTECH
Bangkok
Thailand

Dear Dr. Soriano:

It is indeed a pleasure for me to outline the basic issues on the IMPACT project. Needless to say at this juncture, I have not been able to provide you with the complete report. However, recognizing the importance of the re-planning session to be conducted from 16 to 18 of June, herewith I would like to make the following recommendations:

1. Re-planning sessions should be conducted regularly by involving the field researchers in Solo and Cebu;

2. Continuous evaluations of the project should be conducted periodically, in the form of self-evaluation and external evaluation. Re-planning sessions should be based on the findings of the evaluation teams as well;

3. Technical assistance should be given by INNOTECH in the following fields:

   3.1 Project evaluation (including Cost-Effectiveness Analysis to enable the researchers to conclude whether one alternative is less or more economical than the others):

   3.2 Modular writing;

   3.3 Management of the Community Learning Centre and

   3.4 The Conceptual development of promoting community participation in the IMPACT process;

4. It is felt that point 3.4 above needs serious attention since there are several questions to be answered academically and practically. The questions are centred around the conceptual development of how to intervene in the community to seek its participation. It involves an in-depth study of the nature of human motivation and how to develop an intervention stategy based on people's motivation, to seek their participation in the IMPACT process. Managerial machinery eventually should be developed in utilizing the community resources, including incentives. I agree wholeheartedly with the recommendation

of the INNOTECH Task Force to apply "newer approaches and techniques for the development and use of local effort in the operation of community learning centres, e.g. institution approach, a reciprocity service scheme and the like". However, these approaches must be based on the result of the study of the people's motivations aspirations.

5. In financial management, a revolving fund could be provided in the existing financial scheme. This arrangement would provide a certain amount of money to be replenished periodically, e.g. two or three months without waiting for the complete auditing of the latest expenditures. I believe that this arrangement would avoid the financial gap due to the time-consuming process of auditing.

A complete report on INNOTECH will be worked out by the evaluation team in July in Bangkok. In the meantime please accept my best wishes for the INNOTECH success.

Sincerely yours,

Jujun S. Suriasumantri
The External Evaluation Team of
the SEAMEO Units

cc. 1. Team Leader
2. Mr. Jean Binon

10. In the Self-Evaluation Report of 1973, the objectives for the Interns Training Programme are as listed below:

(a) To development attitudes and skills needed by educational innovators.

(b) to train skilled and knowledgeable people for possible service at the National INNOTECH Centres and at the Regional INNOTECH Centre.

(c) to translate into action programmes the ideas gained from the Centre.

(d) to familiarize participants with educational technology such as data processing, programming and related matters.

(e) to gain expertise in research methodology and its applications.

11. The qualification were (1) a bachelor's degree or better in education, educational psychology and the school or behavioural sciences; (2) proficiency in English; (3) high scholastic records and (4) interest in research.

12. This problem had been exposed in the 10th Governing Board Meeting (page 14):

> Although INNOTECH has sent to all member countries a list of the qualifications required for the participants, a study of the qualifications of these people sent indicates that they come with a wide range of qualifications and experience. This is one of the problems most strongly felt in conducting the training course.

13. A.S. Munandar, "The Interns Programme 1971-1972; A 4-Month Report, July-October 1971", the 5th Governing Board Meeting, pp. 60a-70a.

14. The 5th Governing Board Meeting, p. 80

15. The 5th Governing Board Meeting (p. 80) report:

    The interns wanted a more structured programme. Their impression was that the programme had been prepared on an ad hoc basis rather than on a long range basis.

16. The 6th Governing Board Meeting, p.7a

17. Ong Teong Wan, "An Evaluation of the Interns Training Programme 1970-1971", in the 5th Governing Board Meeting pp. 50a-55a.

18. The original Five Year Development Plan was published in Saigon in July 1974 and it had just been revised during the 13th Governing Board Meeting in April 1976.

19. Tassaniya Punyodiana, "The Ninth Three-Month Training Course in Restrospect: The Participants' Apprasisal," unpublished working paper, INNOTECH, October 1975.

20. From a more detailed analysis of the 10th training programme, the INNOTECH sub-team could draw a conclusion that most of the subjects given in the training were mastered by the participants. Most of them rated "very well" or "well" in the subjects of "systems model building", "problem identification", "formulating objectives", "identify resources and constraints", "generating innovative solutions", and "designing strategies for change". The overall picture of

this mastery of the subject was later corroborated during the discussions with the participants of the 11th training programme and the alumni. An analysis of the 9th training programme revealed the same picture as well. (See table on the following page)

21. The first rraining programme was designed as a work programme and not a study programme. The participants were regarded as INNOTECH temporary staffs engaged in the INNOTECH research project i.e. CLEAR, ACTION and PROGRESS. Lecture was given although it was regarded more as a supplement and reinforcement than as the primary mode of instruction. However, it turned out that the lecture method was not effective, hence training was gradually shifted to the use of modular approach in the form of self-instructional materials. The first self-instructional materials were developed by the INNOTECH staff with the help of interns of the Third Interns Training Programme. As touched upon earlier, the linking of research and training activities had been discarded upon the termination of the Third Interns Training Programme; henceforth the Three-Month Training Programme was continued but simply as a pure training programme using the modular approach.

22. In the evaluation procedure a first post-test was conducted to determine trainees' achievement. Afterwards this approach was eliminated because it was too secretive, relied too much on memory and did not adequately measure the acquired skills. A post-module practicum was then introduced in which what the trainees had learned was applied in solving practical problems. It consisted of individual practica comprising the members from the same country (around 6) and cross-country practica where members from the different countries grouped together to work on their common problems (around 2).

An Evaluation of 23 out of the 25 Participants of the 10th Three-Month Training Programme on How Well They have Mastered the Specific Subject of the Course

Subjects	How Well Mastered?			
	Very Well	Well	A Little	None at all
1. Systems Model Building	17	5	1	-
2. Problem Identification	10	13	-	-
3. Formulating Objectives	11	11	1	-
4. Identifying Resources and Constraints	11	12	-	-
5. Generating Innovative Solutions	10	10	3	-
6. How to Evaluate Tryout Project	3	7	13	-
7. Setting Priorities (VC Method)	2	11	9	1
8. Designing Strategies for Change	4	15	4	-
9. Planning, Control and Scheduling Projects	3	11	7	2

Source : 23 Evaluation Sheets of the 10th Three-Month Training Programme

23. Evaluation sheet filled out by the participants of the Second IRROTECH Short Course on PROJECT DESIGN and Evaluation, Bangkok, 6-10 October 1975, attended by 25 participants depicted the following summary :

QUESTIONS	ANSWERS										
	Very useful	Moderately Useful	Useful	Too short	Yes	Just right	Very good	Good	Not enough	Very precise and easy to understand	English
1. Is the workshop useful to your work?	20	5									
2. The duration of the workshop is				16		9					
3. Should another workshop of this type be arranged?											
3.1 For your-self					21						
3.2 For your friends					22						
4. The materials given by the lecturer are	20	1	4								
5. The result of the workshop is							14	11			
6. The members of the workshop are						25					
7. The number of the exercises is						20			5		
8. The lecturer's explanation is										24	
9. The language of the workshop should be											25

REFERENCES

CHAPTER 4

Basic References

All of the Centre's official publications were consulted such as the Final Reports of the thirteen Governing Board Meetings, the Centre's Annual Reports and its Enabling Instrument. In addition, the following publications were consulted for this chapter:

Slattery, T. Review of SEAMEO Centre Self Evaluation Reports (Bangkok, SEAMES, September 1973).

SEAMEO Regional Centre for Education Innovation and Technology : Answers to Guidelines of self-Evaluation (n.p. : n.d.)

American Institute of Research, Technical Advisory Services to INNOTECH (Washington, D.C.: AIR, June 1975)

- Progress of Education in the Asian Region - UNESCO - Regional Office Bangkok 1975
- A Study of Non-Formal Education in the SEAMEO Region (SEAMES Bangkok 1974)
- Summary of Major Accomplishments - Problems and Trends (Bangkok - March 1976)

Special References

Section 1

Beside the general documents quoted here above, one has to note :

- Proposed Development Plan KUALA LUMPUR (January 1970)
- Five Year Development Plan SAIGON (July 1974)
- The Third Year of Operation in SINGAPORE - Progress Report by Chanh Due - (November 1972)
- Annual Report 1974
- Revised Five Year Development Plan BANGKOK (1976)
- INNOTECH Programmes and Activities BANGKOK (1975)

Section 3

3.2 - INNOTECH Concepts - INNOTECH SINGAPORE 1971

- Project RIT for Mass Primary Education - Progress Report N°1 (August 1974)

- Plans for continuing Project RIT BANGKOK 1975

3.3 - Research Planning Document : Setting Priorities for INNOTECH Research on the Delivery of Mass Primary Education SINGAPORE : INNOTECH, 10 April 1973

- Technical Proposal : Delivery of Mass Primary Education in Rural Southeast Asian Communities (Bangkok : SEAMEO, 10 September 1973).

- Project IMPACT : Initial Planning Document SAIGON : INNOTECH, 14 December 1973

- Memorandum of Grant Conditions for Project IMPACT (attached to letter of January 22, 1974 from IDRC to SEAMES).

- Memorandum of Agreement on Project PAMONG (INDONESIA).

- Memorandum of Agreement on Naga Project IMPACT (PHILIPPINES)

- Report of the INNOTECH Task Force on the Evaluation of Project IMPACT (Bangkok : April 1976).

- Periodical Reports on IMPACT.

Section 4

- Modules used in the BANGKOK training courses

- Punyodyana, Tasaniya, "The ninth Three-Month Training Course in Retrospect : The Participants' Appraisal", unpublished working paper (BANGKOK : INNOTECH, October 1975).

- Ong Teong Wan, "An Evaluation of the Intern Training Programme 1970-1971", Final Report of the Fifth Meeting of the INNOTECH Governing Board Meeting (SINGAPORE : INNOTECH, November 1971). pp. 50a-55a.

Section 5

INNOTECH Newsletters

- Volume I : Covers October 1972 to May 1973
- Volume II : Begins in October 1973 and continues for a full 12 months through september 1974
- Volume III : Covers October 1974 through February 1975, and following the relocation to BANGKOK was begun anew in June 1975.

Seminars

- Regional Practicum on Alternatives in Education SINGAPORE 1972
- AED/INNOTECH Seminar of Educational Technology 1972
- Approaches to Effective and Economical Delivery of Mass Primary Education SINGAPORE March 1973.
- SEAMEO/DSE Seminar on the problems of :
  - Promotion and Production of Educational Materials in Southeast Asia SINGAPORE 1973
  - Use of Community Resources for Providing Low-Cost Primary Education SAIGON 1973.

CHAPTER 5

REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS

1. Introduction

1.1 Purposes

In accordance with Article IV(10) of the Charter of SEAMEO, the Council of the Organization established the Regional Centre for Education in Science and Mathematics (RECSAM) at Penang, Malaysia, for the purpose of assisting member states to improve the teaching of science and mathematics in their respective countries and to that end, to undertake research, publications, and training programmes and other related activities within and outside Malaysia. The Centre was also charged with the responsibility of striving to achieve the aims of the Organization as laid down in its Charter.[1]

1.2 Location

RECSAM is located at Glugor, Penang, Malaysia, and its buildings adjoin those of the Malayan Teachers' College. It has its own hostels and temporary block for administration, teaching, recreation and dining, but rents some facilities from the Malayan Teachers' College. The new building is scheduled for completion by December 1976. This will enable the temporary administration and teaching rooms block to be converted to provide recreational and study facilities for participants.

1.3 History

In July 1966 at a technical workshop convened in Kuala Lumpur, delegates from SEAMEO countries agreed that member countries should support a regional centre for the training of key teachers in science and mathematics to be located initially at the Malayan Teachers' College, Penang, Malaysia.[2]

RECSAM was inaugurated in May 1967, with the first meeting of a Steering Committee consisting of two representatives from each SEAMEO country and chaired by the Director of Teacher Training of the Malaysian Ministry of Education. This Committee provided policy guidelines and information about regional problems and training needs for the interim phase of RECSAM which extended to June 1970.[3]

The first Five-Year Plan of RECSAM's permanent phase of operation (July 1970 - June 1975) was approved at the Fourth Ministerial Meeting of SEAMEO in Jakarta in January 1969. It detailed the goals and objectives for the Centre and provided guidelines for its organization, programmes, staffing, and capital development.[4]

Responsibilities for the funding of RECSAM by the three principal parties involved in its development - Malaysia, United States and SEAMEO - were agreed in a Memorandum of Understanding signed on 12 June 1969.[5]

The first professional venture of RECSAM, an Inter-Regional Project[6] conducted with BIOTROP in Indonesia, was held in June 1969; its first permanent director was appointed as from 1 January 1970 and its first Governing Board[7] meeting was held in October 1970.

A formal agreement[8] giving RECSAM its legal personality, autonomy, privileges and immunities was signed by the Government of Malaysia (GOM) and SEAMEO on 15 January 1972. In the same month, the Council of SEAMEO adopted enabling resolutions which are intended as the sole source of any authority or rights of this branch of the Organization.[9]

During the Interim Period and the first Five-Year Phase, the Centre conducted 68 training and research courses for over 900 teaching personnel from Southeast Asian Countries,[10] it initiated two pilot projects concerned with teaching science and mathematics in the region - Southeast Asia Science and Mathematics Experiment (SEASAME) and Concept Learning in Science and Mathematics of Southeast Asian Children (CONCEPT), it had moved into its first permanent buildings adjoining the Malayan Teachers' College, and it had appointed a professional staff drawn mainly from the SEAMEO countries and supplemented by resident specialists appointed under technical assistance programmes of Australia, Canada, Denmark, France, New Zealand, United Kingdom and United States.

Planning for the Second Five-Year Plan (1975-1980) was launched by a Regional Review Seminar in June 1973 and culminated in the adoption by the SEAMEO Council in January 1975 of the proposals in "Approved Courses on Training Research and Development."[11] Funding for this phase was agreed between the Government of Malaysia and SEAMEO in a Memorandum of Agreement[12] and signed on 13 June 1975. During this phase a total of 71 courses of ten-weeks duration will be conducted for some 880 participants. Other aspects of the programme, including short-term workshops and seminars for influential educators, the SEASAME and CONCEPT learning projects, and the development of Self-Instruction Modules (SIM) for course participants, will be continued.

1.4 Functions

The Centre limits its concerns to the elementary and secondary school levels in carrying out the main purpose cited above. Its functions are:

(a) Offering of short-term non-degree training courses for senior personnel who are or are expected to be in responsible positions in the conduct of pre-service and in-service programmes and curriculum development activities at the national level;

(b) Conduct of research and development projects relating to the training programmes, evaluation methods, and the production of low-cost prototype equipment and teaching aids;

(c) Service as an information centre and clearing house;

(d) Organization of regional workshops and seminars; and

(e) Provision of special and consultative services to member countries upon request.

1.5 Relationships with Other Institutions

1.5.1 Formal Relationships. The formal ties between RECSAM and SEAMEO and its agencies are fully documented and are examined in other chapters of this report. RECSAM has also developed well-defined associations with the Ministries of the member countries so that obligations concerning the reciprocal exchange of information and the selection of participants can be met. A special formal agreement[13] between RECSAM and the Government of Malaysia, since Malaysia is the host country, was drawn up by SEAMEO and signed in January 1972. Formal arrangements are aslo made between RECSAM and the Malayan Teachers' College for the rental of facilities.

1.5.2 Informal Relationships. RECSAM has established informal links with the various national centres that have been established by the Ministries of member countriesfor the development of mathematics and science teaching. These links are maintained by exchanging information and materials, by visits to the centres, and by virtue of the fact that in some cases, personnel serving in the centres are members of the Governing Board of RECSAM.

Links with universities and teachers' colleges are not as well defined as those for the national centres, and depend largely on the maintenance of personal professional friendships. The exceptions are the Education Faculty of the University of Malaya which has formed a close liaison with RECSAM in connection with the development of SEASAME and the Universiti Sains Malaysia which has co-operated with RECSAM in conducting seminars, it has made its computer facilities available for some special projects and its language laboratory for improving the English proficiency of some participants.

RECSAM also keeps in close touch with the National Committees set up in member countries to oversee the trials of SEASAME materials.

1.6 Funding

Funds for operating costs during the interim period from 1967 to 1969 were obtained from external aid sources. Support services and facilities were provided by the Malayan Teachers' College. The funding scheme for the first five years (1970-1975) of permanent operations was laid down in the Memorandum of Understanding of 12 June 1969 mentioned above. The U.S. Government shouldered the expenses for construction, equipment and advisory services of its experts; the GOM provided for operational costs, purchase of equipment, and the expenses for technical and professional services; and SEAMEO supplied the special funds for scholarships, research support, and the conduct of seminars, conferences and meetings of the Governing Board.

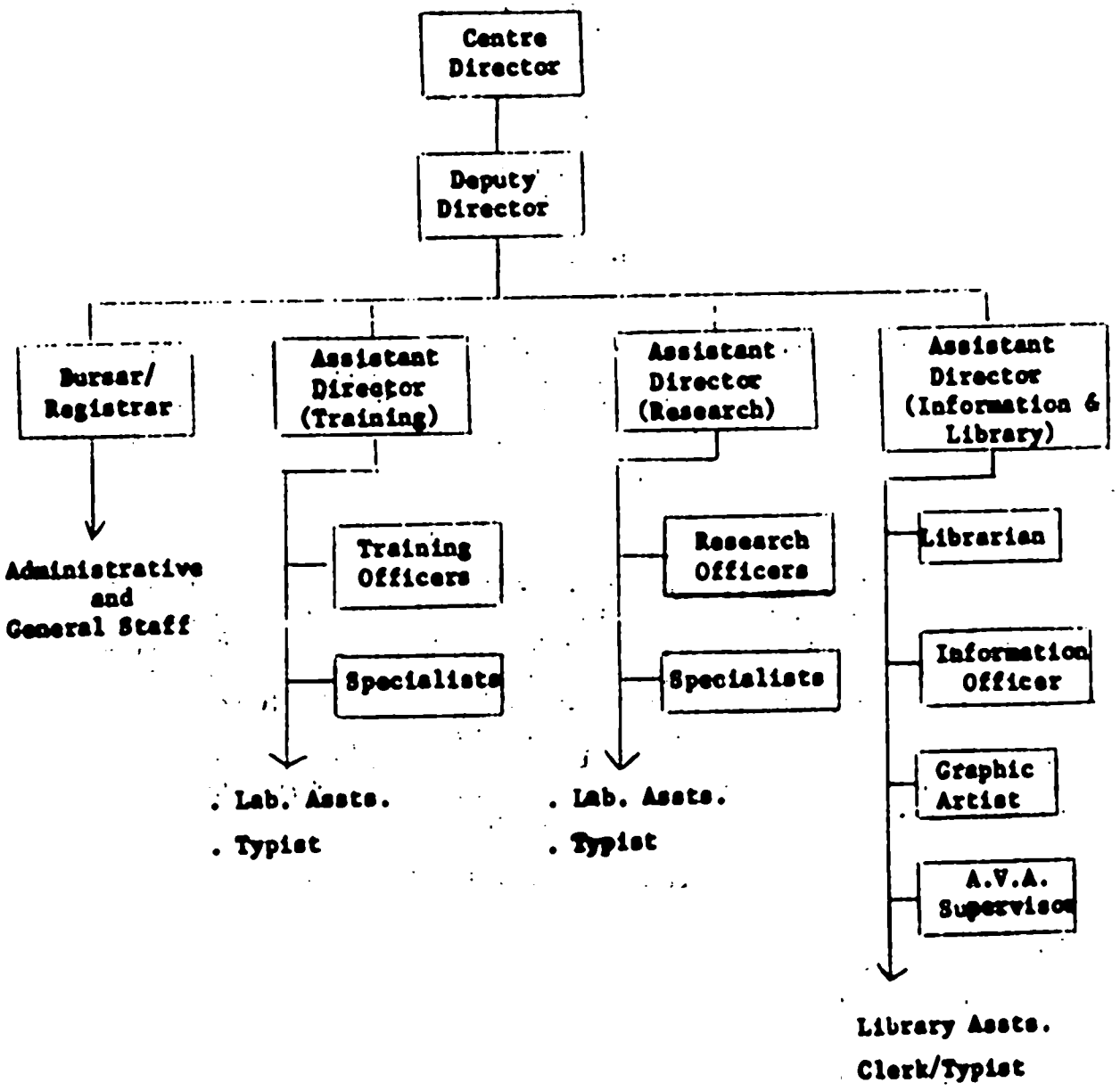
The breakdown of funds used by RECSAM for operational costs, capital costs and special purposes for the period 1967 to 1975 is shown in Table 1 in the Annex by year and by source obtained. Services and benefits obtained in kind from different sources for the same period are included in the footnote.

For the second five-year period of operation (1975-1980), the Council, at its Tenth Ministerial Conference in Baguio City, Philippines, in January 1975, approved a programme and funding scheme. On the 13th of June 1975, the GOM and SEAMEO signed a Memorandum of Agreement on the Operation and Funding of RECSAM for the second period. GOM would take are of operating costs while SEAMES would provide the special funds for scholarships, seminars and conferences, meetings of the Governing Board, and personnel exchanges. Sufficient funds were also pledged by the GOM and the U.S. Government for the completion of the construction of the Centre building. The construction was begun in May 1965 and is expected to be finished in December 1976, at a total estimated cost of US$2,090,900.

1.7 Administrative Structure

RECSAM is an autonomous institution established by the Council of SEAMEO, with the co-operation and support of the Government of Malaysia. It is administered by a Director under the guiding policy of the Council of SEAMEO, channelled through a Governing Board composed of two representatives from each of the member countries. Some member countries have set up national co-ordinating committees to relate the activities and plans of their national institutions for developing the teaching of science and mathematics to the programmes of RECSAM.

The staff of RECSAM is organized according to the following organization chart:[14]



2. Procedures for External Evaluation Study

2.1 Design of the Study

This evaluation study is based on the rationale that RECSAM was established for the purpose of designing and implementing programmes to achieve a set of objectives agreed by the representatives of member countries. The purpose of the study is to identify the outcomes of these programmes and to indicate the extent to which they meet the agreed objectives.

An equally important aspect of the study is the evaluation of the objectives themselves with the aim of assessing their suitability for meeting the goals of RECSAM and the changing needs of the region. Similarly, it is important that consideration is given to the quality of the plans formulated and the manner in which they are implemented, especially bearing in mind the use that is made of available personnel and resources.

Finally, there is the evaluation of the processes by which the objectives are agreed, the needs of member countries and participants are ascertained and the programmes are planned, and the mechanisms that have been set up by RECSAM itself for monitoring all phases and components of the operation.

2.2 Collection of Information

The basic technique used to gather information for the study was to distribute questionnaires to a sample of each of the various categories of people associated with RECSAM and, wherever possible, to follow up these questionnaires with personal interviews. To supplement this information, interviews with high officials in the Ministries of Education of each of the member countries were conducted, and a careful study was made of all documents relevant to the investigation. At some of these interviews the leader and assistant leader of the SEAMEO External Evaluation Team were also present.

Questionnaires were sent to all SEAMEO desk officials in the Ministries of Education, to all Governing Board members and to 205 former participants at RECSAM courses. Responses were received from three desk officials, from all Governing Board members and from 81 former participants.

Interviews, based on a schedule of questions and issues, were conducted with three desk officers - two of whom had completed the questionnaire, with all Governing Board members except one, with the senior professional officer in the Ministries of three countries, with three directors of curriculum centres, with four professors of science and mathematics, with a professor from the education faculty of a university, with two former members of the RECSAM staff, with twelve members of the present staff, with twelve participants of the courses

ending on 24 June 1976, with the librarian and her staff, with the finance officer, with members of the staff of two teachers' colleges, and with the programme and finance officers of the Secretariat of SEAMEO.

Senior personnel of the staff of RECSAM who were interviewed included the Director, with whom extensive discussions were held, the Deputy Director, the Assistant Director (Research), the Assistant Director (Training), and the Assistant Director (Information).

A record was kept of the responses of all people interviewed.

A tour was made of all buildings at RECSAM and short visits were paid to the library, workshops, laboratories, classrooms, hostels and equipment storerooms.

To provide the external evaluation team with additional information in a summarised form, the Director of RECSAM had prepared two documents entitled, "Significant Development of the Regional Centre for Education in Science and Mathematics Since its Inception in May 1967"[15] and "A Short History of RECSAM 1966-1975."[16] In addition, two schedules were prepared by the Director; one providing a summary record of results obtained from the beginning of the interim period of operation to June 30, 1976, and the other identifying funds, services and benefits in kind obtained from different sources during the same period.

The variety of sources of information that were consulted and the ways in which it was gathered were governed by the amount of time available for the exercise.

2.3 Analysis of the Information

A summary of the replies to the questionnaire for past participants was prepared by RECSAM. This summary took the form of a count of the frequency of different responses to the various questions, and a brief description of the most commonly occurring comments.

The records of all the interviews conducted and all relevant documents were studied to note the points of agreement and disagreement, and to identify the majority viewpoints. Due cognisance was also given to minority opinions and to those expressed by high officials or personnel who have had a long and continuing association with RECSAM.

2.4 Discussion of the Study

The self-evaluation team was fortunate that the activities of RECSAM and associated institutions had been fully and carefully documented from its inception. These documents provided a very clear picture of major developments, of problems that had arisen and decisions taken to attempt to solve them. They also clarified the issues that needed to be pursued in this study.

A characteristic of this study is that it is essentially a subjective inquiry. The questionnaires themselves consist of questions selected according to the perceptions and criteria of the evaluators. And the respondents are subjective in their replies. No amount of processing once the questionnaires have been completed will remove their subjective foundation.

When information is gained through interviews the study becomes even more subjective. Nevertheless, interviews provide a measure of flexibility that allows issues to be pursued in depth and points to be clarified. On the other hand, if the evaluation of RECSAM had been restricted to only these issues that can be quantified, for the sake of being objective, then the quality of its programmes and output would have been overlooked.

One feature of the inquiry that became more evident as more people were interviewed was that on any one issue there was a wide range of views extending from one extreme position on the spectrum to the other. This divergence of opinion seemed to stem from differences in need and is a reminder that RECSAM attempts to provide programmes for a region which has many diversities, and for participants who have a great variety of needs and backgrounds.

3. Programmes

3.1 Philosophy and Goals of RECSAM

The philosophy of the Centre is expressed in its definition of role, namely, that it is "fundamentally, to complement and not to compete with national efforts in the indigenous curriculum reforms for development and to strengthen and not to duplicate national functions. It should not dominate but assist Member States in reform through science and mathematics education programmes through regional co-operation. In simple terms, RECSAM should participate as a regional catalyst in modernizing science and mathematics teaching and learning in Southeast Asia."

The principles are derived from a consideration of the main purpose of RECSAM defined in its enabling instrument within the context of the broad purposes and functions of SEAMEO. The philosophy is reflected in the general goals of the Centre:

(a) Acceleration of educational development in the region through development-oriented activities and services to assist member countries in improving the capabilities of their institutions;

(b) Provision of opportunities within the region for professional development and growth;

(c) Promotion of complementary and reinforcing activities, involving whenever possible teacher-training institutions, colleges of education, and faculties of science and mathematics and such other fields as may be necessary; and

(d) Sharing of experiences and resources in optimal ways for mutual assistance and benefit.

These specifications guide the selection of programmes, the identification of specific objectives, and the organization of activities. They also provide the guidelines for the formulation of strategies for operations. For example, major emphasis is placed on the offering of specialized short-term courses for the training of senior personnel who can be expected to exert significant multiplier effects in their countries. The programmes are responses to the most common and urgent needs expressed by the home countries. On the diffusion of innovations, RECSAM takes the view, that, "As RECSAM is a regional institution, its relationship with each Member State is based on mutual respect and understanding of each other's professional and administrative responsibilities and jurisdicial status. As such, the diffusion process in educational innovations at each national level is the primary responsibility of each Member State."[15]

3.2 Training, Development and Research Programmes

3.2.1 Objectives. The programmes in these areas consist of intensive courses of 2½ months duration aimed at training senior personnel from the member countries in specialized topics in ways conducive to their contributing in a practical manner to training and curriculum development efforts in their home countries.

The kinds of courses needed, their descriptions and specific learning objectives are discussed in national workshops held periodically in each member country. The various suggestions are then considered in a regional seminar attended by representatives from the member countries and consultants from countries outside the region.

The recommendations are then studied by the Governing Board. Due consideration is given to the basic philosophy and objectives of the Centre, the available resources, and the most common and urgent needs of the member countries. The final choices are incorporated into the development plan and submitted to the Council for approval.

At the Centre, the objectives of each approved course are recast into cognitive and behavioural objectives through a series of meetings among the Director, the Assistant Director and members of the staff concerned with organizing and offering the course.

There is a time lag of at least 3 years from the generation of ideas in the national workshops to their implementation by the Centre.

3.2.2 Planning. A course supervisor is designated for each new course. He identifies the relevant areas required for the course and selects conceptual and experimental materials to match the specified objectives of the course. The specifications are then arranged in a pattern and sequence, taking into consideration the broader programme concepts of the Centre, and the constraints on resources, facilities and costs. During the whole process, informal meetings are held with the Director, the Assistant Director concerned, members of the staff, and in some cases, with specialists from other institutions.

After approval of the provisional package for the course, the teaching staff is identified. Visiting short-term specialists from the member countries and from other governments are selected to contribute enrichment to the course. Classroom materials are then prepared and instructional techniques are selected with due regard to the differences in educational systems of the member countries and the variations in experience, culture and capabilities of participants.

Planning takes into account the co-ordination of the course with other programme thrusts. To obtain information for the evaluation, a questionnaire is used to get the views of the participants on the course and on some aspects of the operations and facilities of the Centre.

3.2.3 Participants. RECSAM uses the term "participants" for people drawn from all branches of the education service who attend its courses. The numbers of participants who attended RECSAM courses from SEAMEO countries during the first 5-year period were as follows:[16]

Cambodia	81
Indonesia	94
Laos	76
Malaysia	100
Philippines	99
Singapore	95
Thailand	98
Vietnam	81

The courses provided by RECSAM are intended for participants who are "key personnel" in their own countries, that is, they are educators who, "on their return to their respective countries ..... can effectively organize suitable national programmes of teacher training, curriculum reforms and project implementation."[17] In fact, categories of personnel who have attended courses at the Centre are classroom teachers, curriculum designers, educational administrators, examination officers, heads of schools, project organizers, research officers, senior teachers, supervisors and teacher educators. In response to the questionnaire completed by 81 past participants from 1970-1976, the following information about categories of personnel who attended courses was given :

	Position held prior to the course	Position held now
Teacher	48	42
Inspector/Supervisor	16	20
Administrator	4	6
Other	13	13

Procedures for the selection of participants vary from country to country. RECSAM notifies member countries quite precisely of the expected qualifications of participants and describes the various courses in a document entitled "Approved Courses on Training, Research and Development."[18] This information is repeated in a memorandum sent to the Ministries prior to each course. In some countries, a national co-ordinating committee has been established by the Ministry to propose nominees for the courses; in other, the selection is carried out by a small group of senior officials in the Ministry.

The Centre regularly reminds the member countries of the importance of proficiency with English as one of the criteria for selection. The member countries, for their part, are also conscious of the need for facility with English if maximum benefit is to be obtained from courses. Ever so, there are still many participants whose level of proficiency in English is marginal. In response to the questionnaire, past participants rated their ability with English as follows:

Ability with English Language Prior to the Course

	Easily	Adequately	With Difficulty	Not at all
(a) I could understand spoken English	54	15	12 (15%)	-
(b) I could speak English	50	15	15 (19%)	-
(c) I could read English	56	22	3 (4%)	-
(d) I could write English	51	18	11 (14%)	1

The problem with language is well known and has been considered on many occasions over the years. At the third Governing Board meeting in 1972 it was stated "that member countries could select their scholars more thoroughly and/or provide English Language training courses where necessary before the participants leave for RECSAM."[19] More recently, at a combined meeting of Centre Directors in 1975, the question was discussed at length but no simple solution emerged. It was agreed at this meeting that dates of commencement of courses be announced six months in advance to provide member countries with more time and opportunity to up-grade the level of English proficiency of their nominees.[20] In the same year, at a Joint Meeting of the Governing Boards of the Regional Centres/Project it was decided it would be impossible for any one Centre to give assistance to every other Centre in regard to up-grading English proficiency and, pending further consideration, it was decided that each Director pursue the problem along lines appropriate to each Centre. The Director of RECSAM is considering the possibility of engaging an expert in the field of English-Science-Mathematics to produce learning materials suitable for use by participants in their home countries prior to attending the courses at the Centre. In the meantime, RECSAM is continuing with its policy of asking member countries to be more selective in respect of language proficiency, and of providing tutorials and language laboratory teaching for some participants

during the early weeks of each course. It has also made a start itself with the production of self-instruction material that could be used by participants prior to the course.

When the membership of each course has been confirmed a booklet is sent to participants providing information about RECSAM and the course. Suggestions for pre-course study are frequently made but most participants report that they did not do any study for the course prior to arrival. In some cases this was because notification that they were to be participants was received too late.

Participants are also asked to bring local curriculum materials to the course for the benefit of other course members but staff report that the response to this request is usually poor.

A significant proportion of the costs of providing courses for participants is met from scholarships. Costs funded from this source per month, in U.S. dollars, are as follows: Tuition fees$$144, supplies $24, health insurance and medical fees $4.80, hostel charges $74, stipend $120 - out of which $1.48 per day must be paid for meals. Air fares of participants to and from RECSAM are also funded from scholarships.

In most countries a senior official in the Ministry usually interviews participants prior to their departure to brief them on RECSAM courses and current curriculum developments in their own country. In some instances, at these meetings, agreement is reached on a topic which the participant might pursue at RECSAM, should the opportunity present itself. Frequently, participants are also advised that they are expected to prepare a detailed report for the Ministry at the conclusion of the course.

3.2.4 Implementation.

Relationships with member countries: The working relationships between RECSAM and the Ministries of Education of the member countries were defined in the first five-year plan.[21] These provisions have been amplified and refined at various meetings of the Governing Board members, Centre/Project Directors and High Officials, and the resulting set of principles guide the obligations of the Ministries in the selection of representatives to the Governing Board, the obligations in the selections and preparation of participants, the definition of needs and recommendations on programmes, the comitment for RECSAM staffing both for long-term and short-term needs, and the exchange of materials and information. Agreements have also been reached on the non-duplication of efforts and on the diffusion of findings, consistent with the philosophy laid down in the Charter of SEAMEO. The GOM, as stated earlier, has special responsibilities for the operation of RECSAM.

The linkages with the Ministries are formally established. Each has a desk officer for SEAMEO affairs and some have national co-ordinating committees for RECSAM matters. One of the functions of this committee is to maximize the employment of RECSAM alumni in educational development work at the national level. All countries admit want of effort in this area and recognize the need for organized action. Thailand is the first country to take a step in this direction by holding a two-day workshop of its RECSAM alumni in December 1975 to discuss how they could contribute more effectively to national development programmes. The report on the proceedings is being prepared.

RECSAM also maintains links with national curriculum development centres and educational and research institutions concerned with the improvement of teaching in science and mathematics. Information and publications are exchanged. The national institutions also send participants to the Centre, participate in national and regional workshops, and provide short-term specialists to RECSAM. The relationships with colleges and universities in Malaysia have been cited earlier.

For the conduct of its pilot projects, SEASAME and the Concept Learning project, national committees were created to co-ordinate the arrangements for experimental studies in selected schools.

A significant amount of feedback on RECSAM's programme and outputs flow back to the Centre through these links. RECSAM, in turn, gathers information on the developments in each member country mainly through this network.

All interviewees saw the importance of improving the communication links with the Ministries and the national centres and the strengthening of co-ordinative action through more functional links between RECSAM and the national network in each country. In the same vein, they felt that support should be given to the information unit of RECSAM so it can operate effectively as a regional information centre and clearing house. Many expressed the belief that more reciprocal visits between the RECSAM staff and specialists from the Ministries and national centres would be very beneficial to their respective development programmes.

Governing Board: The Minister of Education of each Member State nominates two representatives who are appointed by the President of the SEAMEO Council as members of the RECSAM Governing Board for a period of three years. The Centre Director and the SEAMEO Director or his representative are ex-officio members of the Governing Board but have no voting rights. Representatives of the Associate Members of SEAMEO are also non-voting members of the Board. The Chairman and Vice-Chairman are elected bi-ennially by Board members.

The Board has the power to determine policies for the operation of the Centre, it approves programmes and budgets within the framework of the 5-year approved budget, it controls the accounts, and makes annual evaluations and reviews of programmes and budgets. It nominates the Centre Director and appoints the Deputy Director, it sets academic standards, and approves the terms and conditions of service of the staff.[22]

To provide information for this external evaluation all Governing Board members completed a questionnaire dealing with their activities and the operation of the Centre and all but one of them were interviewed. The views expressed are summarized below.

There was general agreement that the goals of SEAMEO as stated in its Charter and the purposes of RECSAM as defined by its Enabling Instrument do not impose any undesirable constraints on the programmes of RECSAM. It was also agreed that the machinery for reviewing these goals and purposes is adequate, though one member added that the machinery has not been put to use. This member thought that the goals and purposes should be reviewed from time to time.

The structural organization which relates RECSAM to SEAMEO and its units was seen to be a satisfactory one - with the reservation that the Governing Board seldom has direct access to the Council. Some Board members observed that they do not receive information about Council proceedings, otherwise communication between the Council, the Secretariat, the Board and the Director was thought to be satisfactory. In general, it was also considered that RECSAM was given adequate support by the Council, the Secretariat and the Governing Board to enable it to carry out its objectives effectively and efficiently.

Most interviewees held the view that Governing Board members provide the essential link between RECSAM and the member countries. It follows that if Board members are to represent the views of their own countries adequately they must be fully aware of their national curriculum developments, their national curriculum needs, and their personnel requirements. In several instances the Board members hold official positions in their Ministry, or are senior officers in a centre which has very close affiliations with the Ministry. These people reported that they are ideally placed to be fully aware of national developments. Board members who are not similarly placed, and possibly serve in the mathematics and science faculties of universities, report that they are at a disadvantage in this respect and are not able to represent national interests adequately.

Most Board members agreed that the Board as a whole was given sufficient support by the Secretariat, by the Director of RECSAM and by their Ministries to enable them to carry out their responsibilities. Those who disagreed considered that the Ministries might do more to keep them and the Board informed about national developments.

There was strong agreement that the Board as a whole is competent to execute the following responsibilities as set out in the Enabling Instrument for RECSAM: to determine the policies of the Centre, to evaluate each 5-year programme, to set academic standards, and to determine staffing requirements. Those who doubted the Board's competence to deal with these matters felt that the Board is not closely enough involved in the activities of RECSAM. One member thought the staffing requirements should be determined by RECSAM itself. Another member suggested that Board members would be in a better position to make those decisions if they were able to visit RECSAM while training courses were in progress.

Several Board members thought that the Board would be more effective if two meetings were held each year.

There was unanimous agreement that there should be two representatives from each member state.

One suggestion put forward, rather tentatively, was that there was merit in the idea of selecting the Chairman from the Malaysian representatives on the Board since they are well placed to bring proposals affecting RECSAM to the attention of officials in the various Malaysian Ministries.

Other officials, when questioned about the Governing Board, considered that it is a very competent and active Board, and is dedicated to furthering the interests of RECSAM.

Programmes: In the field of training, research and development RECSAM conducts programmes aimed at training key educators in modern, relevant and effective approaches to teaching mathematics and science, and undertakes programmes in research and development of syllabi, curriculum materials, evaluation methods, learning processes, and teaching aids and techniques applicable to the particular needs in the region.[23] RECSAM cautions that there is some overlap among these functions but argues that this is desirable from a multi-disciplinary viewpoint.[24]

The numbers of training, research and development courses conducted during the interim period, and the first 5-year period, and to be conducted during the second 5-year period are set out in the following table - percentages are shown in parentheses:[25,26]

	Interim Period	1st 5-year Period	2nd 5-year Period
Training	5 (50%)	22 (39%)	47 (66%)
Development	5 (50%)		14
Research and Development		34 (61%)	(34%)
Research			10

Some of the highlights of the training courses during the first 5-year period are that they included latest trends in curriculum development and evaluation, modern learning theories and findings, innovative curriculum practices and development of educational technology, critical studies of selected project materials, comparative studies of school science and mathematics programmes in SEAMEO countries, trials of materials and methods in schools, the development of techniques for making apparatus from low-cost materials, the evaluation of courses by participants and the production of teaching modules and teachers' guides on specific topics by participants.[27]

Some of the highlights of the research courses during the same period are that they dealt with latest trends in curriculum and research, research on curriculum materials and methodology, research done in SEAMEO countries, the development of action research techniques and guidelines for their use, the development of specific studies and instructional materials to be carried out as pilot projects, and the evaluation of courses by participants.[28]

During the first 5-year period RECSAM embarked on two pilot projects which have become a significant feature of its activities. They are the Southeast Asia Science and Mathematics Experiment (SEASAME) and the project entitled Concept Learning in Science and Mathematics of Southeast Asian Children (CONCEPT). These projects will be dealt with more fully later in this report.

From 1972 onwards the production by participants of teaching units and teachers' guides on specific mathematics or science topics and of research products became an important aspect of RECSAM's policy. Altogether 132 prototype teaching units and teachers' guides, and 34 research products were designed and produced by the end of the 5-year period.

The planning which precedes the final adoption of the 5-year programmes has already been discussed. One of the critical issues that is carefully considered during these planning sessions is the amount of emphasis to be given to training courses, to research programmes and to development programmes. During the first 5-year period, when nations throughout the world were involved in major curriculum changes it was natural that RECSAM also should elect to concentrate on research and development. From the table above it can be seen that approximately 60% of its efforts were devoted to this purpose. However, as member states of SEAMEO established their own curriculum centres and their new curricula, and as they became increasingly self-sufficient in this respect, they directed, through their national and RECSAM seminars, that RECSAM emphasize training courses for key personnel in the second 5-year plan. This proposal was put into effect, as can be seen from the fact that the ratio of training to research and development changed from 39 to 61 in the first 5-year period to 66 to 34 in the second. When the second 5-year plan was being considered the staff of RECSAM put forward a proposal that the number of training courses be reduced, that research activities should take new directions, and that special projects and services be increased but these suggestions were not adopted.

The Governing Board, at its meeting in 1974, endorsed the recommendations of the regional workshop on proposed programmes for RECSAM's second 5-year plan held at Penang in April 1974. In particular, they supported the shift from curriculum development and research programmes to training courses for key personnel. Governing Board members, with one dissentient, reaffirmed this position in their responses to the questionnaire prepared for this external evaluation.

Members of the staff, on the other hand, and other professional people interviewed, considered that the energies of RECSAM are being sapped by a disproportionate emphasis on training courses. It was suggested in several quarters that ways should by found to reduce the amount of time spent by some staff members on the preparation and conduct of training courses so that attention might be turned to extending research work and information services.

One of the most important issues related to the training, research and development programmes is the question of their relevance to the needs of the member countries and the participants. Everyone interviewed agreed that these programmes must be relevant to the countries' needs but some Governing Board members considered that, though it may be desirable, it was not equally necessary that they be relevant to the participants' needs - arguing that the main responsibility of RECSAM is the improvement of teaching in the region.

Several initiatives have been taken in attempting to ascertain the needs of the various countries and building courses around them. These have included setting up national co-ordinating committees by some of the ministries, representing country needs through Governing Board members, visiting senior officials of member countries by RECSAM staff, distributing questionnaires to member countries by RECSAM, periodic requests by RECSAM to member countries to be kept informed of national developments, and exchanging information during the early stages of most courses at RECSAM. Even so, it was the general view that more could and should be done to make this exchange of vital information more formal and regular.

The other associated difficulty is that there was great variation in the stated needs of the countries and in the ways people thought that RECSAM might be expected to respond to them. Indeed, some people thought that this was an almost insurmountable problem and, in the circumstances, considered that RECSAM was doing all that could reasonably be expected of it in this respect.

The courses themselves are held in classrooms and supporting facilities which are now described as temporary, in view of the opening of the new block at the beginning of 1977. The staff and participants stated that the principal disadvantage of the classrooms is that they are not air-conditioned and they have complained that they become uncomfortably hot in the afternoons. Course supervisors have had to reorganize their programmes to ameliorate this problem as far as possible. There has also been a shortage of adequate laboratory accommodation which has affected the range of activities that might have been offered at some sourses. Other deficiencies with respect to accommodation will doubtless be overcome when the new building is opened so they will not by dealt with in this report.

Staff members reported that the Centre is very well equipped for teaching purposes - a wide range of modern teaching aids being available. The RECSAM stores are also holding a considerable quantity of equipment that will be put to regular use when suitable work spaces are available in 1977.

Planning for the use of staff for the various courses is largely informal. Proposals for the selection of course supervisors are made by assistant directors and submitted to the Director for confirmation. Supervisors are given considerable freedom to plan their courses and, in practice, they approach other staff members to gain their assistance with carrying out some aspects of the course. They are also free to suggest that regional or international experts (short-term specialists) be invited to make a contribution to the course. These plans are usually discussed with an assistant director or the Director and are finally approved at this stage.

A common pattern for a course is for the first part to be devoted to lectures and other forms of presenting information to participants, and the latter part is given to the production of teaching units and guides or some similar materials. A wide variety of modern methods and teaching techniques are incorporated into course programmes. Throughout many courses participants are encouraged to evaluate the course and provide information about aspects that they think could be improved. At the conclusion of the course a questionnaire prepared by the supervisor is completed by participants. The results are collated and analyzed and the resulting report is distributed widely.

The length of courses at RECSAM has varied over the years. During the interim period and the first 5-year period the duration ranged from 2 to 16 weeks with the majority being 12 or 16 weeks. For the second 5-year period all courses are 10 weeks in length.

At the time of the self-evaluation survey in 1972-73 many of the participants reported that they found the courses too short. In the analysis of past participants responses to a questionnaire in 1973[29] the commentator felt there was a relationship between the amount a participant felt he had to learn and his views on the length of the course. If he had too much to learn then the course was too short.

At a seminar to consider plans for the second 5-year period it was recommended that both short-term and long-term courses be offered, the former of 1-4 months and the latter of 8-10 weeks.[30] Following a discussion of this recommendation at the fourth Governing Board meeting it was generally felt that most SEAMEO countries are unable to spare their personnel to attend courses for long periods.[31]

The production of materials at RECSAM is another feature of its work that has generated a good deal of comment - this is particularly so in respect of SEASAME products, but these will be discussed later. It is relevant to this issue that the Governing Board at its third meeting decided that at its courses the Centre must exphasize the development and production of curriculum materials relevant and suitable to SEAMEO countries. RECSAM takes the view that these products provide an important vehicle for the training of participants and give their work a sense of reality. Further, it insists that its concern is to provide opportunities for participants to study the process of curriculum development so that they can become creative, innovative, self-reliant and productive. The products and their quality are secondary to this concern. However, they are made available to the member countries to use or not at their own discretion. Nevertheless, some officials in member countries felt that RECSAM's materials were being produced in competition with their own and they were disinclined to support this competition in any way.

The problems related to English language proficiency have been discussed in an earlier section of this report. Several measures are taken by RECSAM to help participants once they arrive at the Centre. Some of the more important of them are as follows: seminar and tutorial classes are held in the first few weeks of a course, language lessons on audio-cassette tapes are used, a set course is provided once a week using the language laboratory at the University of Science, Malaysia, lecture notes in simple English are prepared by teaching staff, small group discussions are held frequently individual attention is given to those experiencing severe difficulties, and RECSAM staff from Indonesia and Thailand conduct tutorials for their countries' participants to supplement the provisions made at the course.

Governing Board members were asked by means of a questionnaire prepared for this evaluation study to rank the quality of the training, and research and development programmes, the SEASAME project, the CONCEPT project and the self-Instructional Materials (SIM) project on a 1-7 point scale, 1 being low and 7 being high. The mean scores were as follows :

Training Programme	5.6
Research and Development Programme	4.4
SEASAME	4.7
CONCEPT	3.9
SIM	4.4

Past participants were also asked to comment on various aspects of courses they attended. The responses of the 81 who returned the questionnaire are summarized below:

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. After the course you considered it relevant:				
(a) to your needs	36	44	1	
(b) to your country's needs	34	40	6	
2. The course achieved its objectives	21	54	4	

The SEASAME Project

In 1972 members of the Faculty of Education of the University of Malaya proposed that the products of RECSAM's courses in primary science and mathematics could be made more tangible by relating them through a pilot project. In the same year, at its third meeting, the Governing Board decided to change the emphasis in the programme of activities from training in curriculum development to development and production of curriculum materials relevant and suitable to SEAMEO countries.[32] The first course at which these proposals were implemented was TCE-1 "Modern Curriculum Development and Evaluation in Elementary Science" held from January 15 to March 30, 1973. At a seminar in June 1973 attended by representatives of all member countries to review the progress of RECSAM and to consider programmes for 1975-1980 a paper describing SEASAME project developments undertaken since the beginning of the year was presented. The seminar recommended that project SEASAME be supported.[33] At its meeting in October 1973 the Governing Board also decided that SEASAME should be supported.[34] Its continuation into the second 5-year period was endorsed by the Governing Board in September 1974.

The objectives of the project are to introduce children to their environment and community through "doing" science and using materials in their environment, to help them to acquire "simple systems concepts" and apply them to real life situations, to help them to apply processes and skills of science and mathemacics, and to help them to understand simple concepts and principles of science and mathematics and appreciate how they can be applied to improve the quality of life.

Papers have been prepared by staff members of the University of Malaya to elaborate the philosophical rationale and educational implications of the project, and systems concepts.[35]

The first twelve lessons, together with related evaluation instruments, were developed at five courses during 1973. National co-ordinators of the project from all member countries attended a seminar at RECSAM in 1974, and on their return to their home countries, together with other local participants of RECSAM-SEASAME courses, they conducted trials of the materials. Staff members of RECSAM observed these trials to obtain feedback on the problems arising during implementation. In 1975 a further eight science and mathematics teaching modules were produced at two courses in 1975, and analycis, implementation and evaluation techniques were studied at two other courses. Trials of four selected topics by some member countries were conducted in the latter part of 1975. Plans are now underway for trying this second set of modules in member countries. RECSAM has made it clear that no trials will be conducted in a member country without its full agreement.

Some of the more important conclusions reached by the evaluator following the evaluation of the project in 1974 were that a regional project is highly feasible, that efforts need to be directed towards nationally-based rather than regionally-based prototype units, and that the experience gained in conducting training courses for SEASAME might be packaged in a form so as to be more wisely shared. The effects of personnel training courses for SEASAME were not evaluated.[36]

Most people interviewed held strong views for or against SEASAME. Support for the project centred around the need for indigenous regional project development, around the desirability of strengthening RECSAM's research capacity, and the benefits to be gained by course members through active participation in such projects. Those opposed to the project believed it to be in competition with national curriculum developments and the latter were at a more advanced stage than SEASAME, some thought it was based too heavily on behaviourist principles, some criticised the extent of the contribution by the Education Faculty of the University of Malaya and thought there was insufficient opportunity for critical appraisal of these ideas, some held the view already cited above, namely, that curriculum development should be locally rather than regionally-based, some claim that the project is too oriented towards the production of materials. From interviews conducted it is clear that some of the staff believe RECSAM has become polarized on this issue and they feel that currently there is a want of dialogue between these two groups. There was also some criticism that the conduct of trials interrupted national developments and disrupted pupils.

The CONCEPT Project

This project was endorsed as a pilot regional project of RECSAM at the "Seminar on the Review of RECSAM's Progress and Programmes for 1975-1980"[37] held in June 1973, and was approved by the Governing Board in the same year.

The objective of this project is to find out how primary/elementary school children in Southeast Asia learn science and mathematics concepts. A secondary objective is to encourage the Ministries of Education of SEAMEO member countries to extend or replicate these studies.[38]

The initial materials were produced at a course in April 1973 and described procedures for replicating twelve experiments on child development originally designed by Jean Piaget. These materials were refined at a course, and materials were produced for three additional experiments. These materials were tried in the member countries, and at a combined course in 1975 the information from nearly 5,500 experiments involving more than a thousand children was analyzed.

While many people are not enthusiastic about this project, as is evident from the previous table of Governing Board members' ratings, nevertheless, they tend to support its continuation on the grounds that there is insufficient research information in Southeast Asia on the learning of mathematics and science. Two critics of the project considered that it is premature to conduct research of this level of sophistication at this stage of Southeast Asia's development of curricula, and it was their opinion that the results will be of little value since they cannot be generalized.

The Self-Instructional Materials Project

The objective of this project is to produce materials which participants can use for private study. The four areas selected for which materials are being produced are: instructional goals and objectives, how children learn, evaluation, and science and mathematics concepts.

Already a few units have been written by RECSAM staff members and were tried at courses during 1975 and 1976.

The evaluators were not able to obtain feedback from past participants who had used these materials.

Staff: RECSAM is staffed from a variety of sources. Some are on secondment from the Malaysian Ministry of Education, some are recruited from other SEAMEO countries, some are long-term specialists on 2 to 3-year appointments from non-SEAMEO countries, and some are short-term specialists from any of the categories of countries named above are who are appointed for a period of a few weeks. The Malaysian Ministry of Education tends to make up for any shortfall in staffing.

Interviewees were divided on the question of whether RECSAM should aim to have an all-SEAMEO or not. The majority view was that it should continue to attract staff for short and long-term specialist positions on the grounds that participants are exposed to a wide range of views, and their presence helps to avoid the possibility of RECSAM becoming insular in its outlook. In response to the questionnaire most Governing Board members thought the present mix of staff from the various sources was about right.

The composition of the professional academic staff is shown in the last column of Chart I. There are three vacancies in the SEAMEO - approved positions. Five staff members will leave by September 1976, and the tenure of three more is uncertain for reasons given in the footnotes. The supporting technical staff consists of a registrar/bursar, a financial assistant, a librarian, an information officer, an A.V.A. specialist, and a graphic artist, all of whom are Malaysians.

The chart also shows the recruitment picture by year and the ratio of staff members from Malaysia to those from SEAMEO and non-SEAMEO countries. Recruitment from SEAMEO countries has been a problem from the beginning. In 1970, the Centre Director requested the Ministries of Education of member countries, except Malaysia, for nominations for the positions of Deputy Director and three training officers for biology, physics and elementary science, giving the terms of assignment or secondment laid down by the Steering Committee of RECSAM. Thailand regretted that the regulations of its Civil Service Commission and its Council of Ministers precluded compliance with the terms of secondment. Singapore could not send a nomination because the applications received after due advertisement were all unsuitable. Vietnam and the Philippines sent regrets without explanation.[39]

The Governing Board at its first meeting in 1970 took note of the situation and created a committee to study the matter and to suggest solutions. The main recommendations of the committee were:[40] (a) The annual contribution of the member government should include home salary and allowances (excluding tax) of the staff member on secondment, round trip fares for the staff member and his dependents and expenses for storage and baggage; and (b) the member government should be responsible for medical and dental fees, and further it should ensure no loss in seniority and other benefits and privileges (promotion prospects, pensions, etc.). The committee also proposed that the position be opened to candidates from the private sector and from non-SEAMEO countries. It was further suggested that the Council be requested to renew its appeal to member countries to release personnel for assignment or secondment.

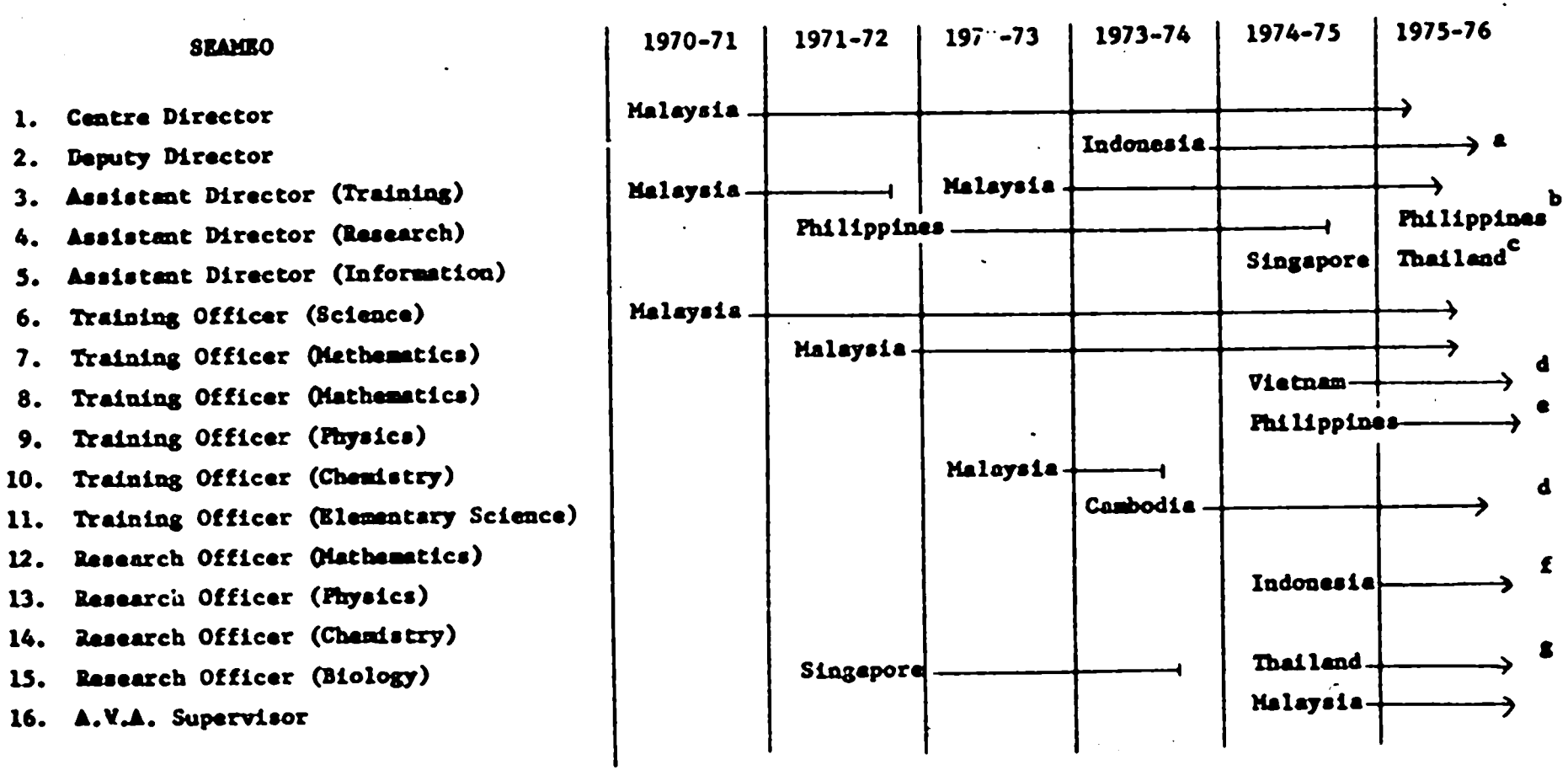
At the Sixth Conference of the Southeast Asia Ministers of Education Council Meeting in 1971 it was resolved that, insofar as it may be desirable and practicable, member countries grant leave to civil servants to take up appointments in SEAMEO regional centres; and that they be guaranteed no loss in seniority, promotion prospects, pension and other benefits. Further, it was resolved that the Regional Centres draw up new salary scales and terms and conditions of service to attract the best available candidates, and that these costs should form part of the annual operating costs of the Centre.[41]

From interviews with officials of the member countries, members of the Governing Board, and the staff of the Centre, it was gathered that the main reasons for the inability of member countries to contribute personnel are: (a) the regulations of member countries do not permit continued payment of salaries and allowances to personnel on assignment or secondment; (b) member countries cannot spare high-level personnel who play key roles in development activities and in administration, except for short periods; (c) proposals for supplementing salaries have proved inadequate or unworkable; and (d) possible candidates, with young children who cannot readily attend schools in Malaysia, cannot bear the financial burden of maintaining two households.

Chart I

PROFESSIONAL STAFF

(By Year by Country Source)



(continued page 129)

NON-SEAMEO	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
17. Adviser (Training)	U.S.A. →	→				
18. Adviser (Research)		U.S.A.				
19. Specialist (Physics)		U.K.				
20. Specialist (Chemistry)			France			
				Australia		N.Z.
21. Specialist (Biology)					France →	
22. Specialist (Integrated Science)				Australia	→	g
				N.Z.		N.Z.
23. Specialist (Elementary Mathematics)		U.K.			France	
				N.Z.		N.Z.
24. Specialist (Secondary Mathematics)				France		
25. Specialist (Elementary Science)		U.K.		Denmark	→	
26. Specialist (Evaluation)					U.S.A.	
27. Education Psychologist					Canada	
RATIO : Malaysia/M.Cs/Overseas	3:0:1	4:2:4	5:2 5	6:2:10	5:8:11	5:8:6

Notes : (a) Term ending July 1976.

(b) Contracted for period June 1976 to Sept. 1976.

(c) Appointed June 1976.

(d) Term ending 1976. Recall anticipated.

(e) Term ending July 1976. Renewal requested.

(f) Term ending August 1976.

(g) Term ending 1976.

The situation has improved somewhat over the years, as the table shows, but the problem persists, particularly in recruiting staff for long-term assignments. At present, all staff members including the Director are either on secondment or assignment. The Centre Director takes the view that, in the present circumstances, it would not be possible to appoint a permanent staff. Moreover, he considers it would not be desirable to have a permanent staff, as long as training is the main function of the Centre and it is operating on a 5-Year cycle. He finds it more effective and economical to have a core staff seconded from SEAMEO countries supplemented by full-time specialists from non-SEAMEO countries on 2 - 3 years tenure and by short-term visiting specialists from different countries.

The variation in the terms of secondment from country to country gives rise to disparities in salaries. The Assistant Director for Training and the Training Officer for Science received higher salaries than the Deputy Director.

A question which has arisen on many occasions is how tightly should job specifications for vacancies at RECSAM be written. It was thought at one stage that the requirements stated were so narrow that they deterred possible worthy applicants. Current practice is to describe vacancies in more general terms. However, some staff members suggested tha this practice should not apply in the case of short-term specialists. They recommended that the requirements for these personnel be clearly specified so that the desired skills and knowledge are precisely known, and a person matching the specifications can be recruited.

The staff members interviewed believe that RECSAM is undertaking too much training activity at the expense of conducting research and development work associated with the training programmes and of tasks relating to its information service function. This sentiment is echoed in a statement contained in the memorandum of agreement by SEAMEO and GOM for the funding of the second five-year operation;[42] "More of the staff time needs to be given not only to cope with individualized guidance and instruction to participants but also to the development of self-instructional materials for course participants, development of the Centre's first two pilot projects, the frequent review and improvement of content and techniques in these courses, and the improvement of information services and clearing house activities." It was suggested by professional people both within and outside RECSAM that if it is to extend its research activities it will probably be necessary to appoint some permanent staff to provide continuity.

Some staff members also suggested that they should be given more opportunities to visit other countries to study the educational systems, observe development activities and trends, exchange ideas, and provide information on the programmes of RECSAM. In fact, the records show that staff members made 24 visits to different countries in 1974-75 as compared with less than 10 visits from 1970-74.[43]

From the interviews with 12 members of the present staff and two former members it was gathered that the great majority considered the technical support and clerical services adequate for present activities. Some felt that custodial services needed improvement. Working conditions were generally considered satisfactory.

The staff appreciated the way the Director allowed freedom of initiative and ready access to himself and others in the organization, especially with regard to the planning and conduct of courses. Some, however, voiced the need for more extensive briefings for new staff members and expressed regret that virtually no formal staff meetings are held to consider programme management, development, and other general issues and problems. Assignments are arranged through informal discussion, with each staff member enjoying a large degree of freedom in selecting assignments and accepting invitations. Some thought that a more formal approach to the distribution of workload would be desirable in the interests of both those seen to be overworked and those seen to be underworked.

The counterpart scheme for staff training under the guidance of overseas specialists is not used to a significant extent. Opinions are divided on the issue. Many felt that it was not feasible in a training programme where assignments change every three months. They felt that formal arrangements were also unnecessary and preferred informal learning from each other. A few staff members stated that they would prefer not to see the counterpart scheme implemented on the grounds that the roles of the two counterparts could be misunderstood - that one might adopt a superior role and the other might feel compelled to assume a subordinate role. Instead, they preferred that regular staff meetings and staff workshops be held so that there would be opportunities for each and every person to contribute to the personal professional growth of all members of staff.

While there was a general reluctance on the part of interviewees to discuss the quality of RECSAM staff, the following points did emerge: that staff appointed to RECSAM should have expertise beyond that possessed by most participants, that they should have an area of specific expertise but should also have a good general background of educational theory and practice that would enable them to make a contribution to a variety of courses, that they must be able to communicate readily in the English language, and that they must possess a thoroughly professional attitude towards learners. On the other hand, many emphasized that RECSAM should not recruit from the mathematics and science departments of universities unless they were well versed in the teaching of those subjects as well.

The Council, at its tenth conference held in the Philippines in 1975, approved a staff development programme for all the regional centres.[44] The programme provides short-term training grants for staff members of the Centres and study grants leading to the masteral and doctoral degrees. It is open to staff members and to qualified Southeast Asians who would be able to fill professional staff positions in the Centre. The purpose of the programme is to build a cadre of permanent staff-members in each Centre. In 1975 the Secretariat[44] obtained offers of support from three donors. Australia offered 12 long-term scholarships and six short-term training grants for the period, 1975-77, open to all centres; New Zealand offered 10 long-term and short-term technical awards for the period, 1975-80, and open to all Centres; and France offered two scholarships for RECSAM for 1975 with support for expenses for undergoing training in functional French for one year preceding the course study.

The Director of RECSAM felt it was advisable to defer calling for applications from nationals of SEAMEO countries as "this depended on the state of the Centre's staff recruitment in 1976 and 1977".[45] The Centre planned to implement the short-term training programme in 1976.

A staff member at RECSAM was scheduled for training in New Zealand during 1976. Arrangements that were in progress have been stopped however, since the staff member's secondment to RECSAM has not been renewed and he is returning to his home country this coming August.

Funding: There are two components to the funding of training, research and development programmes; they are the special funds mainly for training and research scholarships which are raised by the Secretariat and there are the operational costs associated with organizing and running these programmes which are the responsibility of the Government of Malaysia. Aspects of these funding operations have already been discussed in the introduction and under the heading of Participants.

In the Memorandum of Agreement on Funding of RECSAM for Second 5-Year Operation the estimate for training and research scholarships for an estimated 880 participants is US$1,048,667, or US$1,191 per participant.[46] Funds for these scholarships are provided through the Secretariat by donor countries. The sub-team of evaluators were advised by the Secretariat that it would be possible to increase the number of these scholarships.

The salaries of staff members, apart from the long-term specialists from non-SEAMEO countries, to carry out these programmes are met from funds provided for operational costs. The funds also cover the per diem costs of short-term visiting consultants. The salaries and other costs of long-term specialists from non-SEAMEO countries are met by their country of origin but their local allowances are met from the operating costs.

Facilities: The temporary building houses four classrooms, one physics laboratory, two workshops (wood and metal), two storerooms, one reading room, and one display room. One biology room and the library are in adjacent buildings of the Malayan Teachers' College.

There are classrooms available for the various learning activities. Laboratory and workshop facilities are also available for training purposes but the working and storage spaces are rather cramped. There is no laboratory for mathematics nor for chemistry. The rooms are uncomfortably hot during the late summer months since the building is not adapted to school activities. Clerical and graphic arts services are considered satisfactory by the participants. The audio-visual unit has cassette tape recorders, a videotape apparatus, and projectors (slide, 16 mm film, overhead, film loop). For the moment, the facilities are not used to a large extent owing to lack of space.

According to the staff members and participants interviewed, there is need for more space not only for laboratories, workshops and storage, but also for staff teaching equipment and audio-visual devices. They thought that facilities should be increased to support research and resource production activities, and that the present arrangements with Malayan Teachers' College and the Universiti Sains Malaysia for the use of their special resources and services should be expanded. All believed that most of these issues can be resolved or attended to when RECSAM transfers to the new building scheduled for completion in December 1976. The building will have two large science laboratory blocks, with three laboratories, eight science workrooms, a biology garden, an animal house, and workshops (wood, metal, plastic, electrical, and electronic). An ETV studio, an exhibition hall, and one conference hall with A.V.A. facilities are included.

According to the participants, the library has sufficient reference materials and books (10,000 titles) and journals (176 titles) to support the present activities. The stock is being increased as staff members regularly submit orders for new acquisitions. It was observed that there was a big backlog of materials for cataloguing. The study space is quite samll. There are no carrels. The reading room in the RECSAM building is also small, and facilities, materials, and individual study spaces cannot be adequately provided.

These problems, they believe, can be resolved when the new building is finished, since it will have an information centre and library block with printing and graphic arts workrooms and ancillary facilities.

Concern was expressed by the staff that the participants use the library very sparingly. It was noted that their working hours (8 a.m. to 4 p.m. daily) coincide with the times when the library is open. On several occasions the library was opened in the evenings at the request of the participants but only one person made use of the opportunity.

3.2.5 Outcomes.

Governing Board: Since its inception in 1970 the Governing Board has held six 4 or 5-day meetings. At these meetings reports are received on the training, research and development courses held during the year, and at appropriate times, the Board comments on and recommends for approval the 5-year plans for the Centre. Other factors affecting these courses are discussed, the most frequently occurring issues being staffing, proficiency of participants with use of English language, SEASAME, CONCEPT, and staff development plans. Decisions taken by the Board are documented in the annual final reports of Governing Board meetings.

Programmes: During the first 5-year period RECSAM conducted 56 training, research and development courses which were attended by some 720 participants. As there were many occasions when several courses were running concurrently during the 60 months of the period RECSAM was able to offer 141 months of course instruction.

During the second 5-year period it is planned that the number of courses will be increased from 56 to 71, the number of participants will be increased from 720 to 880 and the number of months of course instruction will be increased from 141 to 178 months.

42% of the courses held during the first period had 8 or less participants, but some had up to 24. During the second period 45% of the courses will have 8 participants and the remainder will have 16.

The following table shows the number of courses, by subject, held during 1969-1975, or to be held during 1975-1980.

Note : The bracketed numbers indicate that these are dual purpose courses and that they have also been listed under other subject headings.

COURSES	1969 - 75	1975 - 80
Primary Science	9 + (6)	5 + (7)
Secondary Science	1	1 + (4)
Integrated Science	6	5
Chemistry	9	3
Physics	9	3
Biology	10	3
Primary Mathematics	5 + (5)	5 + (17)
Secondary Mathematics	7	5 + (4)
Vocational Mathematics & Science	0	4
Apparatus Mathematics & Science	0 + (4)	9
SEASAME	2 + (7)	5
CONCEPT	8	10
Curriculum Development Processes	8	7
In-service Training Techniques	0	6

In short, by the end of the second 5-year period RECSAM will have conducted some 145 courses for approximately 1,800 key personnel from eight Southeast Asian countries.

Apart from the formal benefits that might be expected from participation in these short intensive courses in specific subject areas, there have been many informal opportunities for personal and professional growth that are difficult to measure but are of considerable importance. These included opportunities to live in close association with people from other countries and cultures, and to share experiences, and to learn to understand and appreciate each other. And there was the opportunity to discuss informally educational problems of common interest, and possibly to form international professional friendships that will prove of mutual benefit in the years ahead.

The personal professional growth of participants resulting from attendance at these courses comprises the intangible output from RECSAM. Attention will now be directed to the tangible products, remembering that during the early years of RECSAM this aspect of its activities was not emphasized.

As part of its policy of preparing materials which can be used independently by participants to further their understanding of fundamental educational concepts and topics, the staff of RECSAM has produced 12 "self-instruction modules" on topics ranging from "How Children Learn" to "Alternating Currents and A.C. Motors."

Following the decision of the Governing Board that the courses be oriented towards producing more materials, RECSAM launched the SEASAME project. In 1973 twelve modules on primary school science and mathematics topics were produced and tried in schools in 1974. In 1975 a further eight modules were developed and will be tried in 1976. To facilitate the trials national committees have been set up by the Ministry of Education in each member country. The first module, "Introduction to Systems" was tried in 28 schools and involved 143 teachers and over 4,000 grade 2 or 3 pupils from all SEAMEO countries. These activities have had direct influence on participants, teachers and pupils. In addition, the materials have also been distributed to Ministries, curriculum centres and teachers colleges throughout the region for their consideration, and for use in whatever ways they see fit.

RECSAM began the exploratory work on project CONCEPT at two courses held in 1972, and since that time two courses per year have been devoted to the project. Guide sheets for conducting Piagetian experiments have been prepared on conservation of solids, conservation of liquids, conservation of weight, seriation, number patterns, perspectives, conservation of volume, classification, conservation of length, and an embedded figures test. In 1975, following extensive trials with children aged 7 to 12, the materials were further refined and developed. In 1976 the field work will be extended to include 10 to 15 year old children, and an attempt will be made to determine the stages of development of children aged 7 to 15. As a result of this project at least 80 participants have been trained in a clinical approach to interviewing children, and regionally prepared replications of many Piagetian experiments have now been distributed throughout the region and are available for use.

At other training, research and development courses, especially at those held since 1972, prototype syllabuses have been produced for physics, chemistry, and mathematics; prototype teaching units have been produced for physics, chemistry, biology, mathematics, and integrated science; and more recently a manual for the management of laboratories has been produced.

<u>Staffing</u> : One of the significant outcomes resulting from RECSAM's training, research and development programmes has been the professional growth of the many staff members who have been associated with the activities of RECSAM since its inception. These staff members have had opportunities to meet scholars of international stature in their particular fields, they have participated in the critical stages of development of an international educational centre, they have examined many of the projects and packages that have influenced

the teaching of mathematics and science throughout the world, and they have had to meet the challenge of designing courses for key personnel in the region and of giving presentations at these courses that will equip the participants to carry out their leadership roles in their own countries. With these experiences behind them one can expect that ex-members of the faculty of RECSAM will be sufficiently well equipped to play an influential part in shaping the strategies for teaching mathematics and science in the member countries in the years ahead.

On the negative side the detrimental effects of constant staff shortages on the development of RECSAM must be recognised. For reasons cited earlier there have been many positions in the establishment for professional staff that have remained vacant for several years. Among the more important of these vacancies have been the positions of Deputy Director - vacant until 1973-74, Assistant Director (Information) - vacant until 1974-75, Training Officer (Elementary Science) - vacant until 1973-74, Training Officer (Physics) and A.V.A. Supervisor - both vacant until 1974-75, and the positions of Research Officer (Mathematics) and Research Officer (Chemistry) were both still vacant at the time this report was written.

As a result of these staffing problems RECSAM has had to re-design some courses, it has had to solicit assistance by outside or overseas specialists at short notice, it has had to recognize this constraint when its overall purposes and programmes have been reviewed, it has had to curtail some of its services, and in some instances it has had to overwork some of its staff members.

3.2.6 Discussion

Relationships with member countries. There are a few facets of RECSAM's structure and organization that are critical to its effectiveness as a regional centre. One of these facets is the quality of its relationships with the member countries. Naturally, this view is accepted by everyone concerned with RECSAM, but it must be remembered that these are busy people, often with other priorities requiring their attention. Ways need to be found to re-programme and re-distribute some of the major liaison tasks so they can be given the deliberate consideration that is needed.

One major aspect of co-operation in each member country is for it to co-ordinate the liaison activities of the various agencies and officials responsible for working with RECSAM or who work in similar fields. Further, it is essential that a few key personnel in each country are fully conversant with all important aspects of teaching mathematics and science in their country and are aware of probable future developments. It is equally important that mechanisms be set up for regularly transmitting this information to RECSAM.

Another major pre-requisite is that there must be adequate procedures for dealing with participants. There are the problems of selecting them, ensuring that they are sufficiently proficient with the English language, preparing them for the courses, getting them to the courses, making use of them after the courses, and maintaining contact with them.

In the interests of regional co-operation each member country could help RECSAM by frequently reviewing the overall plans and activities of RECSAM, not only to consider ways in which it can help member countries but also to consider the organizational health of RECSAM itself and its capacity to carry out the tasks expected of it. A pertinent issue at this point is the responsibility of member countries for the staffing of RECSAM.

RECSAM in its turn has a responsibility to keep member countries fully informed of its plans and operations. More especially, it needs to develop close personal links with key people in member countries so that problems can be solved and misunderstandings clarified.

The dedicated work on the part of many people, paid and unpaid, in carrying out these tasks is freely acknowledged by the evaluating sub-team. As was stated earlier, the success or failure of RECSAM rests on the contribution they make. The purpose of re-cataloguing the tasks at this stage is to highlight their magnitude and importance.

It appeared to the evaluating sub-team that where a member country had established a fully-fledged national co-ordinating committee most of these matters were attended to in a commendable manner. It is suggested that those countries that have a co-ordinating committee take an opportunity to review its membership and activities, those countries that do not have such a committee might consider establishing one. The membership of a co-ordinating committee might include the director(s) of primary and secondary education (or their equivalent), supervisor(s) of science and mathematics in the Ministry of Education, the director of curriculum development, the director of the curriculum centre, the director of the national institute for science and mathematics, the Governing Board members, the director of teacher training, and the SEAMEO desk official. Experts from universities and teacher's colleges might be invited to attend some meetings to give advice on specific topics.

<u>Governing Board</u>. There are two groups who are in a key position to influence the activities of RECSAM; there is the Governing Board which is charged with this responsibility, and there is the staff who implement the policies and proposals of the Board. No other

groups associated with RECSAM hold comparable positions of power. Clearly, it is important that the Board exercises its mandate to the limit so that RECSAM can continue to flourish, to adapt to new circumstances, and to meet new challenges.

It has been recorded earlier that, in general, most Board members were satisfied with the place of the Governing Board in the structure of SEAMEO, and did not feel that there were issues confronting them at present that urgently need attention.

The evaluation sub-team took note of the representations made by several people that Governing Board members must be in close touch with current developments in the teaching of mathematics and science in primary and secondary schools. It is apparent that the people with the best grasp of these developments are those who are in the various Ministries, or have recently served in them. In taking this position, the contribution to the growth of RECSAM by those who are experts in science and mathematics is not being overlooked but it is felt that their views can still be tapped in many ways. For instance, they can give advice to national co-ordinating committees, they can act as formal consultants to RECSAM, and they can be invited to seminars conducted by RECSAM at which their expertise can be put to good use.

It might be timely for the Board to reconsider if it is, in fact, in a position to examine in depth the major issues confronting RECSAM and if it is able to provide the inspirational guidance necessary for the continuing growth of RECSAM. It could well be that by planning each 5-year period in advance in considerable detail that, except at the planning stage, the powers of the Board are somewhat circumscribed and that there is insufficient flexibility to enable changes to be made to the plans from year to year. The Board might see some merit in the future in preparing a less tightly-structured 5-year programmes so that annual programmes can be finalized, say, two years in advance rather than any period from two to six years in advance as at present.

Although most Governing Board members agreed that one meeting per year is adequate, they were aware that this policy also creates problems. It certainly highlights the need for RECSAM to continue to send to Board members throughout the year copies of all documents pertaining to its operations. There is also an onus on the Director of the Centre to bring to the attention of Board members information about issues as they arise during the year. Similarly, Board members should attempt to keep in touch with each other and with RECSAM as and when necessary between meetings. The Board might find it useful, as a means of maintaining activity during the year, to devise procedures whereby Board members can call for a report to be prepared on any specific issue.

Representations were also made to the evaluating sub-team by some of those interviewed concerning the advantages that accrue when the Chairman of the Governing Board is one of the Malaysian representatives. The principal advantage cited was that the Malaysian representative is usually readily available when treasury officials of GOM are considering the annual financial allocation to RECSAM. The evaluating sub-team is of the opinion that this cannot be an overriding criterion and has no recommendation to make.

Finally, it should be reported here that the Governing Board of RECSAM is held in high esteem on every hand. It is seen as a group of thoughtful and knowledgeable people who keep the best interest of the Centre uppermost in their minds.

Programmes : During its short life-time RECSAM has conducted an impressive number of courses and has contributed to the continuing education of an equally impressive number of key educators involved in the teaching of mathematics and science in schools in Southeast Asia. RECSAM, and those associated with it, must be applauded for these efforts.

In a report of this length, it is unfortunate that it is not possible to give due appreciation to the many fine aspects of RECSAM's programmes. It must suffice to state here that there is, in fact, a preponderance of commendable features, and the remarks that follow must be interpreted in that setting.

RECSAM states quite clearly the categories of personnel for which each course is intended but there have been many instances of member countries sending participants who do not meet the specified criteria. In particular, there is a tendency for some countries to send classroom teachers to courses intended for more senior personnel. This practice tends to place undue strain on both the course supervisor and the participant and should be avoided except in unusual circumstances.

The issue that has been most difficult to resolve over the years has been that of the distribution of time, effort and funds to the various programmes, that is, to the training programme, the research programme, the curriculum development programme, the information services programme and the special services programme. It has been noted that the proportion of effort given to training courses as compared with research and development courses has switched from 40% to 60% for the first 5-year period to 65% to 35% for the second, and that many staff members considered that their commitment to training courses leaves them with little time for other activities. The evaluating sub-team considers that the pendulum has swung too far and that a 50-50 mix might be more appropriate. In addition, it suggests that either the number of training courses be decreased or the number of staff increased so that some staff time can be diverted to other purposes. The number of courses can be further reduced without decreasing the

number of participants by increasing the number of participants per course to 20. Research and development activities are often seen as the life-blood of institutions such as RECSAM and sufficient opportunities need to be provided for the Centre to pursue these activities.

It is probable that the policy that all courses be of 10 weeks will be unduly restrictive and might well compel course supervisors to protract some courses or shorten others unjustifiably. The length of each course should be decided on its merits.

A point that has frequently been made is that member countries cannot release senior key personnel from their duties for long periods to enable them to attend courses. Yet several people interviewed, often past participants, expressed a strong interest in retruning to RECSAM for a short course of one or two weeks to study a specific aspect of their work. It is suggested that RECSAM might investigate the strength of this demand and design appropriate courses if necessary.

The problem of proficiency of participants with the English language is a difficult one and has been given a good deal of attention in the past. The efforts, already noted, that RECSAM makes to help participants is very much appreciated by them. It might be possible assist further those experiencing greatest difficulty by having some of the key documents and learning materials translated into their language. Where staffing permits, the Centre might also be able to assign language tutors to each course so that they can give supplementary help, especially during the initial stages of courses. The Centre might also investigate the feasibility of making learning materials, such as language tapes and dictionaries, readily accessible in hostels and workrooms.

The evaluating sub-team is firmly of the opinion that Southeast Asia should attempt to produce indigenous curriculum materials and that carefully planned initiatives taken in this direction should be encouraged. For this reason continuation of the SEASAME and CONCEPT pilot projects currently being developed by RECSAM is supported. This does not imply that the sub-team necessarily agrees with every assumption underlying these projects or with all of their objectives. The sub-team assumes that, as with most contemporary curriculum developments, the unitial proposals for these projects are seen by RECSAM as a starting point, and they will be modified in the light of trials and other evaluative information. For instance, the project designers will need to ask themselves in the near future if these projects are based sufficiently on 'local' needs and incorporate local approaches to helping children to learn. In the time available it was not possible for the sub-team to study these projects in sufficient depth to enable it to reach definite conclusions. The team has some reservations and recommends that a small independent team of expert educators from the region study these projects and advise RECSAM on possible future courses of action.

This is also an opportune time in the development of these projects for RECSAM to review the processes being employed. For example, many people are grossly misinformed about SEASAME and so-called 'systems thinking' and it is essential that those who are attempting to implement them, and those who are judging them, have a much surer grasp of the fundamental ideas. The written material that has been prepared already needs to be elaborated and simplified. It is also essential that all professional staff members of RECSAM be involved fully in the development of these projects, especially in the critical analysis of information from all sources, and of new ideas to be tried.

Now that several SEASAME modules have been written and tried they should be reviewed, re-edited and re-designed so that they meet the highest production standards for curriculum materials. At the time of distribution of these materials RECSAM should take the opportunity to re-affirm that these are prototype materials to be used, or not, at the discretion of the member countries.

The production of study units for the "Self-Instruction Materials" (SIM) project is seen as a worthwhile and useful endeavour that is appreciated by participants. It was noted that the topics of some of the units did not fall within the criterion of basic and frequently occurring concepts in education and it is suggested that, in the initial stages of the project especially, this criterion be applied quite rigorously. If resources allow, these materials could well be translated into other languages since it is often the case that the ideas themselves are simple, but the language in which they are couched makes them appear difficult. This must be doubly so when the language is not the reader's mother tongue.

The nucleus of a fine library of books and resources on the teaching of mathematics and science in schools has already been established. It is hoped that eventually this can become one of the finest specialist libraries in the region on this subject. There is an immediate need to increase staff by at least one so that the backlog of cataloguing can be attended to. It is also imperative that greater use be made of the library; the more convenient location in the new building will help, but it still will not be used if it is open only during those hours when participants are at lectures. Course supervisors will need to include library periods and library assignments in their course timetables.

Staff: The discussion on programmes and on the relationships of RECSAM with member countries point to the need for taking steps to increase the strength of the professional staff, to provide opportunities for professional growth, and to establish working conditions conducive to maximum staff contribution to the programmes of the Centre.

The recruitment of staff members from SEAMEO countries continues to be a very serious problem. RECSAM needs a full complement of staff with a permanent core for its research and information service activities. Without a strong staff, RECSAM cannot hope to make significant contributions to its main mission of improving science and mathematics education in the region. The alternative is that it will be outpaced and overrun by developments in the member countries. A renewed and vigorous effort should be made to attract highly qualified personnel from the member countries. The salary structure and the system of rewards and incentives should be revised.

Members of the Governing Board and high officials in the Ministries should exert strong effort to assist RECSAM in recruiting staff members. They should also intensify their search for candidates for the scholarships provided by the SEAMEO staff development programme. RECSAM, in turn, should capitalize immediately on the opportunities provided by this programme.

The present practice of using the services of short-term visiting specialists for courses is commendable and should be continued. It is recommended that the practice also be extended to the information service programme so that expert guidance can be given from time to time. Qualifications of these specialists should be more rigorously defined to ensure a closer match with programme requirements.

The specialists from the non-SEAMEO countries have helped to fill vacancies created by staff shortages. Their more important contributions have been their exposition of views and experiences gained under different conditions and their provision of competencies to specific programme areas. These contributions produced leavening and variant effects which were beneficial to the programmes and acted as a deterrent to the formation of an insular atmosphere. RECSAM should continue to secure technical assistance of this nature.

Staff travel to member countries increased significantly in the last two years. This activity should be encouraged. A development-oriented institution thrives on the infusion of new ideas and experiences which are best acquired by observation and study of situations in the field and by dialogues with colleagues in the member countries.

The maintenance of a creative and professional atmosphere is an important concern. The organizational health of a development-oriented organization depends on the maintenance of a setting conducive to the open and free exchange of ideas and on the arrangement fo working conditions so that the staff members, even as they pursue individual tasks in different ways, can work together cohesively for the larger goals of the organization. Each staff member should identify himself with the total programme and accept, or at the least understand and appreciate, the ways workloads are distributed and staff competencies utilized. Staff meetings should be held periodically to discuss all aspects of the Centre's programmes. Responsibilities for programmes should be shared to the fullest extent possible.

3.2.7 Recommendations

1. That Ministries in all members countries, and RECSAM, take steps to ensure that RECSAM has at least two sets of all primary and secondary school science and mathematics syllabi, textbooks, and all other curriculum materials used for teaching current courses.

2. That the Ministries in all member countries, and RECSAM, take steps to ensure that RECSAM has copies of all teachers' college courses of study for training teachers of mathematics and science.

3. That the Ministries take steps to ensure that RECSAM is advised when major changes in syllabi, textbooks, curriculum materials, and teachers' college courses are being planned.

4. That the SEAMEO desk officer's position in each of the Ministries be established as one with both an administrative and a professional component.

5. That each Ministry establish a co-ordinating committee for RECSAM which would be concerned with:

(a) considering the present and future activities of RECSAM.

(b) establishing criteria for the selection of participants.

(c) proposing participants for the various courses, seminars and workshops.

(d) organizing the pre-course study, training and briefing of participants.

(e) suggesting possible assignments for participants after the course.

(f) organizing alumni activities.

(g) designing strategies for improving the English language proficiency of participants prior to the course.

(h) advising on the use that might be made of curriculum materials produced at RECSAM.

(i) maintaining a close liaison with RECSAM, especially through personal contacts whenever possible.

(j) organizing regular meetings with Governing Board members, if they are not members of the co-ordinating committee.

(k) soliciting contributions for a proposed RECSAM bulletin.

6. That with the co-operation of Ministries of Education, RECSAM take steps to ensure that participants are aware at least three months in advance that they will be participating at a course.

7. That from time to time Ministries of Education consider conducting seminars of high officials in their own countries to review the purposes and activities of RECSAM.

8. That RECSAM periodically conducts short seminars for SEAMEO desk officials and other Ministry officials concerned with maintaining professional and administrative links with the Centre.

9. That RECSAM conducts seminars for directors and other key personnel of the curriculum centres and science and mathematics institutes in the member countries.

10. That provision be made for increasing the number of visits of staff members to the SEAMEO countries for conferences, study and observation.

11. That RECSAM establish and maintain informal links with science and mathematics departments and education departments of universities.

12. That RECSAM maintain links with its participants for a period of three years after the course attended by them.

13. That both Governing Board members of RECSAM be senior officials in the Ministries of the member states.

14. If the Governing Board member is not a senior Ministry official, that both the member and the Ministry consider taking steps to ensure that the closest possible liaison is established and maintained between itself and the Governing Board member.

15. That Governing Board members accept responsibility for being fully conversant with the aims of teaching mathematics and science in their countries and for placing this information before RECSAM.

16. That the Governing Board at each meeting spend the greater proportion of its time examining the larger issues concerned with teaching mathematics and science in Southeast Asia and considering the contribution that RECSAM should make to effecting necessary improvements.

17. That Governing Board members also be members of national co-ordinating committees.

18. That Governing Board meetings be held at a time when courses are actually in progress at RECSAM.

19. That the Governing Board approve the necessary changes that will enable any three members of the Board to call any time during the year for the Director of RECSAM to prepare a report on any topic - such report to be presented at the next Board Meeting.

20. That member countries should send to courses only those participants who clearly meet the criteria for each course specified by RECSAM.

21. That unless staff numbers can be increased considerably the amount of time devoted to training courses be decreased so that more staff time can be allocated to other programmes, expecially the information services.

22. That a reduction in the number of courses be compensated for by increasing the numbers of participants for each course, possibly to a maximum of 20 per course.

23. That RECSAM attempts to clarify misunderstandings among member countries about the use that might be made of curriculum materials produced at the Centre.

24. That the staff of RECSAM be encouraged to continue preparing proposals incorporating its views on the nature of programmes that might be offered by the Centre.

25. That RECSAM redouble its efforts to tailor its courses to suit the needs of member countries.

26. That small teams of staff members be established for each course to assist course supervisors with the planning of their courses.

27. That the involvement of staff members in courses be rationalized.

28. That one Thai and one Indonesian member of staff be assigned to each course and be responsible for conducting tutorials regularly with Thai and Indonesian participants respectively.

29. That all self-instruction materials (SIM) produced at RECSAM be translated into Thai and Indonesian (Translation into French should be considered at a future date.)

30. That English language learning facilities be made available in each hostel.

31. That Thai/English and Indonesian/English dictionaries be available in all workrooms.

32. That sections of the RECSAM booklet for participants "Information to Participants" be translated into Thai and Indonesian.

33. That the policy of fixing the length of courses at 2½ months be reviewed.

34. That RECSAM conduct courses of up to two weeks duration on specific topics of common interest to senior curriculum developers in member countries.

35. That SEASAME and CONCEPT projects be continued, with further efforts being directed at improving the existing proposals.

36. That a series of articles be written to explain to teachers the philosophy and underlying principles of SEASAME and CONCEPT.

37. That the Governing Board convene a small panel of independent experts from SEAMEO countries to report on the suitability of "systems thinking" as a foundation upon which to build a Southeast Asian approach to teaching mathematics and science.

38. That the staff of RECSAM re-edit the curriculum materials already produced for SEASAME and that this version be published and widely distributed.

39. That the SEASAME and CONCEPT projects be subjects for discussion at RECSAM staff meetings and that all staff members be fully involved in the developments.

40. That any new proposals for modification or development of the SEASAME and CONCEPT projects be directed, in the first instance, to the staff of RECSAM for its consideration.

41. That RECSAM continue producing materials for the SIM project and

(a) that the topics selected be basic educational concepts.

(b) that they be translated into the Thai and Indonesian languages.

42. That the Governing Board revise the terms of secondment and assignment of staff members from SEAMEO countries in a manner that will attract highly qualified personnel, and also avoid disparities in salaries.

43. That greater effort be exerted by all officials concerned to recruit highly qualified personnel from the member countries for long-term or permanent assignment to RECSAM, and to bring the staff to full strength as soon as possible.

44. That RECSAM take steps towards building a permanent core of staff members particularly for its research and information service programmes.

45. That in relation to item (44) above, RECSAM take immediate advantage of the opportunities provided by the SEAMEO staff development programme.

46. That RECSAM devise strategies and provide opportunities to encourage open and free discussions among the staff of all aspects of the Centre's programmes.

47. That the Centre continue to use the services of short-term visiting specialists, taking care to define the qualifications desired with greater precision to ensure a closer match with programme requirements.

48. That RECSAM continue to secure the full-time services of specialists from non-SEAMEO countries for a tenure of 2 years at least whenever possible.

49. That the funds allocated to RECSAM by GOM for operating costs be increased to provide for:

(a) a marked expansion of the information services

(b) an increase in the number of visits by staff members to member countries.

(c) an increase in the professional staffing establishment so that the number of staff contact hours for training courses can be reduced.

(d) additional members of staff for the library.

(e) continued expansion of the library.

(f) increasing the level of paraprofessional assistance for the laboratories.

50. That the library be open on week days during the lunch break, after the close of classes, and in the evening and during weekends.

51. That course supervisiors include in their programmes assignments which require the use of the library, and they make provision for library periods in their course timetables.

3.3 Information Services

3.3.1 Objectives. The Division of Information Services is headed by an Assistant Director who is responsible for the maintenance of adequate library facilities and services, the publication of materials produced by the Centre, and the service RECSAM provides to the region as an information centre and clearing house.

The first two activities were dealt with in earlier sections of this report. In pursuing the third function, the Centre's immediate objective was to build a network of information services with countries within and outside Southeast Asia. In his recent report[47] to SEAMES on the major accomplishments of the Centre, the Director stated that a network has been established within the last two years, an achievement, he considered, "as a major accomplishment in the face of difficulties in communication and in the midst of the development of the Centre and the shortage of trained staff at the Centre". The extent of distribution of publications was as follows:

Publications	Institutions and Educators in S.E.A.	Institutions and Educators outside S.E.A.
Annual Reports, Workshop/ Seminar/Conference Reports	65	15
Newsletter	240	20
Training and Research Course Products	90	20

Lack of funds precluded an increase in the distribution. The position of RECSAM on its information service is presented in a recent publication:[48] "Due to financial constraints, RECSAM has not been able to publicize its regional mission widely and its activities in science and mathematics development for Southeast Asia, but recognition is shown by an increasing number of international organizations and agencies, national educational research institutions and education centres within and outside Southeast Asia requesting RECSAM's professional publications and prototype teaching modules developed by its course participants".

It should also be noted that the position of Assistant Director for Information was not filled in the first four years of operation. The first appointee in 1974-1975 stayed for one year only. The successor started on June of this year.

Most of the officials, as well as members of the Governing Board interviewed, believe that the time has arrived for the Centre to expand its information service and to organize a regional clearing house programme.

3.3.2 The Newsletter. The first newsletter was issued in July 1967. Two issues were published in 1968, three in 1969, and one each in 1970 and 1971. It was published regularly as a quarterly starting April 1972. The last issue in March 1976 is the twenty-fourth newsletter. The mailing list includes Ministries of Education, curriculum development centres, teachers colleges, members of the Governing Board, donors, international assistance agencies, the Secretariat, selected research workers and course participants. Due to limited funds, only 500 copies are to be printed per issue, and the newsletter will no longer be sent to course participants.

The aims of the Newsletter have not changed over the years according to RECSAM's Information Officer. They are :

(1) to keep the member countries, participating organizations and individuals informed on major accomplishments, activities and future plans of the Centre;

(2) to promote interest in the Centre's work and serve as a communication medium to collect and disseminate information on regional and international educational events of relevance to the fields of science and mathematics teaching;

(3) to serve as a sounding board for appraising new ideas in the educational field; and

(4) to serve as a vehicle for exchanging information with other institutions with a common interest in new techniques of teaching, curriculum development, teaching materials and the like.

Most of the officials interviewed felt that the circulation in the member countries should be broadened. Some suggested a professionalization of style as well as content.

3.3.3 Curriculum Materials. This topic has already been discussed in connection with the implementation phase of RECSAM's training, research and development programmes. Curriculum materials are referred to again in recognition of their role in supplementing the productions planned specifically to disseminate information to member countries and other interested organizations.

Since 1968 RECSAM has produced the following curriculum materials:

Prototype Syllabuses: in secondary physics, chemistry and mathematics.

Prototype teachers' guides and teaching units: 132 of these on a variety of mathematics and science topics have been produced by participants at courses. These have taken a variety of forms with the emphasis in earlier courses on comprehensive handbooks for teachers, and more recently on booklets for pupils containing a short sequence of lessons on a specific topic and an accompanying teachers' guide. A considerable amount of care and attention has been given to good layout and design.

Research products: 34 research products have been produced by participants at courses since 1972. These include:

- 20 primary school science and mathematics modules for SEASAME. Typical of these modules is "Live Wires", a 40-page document which contains a rationale for SEASAME, a set of unit objectives, an overview of the four half-hour lessons, a teachers' guide for each lesson with accompanying activity worksheets for pupils, and a bibliography of useful books for teachers.

- 14 guides for replicating Piagetian experiments on the development of science and mathematics concepts. These experiments are fully described in "Science and Mathematics Concept Learning".[49] This book also discusses in some detail Piaget's theories and their relevance to Southeast Asia, the CONCEPT project and it presents an overview of the experiments.

These curriculum materials are sent to the Ministries of Education of member countries, to all Governing Board members, to curriculum centres and teachers' colleges in the region, and to other interested organizations.

3.3.4 Discussion. RECSAM has not been able to develop its information services to the extent that was originally envisaged for the reasons cited above. In the first 5-year period it was agreed that emphasis had to be given to the training programmes to meet the immediate needs of member countries for trained key personnel. Furthermore, the demand from member countries for information services was low during this period. But, in the opinion of most of the officials, educators, and members of the Governing Board who were interviewed, this demand will progressively rise as educational development programmes in the member countries increase in extent and scope. Knowledge and

experience has accumulated in each member country and it is timely that it be diffused to the other countries. The differences among countries are widening and can only be bridged by regional co-operative action. RECSAM is committed to promoting this exchange of information by the principles enunciated in the SEAMEO charter and it now has a unique opportunity to exercise initiative in this domain. To expand its information services to the extent that it becomes accepted and valued as the acknowledged regional source of information is a strategy that will help to confirm RECSAM as a prestigious institution.

RECSAM already has a mine of materials. The reports of meetings of the Governing Board, the proceedings of workshops and seminars, the reports on educational systems of member countries, their development plans and the progress of their national educational projects contain a wealth of information which, at the moment, is not readily accessible. There are also the course materials produced by the participants at the training programmes. These materials could be codified systematically for easy retrieval. In addition, RECSAM could establish a bank of information on all major projects and significant development in the teaching of science and mathematics.

In organizing its approach, RECSAM should find ways to reduce the training load of its staff members so they can contribute to an expanded information services. They could prepare evaluative reports on items which are of possible use to educators in the region. They could also select curriculum materials produced at the Centre, revise them, and produce them for distribution in a form that will meet the highest standards. These activities would draw on competencies of the staff which are presently not being used and would give them new opportunities for making a professional contribution. The effort is bound to create conditions conducive to their professional development and self-renewal.

The establishment of links with member countries should be carefully mapped out. Useful co-operating arrangements should be built into the network. The national co-ordinative committees in the member countries should be included. Carefully selected educators and researchers should be invited by the national co-ordinating committees as well as by RECSAM to contribute to the proposed store of information. Functional linkages should be forged with educational institutions with strong graduate programmes and library systems. Co-operation with other SEAMEO Centres, particularly INNOTECH, should be explored. Possibilities may exist in the recently established relations with UNESCO wherein RECSAM might participate as an Associate Centre of UNESCO's APEID programme.

An effective information service will give impetus to research and development activities in the member countries and increase their capability to exert beneficial effects in the implementation of educational programmes. In turn, the information service will provide invaluable feedback to RECSAM in the form of guidelines on how RECSAM's programmes can be improved and how RECSAM can be of greater assistance to the region.

The newsletter should be seen as an organ suited primarily to maintain contact with participants, former staff members, visiting specialists, and desk officers. It should confine its coverage to staff news, notable events at the Centre, digests of programme activities and plans, announcements, and information about the alumni and former members of the staff. To cut down costs and to facilitate handling and mailing, it is suggested that it be produced as a tabloid instead of the present magazine format.

The information service unit could publish regularly a list of titles and brief descriptions of the materials mentioned above A professional bulletin would be the proper medium for publishing this information. The bulletin could also contain professional articles written by RECSAM's professional staff as well as contributions from educators throughout the world.

The views and suggestions of representatives from member countries and of possible readers should be solicited to help determine what is practical and possible.

3.3.5 Recommendations. It is recommended that RECSAM:

52. Expand its information services to the point where it becomes the acknowledged regional source of information on the teaching of science and mathematics.

53. Plan and maintain the organizational procedures that will enable it to establish a bank of information about all significant developments in the teaching of science and mathematics.

54. Obtain sample kits of the materials and resources of the major projects and significant developments in science and mathematics.

55. Divert some of the time and energies of its professional staff to supporting its information services.

56. Assign the professional staff to prepare evaluative reports on all those items which it considers of possible interest and relevance to educators in Southeast Asia.

57. Assign small teams of its professional staff to revise a selection of the curriculum materials prepared at courses and produce them in a form that will meet the highest standards. (The curriculum materials produced by participants should be given restricted distribution initially.)

58. Invite and encourage other educators and institutions from member countries to contribute to the store of information.

59. Publish regularly in a bulletin a list of titles and very brief descriptions of the items cited in recommendations 53, 54, 56, 57 and 58.

60. Extend its information services to a wider and larger audience in the member countries.

61. Consider, for the long term, the feasibility of having some of its information services computerized.

62. Convene a regional seminar to examine these proposals for an expansion of information services.

63. Reconsider its decision to stop sending the newsletter to past participants.

64. Change the format of the newsletter from a magazine to a tabloid to make it more readable, to cut down costs and to facilitate mailing.

3.4 Special Services

3.4.1 Objectives. RECSAM has sponsored many workshops and seminars, sometimes jointly with other agencies. These workshops were organized for the planning of courses and projects to meet the needs of member countries, the review of RECSAM's activities, and the exploration of ways to develop sample materials, low-cost equipment, and teaching aids suited to educational practices in the member countries. The seminars were held for the exchange of information on curriculum development activities and educational practices among the member countries, the exploration of new developments and emergent issues in the teaching of science and mathematics, and the consideration of strategies for implementing the projects of the Centre including familiarization with the use of materials produced by the Centre.

The Centre has provided assitance to Laos in the planning and conduct of selected aspects of its national programme in science and mathematics education.

In response to requests from some member countries RECSAM has also offered special courses to groups of teachers from these countries.

In providing these special services, the Centre in turn received benefits in the form of guidelines for its planning and programming operations, perspectives for its search for new directions, and a rich fund of information on practices and developments in the teaching of science and mathematics in the member countries. Since all these activities were held at Penang, the staff members were able to gather deeper insights into the problems and constraints in the introduction of change into the educational systems of member countries.

3.4.2 Workshops and Seminars. One seminar and four workshops were held in the interim period, 1967-1969, for the planning of a few courses. Since 1970, RECSAM has sponsored six seminars, six workshops, and one conference. UNESCO and the German Foundation for International Development each co-sponsored two workshops and the Universiti Sains Malaysia and the Southeast Asian Mathematical Society co-sponsored the conference. These activities were attended by representatives of member countries and associate member nations, and usually by faculty members of selected colleges of education and universities in Southeast Asia, UNESCO specialists, overseas experts, and representatives of donor agencies. The listing in Appendix 2 in the Annex gives the topic of each activity and the reference number of the report of proceedings.[50, 51]

The first seminar sponsored by RECSAM on science curriculum development and evaluation provided detailed guidelines on proposed courses in physics, chemistry, biology, mathematics and integrated science for secondary schools for the training programmes in 1971. The seminar (1971) on research in science and mathematics education provided a framework of strategies for RECSAM to consider in carrying out its clearing house and co-ordinating functions. The seminar for senior national administrators (1971) and the seminar (1972) on strategies for curriculum development also attended by senior administrators proposed new approaches to educational practice and development in the region. The fifth seminar (1973) dealt with the strategies for the development and implementation of the SEASAME project. The sixth seminar (1973) on the review of RECSAM's progress and programmes for 1975-80 led to proposals for the development of self-instructional materials for course participants, pilot studies on how Asian children learn and for an increase in RECSAM's in-country services. The participants stressed the need for giving priority in the second 5-year plan to the training of key personnel.

The first workshop sponsored by RECSAM (1972) on integrated science teaching produced sample guides, models and suggestions for the production of low-cost equipment and teaching aids. The second workshop (1973) on the production of low-cost teaching materials for science and mathematics at the primary level of schooling was held to explore ways and means for the design and production of equipment using local materials. The major recommendation was that an equipment unit be established at RECSAM to design and fabricate prototype equipment and to train key personnel in the design and production of such materials. The third workshop (1974) was a sequel to the seminar (1973) on the review of RECSAM's programme for 1975-1980. The main recommendations were: that training courses be given priority over other courses; that emphasis be given to those development courses that provide continuity with training courses; and that in view of the acute shortage of professional staff at RECSAM, serious efforts should be made by member countries to assign at least one education specialist to the Centre. The fourth workshop (1974) on new approaches to the teaching of physics explored the problems which teachers face as pupils move from lower level science courses to physics with the aim of developing materials to help the teachers and pupils bridge the transition. The fifth workshop (1975) on the development of outlines for action-oriented curricular modules for biology teaching, and the sixth workshop (1975) on planning for the teaching of science and mathematics to vocational/technical students produced both guidelines and materials for the courses in the training programme of RECSAM for the 1976 schoolyear.

The conference on mathematical education and new areas in mathematics (1974) provided a forum for the exchange of ideas among professionals and teachers at the senior secondary and university levels. It was attended by participants from member countries, Hongkong, Australia, Germany and the U.S.A.

3.4.3 Consultative Services. In 1971, at the request of the Association for Science Education of Penang and the Department of Education at Penang, several members of the staff served as consultants and trainers in the States in-service training programme in elementary science. They also assisted in the development of simple techniques for making low-cost equipment. In 1973, one staff member went to Laos to assist the Ministry of Education in planning a national programme for science and mathematics education. In 1974, two members of the staff went to Laos to give advice and assist in the conduct of in-service training programmes for teachers of elementary mathematics and elementary and secondary science courses.

3.4.4 Special Courses. Three special courses were offered in 1971 in response to requests made by Thailand, Laos and Malaysia. These were: (1) a 2-day practical workshop held at RECSAM for a group of key personnel in science and mathematics from the College of Education, Songkla, Thailand, on the use of simple techniques for making low-cost apparatus; (2) a similar course for fifteen senior inspectors of schools and state science supervisors in Malaysia; (3) a 3-month course in science at the secondary level for six key teachers from Laos to acquaint them with some of the modern approaches to teaching the various sciences at the secondary school level.

In all cases, expenses were borne by the requesting governments.

3.4.5 Discussion. The seminars and workshops were systematically organised and managed, and they produced results which were mutually beneficial to RECSAM and the member countries. In every case, the purposes of the seminars and workshops were consistent with the objectives of RECSAM as defined in its enabling instrument. The proposed topics for the ten seminars and workshops approved for funding for the second five-year period of operation are in the same category. Earlier, the evaluation sub-team suggested the inclusion of information services in the list of proposed topics. The sub-team also recommended that the selection of the participants for future seminars and workshops should be made in close collaboration with the national co-ordinating committees of each member country.

The Centre director foresees an increase in requests for special services from RECSAM in the next five years, especially in emergent areas of interest such as the fabrication of prototype equipment and in the management of in-service training programmes.

The consultative services which RECSAM may provide in the future should be limited to giving advice on the development of national programmes and projects. In this connection, RECSAM should also look into the possibility of securing the services of experts from member countries, either singly or preferably as a team, for providing consultative advice.

The Centre should take the initiative in exploring the possibility of offering short special courses for teams from member countries who need special kinds of training for their work on specific phases of national development projects. Again, the use of experts from member countries should be considered. A variation of this special course approach which should be explored is to secure the services of an expert or a small team of experts who can visit member countries to offer short courses to meet specific teachnical training needs common to all member countries. Some topics suggested by interviewees were laboratory management, graphic arts applied to the preparation of curriculum materials, and improvisation of equipment.

3.4.6 Recommendations. It is recommended that RECSAM :

65. Sponsor a regional seminar on the proposed expansion of its information service.

66. Ensure that the participants in workshops and seminars are selected by the national co-ordinating committees of member countries.

67. Confine its consultative services to giving advice on the development of national programmes and projects.

68. Look into the possibility of using experts from member countries to join teams that could provide consultative services.

69. Take the initiative in exploring the possibility of offering short special courses to meet specific training needs of teams from a member country which are involved in significant phases of national development programmes.

70. Consider also the possibility of securing the services of an expert or team of experts which can offer short special courses in all member countries to meet specific technical needs common to all member countries.

4. Other Issues

4.1 Continuing Evaluation

During its brief history the activities and proposals of RECSAM have been evaluated on several occasions.

The first round of evaluation was that undertaken by various agencies and organizations, including the Council, the Government of Malaysia, and the United States Government, when they considered the final development plan for the first 5-year period of RECSAM's operations. These evaluations were directed at the facilities available and plans for their extension, at the proposals for programmes, and at the basis for funding these activities.

The next major evaluation was the exercise carried out in 1972-73 in response to a recommendation by the Seminar on Educational Planning held in Bangkok in April 1971 that each Centre conduct a self-evaluation according to criteria established by SEAMEO. Subsequently, RECSAM responded to a questionnaire covering every aspect of its operations,[52] and itself prepared an extensive questionnaire which was completed by its past participants.[53] These were timely

exercises for RECSAM as it was about to embark on a review of its past activities preparatory to formulating its plans for the second 5-year period.

These self-evaluation activities were taken a stage further at a seminar convened by RECSAM in June 1973 attended by representatives of all member states to review RECSAM's progress and its programmes for 1975-1980.[54]

Again, this second 5-year plan was subjected to the same kind of scrutiny as the first 5-year plan by those organizations and agencies with a direct interest in RECSAM's operations. And, of course, this current external evaluation being reported here is another in the series of major reviews of RECSAM that have been undertaken.

Successive Governing Boards have been involved in some of the evaluation activities already referred to, but it has also conducted evaluations itself. The most important of these was that which preceded its recommendation to the Council that the second 5-year plan be approved. And of no less importance have been their evaluations of the SEASAME and CONCEPT projects which have regularly been reviewed.

RECSAM course supervisors, as a matter of routine, prepare questionnaires to be completed by participants at the conclusion of each course. The information obtained is processed and circulated to member states, associate members, and to Governing Board members.

In short, RECSAM has been subjected to several major evaluation exercises during its comparatively short life, its activities are regularly reviewed by its Governing Board, and all participants at the end of each course are given an opportunity to evaluate the course and comment on the facilities provided.

As a result of this evaluative activity RECSAM has been provided with a valuable store of information that has guided decision-makers at critical points in its development and has provided those responsible for implementing the various programmes with the assurance that the Centre is meeting many of its major objectives.

Though this type of work is time-consuming, and can sometimes be expensive, its importance cannot be questioned. Regular feedback from a wide variety of sources is a pre-requisite to RECSAM's continuing search for ways of improving its performance and is an information base from which new purposes may be perceived and new courses charted.

Earlier in this report the need for the Governing Board to try to restrict its deliberations to matters of major importance was stressed. The Board might achieve this objective in part by carrying out evaluative reviews of the many aspects of RECSAM's work. It could well address itself to one or two major aspects per year and seek the support of RECSAM's professional and administrative staff in assisting them with this task. For instance, issues which are worthy of this type of detailed investigation are the effectiveness of RECSAM's communication network, the use made of participants on their return to their home countries, RECSAM's relationships with other SEAMEO Centres/Projects, or utilization of staff and resources.

It is equally important that the staff of RECSAM be involved in evaluating its programmes. It needs to be concerned with the larger issues affecting its work and it needs to be continually concerned with improving the quality and effectiveness of its efforts. This suggestion is made for its own sake but it may well be that this kind of activity will increase the personal commitment of staff members to the Centre and contribute to their professional growth.

The other aspect of RECSAM's programme that might benefit from more systematic evaluation is the design of the courses themselves. The usefulness of the feedback from the participants is acknowledged and these investigations should be continued. However, the conducting of courses is one of RECSAM's most important and recurring activities and warrants all the deliberate and carefully planned consideration that can be given to it so that in subsequent courses all benefits are maximized. It is recognized, of course, that in some respects each course is unique, and that each course supervisor must be given freedom to exercise his creative talents. On the other hand, it is also recognized that there are many common elements to the courses that can be improved by systematic evaluation. And course supervisors, no matter how idosyncratic, will be able to put evaluative comment about their courses to good use in the future. Possibly the most effective means for implementing this suggestion will be for small evaluative teams to be appointed for each course from among RECSAM staff members.

Recommendations

71. That the programme of regular periodic major evaluation exercises be continued.

72. That the Governing Board at each annual meeting devote some time to evaluating at least one major aspect of RECSAM's operations.

73. That the professional staff of RECSAM draw up a blueprint for their regular evaluation of the major thrusts of the Centre and that provision be made for their findings to be represented in the appropriate quarters.

74. That RECSAM appoint small teams of its staff members to evaluate each course, and that these evaluation reports be circulated among all staff members.

4.2 Living and Recreational Facilities

Course participants stay at the Centre's hostel. The room rent of US$ 74/month is paid from the scholarship grant. The participant receives a monthly stipend of US$120 out of which he pays US$1.48/day for food. The hostel has no dining facilities and the meals are served in the dining room-lounge in the adjacent RECSAM building by a caterer under contract to the Centre.

The hostel has four sub-blocks with a total of 120 rooms. Each sub-block has a laundry room and a common room. There are 110 furnished rooms available for rental, each equipped with a ceiling fan and provided with bathroom and toilet. Nine rooms are air-conditioned.

The hostel is managed by a steward who reports directly to the registrar/bursar. Custodial service is provided by eleven employees.

From the analysis of the feedback from participants and the responses from interviews, it is apparent that the participants were satisfied with the hostel facilities and the congenial atmosphere. They generally decried the smallness of the common room, the inadequacy of its furnishings, and the absence of reading matter. Almost unanimously, they deplored the poor quality of the food, singling out, among other things, the lack of variety in the food served at all meals. They also called attention to the absence of facilities for indoor and outdoor games.

RECSAM plans to convert the temporary RECSAM building into a recreational centre when it moves to its new building early next year.

The promotion of the spirit of friendship and mutual understanding is a basic objective of the SEAMEO programme. Conditions and facilities should be established in the proposed recreational centre to encourage the social interactions conducive to the development of this spirit. There should be facilities for indoor games such as ping-pong and chess and for outdoor games such as volleyball

and badminton. The lounge should be adequately furnished and provided with newspapers and magazines. The canteen should be re-located to a more congenial room and operated as a restaurant in accordance with acceptable standards of management and hygiene.

The common rooms in the hostel are too small to serve their purpose. The lounge could serve the purpose better. If it is uneconomical to operate the restaurant at night, tea and coffee makers should be made available in the lounge.

The food served to participants should be improved. At current food prices, this can only be done by increasing the monthly stipends of participants so they can afford to pay higher prices for their meals. It is suggested that the stipend be increased from US$120/month to US$150/month and the charge for food be raised from US$1.48/day to US$2.50/day.

Recommendations

75. That the plan for the proposed recreational centre should include the provision of facilities for indoor and outdoor games and accommodations in the lounge that will encourage the social interactions conducive to the exchange of ideas and the promotion of the spirit of friendship and understanding among the participants.

76. That the restaurant service should be professionalized according to acceptable standards of management and hygiene.

77. That the monthly stipend of the participants should be increased by at least US$30/month so they can pay US$ 1/day more for three meals daily and thus get better food service.

5. General Observations

Within a period of nine years RECSAM has established itself as an important educational centre in Southeast Asia; it has conducted an impressive number of courses on a wide range of subject interests and through its influence on the many key educators who have attended these courses, has contributed to the healthy growth of mathematics and science teaching in the member countries.

The teaching staff of RECSAM have always earned the praise of members of successive courses, this despite the difficulties caused by inadequate numbers and constant turnover of staff. The two pilot projects which it has launched, aimed at producing

curriculum materials for the Southeast Asia region, already provide a framework within which the staff of RECSAM is developing its research capacity. With further support, it can be expected to enhance its reputation for research.

The Centre's training courses are continuing to meet a need which has been expressed strongly and persistently by the member countries. It is expected that, with an expansion of education services in the region, RECSAM will need to continue to provide this service. The evaluating sub-team urges that member countries continue to recognize RECSAM's special regional training role, and that they continue to send participants who are able to derive maximum benefit from the courses.

The evaluating sub-team predicts that in future RECSAM will generate an increasing amount of information on mathematics and science teaching. This information will need to be widely disseminated throughout the region. As it is possibly through this activity that RECSAM can exert the greatest amount of influence the sub-team recommends that the Centre be given the fullest support for the expansion of its information services.

If the evaluating sub-team has one major concern it is that, for various reasons, member countries have been reluctant to release staff of the calibre needed to equip RECSAM to discharge the responsibilities that the countries themselves have assigned to it. RECSAM must have quality staff to achieve its goals. Member countries must play their part in providing quality staff. If these propositions can be accepted a solution will be found to the problems that have beset this issue for too long.

The sub-team expresses its grateful thanks to the many people in the member countries, at the Secretariat, at RECSAM itself, the Governing Board members and especially the Director of RECSAM, who have been generous in providing assistance and co-operation.

"RECSAM is a prestigeous educational centre making a pronounced impact on the teaching of mathematics and science in schools throughout Southeast Asia". This was the view of all those interviewed who have been associated with its activities. This view is also endorsed by the evaluating sub-team.

FOOTNOTES

CHAPTER 5

1. SEAMEO; Enabling Instrument for the Regional Centre for Education in Science and Mathematics; 1972, SEAMEO: Bangkok.

2. SEAMEO; Final Report of SEAMEO Technical Workshop - July 1966; 1966, SEAMEO: Bangkok.

3. RECSAM; Report of the First Meeting of the Steering Committee for RECSAM; 1967, RECSAM: Penang.

4. RECSAM; Final Development Plan for RECSAM - Vols I and II; 1968, RECSAM: Penang.

5. RECSAM; Memorandum of Understanding; 1969, RECSAM: Penang.

6. RECSAM; Sixth Meeting of Steering Committee of RECSAM; 1969, RECSAM: Penang.

7. RECSAM; First Governing Board Meeting of RECSAM; 1970, RECSAM: Penang.

8. SEAMEO; Agreement between the Government of Malaysia and the Southeast Asian Ministers of Education Organization Regarding the Regional Centre for Education in Science and Mathematics; 1972, SEAMEO: Bangkok.

9. SEAMEO; Enabling Instrument for the Regional Centre for Education in Science and Mathematics, 1972, SEAMEO: Bangkok.

10. RECSAM; A short History of RECSAM 1966-1975; n.d., RECSAM: Penang. p. 21

11. RECSAM; Approved Courses on Training, Research and Development - Second Five-Year Phase of Operation; n.d., RECSAM: Penang.

12. SEAMEO; Memorandum of Agreement on Funding of RECSAM for Second 5-Year Operation; n.d., SEAMEO: Bangkok.

13. SEAMEO; Agreement between the Government of Malaysia and the Southeast Asian Ministers of Education Organization Regarding the Regional Centre for Education in Science and Mathematics; 1972, SEAMEO: Bangkok.

14. SGV-KASSIM CHAN; Management Audit of the Regional Centre for Education in Science and Mathematics 1973-75; 1975, SGV-Kassim Chan: Kuala Lumpur.

15. RECSAM; Significant Developments of Regional Centre for Education in Science and Mathematics Since its Inception in May, 1967; n.d., RECSAM: Penang.

16. Ibid. p. 8.

17. CHIN PAN SENG; Welcoming Address to Course Participants, May 1970, Report of First Governing Board Meeting of SEAMEO-RECSAM; 1970, RECSAM: Penang. p. 51.

18. RECSAM; Approved Courses on Training, Research and Development - Second Five-Year Phase of Operation; n.d., RECSAM: Penang.

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20. SEAMEO; Report of Eleventh Project Director/High Official Meeting; 1975, SEAMEO: Bangkok.

21. RECSAM; Final Development Plan for RECSAM; Vols I and II; 1968, RECSAM: Penang.

22. SEAMEO; Enabling Instrument for the Regional Centre for Education in Science and Mathematics; 1972, SEAMEO: Bangkok

23. SEAMEO; Supplement to the Bangkok Post; 1975, Bangkok Post: Bangkok.

24. RECSAM; Final Development Plan for SEAMEO Regional Centre for Education in Science and Mathematics; 1968, RECSAM: Penang. p. 16.

25. RECSAM; Summary Record of Results Obtained form the Start of the Interim Period of Operation, 1968 to June 30, 1976; 1976, RECSAM: Penang.

26. SEAMEO; Memorandum of Agreement on Funding of RECSAM for Second 5-Year Operation; n.d., SEAMEO: Bangkok.

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CHAPTER 6

REGIONAL ENGLISH LANGUAGE CENTRE

The Regional English Language Centre (RELC) was authorized to be established in Singapore by the Southeast Asian Ministers of Education Organization (SEAMEO) at the Manila Conference in 25-28 November 1966. It is an autonomous international institution which is a subordinate body of SEAMEO.[1] Its early planning and administrative activities were conducted by an Interim Project Office beginning in August 1967. These led to RELC's Interim Operational Programme, which began in July 1968.

1. Introduction

In the context of the goals, purposes, and functions defined by the SEAMEO Charter - in general, to promote co-operation, mutual knowledge and understanding, collaboration in joint projects and programmes of mutual benefits, articulation of education to the economic and social goals of its member states, and preservation of the independence, integrity and fruitful diversity of their cultures and educational systems[2]- it was agreed that the region needed RELC for at least two important functions of English within it. These functions were identified, namely, (1) as a means of international communication and (2) as a tool for education. It was also stressed that the relationship of English to the local and national languages would be essentially complementary, and that it could not replace them in the life of the family, community and nation.[3]

The programme of RELC has evolved through a project development phase from 1966 to 1968, an interim phase during the years 1968-1971, followed by the first five-year period of permanent operation, 1972 - 1976, and entering in 1977 its already authorized development plan for the second five-year period of permanent operation. That an external evaluation of RELC is being undertaken when the 1972-1976 period is in its closing year and while the full operational details of the programme for the ensuing period are still in the stage of comprehensive consideration and preparation offers more possibility of usefulness than it would otherwise possess at any other time, and more so perhaps in comparison with the evaluation of other SEAMEO centres at their various stages of growth.

RELC has been under the continuous leadership of the Director who was originally appointed as Interim Project Director in 1967 upon nomination by the then Co-ordinating Committee with the approval of the Minister of Education of Singapore. Formal approval by SEAMEC is also a condition of the Director's appointment. The Director has therefore seen RELC through its pre-interim and interim phase, and its first period of permanent operation, from 1967 to 1976. The duties of the Director and of the Governing Board, which succeeded the Co-ordinating Committee, are defined in the Enabling Instrument approved and adopted by SEAMEC on 27 January 1972.

There are eleven (11) specialists in professional fields of teaching and research on the staff of RELC assisting the Director. Seven (7) of these are from the United Kingdom, the United States of America, Australia, and New Zealand under various forms of technical assistance programmes; two (2) are posted by Singapore, as is the Director; and one (1) each from India and Indonesia have been directly recruited and funded by RELC, There are six senior administrative staff members, four of whom are posted by Singapore. The total number of staff members in RELC and its International House is 110.

The Centre opened in temporary premises, a bungalow in the Watten Estate, where it stayed until April 1972. Having acquired a new site and having completed construction of a centrally air-conditioned 18-storey building for its operations, it moved in May 1972 into this new building located in a residential district within walking distance of the banking, business and shopping centre in Orchard Road and Tanglin Road. Here RELC is not only permanently located but also manage the RELC International House and the rental of extra office space to a number of private and government agencies.

The programme and administrative management and operation authorized by the Enabling Instrument and represented by the professional and administrative staff of RELC is generally similar to that of other SEAMEO centres but differs in two major respects. The first of these differences consists of the capital assets of land and building which generate income for RELC from its operation of the International House, certain floors in the building for business occupancy, and special facilities for various public functions. This income accumulates and provides additional funding for RELC under special arrangements to meet anticipated needs during the period of permanent operation. Over the 10 years up to 1976, GOS and other sources have contributed to Operational and Capital Costs the equivalent of 69.80% and to Special Fund Costs 43.8%. USG contributions have been 30.20% and 56.2%, respectively. In fiscal year 1975-1976, the total amount for Operational and Capital Costs is US$861,400. The total Special Fund Costs for the same year amounts to US$334,200. Thus the past 10-year process of RELC's increasing capacity to meet its operational and capital costs seems to assure that the succeeding periods of permanent operation under the recognized procedures of funding will enjoy favorable prospects of continued programming.[4]

The second major distinctive feature of the organizational structure of RELC in relation to the member countries consists of the network of national committees it has helped to establish in each country. These committees are in addition to the Governing Board of RELC. They include a committee of national specialists for every major part of RELC's programme. Thus there are local committees for training, research, instructional materials, library and information services, and publication. The committee chairmen and the national representative to the Governing Board consitute the over-all National Committee.

A philosophy for RELC, which is twofold in its combination of the professional concern for language and its human aspiration for regional understanding and world-mindedness, has been expressed in the following words of a SEAMEO Minister of Education and RELC Director Tai Yu-lin:[5]

> "One of the difficulties of living in modern times arises from the need to adjust to rapid changes and new demands. Linguistically, most of the societies in Southeast Asia have acquired a multi-lingual pattern dating back thousands of years. Each language has its own characteristics and legitimate claim to a place in each of our education systems. But in order to accelerate economic and social development in Southeast Asia, we, for practical considerations, must of necessity design for ourselves an education system which meets our particular needs. If the English language is today one of the keys to modernization and to a vast amount of new knowledge, particularly in the fields of commerce, science, and technology, then the youth of our nations must be given the conditions to attain a satisfactory proficiency in English as a second or foreign language even though they live in Asia and will remain Asians."
>
> .....
>
> "In conclusion, I would like to say that in a world torn by conflicts and fears, regional centres such as the Regional English Language Centre can provide solutions to some of the major problems confronted by the modern educationalist. While the world, seen globally, has shrunk, the world of each individual, child or adult, has expanded enormously. In Southeast Asia, in order that regionalism may succeed as anticipated, the region must be both a source of knowledge and a subject for increased study. At our Regional Centre, barriers are cut down to the minimum to allow the free flow of knowledge about peoples in Southeast Asia, to encourage interchange of information, and to promote regional understanding and goodwill. It provides opportunities to

consider common regional problems, the possibility of multinational contributions to higher living standards in Southeast Asia, the meaning of interdependence, and the reason why, at this time of history, nations can no longer exist in isolation one from the other. The crucial task for the educator in the post-Second-World-War period is to teach that loyal citizenship of one's own country is consistent with world-mindedness and that national interests will suffer if regional and international interests are ignored. An institution such as the Regional English Language Centre has the opportunity as well as the responsibility to take up this task of importance and magnitude".

2. Procedures for Evaluation Study

2.1 Design

As a basis for the evaluation of RELC, the evaluators adopted the framework put forward by Stake.[1] It was recognised that in any evaluation there are two basic components: description and an accompanying judgment or evaluative comment. In describing a programme or project the evaluator can take note of the stated objectives and, as well, he can observe what is happening. Judgments, likewise, may be classified in two ways, first in terms of general standards of quality and, second, in terms that are specific to the programme in question.

To guide the evaluator in his collection of data, both in describing a programme and in making judgments upon it, Stake suggests focussing on three, not necessarily independent but temporally related, aspects: the set of conditions existing before the start of a programme, the implementation of the programme, and the outcomes or results of the programme. In a training programme, for instance, the prior conditions might include the status and qualifications of entrants; the implementation might include the interactions taking place during instruction; and outcomes might include the impact of instruction on those completing the programme and on others (the so-called multiplier-effect). Thus the descriptive component of Stake's evaluation model might be thought of as containing six cells (anticipated and observed prior conditions, anticipated and observed implementation, and anticipated implementation, and anticipated and observed outcomes). Similarly, there are six cells in the evaluative component of the model. To complete the model there is a statement of the rationale of the programme.

2.2 Data Sources

The framework of Stake, described above, is simply an attempt to systematise data collection. Using the framework, the evaluator can determine from the variety of available data sources the information that he needs. Table 1 shows how Stake's framework was used in evaluating one of RELC's major programmes, namely, the research programme. Similar tables were drawn up for training programmes, instructional materials development, regional seminars, library and information centre services, and technical assistance to national programmes.

The major data sources as Table 1 indicates, is persons with knowledge of RELC and of the needs of the region with respect to language teaching. These persons may be grouped as follows :

1. Persons inside RELC

   a) The Director
   b) Staff
   c) Present course members

2. Persons associated with RELC

   a) Governing Board Members
   b) Members of National Committees
   c) Former staff
   d) Alumni

3. Persons outside RELC

   a) Ministry officials in member countries
   b) Personnel from other institutions

2.3 Data Collection

Data were collected in three main ways. First, a sample of all the persons listed above (that is, persons inside RELC, persons associated with RELC, and persons outside RELC) was interviewed or sent questionnaires. Copies of three of the data-gathering instruments, two Interview Schedules and a questionnaire, are contained in the Supplementary Annexes. In the case of the Interview Schedule for the Centre Director and Members of the Governing Board and National Committee for RELC, a number of different interviews was administered. Under each question in the appended schedule a code indicates to which person(s) the question was addressed. The evaluation team visited RELC for three weeks and during this time interviewed the Director, teaching and administrative staff, and a sample of course members currently studying at RELC, together with the members of the Governing Board and of the various National Committees in the host country.

TABLE 1

Sources of Data for Evaluating the RESEARCH Programme of RELC

Rationale	Objectives	Observations	Standards	Statement
	Description		**Evaluative Comment**	
The teaching of English in the region will be assisted if RELC undertakes, promotes and disseminates the results of research. Research is important in establishing the reputation of RELC as being the outstanding institution for creativity and innovation in the field of language teaching and learning.	**Prior Conditions**		**Prior Conditions**	
	Decision that research should play an important part in activities of RELC	What part does research play in activities of RELC?	What do experts think is the place of research in the activities of RELC?	Evaluator's statement on desirability of RELC's research role.
	Implementation		**Implementation**	
	Research to be undertaken by a) staff b) course members Financial support to be given to research workers. Research to be promoted Results of research to be disseminated	How involved in research are a) staff b) course members? What support is given to research workers? How is research promoted? Through what avenues are research results disseminated?	What do experts think are the appropriate procedures for undertaking and promoting research and disseminating the results of research for the benefit of member countries?	Evaluator's statement on the nature and quality of staff and course members involvement in research.
	Outcomes		**Outcomes**	
	Research priorities determind and list of project approved. Course members to undertake individual research.	Which of approved projects are completed? What research have staff undertaken? What research have course members undertaken	What type of research do experts think should be undertaken and/or promoted by RELC?	Evaluator's statement on type, quality and amount of research undertaken and promoted by RELC.

The team also attended meetings of the professional staff. A questionnaire was administered to all members of the fifteenth four-month certificate course and the fifth diploma course. The evaluation team also interviewed and administered questionnaires to Governing Board members, members of national committees, ministry officials, and personnel at other tertiary institutions in member countries. During visits to member and associate-member countries of SEAMEO the views of alumni and former staff were obtained. No attempt was made to select alumni randomly. Time was one constraint. The principal reason, however, was that a major survey[2] of course members who had trained at RELC from 1968 to 1974 had been completed and the results of this study were available to the evaluators.

The second means of data collection was by examination of the documents written and produced by the persons listed above (sec. 2.2). These documents included information publications (reports of Governing Board meetings, Annual Reports, Reports of regional meetings, newsletters, and library publications), professional publications (e.g. RELC Journal, reports on proceedings of regional seminars, research papers and monographs), a sample of instructional materials developed for the region, and a sample of research projects completed by course members and staff. These documents were examined at SEAMES during the four-week planning phase and again during the visit to RELC.

The third major means of data collection was by observation during the visitation phase at RELC. Since the members of the evaluation team were housed at RELC International House during their three-week stay in Singapore, there was opportunity to act as participant-observers in many of the activities of the Centre. These included attending seminars, joining in the social and cultural activities presented, using the resources and facilities of the Library and Information Centre, and generally joining in the life of staff and course members at the Centre.

2.4 Reliability of Data

Reliability checks were made during the course of data collection.

In the administration of the Interview Schedule, for instance, both interviewers took notes in half the interviews conducted. Comparison of the written responses gave no evidence to suggest that the recording was unreliable. The procedure followed in all the interviews was to have each question typed on a separate sheet and to give a copy to the interviewee. The procedure allowed questions to be seen as well as heard, thus avoiding repetition of questions and minimising misinterpretation. At the same time it allowed the interviewers to take notes in a fairly natural manner on similar question sheets and more comprehensive answers seemed forthcoming than might otherwise have been the case.

In the interviewing of course members, the diploma and certificate groups were divided in shalf with each interviewer taking half of each group. Again comparison of notes gave no grounds to suggest that the recording was unreliable. Similar reliability checks were made with other information-gathering instruments.

To increase the validity of the questionnaires respondents were not required to give their names.

3. Training Programmes

3.1 Objectives

The training programmes of RELC have had as their goal since 1968 the improvement of the teaching of English as a second or foreign language in SEAMEO member countries. This goal is functionally and specifically developed in the 1968 Programme Development Plan and the Blueprint 1972-1976. The programmes were planned to meet specific problems and needs of member countries and designed to operate at levels and in areas where they could contribute to the effectiveness of existing national programmes and towards pioneering new approaches. They were aimed at high-level personnel such as, teacher educators rather than teachers, designers of research, supervisors/inspectors, curriculum materials specialists, and other key or potentially key personnel.[1]

In addition to continuing the development of this major goal along necessary redirections and renovations of English teaching programmes due to changing national conditions and policies of member countries, RELC has conceived a reorientation of purpose out of its accumulated experience from the last 10 years. It has gained a greater awareness of the complex language interaction growing in Southeast Asian countries, and of the deep involvement of language planning, language education, and language use in social-cultural, economic and political development goals of developing countries. RELC was asked by the SEAMEO Council's President in 1975 to consider the role of leadership in investigating psychological and sociological problems in the intellectual development and life experience of bilinguals and in providing impetus to the establishment of wider and more efficient communication channels in Southeast Asia.[2] The Governing Board in its meeting of December 1975 and SEAMEC in January 1976 instituted the following policy for the post-1976 programme of RELC :

> "The Centre shall assist member countries in the improvement of the teaching of English and other languages."[3]

Under the 1968 Programme Development Plan and Blueprint 1972-1976, RELC set some definite quantitative targets. It planned to train 591 key educators during this period.[4] This training was to be carried out through three different types of training programmes : (1) Four-Month Intensive Course in the Teaching of English as a Second or Foreign Language; (2) One-Year Diploma Course in the Teaching of English as a Second or Foreign Language; (3) Three-Month Specialized Advanced Course.[5]

3.2 Implementation

A Co-ordinating Committee, which met eight times from June 1967 to June 1971,[6] and a successor to this Committee, the Governing Board, have guided RELC in developing the training programmes and in carrying out their general and specific objectives. The Governing Board met regularly once a year and in emergency sessions. Regional seminars have been held for the special purpose of bringing the proposed programmes under wide and in-depth professional scrutiny, with the benefit of advice and assistance from experts not only from SEAMLO member countries but also from western countries. This was done before the adoption of the Proposed Development Plan, 1967, and Blueprint 1972 - 1976. Besides two of these programme development regional seminars, the latter in 1971 having been attended by 80 participants from 10 countries, there were four more regional seminars prior to 1972 from which RELC gained much knowledge and experience applicable to training.[7]

The three types of training programmes are described in extensive detail in Blueprint 1972 - 1976. The aim, content, structure, duration, schedule, and requirements of each are fully elaborated, including guidelines for the selection of participants. Professional staff members have produced syllabi and abundant handouts for each course subject. The complete course outline and syllabi are furnished to the participants and discussed in orientation sessions at the beginning of each course. Time-tables for lectures, tutorials, seminars, group discussions, individualized projects, private study in the library or language laboratory, and other programme activities are prepared in advance and copies supplied to all staff and course members.

Without attempting to repeat or even summarize all the copious information available in RELC publications and documents about the 1968 - 1976 training programmes, one may note a few special characteristics which affect implementation. First, the class and out-of-class load of the course-members is more than double the usual load for students in a normal schedule of traditional programmes in a tertiary institution. The load carried by the instructional staff is commensurately heavier. As an example, each four-month course takes up at least 400 student hours, of which 300 are classroom contact hours, and 100 hours are for the assignment paper.

Second, each programme is composed of a number of basic or core subjects and a wide variety of elective and optional subjects. This pattern is further refined in the one-year diploma course by the adoption of two schemes for meeting individual needs. These are Scheme A for course members who follow a programme containing "a considerable amount of formal instruction plus a number of term papers and minor projects," and Scheme B for those who are given "a minimum of formal classes with a considerable amount of time devoted to guided reading and supervised work on a substantial research project."

Third, a most striking characteristic in the implementation of the three-month specialised advanced course is the choice of a major teaching problem as the focus of the course and the scheduling of the course to make it dovetail with the holding of a regional seminar in which the same, or a closely related topic, is the theme. The course work includes attendance in the regional seminar.

Fourth, the training programmes undergo continuing modification and adjustment as a consequence mainly of internal evaluation. This internal evaluation has been done with use of two English proficiency tests (University of Michigan and Davies), given as pre- and post-tests, the composite test devised by RELC and also given as pre- and post-tests, and questionnaires administered at the end of each course. The staff also exchange comments informally and in formal academic committee meetings devoted to discussions of the course while in progress, as well as at the beginning and the end of the course. An external evaluation was attempted in 1972 under the leadership of one of the visiting specialists but its completion suffered from a number of obstacles, and an inadequate data-gathering approach reduced interest in the data which was obtained. RELC also carried out a comprehensive self-evaluation by SEAMEO in 1972, which was later analysed by a SEAMES consultant.[8]

Through these measures, the training programme developed a process of acquiring flexibility through the years. RELC also has had the net-work of national Training Committees in member countries which provided an additional source of feedback. RELC's major achievement in evaluation is <u>RELC Training Programmes : Their Impact on English Teaching in Southeast Asia</u>[9], a staff research project completed in November 1975, which has also played a greatly significant role in the formulation and justification of decisions behind the <u>Development Plan for the Second Five-Year Period (1977 - 1981)</u>.

The four-month course has been given twice a year, the three-month course once a year, and the ten-month course also once a year. There are in effect four courses each year with two, and sometimes three, going on simultaneously. The one-year diploma course is continued in a revised form in the programme approved for 1977-1981. Two certificate short courses, each lasting one semester and corresponding to the first and second semesters of the diploma course, the

M.A. course, and an advanced diploma course represent the training programme planned for 1977 - 1981. RELC has indicated that the final operational formulation and management of these training programmes is still undergoing study, consultation, and discussion before they are implemented.

3.3 Outcomes

The outcomes of the training programmes may be partially quantified through a count of the number of times they have been given, the number of key educators who were course members, and the number of completed assignments and projects, and of individual studies on the level of Master's degree theses.

3.3.1 Training Course. RELC has achieved its planned number of courses offered.[10] By the end of 1976, it will have conducted:

15 four-month intensive courses for the Certificate in the Teaching of English as a Second or Foreign language;

5 one-year courses for the Diploma in the Teaching of English as a Second or Foreign Language;

5 three-month specialized advance courses, "each devoted to an in-depth study of one particular topic representing a major English Teaching problem in SEAMEO countries and requiring urgent consideration and solution". These specialized problem-oriented topics are as follows:[11]

1972 : The Production and Evaluation of Instructional Materials

1973 : The Training and Supervision of Teachers of English as a Second or Foreign Language

1974 : Research in Language and Language Teaching

1975 : Curriculum Development and Syllabus writing for Programmes of English for Special Purposes

1976 : Sociolinguistics

3.3.2 Course Participants. The number of 581 key educators concerned in English teaching set by RELC for its interim phase and first five-year of permanent operation has been exceeded. By December 1976, RELC will have taught over 625 key and potential key personnel in English teaching in SEAMEO Countries. In addition, it has taught over 30 participants from non-SEAMEO countries.[12]

3.3.3 Assignments and Projects; Scheme B Studies. A total of 378 assignments and projects have been produced in the four- and three-month courses. Nine (9) individual studies comparable to theses presented for the master's degree were carried out in Scheme B of the one-year Diploma Course. Of the 378 assignments and projects at least 50% could be described instructional materials. These focussed on language teaching methods, materials and problems at the secondary level (45%), the primary level (25%), and the tertiary level (20%).[13]

3.3.4 SEAMEO Charter, Art I.2: "Advancing the mutual knowledge and understanding of the peoples in Southeast Asia as well as the rest of the world". It is easily overlooked that the total curriculum of the training programme formally incorporates methods for the exchange of ideas and experiences from varying national milieus among the course members who represent different countries in Southeast Asia. Co-operative projects involve a mixture of participants, as group discussions, workshops, and seminars do. Each group of country participants also take turns in presenting cultural programmes dealing with their cultural background, history, customs, art, and folk life. The rooming arrangements in the International House assign a mixed occupancy of a room by participants of different nationalities, thus enhancing the cultivation of greater cross-cultural knowledge and understanding. The participants, past and present, identify as one of the most important experiences in, and benefits from, the courses their developing friendships with fellow course members from other countries and their greater knowledge and understanding of peoples in Southeast Asia and other parts of the world.

3.4 Discussion

3.4.1 General consideration of the nature of regional training programmes. Regional educational programmes have built-in problems. These are the unavoidable problems of trying to cope with, or bridge, the differences of the participants due to their different countries of origin, their different systems of education and development, their different cultures, and their wide range of educational and professional background. Together with this socio-cultural national variety and heterogeneity, the participants exhibit distinct patterns of work and behaviour. The common bond of representing the same profession, discipline, or field of experience and interest, is their strongest unifying factor, but this is not strong enough in itself to insure the general over-all effectiveness of a programme.

For such a target population in a regional training programme, it becomes inevitable that a general type of programme becomes a gathering of a general type of participation. Then the wide-range of possible different kinds of people to which a general type of participation makes itself open compounds the initial unavoidable and basic heterogeneity built into, or generically characteristic of, a regional programme. This creates a condition for instruction in which the faculty are compelled to gear their course preparation to the average participant. However, the participants usually include some who have had little or no background and are new to the subject matter, on the one hand, and some who have had advanced training in long-established and expertly taught national programmes as well as in western universities, on the other hand. Furthermore, as far as their present and anticipated work is concerned, they are a mixture of school teachers, supervisors, administrators, and teacher educators. They also come from various levels - primary, secondary, and tertiary.[14]

This rather extensive heterogeneity characterizing the body of participants in one common type of regional training programme presents an inherently tremendous hardship for faculty and students, not that a strong and resourceful faculty and administration have to be helpless under the circumstances. The faculty will need to provide more individualized instruction. They will have to be more knowledgeable of particular country programmes and problems. They have to incorporate in their syllabuses and in their actual teaching as much specialized information, practical examples, and demonstration as possible. It is in this manner that one common programme for a vastly mixed group of professionals and of people coming from different countries as well as from different levels and areas of work, even though they are all working on English teaching, can at all be expected to be interesting, effective, and responsive to the needs and expectations of the participants, instead of being too general and academic.

There is another possible approach to this serious and fundamental problem of the heterogeneity of the participants. The solution in the situation based on a common programme is suggested above in terms of planning and implementing the programme with special attention to its demonstrating resourcefulness, flexibility, responsiveness and more practical applicability. The other approach could be that of designing the programme to focus on a common selected level, or problem, or theme, such as the specialized advanced three-month course has done. The school level selected for a programme may be elementary, secondary, or tertiary at any given time, with a planned coverage on as wide or as delimited a scope as may be desired. With such a specialized course, the choices of the participants may be correspondingly selective, not just as to general eligibility but according to uniform characteristics of professional responsibility, interest, and expected future work. The model for this approach would be the three-month specialized advanced course.

3.4.2 Relevance and effectiveness. The training programmes are expected to meet the needs of member countries. How effectively it is possible to do this may be observed in the beginning from the procedure of formulating the programmes. Full participation by member countries has been carried out through their representation in the Governing Board and with the formation of National Training Committees working with RELC. The programmes conceived under the leadership of national representatives and prepared for operational management with the expertise of a professional specialist staff are further deliberated upon in a series of regional workshops and seminars. At this stage more specialists from member countries are involved, together with some recognized international scholars and educators. Finally, the programmes must obtain the authorization of SEAMEC. The process by which RELC's training programmes were conceived, formulated, and finalized is a highly effective way of making relevance a working reality rather than a rhetorical disguise.

3.4.3 Awareness of and reorientation to new issues in a fast changing world.[15] History in Southeast Asia has been moving quickly and making momentous changes amounting to great upheavals in the structures of society and the lives of its people. These historical developments create, beyond the control of educators, new shifts in socio-cultural and economic directions for development, and a new awareness of the wider dimensions and the more complex character and utilization of old familiar educational tools, specially language. The situation of language in education has not changed insofar as the requirements of good standards of teaching and learning are concerned. However, where most attention in the past was concentrated on the work being done in the classroom to insure minimum to high standards of instruction, there has been a growing recognition among social scientists, linguistic scholars, educators, and community leaders of the need to know more and understand better the significance and role of language in Southeast Asian multi-racial, multi-lingual, and multi-cultural societies and nations.

This awareness is reflected in the new dimension added to the basic objective of improving English teaching for use in Southeast Asia by the 1976 SEAMEC policy that RELC should begin to consider the problems of improving the teaching of other languages. This new policy not only broadens the scope of RELC's programmes and starts the process of reorientation of their goals but also impels the renovation of courses not only in their internal make-up but also in the balance of major components of the total teaching, research, and dissemination programme.

3.4.4 Course Organization, Methodology, and Instructional Materials. The preparation of the courses by the faculty has been very thorough. They are organized into various academic committees for specific responsibilities as working groups and for co-ordination, besides carrying out individual professional duties. The climate of friendliness, co-operation and dedication is very strong. The instructional materials specially prepared by the faculty for each subject are bountiful but not excessive for conscientious study on the part of the participants. The library has developed into an excellent centre of literature on the various subjects of the curriculum, and has learning aids in other media besides print. It is highly praised by its users, participants and faculty alike. The facilities and service provided by the language laboratory and educational technology units for listening and viewing and for practical and demonstration activities are first class. The methodology employed in teaching ranges from the formal lectures to group discussions, practical exercises and demonstration, and individual work.

3.4.5 Training Programmes in Relation to Other Main Functions. The dominance of training programmes over other main functions of RELC comes in the nature of the priorities set basically by the representatives of SEAMEO countries in the formulation of the total RELC programme. As described in the preceding description of implementation, the demands and the actual work load of four courses - two four-month, one three-month, and one one-year (about 10 months) - in one year, three of them being highly intensive and concentrated, with 25 to 35 participants each, means a much heavier than normal load and programme per year for any tertiary level institution.

3.4.6 The 1977-1981 New Academic Format. The outstanding development, aside from new restructuring of the short certificate courses, is the M.A. programme in which RELC has received recognition and co-operation from the University of Singapore. In addition to the encouragement and endorsement this new and more advance stage of programme and curriculum development as part of RELC's over-all training programme has received from its Governing Board and National Training Committee members, it has an enthusiastic reception from course members, both past and present. The University of Singapore is not only well plessed with starting this co-operative programme, but has also indicated through its awareness of the realities in the language situation and language education programmes of Southeast Asian countries that universities ought to innovate their old traditional and often exclusively literature-oriented curricula in Language study. The M.A. programme of RELC and the University of Singapore need not fall in the category of ivory tower programmes, provided a constant adherence to the SEAMEO objectives of serving the priority needs of its member countries along continually reconstructed guidelines responsive to the most important and urgent needs and problems of their societies, and a problem-oriented conception, formulation, and imple-

mentation of programmes is conscientiously pursued. In this way, the advancement of knowledge through research is basically directed towards practical application and usefulness to society and the individual.

3.5 Recommendations

3.5.1 The dominance of training programmes which continues in the approved 1977-1981 programme will need to be softened through development of new guidelines for their operation and management to help enlarge the role of research in the overall programme of RELC. Unless the administration and faculty of RELC can find a solution, a review by the Governing Board may need to be considered.

3.5.2 The specialized advanced three-month course of Blueprint 1972-1976 has demonstrated two greatly desirable characteristics. First it responds to judiciously selected critical needs and problems in member countries. Second, it minimizes the generic handicaps and hardships which regional training programmes possess. This type of course needs to find some accommodation within the training programme for 1977-1981, in the most practicable operational implementation of that programme, including the possibility of using it as an alternative, when conveniently possible, for one of the short courses.

3.5.3 In response to the new urgent demands on language planning and language education as a consequence of recent historical, socio-cultural, and economic changes in Southeast Asia, training and research need to enlarge and strengthen their mutual reinforcing processes. Hence, the direction and management of the M.A. Programme requires clear and firm delineation to avoid wastage in development of high-level manpower and to insure attainment of goals desired for the programme.

3.5.4 RELC's valuable professional assets which lie in its presently strong aids to training as represented by its library and educational technology units deserve continuous support for their increased development to enable them to provide for the new special and changing demands of training and research. Reference is made in this connection to recommendation under "Research", which adds even more weight to the importance of continuous development of facilities.

3.5.5 The structuring of activities and the choice and balance of methods used in various subjects of the curriculum require re-examination specially in the light of the findings in RELC Training Programmes: Their Impact on English Language Teaching in Southeast Asia.

3.5.6 The administration, faculty, and course members deserve commendation and continuing encouragement to the end that they never fail to include such activities as cultural presentations and exchanges by the course members as indispensable parts of their training programmes.

3.5.7 While the countries and RELC are generally satisfied with the results in the past, it should not escape notice that the 1975 evaluation research report on the training programmes brings out the fact that of all categories of participants the school teachers represent a large majority both before and after RELC, or 35.3% and 24.9%, respectively.[16] More effort in applying the criteria for screening and selecting course members and adhering to the basic objectives of the training programme in addition to improving communication links not only between RELC and the National Committees but also internally among the co-operating Committees in each country, is highly desirable.

3.5.8 The recruitment of Southeast Asian specialists for the professional staff is receiving strong support in the approved 1977-1981 development programme. To minimize the difficulty of securing the services of such staff, and to give a desirable balance including some non-Asian native English-speaking specialists, it appears very desirable to attract a number of these non-Asian specialists. The new shift and wider dimension of RELC's future programme involves professional expertise and scholarship in which linguists and educators outside Asia have done some work ahead of those in Asia, and there are cases of those specialists having been much attracted to working in RELC. It is recommended that RELC exert special efforts to attract and secure the services of a number of these native English-speaking non-Asian specialists to give a constructive and stimulating balance to the professional staffing. To this end RELC might find it fruitful to pursue its already diligent approach through various forms of technical assistance programmes.

3.5.9 The term "training" has been customarily used in RELC's documents, and in this report for the sake of consistency, but it is submitted that a better phrase would be "Instructional Programme", and that it may be adopted for permanent usage instead of "Training Programmes".

4. Research

4.1 Objectives

Research was considered a vital part of RELC's activities according to the RELC Blueprint 1972-1976.[1] Among the stated objectives were that the centre should undertake and promote research and disseminate the results of research relevant to the teaching of English for the benefit of member countries. Through research it was believed RELC might foster creativity and innovation leading to new approaches in English language teaching.

The Proposed RELC Development Plan (1977-1981)[2] envisages the research involvement of the Centre as playing an even more important role than in the past. The reasons given are the involvement in a new post-graduate degree programme to be offered in conjunction with the University of Singapore. It seems that research, which includes development, is to receive increased emphasis vis-a-vis training for it is stated that "the three functions-instruction, research and development - will be equally emphasized" in the second five-year period.[3]

4.2 Implementation

The objectives stated in the Blueprint were planned to be implemented in several ways. Research was considered to be an important part of the duties of professional staff and hence was wirtten into all job descriptions. A research component was also built into the teaching programmes and Scheme B candidates of the Diploma course undertook a research project under supervision. Other course members completed smaller-scale projects. To promote research the 1971 Governing Board meeting adopted criteria for evaluating research proposals and agreed on five priority research projects. A decision was also made to sponsor research through a research fellowship scheme. To provide a forum for scholarly studies a journal of English language teaching in Southeast Asia was established. Other occasional professional publications were fostered to disseminate information relating to English language teaching more widely.

4.3 Outcomes

Examination of the research output from the Centre since 1972 gives an indication of the extent to which the objectives stated in the Blueprint were realised.

4.3.1 Staff Research. Six individual projects were completed by the professional staff of the Centre. Details are given in the Annual Reports.

4.3.2 Research Projects by Course Members. Besides research projects completed by Scheme B candidates in the Diploma Course, course members in the four-month course and in the three-month specialized advanced course to the end of 1975 had produced a total of 378 research assignments relating to English language teaching.

4.3.3 Priority Research Projects. In addition to research conducted by individual staff members and by course members, the Centre has engaged in five quite major research projects since 1972. These projects had been approved at the 1972 meeting of the Governing Board[4] and included a sociolinguistic survey feasibility workshop, a description of the English language situation in the SEAMEO countries, a linguistic handbook for English language teachers, a project in scientific English, and pilot project on comparative TEFL methods. A further major project was the evaluation of the impact and effectiveness of the RELC training programmes. Again details of these studies may be found in the Annual Reports.

4.3.4 Research Fellowships. A research fellowship scheme enabled a small number of more modest projects to be undertaken. Two of these are listed in the RELC Development Plan.

4.3.5 Dissemination of Results of Research. The RELC Journal,[5] published biannually, first appeared in 1970 and seven volumes later it had achieved a circulation of more than 800; the proceedings of 11 Regional Seminars[6] held from 1967 have been published; and in 1975 three new professional publications, the RELC Monograph Series,[7] the RELC Anthology Series,[8] and RELC Occasional Papers[9] were launched.

4.4 Discussion

There is general agreement that centres of higher learning ought to engage in research and there is no doubt in the minds of the evaluators that research should be an important activity of the Centre. Research is not a luxury: it is an essential co-requisite of a teaching programme at the tertiary level.

There are different ways of promoting research activity in a centre such as RELC and there are, of course, different types of research. The 1972 Blueprint envisaged research being undertaken on a number of fronts and looking back over the past five years it is apparent that more emphasis has been placed in some areas than in others. All course members engaged in an individual assignment or project under staff supervision and this has always been an

important part of all courses. Quite often course members arrive at the Centre with a project given them by their Ministries of Education. Others select a topic arising from the course work or are assisted by the staff in selecting a topic. The result is a growing collection on a wide range of topics relating to linguistics, language teaching, and instructional materials. Evidence gathered in the evaluation study of the RELC training programmes shows that course members regard the individual project often as the the most valuable part of their RELC experience.

Research undertaken by staff has been steady without being dramatic. Staff were involved in the Five group research projects approved at 1972 meeting of the Governing Board and the evaluation study of the RELC training programmes was led by a former staff member. Staff contributions to the RELC Journal have included twenty-four papers and a number of book reviews. Some staff have clearly been more research oriented than others. There have been certain constraints in the way of staff undertaking research, not the least being their heavy involvement in the teaching programmes. As well, there has never been a generous allocation of funds to research. Nevertheless, if RELC is to establish itself as an institution known for its creativity and innovation in the field of language learning and teaching, more resources will need to be allocated to research.

It is indeed unfortunate that the Research Fellowship scheme may no longer be financed from the SEAMEO Special Funds for until 1973 this was the primary source of research funding. Two projects were complete under this scheme. Now the Centres are themselves responsible for fund raising to support research fellows and special research projects. This is an impediment which has been placed in the way of RELC encouraging scholars to undertake needed research in language teaching and learning.

Examination of the research undertaken to date reveals that much of it is of the survey or information-gathering sort. While this is an important research activity, particularly in the early stages of an enquiry, RELC should now be in a position to do more experimental research into language acquisition, comparison of teaching methods, remedial techniques and so on. This kind of research requires certain hardware support as well as support on the technical level.

It is important, particularly as RELC forms an association with the University of Singapore, that the Centre be seen as a research as well as a learning institution for the two activities are complementary to one another. There are implications for staff appointment; there are implications for staff utilization; and there are budgetary implications. An increased emphasis on research does not necessarily mean the research need be highly theoretical or

esoteric. In the field of applied linguistics there are many topics of immense practical significance to member countries awaiting investigation.

4.5 Recommendations

1. Research must be seen to be an important focus of the Centre's future activities.

2. If RELC is to be more research oriented in the future, the usual criteria for appointing University staff will need to be observed. That is, staff are required both to be good teachers and to have demonstrated the ability to do research.

3. If it is expected that research be undertaken by the staff, they will need to be given lighter teaching loads than in the past.

4. Research and technical assistance will need to be budgeted for and depending on the type of research undertaken certain equipment will need to be purchased.

5. Every effort should be made to support Research Fellows either by replacing the "Research Fellowships and Grants" component back into SEAMEO Special Funds or, until that is successful, raising funds by the Centre itself. For a moderate investment it will be possible, with the facilities available at RELC, to attract international scholars to work on regional projects.

5. Instructional Materials Development

5.1 Objectives

The RELC Blueprint 1972-1976 indicated that instructional materials development was to be an important activity of the Centre. The stated objectives were to collect samples and descriptions of materials and to disseminate information about these; to stimulate and assist in the production of instructional materials; and to develop instructional materials for the needs of the region.

The Proposed RELC Development Plan (1977-1981) point to shift in policy. Instructional materials development appears to be taking a different role from that in the past, being embraced by "research and development", with the new emphasis being placed on the application of research findings to teaching methods and techniques.

5.2 Implementation

To achieve the objectives stated in the Blueprint action was taken on several fronts. The Library and Information Centre and the Instructional Materials Unit were charged with collecting English teaching and learning materials and with disseminating information about these. Instructional materials development was encouraged through the training programme, through the holding of regional seminars, and through the technical assistance programme. The actual production of instructional materials was undertaken in certificate and diploma courses conducted at the Centre.

5.3 Outcomes

That instructional materials development has played a central role in the Centre's activities is evidenced in the accomplishments to date. It is possible here to list only some of the developments, most of which are described in detail in the Annual Reports.[1] The Instructional Materials Unit together with the Library has built up a comprehensive collection of learning materials, and specialized bibliographies[2] have been prepared by the Library and Information Centre; the development and evaluation of learning materials have been key topics in most of the training courses to the present and two of the three-month specialized advanced courses were devoted specifically to syllabus design and to the preparation and evaluation of materials; at the specific request of some member countries course members have prepared reading box materials, writing materials, teachers' handbooks, and self-instructional materials; "at least half" of the projects and assignments completed by course members have focussed on instructional materials; RELC staff have also produced teaching materials; Regional Seminars and RELC publications have high-lighted instructional materials for English language teaching; and much of the assistance to national programmes has been concerned with curriculum development.

5.4 Discussion

Examination of the Proposed RELC Development Plan (1977-1981) tends to indicate a lessening of the role that instructional materials development will play in the second five-year period of permanent operation. Evidence for this is seen in the fact that whereas instructional materials development was one of seven major programmes up to 1976, it is linked with research as one of eight programmes in the next five years. This might of course be interpreted in the opposite way as an upgrading in importance. However, elsewhere in the development plan it is stated that "by 1976 RELC will have carried out most of the projected instructional materials activities listed in the Blueprints; and the impression was gained from interviews of persons inside RELC that there was now in each of the member countries a body of people who could in the future initiate and co-ordinate

these kinds of activities, thus obviating the need for RELC to give instructional materials development the same emphasis as in the past.

The statement that "most" of the projected instructional materials activities will be completed by the end of 1976 can be challenged, for in one sense the collection of samples and descriptions of materials and the dissemination of information of these is a continuing task as is the stimulation of and assistance to instructional materials production. As the trend in education is to give more responsibility to the classroom teacher, instruction in curriculum development and in the design and evaluation of instructional materials is going to assume even greater importance. The second point that there now exists in the member countries people who have been trained by RELC and who can now prepare others can also be challenged for, however valuable RELC's contribution has been in the past, it is a very small part in the context of the educational programmes of member countries. Of course if the members attending courses at RELC are key personnel and if they are utilized appropriately on their return to their countries so as to maximize the multiplier-effect, then it may well be that this function of the Centre's activities can in future begin to focus more on research development.

If the statement about having completed most of the instructional materials is limited in context to refer only to those projected for 1972-1976, there is indeed extensive proof of this performance in the numerous materials collected in the library. besides the few samples displayed in the Instructional Materials Unit. However, the existence of this collection represents only an encouraging beginning task of the continuing task of persistently building up the collection and stimulating new materials production to meet emerging needs besides supplementing previous limited activities which unavoidably suffered from many gaps.

Information gleaned from members of the Governing Board and of the various National Committees showed, without exception, how valuable instructional materials development was considered. Many examples were cited where projects completed by course members at RELC were in use or adapted for use in member countries. Indeed, the wish was expressed that in moving towards postgraduate degree programme RELC would not lose sight of the practical, immediate needs of the region. Alumni and current course members also stated how valuable to them had been their individual projects.

The library contains a complete set of all completed projects organised course by course - not by topic - and also contains a good representative sample of published instructional materials, usually from outside Southeast Asia, which are or can be used in English language programmes in the region. The Instructional Materials Unit at RELC also holds copies of projects completed by members together with some samples of commercially produced materials. The quality of the completed projects varies widely. A few appeared very skimpy. These were other that were extremely well developed and with certain editing seemed publishable. In visits to member countries several instances of publication that had resulted from work completed at RELC were brought to the evaluators' attention. It would be worth displaying all the materials in the Instructional Material Unit more effectively for the benefit of future course members and visitors to RELC. This Unit might then develop into a clearing-house for language learning materials for the whole region and become as well known as the RELC Library. For this to happen more resources would need to be allocated to the Unit.

5.5 Recommendations

1. Instructional materials development should continue, as in the past, to be an important function of the Centre.

2. The addition of postgraduate degree programmes to the other instructional courses offered by RELC should not lead the Centre away from the practical and immediate needs of the region.

3. The inclusion of topics, and indeed whole courses, on syllabus design, materials writing, and evaluation should continue in the teaching programmes offered by the Centre if the needs of member countries in the region are to be met.

4. The focus in the future on aiming to assist member countries in improving the teaching of English and other languages will need to be accompanied by the collection of samples and description of materials in these other languages.

5. The housing of instructional materials should, perhaps in conjunction with the Library, be displayed more effectively and the Instructional Materials Unit should move towards the dissemination of information on language learning materials throughout the region.

6. A very promising beginning in the direction of dissemination and assistance to member countries is a highly noteworthy set of selected instructional materials from among those produced in student projects and bound together for display at RELC. The preparation of similar sets and their dissemination would constitute an excellent method of utilizing instructional materials, nationally and regionally, which it is urged that RELC undertake systematically.

6. Regional Seminars

6.1 Objectives

Regional seminars are for the purpose of bringing together planners, researchers and specialists in English language teaching programmes in member countries to exchange ideas and co-operate towards finding solutions to current problems.[1]

6.2 Implementation

From 1967 to 1975, there have been 11 regional seminars, 10 of which were held in Singapore, and one in Bangkok. Representatives of SEAMEO member countries, educational institutions, professional organizations, foundations, governmental and international bodies attended these regional seminars. One of these was attended by as many as 400 participants from 14 countries. Three had from 200 to 266 participants from 14 to 18 countries; one had 300 participants from 19 countries; two had 170 and 179 participants from 13 and 16 countries; and four had from 25 to 80 participants from 9 to 10 countries.[2]

Two of these seminars were programme development meetings to help RELC formulate and finalize the programmes for the interim (1968-1971) and first five-year permanent operation (1972-1976) periods. Special displays and exhibits of publications and materials were prepared and held together with these seminars.

6.3 Outcomes

The following is a list of the seminars and their themes:[3]

1. Regional Seminar on "The Development of the Regional English Language Centre", Singapore, 18 - 21, September 1967

2. Regional Seminar on "The Training of English Language Teachers", Singapore, 4 - 6 April 1968

3. Regional Seminar on the "Teacher Education Programme Tryouts at the Regional English Language Centre", Singapore, 31 October - 2 November 1968

4. Regional Seminar on "New Developments in the Theory and Methods of Teaching and Learning English", Singapore, 9 - 14 June 1969

5. Regional Seminar on "English Language Testing", Bangkok, 25 - 30 May 1970

6. Regional Seminar on "Programmes of Activities for the Regional English Language Centre, 1972 - 1976", Singapore, 14 - 18, June 1971

7. Regional Seminar on "Instructional Materials for English Language Teaching", Singapore, 5-- 12 June 1972

8. Regional Seminar on "The Training and Supervision of Teachers of English as a Second or Foreign Language", Singapore, 3 - 7 July 1973

9. Regional Seminar on "Recent Developments and Research in Reading Relevant to the Teaching and Learning of English in Southeast Asia", Singapore, 23 - 27 July 1974

10. Regional Seminar on "The Teaching and Learning of English for Scientific and Technological Purposes in Southeast Asia", Singapore, 21 - 25 April 1975

11. Regional Seminar on "Curriculum Development and Syllabus Design for English Teaching with Some Focus on the Needs in Science, Technology and Commerce", Singapore, 28 July - 1 August 1975

The papers presented by participants and the proceedings of the regional seminars form an extremely valuable collection of material useful for teachers, researchers, and planners.

6.4 Discussion

Through the regional seminars, RELC has succeeded in establishing strong and important professional links with hundred of universities and other tertiary institutions distributed around the world. It has favorably impressed its international participants. The impact of its work on students, professionals, institutions in Southeast Asia involved in English teaching, linguistics, and language education has become widely felt and has spread as a desired and useful influence.

The usefulness to RELC and the member countries of the regional seminars are of a manifold character. First, they have provided RELC, expecially in the case of the two particularly designed for the purpose, valuable guidance in the formulation of its long-term development programmes. Those which were held for their own specific purposes actually served the same way in a continuing manner, for the background, the new trends, and the periodic assessments they provided concerning important aspects and areas of language teaching,

research and planning were all grist for the mill in RELC's continuing evolution of its own activities and preparation for future programmes. The regional seminars dealt on a high level with much accumulated and combined expertise on specific major topics of special concern in themselves. Simultaneously, they contributed to the further improvement and growth of RELC's on-going major functions of training, research, acquiring, producing and distributing instructional materials, and disseminating information and assisting programmes in member countries.

6.5 Recommendations

It should be strongly stressed that in spite of the brevity of this section regional seminars are considered very important, and that the following recommendations deserve special attention:

6.5.1 If RELC's total programme is to continue to reap the numerous benefits from regional seminars as it has already experienced, they need to be maintained as an important part of its activities, depending on RELC's financial capability, but desirably on an annual basis.

6.5.2 To widen the service and influence of RELC and to put the valuable materials accumulated through the regional seminars to wider use, more ways need to be explored in order to process these materials for general dissemination. Member countries may consider ways by which their language programmes and professionals may utilize these materials to benefit work on all levels and on a more extensive scale of application.

7. Library and Information Centre Services

7.1 Objectives

From the beginning the Library and Information Centre Services were seen as underpinning all the major programmes of the Centre. The objectives, stated in detail in the 1972-1976 Blueprint, were essentially to build up a resource collection to support the training and research activities of RELC and to serve as a clearing-house of information on TESL/TEFL at all levels.

In the second five-year period these objectives are to be modified only to the extent of RELC's "expanded role in language teaching programmes in Southeast Asia".

7.2 Implementation

To achieve the stated objectives an early decision was made to establish a comprehensive collection of multi-media resources and to provide to users within and outside the region a full range of information and services. These were to include reference and bibliographic services, specialized bibliographies, a research register, directories of professions, personnel and institutions.

7.3 Outcomes

The wide range of holdings of books, periodicals, and non-book materials like audio tapes, records, filmstrips, microfiches, cineloops, slides and kits is described in each Annual Report as are the use of the library and the various library services and facilities. A significant service of the library staff is participation in library training programmes and assistance to visiting professional staff and scholars from other institutions.

7.4 Discussion

The criteria by which a library may be evaluated are the extent to which it meets the needs of those who use it and, arising from this, the reputation it develops both as a specialized collection and for the nature of the services it provides. There can be no question of the importance of a library in any institution of higher learning and in an institution that is established essentially as a teaching and research institution at the graduate and post-graduate levels, the library is central to the whole operation. This was recognized from the beginning and with generous grants from the US Government and donations from many other sources, a very valuable collection of multi-media resources in English language teaching has been assembled at RELC.

To be effective, however, a library needs to be more than a mere collection of works. The collection must be accessible, assistance should be given where necessary to locate information, desirably the library should be a pleasant place within which to work, and facilities should be near at hand for the use of non-book materials. Acknowledgment is due to the librarian and to the support she has received in developing, in the space of a few short years, a collection which has most of these features. The name of the Library and Information Centre, and with it the name of RELC, has spread far beyond the borders of Southeast Asia. International scholars have visited the Library and have made use of it. Course members and alumni who were interviewed spoke highly of the assistance they had received. In fact a frequent comment made was that course

timetables should permit greater use to be made of the library facilities. The only slightly negative comment received was that the air-conditioning in the library was uncomfortably cold.

A comment that was made sufficiently often to warrant mention was a desire for the library hours to be extended. It was felt by some that if the hours were extended, more study would be done in the evenings and it was further stated that not all members liked working in the confines of their rooms. Apparently the hours of opening were extended on a trial basis early in the Centre's operation and it was found then that little use was made of the facilities. It might be useful to repeat the experiment, perhaps on a limited basis of one or two nights per week, or for peak work periods such as towards the end of a course.

7.5 Recommendations

1. The Library and Information Centre should continue to receive adequate funds so that it can maintain its premier position in the field of language teaching.

2. As the Centre moves towards language teaching, rather than specifically English language teaching, the holding in particular language areas will need to be increased.

3. Consideration should be given to extending the hours of opening of the Library so that its facilities may be utilized to the fullest.

8. Publication Programme

8.1 Objectives

The RELC Blueprint 1972-1976 envisaged a publication programme for the Centre to provide information on its various activities and this function is projected into the second five-year period of operation.

8.2 Implementation

Two general types of publications were planned. First, there were information publications to describe for the benefit of different audiences the programmes and activities of the Centre. Second, there were professional publications to disseminate information of various matters relating to English language teaching and linguistics.

8.3 Outcomes

The information publications include reports of the RELC Governing Board meetings[1] distributed to key officials in SEAMEO member and associate-member countries, Annual Reports dating from the Centre's inception and intended to give a fuller description of each year's programmes and activities, and a quarterly newsletter sent on request to interested individuals around the world.

The key professional publications (the RELC Journal, proceedings of Regional Seminars, and the RELC Monograph Series, Anthology Series and Occasional Papers) were described above (Sec. 4.3.5).

8.4 Discussion

Of all the SEAMEO Units there is none to equal RELC in the amount of documentation into every facet of its programmes. This has been a deliberate policy and it greatly assisted the evaluation team. Every step of the Centre's history, the detailed objectives it set for itself, the way in which these were arrived at in seminar workshops, the implementation of its programmes, and the outcomes have been meticulously produced. This detailed record serves several functions: it greatly assists in-coming members of staff to get a feel for the philosophy of the Centre; it provides the necessary background for newly appointed members of the Governing Board and of the different National Committees; and it serves to describe the Centre's activities for the benefit of countries within and outside the region which sponsor members for the different courses.

While the information publications have helped spread word of the programmes and activities of the Centre, the professional publications have contributed in disseminating the results of research and development in language teaching. One criterion for judging academic quality is through professional publications and in this regard it is noted that a number of international scholars have contributed papers to the RELC Journal and have allowed their research to appear in the Monograph and Anthology series. The questionnaire completed by members of the Governing Board and National Committees indicated that the Journal was considered useful as a means of disseminating information to such people as teacher-trainers, researchers, supervisors and curriculum specialists. The Monograph and Anthology were both too new to evaluate in this way though, if sales are a reliable guide, the new publications are meeting a felt need. The RELC Newsletter which is distributed free to more than two thousand readers in some thirty countries serves to acquaint the public with more general news of the Centre.

It is especially noteworthy that the RELC Journal has achieved its aim to become a new scholarly publication in Asia coming out faithfully according to a regular biannual schedule, and moving from the initial stage of dependency on RELC financing to that of self-support from its present circulation of more than 800. It has succeeded within a period of seven years, from 1970 to 1976, in establishing a fine reputation with a gradually expanding select specialized readership inside and beyond Asia. In the process it has proved that it is possible, initially through the various educational regional and international links developed by RELC, for a high quality specialized journal produced in Southeast Asia to be viable economically. The same goal has been set for RELC's other professional publications. It is hoped that eventually the income from their sales will provide an adequate revolving fund to support their continuing appearance and to assist in expanding the programme of publication.

8.5 Recommendations

1. The information and professional publications serve a very useful purpose in disseminating information about the Centre's activities. The publications in their present form appear to meet the needs of the target audiences for whom each is designed and the current resources allocated to publishing should be continued.

9. Technical Assistance to National Programme

9.1 Objectives

The function of RELC to serve as a resource centre in the region includes the extension of the services of its professional staff to member countries.[1]

9.2 Implementation

Requests for technical assistance are normally made through the Ministries of Education of the member countries addressed to RELC. The capacity of RELC to respond to such requests depends upon the availability of the staff outside of their teaching, research, and other preplanned professional commitments to the total programme. Furthermore, suitable funding which would be mainly the responsibility of the requesting party needs to be provided, as this service does not have direct budget support from RELC.

9.3 Outcomes

An impressive and long list of technical assistance services is found in the Development Plan 1977-1981, which is by no means exhaustive. It has been possible for RELC to render this assistance extensively for Singapore and nearby countries which were in a better position to avail of this assistance because of budgetary constraints. A number of occasions for such service have been in Indonesia, Thailand, and the Philippines, and more frequent occasions in Laos, Vietnam, Malaysia, and Singapore.

The types of assistance have been as follows :

(i) Special Courses conducted at RELC.

(ii) Special Courses conducted outside RELC.

(iii) Seminars/workshops/conferences in SEAMEO countries conducted with RELC assistance

(iv) Consultancy services

The frequency of these services under all types in the list mentioned earlier, even though incomplete, has been a total of 65 from 1969 to 1975. The details are given in the Development Plan 1977-1981.[2]

9.4 Discussion and recommendation

It would be desirable to enable the professional staff systematically to respond to the most important kinds of requests from member countries, or to initiate such service where such initiative may be welcome, on the principle that a regional programme needs to reach out to national programmes to absorb the realities of the local situation directly, to cultivate its local connections, to maximize follow-up opportunities, and if possible to decentralize itself moderately by possibly establishing field pilot projects. These aspects of technical assistance are of considerable significance and value and deserve more attention and support to the extent that staffing and funding could be profitably extended as much as possible for the purpose. Moreover, a double benefit accrues to the programme in the improved orientation and better preparation for their work in RELC, which this form of service yields to the staff members who engage in it.

10. General Comment: RELC and the Concept of a Regional Centre of Excellence

During interviews held with Ministry of Education spokesmen, there were instances when they categorised centres according to levels of performance and accomplishment. RELC always surfaced among the centres which they rated among the best.

In this connection, it may be recalled that everyone seems to expect that each centre should have become, or should be capable of becoming, a centre of excellence in its fields of specialization. There is no doubt that the leaders and staffs of the centres aim towards such a prestigious state, even though their charters make no such demand. It is probably inevitable that those responsible for operating the SEAMEO centres, no less than their clientele and their public in general, would entertain no lower standard of expectation about the centres' progress. On this point there is no room for either disagreement or controversy, as long as one thinks and speaks in terms of aspirations. In the realm, however, of material conditions and realistic considerations of planning, funding, recruitment, organization and actual implementation (together with the empirical socio-political, cultural, educational, and economic context of the SEAMEO member countries), the obvious result is somewhat different from the image molded by aspiration.

This difference need not be irresolvable. Besides the ever-present problem of financing, one glaring example of the factors underlying this difference is the difficulty of providing for and securing some of the best Southeast Asian specialists and experts who are needed to serve on the staffs of the centres. It does not really seem impossible to evolve a solution to this problem, if the member governments would seriously explore new patterns of service conditions and of compensation in the supreme interest of achieving the development of regional co-operation and institutional centres of excellence.

A SEAMEO centre lives with the paradox that it has been conceived to be regional in scope and spirit and has to promote the growth of this character in a spiral fashion - intensively and extensively - yet it must continuously seek increasing support from, and fashion widely spread linkages with, co-operating agencies within its host-and-home country. As some centre directors have emphatically declared, the success of a regional centre depends upon its establishing a strong national base. They say it would have no chance of survival otherwise. The confidence that a strong national base can inbue it, together with a good reputation from relevant and creative initial activities draws attention and financial support, both official and

private, within and outside the region. Some of these sources cannot be without their own self-interests and purposes. In this matter-of-fact situation and with this operational vulnerability, the centre must forge its standard of professional integrity intertwined with its dual national-regional identity. Thus, an unquestionnably unique, pioneering, hazardous, but inspiring and inevasible mission belongs to a SEAMEO regional centre like RELC.

FOOTNOTES

CHAPTER 6

Section 1, Introduction

1. Enabling Instrument for the Regional English Language Centre, in Blueprint 1972-1976. Singapore, 1972, pp. 18-23.

2. Charter of Southeast Asian Ministers of Education Organization, Bangkok, September, 1973, pp. 1-2.

3. Blueprint 1972-1976, p. 4.

4. Funding Support to RELC from Different Sources (statement supplied by RELC, April, 1976).

5. Tai-Yu-Lin, Director of RELC. "The Aims and Objectives of the Regional English Language Centre," in Southeast Asian English Language Research Seminar, sponsored by East-West Culture Learning Institute, East-West Center, and Regional English Language Centre, Southeast Asian Ministers of Education Organization, Singapore, at Honolulu, Hawaii, February 7-11, 1972, p. 2 and p. 6.

Section 2, Procedures for Evaluation Study

1. Stake, R.E. "The Countenance of Educational Evaluation," in B.R. Worthen and J.R. Sanders, eds. Educational Evaluation: Theory and Practice. Worthington, Ohio: Charles A. Jones, 1975.

2. Ibe, Milagros D. RELC Training Programmes: Their Impact on English Language Teaching in Southeast Asia. Singapore: RELC, 1975.

Section 3. Training Programmes

1. Blueprint 1972-1976, p. 14

2. Proposed RELC Development Plan for the Second Five-Year Period (1977-1981). Singapore: RELC, 1976, p. 31.

3. Ibid, p. 40.

4. Annual Report 1968/1969, p. 4.

5. Blueprint 1972-1976, pp. 24-32.

6. Ibid, pp. 7-13.

7. Development Plan, 1977-1981, pp. 74-81

8. Slattery, T. B. Review of SEAMEO Center Self-Evaluation Reports, Bangkok, September, 1973.

9. By Milagros D. Ibe, RELC, Singapore, 1975.

10. Development Plan, 1977-1981, pp. 6-7.

11. Ibid, pp. 72-73.

12. Ibid. p. 7.

13. Ibid, p. 7.

14. Cf. Ibe, op cit, Chapter 3, "Respondents' Characteristics," pp. 12-35.

15. Cf. Development Plan, 1977-1981, Chapter III, Factors That Led to the Expansion of RELC's Functions," pp. 29-37.

16. Ibe, op cit, p. 25.

Section 4. Research

1. RELC Self-Evaluation of Programmes and Activities of the Regional English Language Centre, Singapore, 1972.

2. Regional English Language Centres, Singapore; RELC, 1976.

3. Ibid, p. 53.

4. Regional English Language Centre. Report of the First Meeting of the RELC Governing Board (Sept., 1972). Singapore: RELC, 1973.

5. RELC Journal: A Journal of English Language Teaching in Southeast Asia. Published biannually since 1970.

6. Reports of Regional Seminars. Dates of publication are given in parentheses.

1967 : The Development of the Regional English Language Centre (1968)

1968 : The Training of English Language Teachers (1969)

1968 : Teacher Education Programme Tryouts at the Regional English Language Centre (1969)

1969 : New Developments in the Theory and Methods of Teaching and Learning English (1970)

1970 : English Language Testing (1971)

1971 : Programme of Activities for the Regional English Language Centre, 1972-1976 (1972)

1972 : Instructional Materials for English Language Teaching (1973)

1973 : The Training and Supervision of Teachers of English as a Second or Foreign Language (1974)

1974 : Recent Developments and Research in Reading Relevant to the Teaching and Learning of English in Southeast Asia (1975)

1975 : The Teaching and Learning of English for Scientific and Technological Purposes in Southeast Asia (1976)

1975 : Curriculum Development and Syllabus Design for English Teaching, with Some Focus on the Needs in Science, Technology and Commerce (1976)

7. RELC Monograph Series

Anthony, E. M. Towards a Theory of Lexical Meaning. Singapore: RELC, 1975.

Lim Kiat Beey. An Introduction to Linguistics for the Language Teacher. Singapore: RELC, 1975.

8. RELC Anthology Series

Anthony, E. M., and J. C. Richards, eds. Reading: Insights and Approaches. Singapore: RELC, 1975

Richards, J. C., ed. Teaching English for Science and Technology. Singapore: RELC, 1975.

9. RELC Occasional Papers

Richards, J.D. Four Papers on Second Language Learning. Singapore: RELC, 1975.

Regional English Language Centre. Research Proposals for Studies in Language Learning. Singapore: RELC, 1975.

Section 5. Instructional Materials Development

1. RELC Annual Reports. Dates of publication are given in parentheses.

RELC Annual Report 1968/1969 (1970)
RELC Annual Report 1970 (1971)
RELC Annual Report 1971 (1972)
RELC Annual Report 1972 (1973)
RELC Annual Report 1973 (1974)
RELC Annual Report 1974 (1975)
RELC Annual Report 1975 (1976)

2. Specialized Bibliographies. Dates of publication are given in parentheses.

no. 1 English composition: a list of books and microfilms available in the SEAMEO Regional English Lanaguage Centre Library (1971)

no. 2 Reading: a list of books and microfilms available in the SEAMEO Regional English Language Centre Library (1971)

no. 3 Foreign language teacher training with special reference to TESL/TEFL in Southeast Asia (1973)

no. 4 Language Laboratory utilization and materials (1974)

no. 5 References on reading relevant to the teaching and learning of English in Southeast Asia (1974)

no. 6 References on the teaching and learning of English for scientific and technological purposes in Southeast Asia (1975)

no. 7 References on curriculum development and syllabus design for English teaching, with some focus on the needs in science technology and commerce (1975)

Section 6. Regional Seminars.

1. Development Plan, 1977-1981, p. 19.

2. Ibid, pp. 74-81.

3. Ibid, pp. 74-81.

Section 8. Publication Programmes

1. Governing Board Meeting Reports. Dates of publication are given in parentheses.

   Report of the First Meeting of the RELC Governing Board, September 1972 (1973)

   Report of the Second Meeting of the RELC Governing Board, September 1973 (1974)

   Report of the Third Meeting of the RELC Governing Board, September 1974 (1975)

   Report of the Fourth Meeting of the RELC Governing Board, September 1975 (1976)

   Report of the Extraordinary Session of the Governing Board, 19th December 1975 (1976)

Section 9. Technical Assistance to National Programmes

1. Development Plan, 1977-1981, p. 27

2. Ibid, pp. 82-89.

SEARCA's administrative structure has been well described in the publication HALF A DECADE, SEARCA's First Five Years, 1969-1974. Its organizational scheme features an extremely close association with the University of the Philippines at Los Banos (UPLB). There is an abundance of co-operative research and training activities underway between SEARCA and UPLB; these involve joint appointments of staff (mainly scientists), common use of facilities such as in the library and the computer installation, and in the establishment of the Academic Consultative Committee which in addition to SEARCA and UPLB personnel includes representation of the International Rice Research Institute (IRRI) also located on the University campus. In fact, the Dean of the College of Agriculture at the time SEARCA became operational also served as its first Director.

2. Methods and Scope of Evaluation by the SEARCA Sub-Team

The sub-team for SEARCA in attempting to evaluate the effectiveness and efficiency of SEARCA operations in accordance with its stated objectives[2] first studied the goals and purposes of the Centre. It has become acquainted with the details of SEARCA's operations which are documented in various reports particularly "Half a Decade : 1969-1974", the SEARCA Self-Evaluation Report, 1972, the Final Reports of the series of SEARCA/AGB meetings and "SEARCA Enters Into a New Period" The sub-team has obtained information regarding the effectiveness of the graduate programme being conducted with the academic assistance of UPLB by way of questionnaires sent to SEARCA alumni and to the scholars who are currently undertaking their studies at Los Banos.

Personal interviews were held in Thailand with the SEARCA Governing Board member for Thailand, the Deans of Agriculture and research and training personnel at Kasetsart and Khon Kaen Universities, the General Secretary of the National Research Council of Thailand, administrators of the Research Centre for the Northeast Region, Khon Kaen, and USAID and FAO officials.

Interviews in the Philippines were held with the leadership of the National Department of Education, top administrators of the University of the Philippines, Los Banos, SEARCA administrators and staff and administrators and certain staff at IRRI and at USAID.

Table 1. List of Donors 1975-1976

GOVERNMENTS

1) Philippine Government
2) U.S. Government
3) New Zealand Government
4) French Government
5) Australian Government
6) Netherlands Government
7) Vietnamese Government
8) Lee Foundation
9) Canadian Government
10) West German Government

PUBLIC AND PRIVATE AGENCIES

11) KDPITAF
12) German Foundation for International Development (TASO)
13) Phil. Council for Agricultural Resource Research (PCARR)
14) Phil. Business for Social Progress (PBSP)
15) Int'l Dev. Research Centre - AIBA (IDRC-AIBA)
16) Harvard University
17) Mekong-Delta
18) Australian Freedom From Hunger Campaign (AFFHC)
19) National Science Dev. Board/Dev. Bank of the Phil. (NSDB/DBP)
20) San Miguel Foundation
21) Int'l Labor Organization-Manpower (ILO)
22) Int'l Dev. Res. Center (IDRC-RMA)
23) Asian Vegetable Rec. Development Centre-Phil. Outreach Center (AVRDC-POC)
24) Japan External Trade Organization (JETRO)
25) Southeast Asia Fisheries Development Centre (SEAFDEC)
26) Holy Ghost Congregation
27) Okasaki Marusan
28) BIOTROP
29) U P L B (1)
30) Phil. Tobacco Authority
31) I A D A
32) German Foundation for Int'l Dev. (DSE) - WRD

(1) Subsidy in the form of site provision and the extension to SEARCA scholars of the same privileges and facilities enjoyed by all the other UPLB students.

CHAPTER 7

THE SOUTHEAST ASIAN REGIONAL CENTRE FOR GRADUATE STUDY AND RESEARCH IN AGRICULTURE

1. Introduction

The Concept of the Southeast Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA) was first advanced on November 30, 1965 at a meeting in Bangkok of Southeast Asian Ministers of Education and the Special Advisor of the President of the United States. Following this, a series of discussions and proposals resulted in the establishment of SEARCA on an interim basis in May 1967 and permanently in June 1969. Financial assistance of the United States Government through core funding terminated in July 1974 at the conclusion of the first 5-year phase with its major financial support now coming from the Government of the Philippines and the Secretariat, which remains the source of its Special Funds. The University of the Philippines at Los Banos (UPLB) provides the venue, extensive facilities and almost all of SEARCA's research and training expertise.

SEARCA in its relatively short history has emerged as a leading centre for agricultural research and training in Southeast Asia. Its physical facilities are well planned and when fully developed will be distinctly appropriate for their intended purposes. (See Appendix 2 for a listing of buildings completed to date). The Government of the Philippines is responding sympathetically to requests for additional needed equipment and building space. A number of SEARCA projects are funded by the Philippine Council for Agriculture and Resources Research (PCARR). The Special Funds received from SEAMES are for training and research scholarships, support of the seminar and conference programme and for personnel exchanges. Substantial support has also been contributed by a variety of sources other than Philippine Government or SEAMEO associated entities. Table 1 identifies the range of donors supporting SEARCA during the current fiscal year, 1975-76. The enlistment of financial assistance for SEARCA activities from so diversified a group of supporting agencies is evidence of the high regard in which the Centre is held within and outside the region.

Others interviewed at UPLB were the SEARCA Professorial Chairholders and Visiting Professors, certain members of the graduate school faculty and the SEARCA project managers who were asked to submit brief, up-to-date reports of their activities. Unfortunately, except for students on the UPLB campus at the time of the survey, the sub-team was not able to interview persons from SEAMEO member countries other than Thailand and the Philippines.

The sub-team felt that SEARCA's administrative operations were of substantial importance to the efficiency and effectiveness of the Centre's professional programmes. The Centre's administration in this case includes particularly financial, secretarial and other office management services which are intended to support and facilitate the implementation of all professional projects and activities. In assessing this aspect of the Centre's operations, the sub-team has based its observations on interviews with such persons related directly to or affected by the administrative mechanism as the project managers/co-ordinators, visiting professors, and some current SEARCA - sponsored scholars.

With regards to financial arrangements in the graduate studies programme the sub-team has interviewed the Centre's Administrative Officer, Administrative Assistant for Finance as well as the Assistant Director who shared with them certain classified financial documents.

The reports issued annually by SEARCA document extensively the quantitative aspects of the programme: number of participants in conferences, workshops, seminars and short-term training courses, number of graduate degree candidates, number of countries represented, degrees granted, etc. The workload undertaken by SEARCA and the University of the Philippines at Los Banos is remarkable and in itself is evidence of the useful service the Centre is providing extensively to member countries. These accomplishments have been well chronicled by SEARCA in its annual reports, its newsletter and elsewhere so they will not be commented on here in any great detail.

The SEARCA sub-team will address itself mainly to the Centre's role as a <u>regional</u> enterprise, emphasizing its qualitative aspects as evidenced by its worthwhileness and acceptance by participants, dissemination and adoption of the results of its research and training efforts in the Member Countries and the impact

of the Centre upon the shaping of the programmes in those nations. The evaluating sub-team will offer its recommendations for enlarging even more the usefulness of the SEARCA enterprise, especially as it may involve greater co-operation with fellow scientists in member nations and a broader regional participation in programme planning.

The sub-team's appraisal of the SEARCA effort and its recommendations were based also on several other important factors. For instance, the physical facilities of SEARCA and those of co-operating units of UPLB were inspected to determine their adequacy for their intended purposes. The completeness and effectiveness of support services such as communications, publications, library, equipment maintenance and field operations were probed. Discussions were held with SEARCA and UPLB administrators concerning adequacy of financial support, project budgeting, current status of co-operative relationships with other research and academic institutions, and, importantly, plans for the enlargement of programmes to be conducted, hopefully jointly, with established centres in the member countries.

2.1 Collection and Analysis of Information for Evaluation

The sub-team received few responses to the questionnaire sent in April by the SEAMES office in Bangkok to SEARCA Graduate Studies Programme Alumni living in Indonesia, the Philippines and Malaysia, consequently, a second mailing was sent from the SEARCA headquarters in June. A response of approximately 44% was realized. The questionnaire was translated into the Thai language and mailed to alumni living in Thailand in March. Approximately 55% of the Thai Alumni have responded.

The questionnaire for scholars currently at UPLB was returned with a 60% response.

The printed reports reviewed by the sub-team and related documentation and other evidence point to the high level of accomplishment of SEARCA as a regional agency servicing the agricultural and rural complex of Southeast Asia. This has been substantiated by the present status of the Centre in terms of its financial growth and stability, the volume of research and training programmes under way and the quality of its achievements. SEARCA is held in high regard by its donor agencies, its sister SEAMEO Centres, the international agricultural research institutes and, for that matter, wherever else its accomplishments are known.

3. The Objectives of SEARCA

The objectives of SEARCA remain today as stated in its earliest documents.

The following statements are addressed to the specific objectives and functions of the Centre:

3.1 To provide advanced studies in agriculture leading to the master's and doctoral degrees:

Actually, SEARCA has only in an indirect way provided high-quality study programmes leading to the graduate degrees. The academic achievements have been accomplished by the UPLB as the host institution of the Centre.[4] Through SEARCA 122 young leaders in agriculture and related fields from seven member countries have been trained and granted master's and/or doctoral degrees by the University of the Philippines at Los Banos. (Table 2)

3.2 To provide graduate scholarships, fellowships and/or assistantships for students from countries in the region:

SEARCA has granted graduate scholarships to 236 students from seven member countries to study for master's and/or doctoral degrees at UPLB. The total includes 38 who dropped out for various reasons. (Table 3)

At present, SEARCA is the single regional agency in Southeast Asia that offers such grants; as many as twelve are available every year to each SEAMEO country.

3.3 To promote, undertake and co-ordinate research programmes with special emphasis on research related to the important agricultural problems in Southeast Asia;

3.4 To provide direction and funds for research by graduate students, faculty members, and other co-operating research workers of member countries;

Table 2. Graduate Degrees Granted by UPLB to SEARCA Scholarship Holders

No of Degrees Granted, 1971-76

Country	Masters	Ph.D.	Total
Indonesia	1	1	2
Khmer Republic	4	-	4
Laos	-	-	-
Malaysia	8	-	8
Philippines	22	17	39
Singapore	2	-	2
Thailand	35	12	47
Vietnam	18	2	20
TOTALS	90	32	122

Table 3. SEARCA Scholarship Awardees

	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	Total
Indonesia									
M.S.					2(1)	1(1)	9	6	18(2)
Ph.D.	5		(5)*		1		1		7(5)
Khmer									
M.S.				1	4	3	3	(5)	11(5)
Ph.D.						1		1(1)	2(1)
Laos									
M.S.							1		1
Malaysia									
M.S.	4(4)		3	3	2		2	1	15(4)
Philippines									
M.S.		2	5(2)	5	7	8(1)	6(1)	1	34(4)
Ph.D.		3	4	4	4	10	5(1)	4	34(1)
Singapore									
M.S.						2			2
Thailand									
M.S.	5	4	9(3)	5	6	12(1)	1	1	43(4)
Ph.D.		3	2	2	4	6	5(1)	5	27(1)
Vietnam									
M.S.		4	7	8	3(1)	6	5(7)	1	34(8)
Ph.D.					3	2	1(2)	2(1)	8(3)
	14	16	30	28	36	51	39	22	236(38)

* Figures in parentheses give the number of dropouts

Since objectives 3 and 4 deal with research and research programmes they will be considered simultaneously.

Most of SEARCA's programmes and projects are supported financially by governmental and/or private foundations and organizations outside the SEAMEO area. The larger portion of the work is conducted by faculty members at UPLB with minimal involvement of research workers in other member countries.[5,6] For the most part, the graduate students have been adequately provided with financial support in carrying out research work for their thesis. However, complaints have been received from both students and faculty about adequacy of funding certain projects, especially in the biological sciences, in terms of providing necessary equipment, supplies and services. SEARCA's inflexibility in the financial management of thesis and staff research has been a matter of frequent mention. Cash flow, delays in travel requests, procurement of urgently needed goods and inactions on requests seem particular deterrents to the orderly conduct of projects through the course of the fiscal year.

3.5 To publish the findings of agricultural research conducted in the region, or other pertinent agricultural research done elsewhere:

Up to June, 1976, SEARCA has published a surprisingly large number of books and manuscripts, all of which report results of research done in the region and/or reflect the thinking of the Southeast Asians or describe the agricultural situation of the region. SEARCA publications including titles of graduate students theses are to be found in the Annual Reports.

3.6 To hold regional seminars on selected agricultural problems and topics:

Thus far, SEARCA has held a wide array of national, regional and international seminars and workshops in several Southeast Asian Countries. There have been 22 such events held with approximately 800 participants.

3.7 To provide advisory and consultative services to member countries through staff visits and exchanges, seminars, studies and participation in national training and extension programmes:

The SEARCA consulting services programme was evolved in 1973-74 to provide professional services to interested countries, institutions or organizations relative to agricultural development and rural prosperity. The consulting staff numbers over 100 coming from the Philippines, Thailand, Malaysia, and Vietnam. All consultants hold advanced degrees and represent competence in a wide spectrum of problem areas related to agricultural development.

Short-term (non-degree) training programmes conducted by SEARCA number 27 with 371 participants enrolled. The programme services extension agents, teachers of agriculture, research workers and managers, technicians, farmers, farm organization leaderships, processors, etc.

Up to June 1976 ten Visiting Professors have participated in SEARCA/UPLB teaching research and consultative services. The Japanese Government has provided the services of four of its nationals and one has been sent by the Government of the Netherlands. Visiting Professors have provided expertise in seven different subject matter areas.

3.8 To stimulate and assist further development of agricultural institutions in Southeast Asia, and to enlist their efforts in solving pressing agricultural problems of the region:

Through graduate training programmes and specialist training courses, SEARCA has trained high-level manpower for building and strengthening agricultural institutions in member countries in teaching, research and extension.

4. Reflections on SEARCA Procedures

The sub-team has looked into the process of the Centre's operations to find out how the broad array of SEARCA's work has been conducted, both in academic and administrative areas to see if anything needs to be done to improve its effectiveness and efficiency.

None of the individuals interviewed by the sub-team has expressed serious dissatisfaction with the Centre. Most consider that the top leadership of the Centre is performing outstandingly. There is general satisfaction with the academic and administrative performances of the various project managers and co-ordinators.

SEARCA and UPLB in appointing this year two SEARCA-supported Visiting Professors have brought to the campus two scientists extremely well qualified in their respective fields -- one from Thailand in soil physics and the other a Filipino in agricultural economics. In addition, SEARCA has sponsored Visiting Professors in Development Economics (supported by PCARR and the Government of the Netherlands) and in Food Science and Technology (supported by the Japanese Government). These appointments are representative of another important way SEARCA employs to help strengthen its own programme and that of UPLB.

The relationship between SEARCA and the leadership of UPLB appears very cordial. SEARCA depends largely on UPLB for the conduct of its research and graduate study programmes; the work loads of graduate faculty members in providing the advisory services to the SEARCA scholarship holders is especially heavy. In spite of this the leaders of the host institution feel it is their continued moral obligation to serve the region in providing high quality studies in agriculture and related sciences.

Events in history change when leadership and social and biological environments change. Pressure from increasing demand for more seats in the graduate school by Filipinos might force a change in magnitude and direction of the SEARCA graduate study programme as it may affect students from other countries. The pressure is being felt by some graduate faculty members and deans who expressed their discomfort about the shortage of graduate faculty members and the workloads of the staff. The likelihood of an imposition of quotas on the enrolment of foreign graduate students was mentioned several times by top UPLB administrators. This would restrict seriously SEARCA's progress and effectiveness in the region and contingent plans should be laid now in the event the University finds it necessary to place limitations on the admission of foreign students.

The students in the social sciences especially have complained about difficulties they experience in seeing and obtaining advice from their advisors, causing frustration on the part of the students and sometimes delay in their graduation. Complaints were also heard generally from the students about the inadequacy and often the obsolescence of textbooks and required reading materials.

Both the project co-ordinators/managers and students appealed for more expeditious administration of funds stating that rules, regulations or procedures controlling the flow and disbursal of funds have been too rigid. This has affected morale, work efficiency and productivity because of the uncertainties interjected.

Support services which are the responsibility of the middle-level management as regards financial administration and other everyday living and working activities are thought to be operated somewhat inefficiently. This is considered to be due to a lack of full understanding on the part of the administrative officers of their role in the SEARCA structure and to administrative rigidity and, interestingly, also to indecisiveness. Delays in ordering of materials and provision of services were mentioned frequently. This is, to them, very substantial as it affects their motivation and the progress of their work.

5. Results of Interviews and Questionnaires

5.1 Suggestions and Recommendations Made by Scholars, Alumni, Faculty and SEARCA Staff

The following suggestions and recommendations were offered by the Centre's professional staff, research co-operators, former SEARCA scholars, Centre's professional staff, research co-operators, former SEARCA scholars, current scholars and UPLB graduate faculty members. The sub-team agrees with most of them and suggests that SEARCA gives them serious consideration. Some of the suggestions may not be practical or feasible. Most of the suggestions made by current and former scholars were taken from the responses to questionnaires distributed by the sub-team.

Three out of 32 biological science students and five out of 16 in the social sciences suggested that more courses in their respective fields should be offered.

Senior professors and Department Heads expressed the hope that something be done very soon to alleviate the shortage of competent and experienced graduate faculty members in teaching and student counseling positions; many are being drawn away by more attractive projects and positions elsewhere. This phenomenon is weakening the Centre's graduate programme at UPLB.

Suggestions regarding more co-operation, decentralization, and regionalization of SEARCA programme and administration have been received. While the main headquarters remain located at UPLB, branch offices to facilitate academic supervision, research activities and implementation of other projects should be established in proper institutions in other member states, like Kasetsart University in Thailand or the Bogor Agricultural University in Indonesia.

SEARCA professional chairholders should also be appointed at institutions in other member countries primarily for better co-operation, co-ordination and supervision of graduate programmes in certain fields and/or at certain stages of the student's curricular or research work when conducted in his home country.

Consultations regarding administrative effectiveness and efficiency should be arranged with or among personnel concerned, especially the project manager/co-ordinators, visiting professors and a representative of current SEARCA scholars.

Due to the rapid increase in living costs especially of foodstuffs in Los Banos, increases in the monthly stipend of scholars should be considered. For instance, the sub-team has observed that the prices of foodstuffs in Los Banos are from 30-45% higher than in Bangkok. The students have also appealed for an increase in allowances to compensate for rises in prices.

An alternative has been proposed to the sub-team regarding the scholars' accommodations in case increases in the stipend cannot be made: it has been suggested that board and lodging for students living in the SEARCA dormitory should be paid for by the Centre and the students should be paid only pocket money as in the case of IRRI's training programme and the German Foundation training course arrangements. The sub-team doubts this arrangement would actually prove popular.

Concerning the preparation of SEARCA scholars, suggestions from many graduate faculty members are in line with the sub-team's opinion that English Language Proficiency Tests should be administered to the candidates before admission and arrangements made to improve the English language proficiency of those found to be deficient. Such students should be given intensive training in the English language prior to their enrolment in their academic courses, if possible before they leave their home countries for UPLB. Language

problems would be minimized substantially if masters degree candidates holding SEARCA scholarships could enrol in universities in their home countries when majoring in departments recognized as academically prepared to offer quality instruction.

5.2 Responses to Questionnaires

The summaries of responses to questionnaires sent to scholars currently attending UPLB are given in Appendix 6 and those sent to the alumni in Appendix 7. They give strong support to the recommendations presented in the previous section, but offer many other suggestion either directly or implicitly. The responses emphasize the need for liaison between SEARCA staff and major professors and the students. It may be that the needs of SEARCA scholars frequently remain unattended because SEARCA and Graduate School faculty assume such matters are the responsibility of the other. Some one officer perhaps should be designated as responsible for student affairs.

The responses of the alumni would appear to have an especial meaning for SEARCA since they are retrospective, have been influenced by the experiences of the respondent since graduation and are offered in a spirit of helpfulness rather than complaint. It is particularly gratifying that with few exceptions the alumni felt that professionally they have benefited greatly from their SEARCA/UPLB experience and are proud to be numbered among the graduates.

6. Institutional Relationships and Linkages

6.1 SEARCA/UPLB Relationships

The almost total reliance of SEARCA upon UPLB for the conduct of the former's training and research programmes must be stressed. The Graduate School and the Colleges of Agriculture and Forestry provide the course work, advisory services and basic facilities for the participants. Three of the five project managers who are responsible for the principal SEARCA research and development activities are members of the faculty of the College of Agriculture. SEARCA visiting professors hold faculty appointments which require almost full-time participation in the programme of the departments to which they have been assigned. The strengths and weaknesses of one have become the strengths and weaknesses of the other; unintentionally, this exercise has become an evaluation of both SEARCA and UPLB.

Despite their extensive role as the principal conductors of SEARCA academic and research activities, UPLB faculty members, including the deans, have little influence on the directions taken by SEARCA programmes. Inter-staff and even inter-administrative conferences concerned with project determination or the development of academic or research programmes are held rarely and there appears to be little follow-through after any such sessions are conducted. There exists a feeling that SEARCA does not always share credit for the accomplishments of staff, and some of the faculty feel they should be more involved in early stages of project determination, rather than after the fact, when it is often too late to make adequate provisions for sufficient staff and facilities for satisfactory conduct of the project or for fair attention to the needs of the students. There is no question that many faculty members are overloaded and that most of these should have fewer graduate students as advisees rather than more as is to be expected in the expansionist atmosphere prevailing at SEARCA. A common complaint among the students is that their advisors too often are not accessible and that facilities for their work are inadequate. Were there more communication between UPLB staff and SEARCA administration misunderstandings would no doubt be fewer, especially as regards division of responsibilities; the work would be expedited and persons associated with SEARCA would be better informed of its purposes. It was surprising how little the SEARCA Chairholders interviewed seemed to know about the objectives and workings of the Centre. This being the case it is even less surprising that there is so little known about SEARCA among faculty members and research workers in institutions of member nations.

It is evident that SEARCA must help UPLB to find ways of solving its manpower problems. It appears to the sub-team that neither SEARCA nor UPLB administrators are fully enough aware of the degree to which many graduate faculty members are overloaded and that adding to the burden (SEARCA looks forward to sponsoring as many as 150 scholars per year) without providing relief, will only make likely a serious degrading of standards. This at a time when SEARCA is attempting to up-grade the expertise of trainers and research workers in Southeast Asia. There are several steps which could be taken:

1. Place project managers wholly on the SEARCA staff, relieving them of their university duties. In this way, the University could place a more effective emphasis upon graduate training and research and SEARCA research projects would be given more positive direction; many of the problems which now plague the teaching and research staff such as cash flow, logistical support and procurement, as examples, would be minimized. This kind of arrangement would not - should not - interfere with the highly desirable involvement of UPLB staff in SEARCA-supported research.

2. Fund the employment of post-doctoral fellows to assist university staff in the conduct of at least the larger SEARCA-financed projects, including the teaching phase. Certainly, most new projects should be so funded as to provide the personnel required to assume orderly and intelligent conduct of the work involved. Post-doctoral fellows can be employed on a project basis with the thought that the experience gained (many who have been trained in the temperate zone have had no tropical experience) would fit them admirably for their ultimate, permanent posting. Post-doctoral fellows would not have to come from the host country alone; they could be natives of any continent. Post-doctoral fellows could be posted usefully in any country where ongoing SEARCA projects are in need of well-trained manpower. Hopefully, a large number would be citizens of Southeast Asian countries. There has been no more effective way found to man short-term projects with qualified personnel than through the post-doctoral approach. Even more importantly, no better way has yet been devised to instill into young research workers and teachers the objectivity, knowhow and confidence they need to help solve the difficult problems facing the peoples of developing nations everywhere.

3. Accelerate the development of co-operative programmes with qualified units of universities and research stations throughout Southeast Asia. The movement of SEARCA into a more complete role as a truly regional entity should not be delayed any further. In the case of graduate students, it would take some of the pressure off UPLB and it would help ease the language problem. In the case of research, it would open opportunities for scientists in financially-disadvantaged institutions to engage themselves usefully in the task of advancing the economic and social welfare of their country-men. The approach would appeal to those donor agencies which are interested in providing assistance to Southeast Aisan countries in a broader way but

wish to channel their support through the offices of a centre such as SEARCA in which they have full confidence.

4. Revamp the system of admissions to the Graduate School. Admission of SEARCA foreign scholars into the Graduate School of UPLB is an exercise in confusion if not futility for scholars and faculty alike. Selection and admissions procedures normally followed by graduate schools are frequently set aside, with the graduate faculty itself often by-passed in the matters of acceptance and assignment of students. The present system is slow and cumbersome often denying departments and graduate faculty the opportunity for orderly planning of programmes, assignment of students to graduate supervisors and distribution of the faculty workload. SEARCA, more than the UPLB Graduate School, can ease the problem substantially by:

Improving publicity concerning availability of scholarships, procedures for application, standards for selection, conditions under which students will live while at Los Banos, stipends and allowances, etc.

Persuading Ministry of Education officials to enlist the participation of academic (agricultural mainly) forces in the recruitment and selection of SEARCA scholars. It is important that the selection process at all times remains consistent with SEARCA's stated policy concerning the building of agricultural institutions.

Abandoning the practice which permits scholarships to be granted before admission is finalized.

Beginning the admissions process early enough that the major department has an opportunity to accept or reject the student before admission; in this way the assignment of theses problems and advisers more compatible with the students' interests would be assured. A more equitable distribution of the student load among faculty members would be accomplished.

Encouraging prospective students who lack proficiency in the English language or are deficient in course work prerequisite for their graduate major to overcome these shortcomings in their home countries before leaving for

UPLB. This should be possible in many cases since the decision to enroll in a graduate school normally is taken well in advance of admission. If it is necessary for the student to proceed to Los Banos before deficiencies have been resolved, it would be in the better interest of the Graduate School and the student if the latter were enrolled at UPLB as a special student until all academic or language shortcomings have been satisfied.

6.2 SEARCA/Member Country Relationships

It is generally conceded that SEARCA must do more of its work in the member countries of SEAMEO - today there are few such projects underway. There are no research projects which are operated co-operatively with any of the other SEAMEO Centres, not even BIOTROP which, like SEARCA has programmes in forestry, fisheries and pest and weed control. Obviously, in this latter case, the lapse is not SEARCA's alone, and is mentioned here as a matter for both Centres to consider. No doubt other occasions will arise when the combined efforts of SEARCA and other Centres will lead to a swifter and more effective resolution of the problems limiting agricultural training. research and production both quantitatively and qualitatively.

The member countries participate only minimally in programme development of SEARCA. Also, there has been some fear expressed that as the second 5-year phase advances with ever-enlarging Philippine support there could develop a tendency to respond less to member country or regional needs, although the sub-team has found no evidence that this is happening. There is also confidence expressed among research and academic staff of member countries that their universities and research could help them greatly to reach their goals more swiftly. For example, the Agricultural Economics and the Food Technology programmes at Kasetsart University are already well advanced and could co-operate effectively with SEARCA in the offering of graduate studies and research.

There is today no clearcut way by which member nations can participate in SEARCA programme planning. There is no intra-regional research and training advisory mechanism established with which SEARCA could consult - SEARCA rather generally makes programme action and decisions unilaterally. The Governing Board, which seldom has practising agricultural scientists in its membership could with all logic serve as the channel through which member countries could

make their needs known, but it does not. SEARCA's Academic Consultative Committee has a membership only of persons resident in Los Banos; it meets only rarely, and its non-SEARCA members consider its influence to be minimal. The faculty group which was responsible for the selection and supervision of the thesis research of advanced degree candidates in 1974 had 17 Filipino members, 2 from member countries (Indonesia and Thailand) and 1 from Japan. Thesis research projects concerned with Philippine problems do outnumber those concerned with the problems of other nations in the region, but not inordinately so - there are, after all, more Filipino students than any others except Thailand. The matter is brought to the attention of SEARCA since the strong Filipino presence has been noted in the region, but not always adversely.

While there is some feeling that graduate thesis research and research conducted by SEARCA staff perhaps should be more relevant to regional needs, the courses being offered at UPLB are considered appropriate and academically adequate for the advanced degrees granted. In fact, half of the Thai alumni contacted by means of a questionnaire felt UPLB is the only university in Southeast Asia in which SEARCA scholars should enroll. Nevertheless, university administrators and students from member countries, rightly or wrongly, many times rate SEARCA/UPLB scholarship as "second choice" - a matter of prestige. This is borne out by the fact that top students of universities of the region seldom apply for SEARCA scholarships and in many instances scholarships allotted to the member nations go unfilled. The fact that SEARCA scholarships pay a lesser stipend than those supported by other agencies influences those students who can qualify for higher paying study grants to enroll in graduate centres outside the region. SEARCA considers its stipend and perquisites as adequate in relation to those paid non-SEARCA at UPLB and because the cost of living is assumed to be lower in Los Banos than elsewhere. Unfortunately, such information is not available to prospective scholars from other countries as they compare the respective advantages of the universities in which they might enroll as graduate students.

There is a tendency also to regard SEARCA scholarships as too limiting since they offer the student no choice other than UPLB. SEARCA should consider the feasibility of co-operative associations with at least some other universities in the region to widen the degrees of choice open to the students. More opportunities for UPLB degree candidates to conduct a major part of their thesis research in their own countries would be helpful in the interim.

As matters now stand, university administrators look at SEARCA/UPLB primarily as a site for graduate study to the Masters degree. With most of their top students enrolling elsewhere, they understand why the standards UPLB must uphold will deny admission to many applicants. However, this introduces problems for SEARCA which, fortunately, are resolvable: the evaluation sub-team believes problems such as those cited above would be dispelled quickly were SEARCA to avail itself of the counsel which could be provided by a professionally constituted advisory body drawn from the staffs of universities and research centres in each of the member countries. Such liaison groups could also gather information on research and training needs of Southeast Asian nations, advise SEARCA on national and regional project priorities and counsel on co-operative efforts possible in their own countries.

As an alternative to national advisory groups or, better still, in conjunction with them, SEARCA is encouraged to assess promptly the feasibility of the plan it is considering of posting an officer in each member country to serve in a liaison and communication capacity, expedite the recruitment and admission of SEARCA scholars, assist with arrangements for seminars, conferences and workshops held in the respective countries and, in conjunction with national research agencies, help to identify projects which SEARCA could support either in the country or regionally.

It would seem that the SEARCA concept that programmes should be first "tested" in the Philippines before being activated elsewhere in the region should be abandoned. There would be no reason to conclude that because a programme did not succeed in the Philippines it would fail elsewhere. SEARCA as a regional centre should not run the risk of overlooking important projects which might have great relevance in the region although not necessarily so in the Philippines. SEARCA would strengthen its position in the region if it would enlist the interest and participation in programme planning of agricultural leaders of all member countries.

6.3 Other Institutional Linkages

SEARCA has developed a number of co-operative research training and service programmes with national, regional and international research organizations. These will broaden substantially SEARCA's role as a leading centre of expertise in the agricultural science in Southeast Asia, enlarging its sphere of influence and

serving to shape SEARCA into an even more useful contributor to the progress of the agriculture of the region.

The co-operative projects are mainly short-term, contractual in nature. Mostly will be headquartered at SEARCA, Los Banos with the Centre providing many of the essential facilities and support services required. Some projects will involve UPLB staff; others will bring to the campus personnel seconded by the co-operating agency. A listing of the projects follows:

6.3.1 Co-operation with International Agricultural Research Centres. SEARCA has thus far signed memoranda of agreement which two of the Centres which are a part of the worldwide network of agricultural research and training institutions supported by the international assistance agencies holding membership in the Consultative Group for International Agricultural Research (CGIAR). Memoranda have been signed with the International Rice Research Institute (IRRI), Los Banos, Philippines and the Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia.

Since IRRI is located on the UPLB Campus, it does not require SEARCA services or facilities. The memorandum with IRRI, already represented on the SEARCA Academic Consultative Committee, covers me and areas of co-operation and formalizes the responsibilities of each centre in all joint undertakings and fields of interest. A feature of the agreement is joint sponsorship of visiting scientists.

The memorandum with CIAT, though signed, has not yet been arrivated. CIAT will post one scientist at SEARCA who will be responsible for the conduct of its cassava, field been and forage crops research and testing programmes in Southeast Asian countries.

6.3.2 AVRDC Philippines Outreach Programme. SEARCA provides support services and facilities for the outreach programme of the Asian Vegetable Research and Development Centre (AVRDC), jointly sponsored also by the Asian Development Bank (ADB) and the Philippine Government through the Bureau of Plant Industry (BPI) and the Philippine Council for Agricultural Resource Research (PCARR). A member of the AVRDC staff is posted with SEARCA; AVRDC itself is headquartered in Taiwan.

To date, most of the work undertaken under the auspices of the AVRDC Outreach Programme has been conducted in the Philippines, with the testing programme centered at the BPI Economic Garden at Los Banos. However, work is also underway at other sites throughout the Philippines and is being extended to include other Southeast Asian countries.

The Outreach Programme includes training in addition to research mainly testing of promising selections and segregating populations of food crops from the AVRDC breeding programme and of methods of insect and disease control and of crop management practices. The vegetables involved are mungbeans, soybeans, tomatoes, sweet potatoes, white potatoes and Chinese Cabbage.

6.3.3 The German Foundation for International Development. SEARCA enlarged its role as a training site serving Southeast Asia when it signed a 5-year cost-sharing agreement with the German Foundation for International Development on 25 September, 1975 for the conduct of short-term training courses and seminars concerned with economic, social and

technical problems of importance in the region. The efforts are limited to ASEAN countries, excluding Singapore, but including Sri Lanka. The Foundation has posted a Project Co-ordinator at SEARCA who is responsible for arrangements, publicity, recruitment of resource personnel and other matters necessary to expedite the programmes.

Thus far, two training sessions have been held: Technical Agriculture and Social Organization, and Women for Rural Development. Soon to be offered are seminars on Agricultural Credit (in co-operation with the Asian Development Bank) and Curriculum Development and Training. The Foundation provides for extended training at UPLB of 4 months duration for two participants from each group.

6.3.4 Fisheries Technology Transfer. SEARCA is the third party in an agreement with the Southeast Asian Fisheries and Development Centre and the Bureau of Fisheries and Aquatic Resources of the Philippine Government for the development and management of a fisheries technology transfer programme. Signed on November 12, 1975, the agreement stipulates that the three entities should join hands in assisting Asian governments develop their fishing industry.

6.3.5 SEARCA/PCARR. Under the SEARCA-PCARR agreement, the Centre and the Philippine Council for Agriculture and Resources Research have agreed to link up their research and training programmes, particularly in the exchange of scientists and technologies, scientific literature, information and methodology. The agreement consummated in March 1976 also provides for the transfer of technology of other Southeast Asian countries to the Philippines and vice-versa.

6.3.6 UPLB/SEARCA-EDI Joint Training Programme. This joint training programme was finalized among SEARCA, UPLB and the Economic Development Institute (EDI) of the International Bank for Reconstruction and Development in late 1975. Under this programme, UPLB/SEARCA and EDI shall jointly conduct training courses in the subjects of rural development, agricultural credit and agro-industrial projects. One of these courses will be offered in Los Banos, Philippines each year for the next three years, 1976-78. The programme will serve the following countries: Philippines, Malaysia, Sri Lanka, Indonesia, Nepal, Thailand, Korea, Fiji, Burma, Papua New Guinea and Western Samoa. Each course will have 25 participants.

6.3.7 Co-operative Projects with American Universities. Recently, SEARCA entered into separate agreements with Kent States University, Cornell University and Auburn University for the pursuit of co-operative projects and activities of mutual interest in Asia and the Pacific region.

6.3.8 Tobacco Research and Training Programme. SEARCA and UPLB entered into an agreement with the Philippine Tobacco Administration on October 7, 1975 to conduct research, extension and training activities in an effort to help improve the quality and levels of tobacco yields in the Philippine. The five-year project aims primarily to speed up the spread of the new tobacco technology, with emphasis on new cultivars which are disease-resistant, high-yielding and high quality through appropriate cultural management and cropping systems.

7. General Observations and Comments

The SEARCA programme has moved beyond the parameters of SEAMEO with AIDA, the Research Management (Asia) project and the training programme supported by the German Foundation for International Development among others. While these programmes have required that SEARCA staff increase their travels to non-SEAMEO countries and that participants from such lands have enlarged the conferences, seminar and workshop programme, they have not yet added to the graduate students load. It is assumed that if the past growth pattern of SEARCA is any indication, they will. By the same token, it also seems assured that the outreach of SEARCA into non-SEAMEO countries will be expanded. One sees no harm in any such eventualities if both SEAMEO and UPLB concur, and if in the case of the latter, sufficient funding for additional staff and facilities is provided. Here again, there is the prospect of enlarging the regionality of SEARCA through activation of more projects in non-Philippine settings.

The projects listed above along with others soon to be initiated such as the Post-Harvest Research and Development Project with multilateral support, the co-operative programmes with Kent State, Auburn and Cornell Universities, and with the National Food and Agriculture Council (Philippines) and the Development Academy of the Philippines indicate the breadth the SEARCA effort has already achieved and the extent to which the Centre has already committed itself to supply the facilities and logistical support for so great a variety of co-operative programmes. As the only centre of its kind in Southeast Asia, SEARCA offers a convenient and highly advantageous venue for work sorely needed in the region.

The high regard in which SEARCA is held, based on its record of accomplishment, vigorous leadership and its uniqueness, make it attractive to international agencies seeking good stewardship of projects they wish to support. Thus far, SEARCA has been quick to accept such obligations but it is urged that all such opportunities

be weighed carefully, lest SEARCA - and UPLB - become severely overburdened through the mass action of logistical details and attention to the personal, academic and research needs of a growing complement of trainees and staff. The SEARCA administrative staff already finds it difficult to keep up with the needs of the present day programmes and should be enlarged as the workload grows to assure that SEARCA will fulfill totally its responsibilities as a partner in co-operative research.

The danger exists that as more and more specially-funded projects are accepted, sponsors may inadvertently exert undue influences on programme determination and priorities. Also, unless many of the programmes are conducted at least partially in other countries of Southeast Asia, they may lose their appeal to sponsors and their reception in the region may be found minimal. These eventualities are mentioned with no expectation that they will happen.

The success of the SEARCA programme as a regional enterprise will be measured by how comprehensively its research findings are applied in Southeast Asian countries and how well the participants in its training programmes are prepared for the difficult roles they must play in advancing the well being of all peoples engaged in or dependent upon the agriculture of the region.

It is manifest that the rate of progress and the impact of the SEARCA programme in Southeast Asia will be determined by how quickly and how well the national agricultural science agencies develop their own capabilities. Institution building is the primary strategy SEARCA must employ to secure its position lastingly as the pre-eminent regional agricultural research and training centre in Southeast Asia.

FOOTNOTES

CHAPTER 7

1. A brief review of the early history of SEARCA is presented in Appendix 1.

2. See the Enabling Instrument of SEARCA, Article L.

3. See Appendix 3 for brief reports of project managers' activities.

4. Appendix 4 demonstrates how wide a range of major studies is available to SEARCA scholars enrolled at UPLB (academic year 1975-1976).

5. Refer to Appendix 3.

6. See Appendix 5 for listing of completed projects conducted by UPLB staff under SEARCA auspices.

CHAPTER 8

REGIONAL PROJECT FOR TROPICAL MEDICINE AND PUBLIC HEALTH

1. Introduction

The Tropical Medicine and Public Health Project (or TROPMED for short) has two features which makes it distinct in SEAMEC. It presently is the only subordinate body which has a network of national institutions delivering service outputs catering to regional needs; this network is co-ordinated by a regionally-financed Central Office which receives its policy and programme direction from a body called the Central Co-ordinating Board. The TROPMED's main interest is in medicine and public health particularly the clinical and health aspects of tropical medicine. Its link with the Organization stems from the fact that one of its principal objectives is to train nationals for service, research and teaching.

The need for a medically-oriented activity in the Organization was felt from the outset. During the first meeting of the Southeast Asian Ministers of Education at Bangkok in November 1965 the view was expressed that regional aims towards articulating education to the economic and social goals of member states would be difficult to achieve unless tropical diseases which continued to afflict the majority of the population could be prevented or controlled.

In 1966 the Secretariat created a Task Force to determine how such a medical activity could be organized. The Task Force developed the concept of a project consisting of a co-ordinated network of national centres which the Council adopted shortly after. Except for some functional modifications introduced a few years later the Project's organization and terms of reference as then proposed remain operative today.

Implementing action followed quickly. The national institutions which were designated as national centres began offering their regional courses as follows: The Faculty of Tropical Medicine, Mahidol University, Bangkok, 1967; the Institute of Public Health, University of the Philippines System, 1968; the Institute for Medical Research, Kuala Lumpur, early 1970; the Faculty of Medicine, University of Indonesia, Jakarta, Later part of 1970 and the Department of Social Medicine and Public Health, Faculty of Medicine, University of Singapore, 1971. The Faculty of Medicine, in Saigon was eventually selected and started its

regional course in 1973. Laos and the Khmer Republic had respectively selected the National Public Health Laboratory in Vientiane and the Faculty of Medicine in Phnom Penh but circumstances have prevented them from commencing their planned course offerings.

During its interim period (1967-1970), the Project initiated other regional activities, e.g., the holding of seminars and exchange of personnel among the national centres. Like the formulation of the First Five-Year Plan which started also during this period, the infra-structural development of the national centres continued into the First Five-Year Plan period.

While the cost of administration and activities were financed from donor assistance during the interim period, arrangements arrived at for the First Five-Year Plan period consisted of fifty percent funding by member governments and the other fifty percent by the United States Government. This period was characterized by the development and further expansion of the activities already started and the completion of the infrastructural programme.

The Second Five-Year Plan (1975-1980) witnessed the cessation of donor support to the administration of the Project; instead, the participating governments assumed the costs although its operations, as with other activities of the Organization, had a substantial amount coming from various donor contributions. The Project's financing was confronted with further difficulties following the temporary cessation of the participation of the three countries in the Indochina Peninsula which were then directing their national energies to post-war rehabilatation of their economy and infrastructure.

The Project is therefore faced with problems as it goes through the Second Five-Year Plan. The available resources are greatly diminished and the participation of member countries has been reduced. If it is to continue, the Project can only pursue its goals with the more efficient use of its reduced resources.

This evaluation exercise is calculated to help in developing this new strategy through the careful examination of the project's past performance against which to work out better measures for a more effective and productive performance. By this means it is hoped that the present donors will be encouraged to continue their support while the others who are still uncommitted will, it is hoped, be stimulated to take an interest and join in the Project's future efforts.

2. Methods and Procedures

2.1 Approach

The approach to this Evaluation had necessarily been pragmatic. It could never be a rigorous exercise in which protocols had been prepared beforehand to record observed findings which could be matched against expected results. The purpose of the Project, the main objectives as stated in the First Five-Year Plan and the specific objectives of the programmes/activities were not framed to enable a precise measurement of their results. In some instances, even, the objectives of some of these programmes/activities were not stated; the challenge then was to derive those objectives and in so doing a subjective element was introduced, posing a constraint at the very start of the study. The approach was pragmatic because while the principle of evaluation was kept in mind, wide latitude was given to its application whenever is was felt that a more methodical and precise procedure was not feasible.

The initial task in this study was to determine the "legal" basis for the complex of activities constituting the Project. Having established this, the terms of reference were studied; this meant an examination of the mandates to ascertain the Project's purpose and to scrutinize the Project's adequacy in carrying out the stated purpose. The broad objectives of the First Five-Year Plan was further examined to see their relationships with the Project's purpose and with the programmes/activities.

The next step was to review in more detail the individual programmes/activities. The first query was on its rationale. This was followed by looking into the specific objectives as to whether they had been defined and when not stated, as sometimes happened, to try to infer what they were from the point of view of the purpose of the Project and/or the results being obtained from the activity. The methods being used were then analyzed firstly, on the basis of their technical or administrative validity, and secondly, on their general effectiveness and, where feasible, their relative efficiency. The consideration of effectiveness and efficiency even though imprecise necessarily involved a study of the resources made available to the programme/activity. The next step was to see whether the objectives were being realized and to what extent; associated with this was an assessment of the results in relation to their costs.

When done, the final task was to look again at the Project's purpose and the general objectives of the First Plan and relate them to the achievements of the programmes/activities components. This procedure was more than a simple addition of results because some activities could neutralize or negate the positive results of others while in other circumstances, the accomplishments of two or more activities would result in an impact greater that the simple sum of the results other than their individual activities.

Apart from the lack of a pre-programmed evaluation frame and more precise means of measurement the constraints in this evaluation were simply the presence of subjective elements coming into play. Consequently, conventional norms adopted for what were "good" or "not so good" could only be interpreted according to the judgements of the sub-team members, whether these be on the technical, administrative or educational aspects.

The sub-team will confess to the biases inherent in their individual disciplines. One of them is a public health administrator and the other a medical educator even though their common denominator is a medical background and a formal training in public health.

This report has been developed in the frame of the process described above. The sub-team adopted the pragmatic approach for lack of any other option in the circumstances. The members hope that the outcome of the study will give some practical meaning to justify their efforts.

2.2 Sources of Information.

Among the documents consulted were self-evaluation reports of four national centres and the Central Office. One of the five reviewed in this study did not submit a report. The other national centres were not included because one of them (Saigon) was not visited while the other two had not yet started.

Other documents reviewed were the reports of consultants and the reports and other documents coming from the SEAMEO and the TROPMED Project.

A list of the documents reviewed may be seen in Appendix 1 Annex V.

2.2.1 Interviews. At the beginning, a set of questions was prepared and this was given to the interviewees to follow in the course of the interviews. This procedure did not turn out to be practical because, generally, the interviewees were either diffident or reluctant to express their views freely. The questionnaire was then modified into a guideline with a copy again furnished to the interviewee but with the members of the sub-team following up with more probing questions on the listed topics.

To make sure that the replies were recorded accurately, all vague replies were followed up with requests for elucidation until the meaning of the response had been fully clarified. In other instances, the report of the interview was given back to the interviewee for his verification or amplification; this particular procedure was adopted with interviewees who had some responsibility for the management of project matters.

The individuals interviewed were:

The Project Co-ordinator

The staff of the Central Office

The Directors of the national centres and/or CCB members

Former trainees of TROPMED scholarships

Staff of the Ministries of Health responsible for training in relation to TROPMED sponsored courses.

Staff of institutions linked with the national centres

Associations related to the Tropical Medicine and Public Health Project

Visits were made to the Central Office and the national centres in the countries visited. Observations were made of their facilities which usually consisted of classrooms, laboratories, libraries and a hospital in the case of the national centre in Bangkok. Field practice areas were further observed and these included a field station in Thailand, a field nutrition laboratory in Bogor, Indonesia, a rural health centre and factory near Manila, the Fly Control Programme site in the Cameron Highlands in Malaysia and certain urban health activities in Singapore.

2.2.2 Consultations. Most of the consultations with other members of the Evaluation Team took place during the preparatory phase towards the end of the mission. While there were inter-personal exchanges between the different members, most of the sub-team's consultations were with the team leader and the assistant team leader which took place throughout the operation ; at the briefing and planning stage, in each of the countries visited and during the finalisation of the report.

3. Organisation and Administration of the TROPMED Project

3.1 The Mandate of TROPMED

There were two reasons for reviewing the Project's mandate. The first was to ascertain the Project's purpose and thereby establish a point of departure for the evaluation exercise. The second was to obtain information on the structure and functions of the units comprising the Project within whose framework the purpose was to be carried out.

Two successive mandates have governed the organization and administration of the Project. The first is the report of the SEAMES Task Force (1966) and the second is the Enabling Instrument (1973).

3.1.1 The First Mandate : (The SEAMES Task Force's Report) (1966-1973). The Task Force was established following a decision of the Council to develop an activity to fight tropical diseases. The group consisted of representatives from member countries and three international consultants. It conducted country visits to ascertain the "attitudes and interests" of the peoples in these countries and determine how the activity envisaged by the Council could be organized and pursued. In its report, the Task Force opted for a network of national centres with a co-ordinating mechanism rather than a regional centre located at one site. The reasons were: "the participating countries would find it difficult to manage at present, a comprehensive and autonomous regional centre .... (and) ..... in committing themselves to a long term financial obligation"; the shortage of national expertise which "would make it extremely difficult to recruit staff for any reasonable length of time in a regional centre away from their own

countries"; and the needs for promoting "co-operation among Asians (which) is vital to the prosperity and stability in this part of the world".

The organizational set-up recommended by the group was a network of national centres and a Central Co-ordinating Board (CCB) to which a Central Office would be attached. The CCB was to correlate the activities of the national centres; make joint approaches for aid and co-operation with other national and international organizations; serve as a clearing house to catalogue, publish and "translate into English information concerning the activities of this Region in order to disseminate knowledge in tropical medicine to all institutions and agencies, not only in this area but also to other centres in the world", act as an agency for the exchange of students between various institutions; and help to organize conferences, seminars and instructional courses concerning medicine and health. The CCB was enjoined to establish at its first meeting the Project's financial policy and funding and to organize the Central Office.

The Task Force viewed each national centre as a national entity continuing to "retain the responsibility" of developing its own tropical medicine centre "as it sees fit" although it could request the CCB "for advice and help".

To ensure early implementation, the Task Force recommended the establishment "in the first instance" of the Central Office at the University of Medical Sciences (now Mahidol University), Bangkok, as it already had a Faculty to Tropical Medicine and because of its location in the same city as the SEAMEO headquarters.

3.1.2 <u>The Second Mandate : The Enabling Instrument (1973)</u>. This instrument supplemented the terms of reference contained in the Task Force's report when it came into force early in 1973.

The format and contents of this document followed generally the model prescribed for all SEAMEO regional Centres/Projects. The Instrument contains a statement of Purpose, a description of the structure and functions of the Project's organization and defines its relationship with the Council. A transitional provision acknowledges that "anything done or made by the Board on behalf of the Project before the adoption of this Instrument ..... shall be binding on the Project and the Organization".

The Project's purpose is stated thus: "..... to promote co-operation in post-graduate training and teaching as well as research work in the field of Tropical Medicine and Public Health for prevention, control and eradication of tropical endemic and environmental diseases so as to improve the health and standard of living of the peoples of Southeast Asia".

The organisational structure (viz., the CCB, the Central Office, and the network of national centres) is retained although substantive amendments were introduced into the functioning of the Board and the Central Office. The Instrument provides a more detailed description of the organisational set-up. More recently, upon decision of the Council, the title of Secretary General has been changed to Co-ordinator.

The CCB membership is composed of a representative from each of the Member countries and all are appointed by their respective Ministers of Education. The representative holds office for three years but is eligible for re-appointment at the discretion of the appointing authority. The Director of the SEAMEO Secretariat and the Co-ordinator are designated as ex officio members who, under the policy and practice prevailing in the Organization, do not exercise the power to vote. Also not mentioned in the Instrument, but effected by virtue of the provisions in the Appendix to the Organization's Charter (1973), is the entitlement to membership without vote of representatives of Associate Members of the Organization.

The powers of the CCB consist of policy making; approval and annual evaluation and review of the Project's programme and budget; control of any of the Project's financial accounts, and nomination of the Co-ordinator to the Council.

The Central Office is given new functions formerly exercised by the CCB, to which are added the authority to enter into contracts, acquire and dispose of movable and immovable property and to institute legal proceedings as may be necessary in the discharge of these duties. The Central Office holds the authority to appoint staff and employees of the Project.

Heading the Central Office is the Co-ordinator who has a term of office of three years but subject to reappointment by the Council upon renomination by the Board. Apart from discharging the functions of the Central Office, the Co-ordinator executes the programme

and budget approved by the Board, operates the Project's accounts and exercises the appointing power given to the Central Office.

The national centres continue to retain their status as national institutions with the right to select their own students and faculty, develop their own curricula and programmes of teaching, set their own academic standards, award their own certificates, diplomas and degrees and pursue their own studies.

The relationship with the Council stresses the latter's ultimate authority of control over the Project's policies and administration, the review of the CCB's decisions and the power to "alter, amend or modify (the) Enabling Instrument".

3.1.3 Discussion. In this review, the Instrument was compared with the first mandate (the Task Force's report) and their contents and its compatibility with the Charter scrutinized. Even the editorial aspects of the document were examined.

To do away with what may seem vague statements in the document it is desirable to start with a consideration of the editorial features.

(i) Editorial aspects. For convenience these aspects are presented below in sequential form according to the numbering of the Instrument, thus:

- Section I. The definitions do not mention the Central Co-ordinating Board and the National Centres for Tropical Medicine and Public Health both of which are essential components of the Project's organization.

- Section II. The text in the statement of Purpose would perhaps have more clarity and technical precision if restated into something like the following: "..... to promote co-operation in education, training and research in the fields of tropical medicine and public health for the prevention and control or eradication of tropical diseases of an endemic nature or resulting from the environment as may help contribute to the improvement of the health and standards of living of the peoples of Southeast Asia".

- Section V. Item "(1)" refers to the "National Tropical Medicine and Public Health Centre". Although the difference from the term used in the second paragraph of Section IV (i.e. "National Centres for Tropical Medicine and Public Health") many seem trivial,

confusion may in fact prevail because the technical concept of a "public health centre" is associated with a unit of service provided by a local health authority.

- Section VII. The meaning of subsection 10(a) could perhaps be made clearer if the text adapted from another Instrument were substituted thus: "The Minister of Education of a Member country may nominate an alternate to attend any meeting in the absence or inability for any reason of the regular incumbent in which case the alternate shall have the right to vote as if he is a member of the Board".

(ii) On the Provision for "Purpose". Reference is made to subparagraph (b) of the second paragraph of section 1.3 above where a revision of the text was suggested for this Section. The two substantive changes were made by adding the word "education" and deleting the word "post-graduate".

With regards to the first, the world "education" was introduced because the Project's functions, cited under Section V with particular reference to broader educational components (e.g. the broad "dissemination of knowledge"), could not, in concept, be comprehended by the words "training and teaching". It is suggested that by listing "education, training and research" all the substantive activities cited in the Enabling Instrument and now actually being implemented will have been given full coverage.

As regards the second, the use of the word "post-graduate" would place a severe limitation on the Project's initiative to undertake training with a broader scope.

It is not that the Project should discourage post-graduate training to which it presently attaches a high priority. But if only post-graduate training were to be sponsored or promoted by the Project as the text would imply, then it would have problems in contributing to some of the aims of the Organization. The Project would only have a marginal impact in participating in the effort to achieve the Charter's aim of "assisting in articulating education in the economic and social goals in the individual member states" Article I, Section 2(d). It would not be able to help in organising such practical courses as were developed for Lao auxiliary health workers. Finally, it would nullify the Project's objectives under the Second Five-Year Plan to "extend its capabilities into areas of service ....."

(iii) On the Provisions for "the CCB". While the powers of the Board under Section VIII are similar to those of others SEAMEO Governing Boards there are features in some of them that do not appear in the Instrument, e.g. the power "to make by-laws, rules and regulations", "..... approval of the terms and conditions of service of the staff....."etc.

The transfer of certain basic functions to the Central Office, together with the newly assigned duties to the latter, has changed the relationships between it and CCB. With the separation thus established there may now be a need for a policy review on how the membership of the Board should be constituted. While Section VII lays the groundwork for this membership, it is silent on the issue of whether the executive officer of the Central Office with all the powers and responsibilities assigned to him can also sit as a regular member of the Board as the representative of his country. It is interesting to note that the second sentence of Sub-section 1 of Section VII states that the Co-ordinator (formerly Secretary-General) is an ex officio member of the Board which would mean that in the contemplation of the Instrument such an officer does not sit in the body as a regular member with the right to vote. There are many precedents within and outside the Organisation to support the latter view which does not represent present practices; nevertheless, the Organization would be the best judge of what will best serve its interest in this particular issue.

In view of the withdrawal from the CCB of its Co-ordinating functions it may no longer be appropriate to retain its present title. In keeping with the title now given to similar bodies such as Regional Centres the term Governing Board may apply.

(iv) On the Provisions for the "Central Office" and the "Co-ordinator". These two headings are combined because in theory and in practice the Central Office and the Co-ordinator are one unit in the organizational set-up. Relevant provisions which concern the Central Office are in Sections V and VI while those for the Co-ordinator are in Section IX.

As indicated earlier, the present functions of the Central Office have been largely transferred from the CCB. The implication is that the Central Office is no longer an appendage of the CCB as under the first mandate but has authority of its own to perform certain essential project functions.

Under Section VIII, the Central Office is described as a "subordinate body" of the Organisation. It is doubtful if this can be applied literally because the Central Office although given executive functions is only a unit of the Project. It is more correct to assume that the subordinate body (in the context of Section 10, Article IV of the Charter) is the Project itself. Examples to support this view are the privileges and immunities (referred to under Sub-section 2) extended not only to Central Office staff but to others serving the Project such as national centre directors attending CCB meetings or serving as exchange staff in other member countries.

Sub-section 1 (d) of Section VII refers to the "full capacity" of the Central Office to appoint and employ "faculty" and other staff as may be considered by the Board "without restriction to nationality". Two issues may be raised here and these are:
a) that faculty members are recruited by the national centres; and
b) that the "no nationality restriction" clause is incompatible with Section 5, Article V of the Charter. The insertion of the latter clause in the Instrument is unwarranted and unnecessary, not only because of its incompatibility with the Charter, but also because the Organisation has already drawn up rules and regulations for the local recruitment of general service staff.

A potentially sensitive provision is found in Section IX where the text under Sub-section 1 and repeated in Sub-section 3 states: "The Co-ordinator (formerly Secretary-General) should be nominated by the Board, approved by the Minister of Education of Thailand and formally appointed by the Council". It is difficult to rationalise why the Ministry of Education of one member country should exercise approval in the appointment of the executive officer of a fully recognised regional Project. A close look at the Project will show that its activities are region-wide and not limited to the confines of one country and that each national centre of all the member countries contributes to the services outputs of the Project which are paid from their own revenues. It will further be seen that the Central Office of which the Co-ordinator is head operates from funds contributed by the participating countries.

The explanation has been advanced in some quarters that the Ministerial approval of the appointment is in fact a clearance procedure which is required either when a national takes up an international appointment or when an international officer takes up

his duties in an office situated in a host country. The two hypothetical situations do not hold because in the first case, the process through which a national seeks clearance from his government to accept an international appointment is an internal matter which does not merit mention in a document like the Enabling Instrument; and in the second case, the authority that gives Government clearance to an international staff member in a host country is the Ministry of Foreign Affairs. It is possible that this provision may have mistakenly crept into the document as a result of the direct copying of the standard text for the Enabling Instrument of the regional Centres without recognition of the fact that the regional Centres and the Tropical Medicine and Public Health Project do not have an identical frame of reference.

A final point for consideration under Section IX is the need to have a provision for an ad interim officer for Co-ordinator in the event that the incumbent for any reason is unble to perform his duties. The provision should state under what circumstances the designation is to be made, who will make the designation and what duties the interim officer will perform.

(v) In the Provisions for the "National Centres". Although the national centres render most of the services of the Project (training, research, etc.) they received the least mention in the Instrument.

The national centres are dealt with in Section IV under the title of "Organisation". In the first paragraph the component units of the Project are cited. The second paragraph then states that the national centres "shall have the powers herein enumerated" followed by a listing of the items. Contrary to the meaning conveyed in the above statement, the "powers" exercised by the national centres do not derive from the Organisation but issue from the authority granted them by their respective governments. This was acknowledged by the Organisation under the first Mandate (Task Force's report) which stated: ".... .. . each Member Country will retain the responsibility of developing its own national tropical medicine centres as it sees fit".

Perhaps, because of the autonomy given to national centres there has been some hesitation to assign them functions in the Instrument. In actual fact, the national centres undertake administrative and financial chores and exercise in-country liaison and co-ordination on the Project's behalf. The national centres are an integral part of the Project and their functions and roles within its framework merit formalisation in the Enabling Instrument.

3.2 The Central Co-ordinating Board

Although the Minister of Education of a Member Country is free to select any individual as representative to the Board, he very often selects the director of the national centre as the country's representative.

The experience gained from the above practice has been generally favourable. More than other national officers, the national centre directors know their own institutions and hence are better able to present their problems and needs to the Board. Repeated contacts at the Board meeting have fostered better inter-personal relationships and even camaraderie which are assets to regional collaboration.

Recently, however, one member country changed this practice and designated another officer not connected with the national centre; the thinking behind this move was that the Board also took up other matters and it was in its Government's interest, therefore, to be represented by one more familiar with the country's educational and health policies and programmes.

The chairmanship of a Board Meeting is given to the representative of the country of venue. Because of the rotating nature of the chairmanship and the lack of any substantive responsibilities attached to the post, except to preside over the meetings, election to the post is perfunctory. Although provided for in the Instrument, the CCB has never elected any vice-chairman which is redundant anyway because the post holds no responsibility. The Board however elects a rapporteur, a practice it has continued from the beginning and which serves a more useful purpose.

The mandatory provision in the Instrument for rotating the venue of CCB meetings enables the members to observe at first hand the actual situation in the national centres which helps them in their Board deliberations. On the other hand, at a time when resources are diminishing and inflation continues, this itinerant type of meetings incurs an extra burden on the Project's available resources which could be better used in programme activities. Under normal conditions, one rotation of meetings among the member countries requires eight years to complete, and with the present number of actively participating countries, five years. This means that it will be five to eight years before the members can hold their meetings at the Central Office in Bangkok where they regularly transact official business.

It thus seems practical that the venue of the meetings be left to the discretion of the members. One way which can specify the Instrument's intent is to alternate the meetings between Bangkok and each member country every two years; this arrangement will permit the members to come to Bangkok headquarters more often at less expense.

A provision in the Instrument which has not yet received attention is for the Board to adopt its "rules and procedures". It is not clear whether the rules and procedures apply only to the conduct of the Board's meetings or whether they could be expanded to other activities of the Project.

Interpreted narrowly (i.e. with respect only to the Board Meetings), the rules and procedures may produce some inconveniences such as limited flexibility in tackling certain ad hoc matters but the advantages are far more important; e.g. deadline dates can be prescribed for the submission of the agenda, reports and other documents for the Board meetings, instructions can be given as to the format and contents of the minutes and reports of the meetings not only to establish consistency but to ensure balanced reporting, and the format and contents of Board resolutions and other Board documents can be standardized.

There are certain vague areas in the relationships between the Board and the Central Office, but there is no doubt that policy making, programme approval and review and overall disposition of project accounts are prerogatives of the CCB while the executory part of the approved programme lies with the Central Office. The CCB can only intervene retrospectively by its power of programme evaluation and review. To date the CCB has not yet adopted any standard operating procedure for discharging its responsibilities which has implications in the planning and evaluation of programmes it has to approve.

At present, the Board acts on programme proposals and receives programme feedback from the Central Office without any further inputs from its end. This arrangement has been considered satisfactory on the basis of satisfactory developments of the programme and partly because of the feeling of esteem for the Project's leadership.

Under the Co-ordinator's effective exercise of his dual role of Project executive and bona fide membership of the CCB he has given sustained guidance on the Project's host of activities. The CCB has adopted policies providing an anchorage for the various actions taken by the Central Office. The Board has approved programme proposals, agreed to evaluation findings and favourably endorsed budgetary outlays including outlays for personnel.

The Board has two options to consider in the future discharge of its functions. It can maintain the current state of affairs vis-a-vis the Central Office operations. The other option for the Board is to continue this co-operative relationship and to further enhance it by contributing the combined initiative and imagination of its membership to the promotion and development of the Project's activities.

There are certain requisites which the members of the Board may wish to consider if they are to exercise a more active role in the Project's development, namely having a deeper understanding of the internal mechanisms of the Project (e.g. a thorough study of the Enabling Instrument and the Organisation's charter, acquaintanceship with the problems and implications of tropical medicine and public health in their home countries, and availing themselves of technical advice in matters coming up for their decision so that they can have a better understanding of the problems involved and the alternative approaches for their countries).

3.3 The Central Office

The Central Office performs administrative, technical and co-ordination functions. It is often difficult to draw a line between them.

Co-ordination is exercised in the planning of seminars, conferences and such meetings where the Central Office serves as a link between the local organizing committee of the national centre and the outside agencies contributing to, or participating at, the meeting. Co-ordination is effected when the Central Office arranges with national centres matters involving the exchange of staff. The Central Office has a co-ordinating role in discharging its "clearing house" functions of receiving, storing, disseminating knowledge about tropical medicine and public health among national centres and with agencies within and outside the region. Little opportunity has been offered so far to co-ordinate the regional courses because of their differences in interest and content.

There are hopes for the future co-ordination of research among the national centres. In the past, the procedures for the awards of grants were highly individualised and certain decisions were delegated to the national centres. With the Organisation's new policy on institutional research, it should be possible for the Central Office to promote co-ordination not only intramurally in the national institutions but between and among them in subjects of regional importance.

The technical functions of the Central Office are performed by the Co-ordinator or undertaken under his immediate direction. These functions include the provision of direction in formulating the development plan of the Project, the publication of the "Southeast Asian Journal of Tropical Medicine and Public Health" and technical reports on seminars, conferences, etc.; the technical approval of research applications; and the preparation of annual reports.

Administrative duties take up a major share of staff time. These include the processing of approved fellowships, research grants, exchanges of personnel; the business aspects of the Journal; processing of requisitions; mailing inventories; payment for ordered equipment and supplies for the national centres and so on. Other administrative duties concern the field visits by Central Office staff for follow-up activities and consultations in the national centres.

Continuing attention is being given to promoting and expanding contacts with technical agencies and prospective donors to the Project's operations. While responsibility for fund raising lies primarily with the Secretariat the special contacts developed by the Central Office with certain organisations and institutions interested in medical activities are still being maintained.

An important activity which combines administrative and technical elements is the servicing of CCB meetings. This requires the preparation or review of technical documents and other papers with both technical and administrative components. Administrative staff is supported by the Central Office even though the meetings are held outside the Project's headquarters.

One member of the Co-ordinator's supporting staff is the Administrative Assistant who has responsibility for all types of administrative work including the immediate supervision of personnel concerned with administration and finance. She serves as executive

assistant during the CCB meetings and regional meetings and in the latter she liaises with the participating agencies. She acts for the Co-ordinator in processing requisitions for supplies and equipment from assistance funds; in this task she receives technical help from the national centre. The processing includes the placement of orders, paying for them and visiting the national centres to ensure that the commodities have been received. She also processes fellowships, exchange of persons grants and the administrative aspects of recruiting consultants.

The other supporting staff member is the Technical Assistant whose duties are concerned with the processing of technical reports (consultant's reports and seminar/conference reports) and overseeing the preparation of the Journal. Other communications of a technical nature are either drafted or reviewed by her before being passed on for the action by the Co-ordinator. These duties require not only ability in English but adequate technical preparation. The post is filled by a medically qualified staff member.

There are accounting posts of varying levels which look after the Project's accounts. The secretaries type correspondence and reports. There is a janitorial service.

Utility services had been provided gratis by the Thai Government but with the increase in costs the sum of $3,000 has had to be allocated yearly to help defray the bill.

The Co-ordinator serves part-time as head of the office. He retains the full-time position of Dean in the Faculty of Tropical Medicine and Hygiene, Mahidol University and is therefore Director of the TROPMED national centre in Bangkok; in the latter capacity he is designated as representative to the CCB. The incumbent has held the post since its establishment which, under the first mandate, had no fixed term of office. With the adoption of the Enabling Instrument in 1973 and the introduction of the fixed term of office for the post, it is understood that a proposal will be tabled for dealing with the nomination for Co-ordinator in Kuala Lumpur at the CCB meeting this September.

The Co-ordinator holds the only professional post in the Central Office despite the technical nature of many of its functions, some of which require multi-disciplinary expertise. For this reason, the Central Office has made use of consultant services on special

problems and issues; not infrequently the help of the national centre in Bangkok has been sought.

It is probably accurate to state that the Central Office under the leadership of the Co-ordinator has to, a large extent, contributed to the substantial development and accomplishments of the Project. He has also been able to mobilize substantial donor support. In a number of instances, the Central Office may have taken certain initiatives in matters normally in the area of the CCB but it is also on record that, in these instances, the Co-ordinator had scrupulously reported them to, and received confirmatory action from, the CCB. On other occasions, the Co-ordinator has taken action at the express request of the CCB.

With the increased responsibilities of the Central Office, consideration need to be given to the further strengthening of its management. Three measures which may be suggested are to strengthen the staffing situation, to introduce some organisational changes and to prepare an operations manual which can provide guidance to office management.

Strengthening the staffing would be accomplished through the use of expertise on short term assignments in order to assist in solving the problems of a technical character relative to the basic functions of the Central Office. Because of certain donor arrangements for the provision of direct services it is desirable that an appropriate expert be employed in each instance; if necessary, resources should be used to find a suitable one within or outside the region. The expanded activities of the Central Office also indicate the need for a full-time Co-ordinator. If, under the existing circumstances, this is not desired, alternative arrangements should be sought to permit the employment of a full-time assistant. This assistant should be recruited at the professional level, preferably with administrative experience besides a background in tropical medicine and public health. The recruitment should be on the basis of geographical distribution not only because the nationality restriction clause in the Instrument is of doubtful validity but in order to give a more regional flavour to a truly regional Project. Equity would also dictate that the two staff assistants (Administrative Assistant and Technical Assistant), who are performing professional duties, should be upgraded accordingly.

The Central Office has been self-sufficient and operates autonomously in its day-to-day tasks. This arrangement is convenient but in the administrative framework it entails overlapping, if not duplication of common administrative services, which results in the needless use of additional resources.

Taking the Organization as a whole, it is possible to view technically subordinate bodies performing such duties like planning, implementing and evaluating programmes, but leaving to other units in the Organization the handling of routine administrative and financial chores which have a commonality with the other subordinate bodies. Although this possibility was rejected at a special meeting of the CCB, it is noted that the real issue did not come out clearly. The rejection was based partly on the assumption that the Central Office did only technical functions which could not be performed by other units, or organs of the Organization. While the Central Office has technical responsibilities it does not necessily have to perform associated tasks of a non-technical or administrative financial nature and which the general administrative service can do after perhaps a little orientation, e.g., the processing of fellowships, arrangements of travel, payment of stipends, disbursement of research grants, payment of per diem, etc. A line of communication can be established between the technical and general administration units, for on-going consultation as needed. Desirable though the above proposal may be, assurance should be had in the first instance that the administrative/finance units of the Organization are prepared to take over; if not, then the transfer should be phased in appropriate stages in order not to disrupt the services.

In the organisational change suggested above, the Central Office should continue to have its identity and functions as the executive branch of the Project. Once routine administrative chores are withdrawn, the Central Office should be able to concentrate its attention on more substantial matters (technical and administrative) hence it is reasonable to expect better performance at less cost to the Project. Under this proposed re-organization, it may be envisaged that the staffing should consist of the Co-ordinator, a full-time Assistant Co-ordinator if the Co-ordinator is serving part-time, the upgraded administrative and technical officers, and secretaries. As they would probably stay in the same headquarters, housekeeping services should be kept or paid for including provisions for utility services. Direct services along programme lines (e.g., the museum for tropical diseases) should be turned over to the national centres where they can be of more immediate use.

An operations manual should systematize office operations. Staff will find in it a useful reference guide for the performance of their duties. The manual will also be a reminder of what reports or submissions will be made including such specifications as format, content and quality and their due dates. A document of this kind will require regular revision and this should be borne in mind otherwise the manual will remain static and of little use to the Central Office.

3.4 The National Centres for Tropical Medicine and Public Health

The initial aims of selecting institutions for designation as national centres were to tap their training facilities for regional use and to promote the application of their research potentials for the advancement of knowledge in tropical medicine and public health.

It was thus that the national centres in Thailand, the Philippines, and Singapore opened their on-going national courses to project trainees; in the same manner, Indonesia and Malaysia developed courses deliberately catering to regional needs. The Institute for Medicial Research in Kuala Lumpur and the Pasteur Institute of Saigon, which had pioneered in laboratory research in their own areas were welcomed additions upon their designation as national centres. Two other member countries made similar offering much later : Laos with its Central Laboratory and the Khmer Republic with its Faculty of Medicine.

There was hesitation at the beginning about involving the national centres in further project activities when it entailed additional resources commitments on their part. This may explain why the mandates had been reticent to indicate the role of the national centres in Project undertakings. But it was inevitable that their further involvement would follow. It became a standard practice among member countries to designate the directors of their national centres as representatives to the CCB. The members thus became acquainted with the workings of the Project and interested in its regional activities. It also stimulated the directors to take a more active role in their national centre.

The result is that, at the present time, the national centres truly operate as integral units of the Project's organisational system. Their primary task continues to be conducting the regional courses assigned to them. But as national stations of the Project they perform other tasks. Each national centre takes responsibility

for administering the regional fellowships locally in two aspects: (a) it initiates the process of finding and then selecting nationals to be trained in other national centres and (b) it takes care of Project trainees attending its own courses. In research, the national centre promotes local interest in the undertaking of investigations and it reviews the proposals received; when these are approved the national centre further undertakes to oversee the work up to the completion and reporting of the studies. In general when a regional seminar is scheduled to be held in the locality, the national centre assumes responsibility for its planning and organization as well as its operation; for this purpose, a local organising committee is created and local efforts and resources are mobilized. The national centre is also involved in the exchange of personnel programme; it processes local applicants wanting to visit member countries and assists in arranging visits of foreign exchange staff in the country. More recently, the national centres have been urged to take "clearing house" functions including the setting up of a museum which would collect specimens on tropical medicine. This new activity has not yet received attention although a modest start has been made with earlier collections of the national centres.

The above activities entail staff time and the use of national resources. Some of these duties are administrative chores like the processing of scholarship applications and research proposals. After these are cleared by the Central Office, its national centres pay the stipends and disburse the grants. Other functions require technical inputs which are contributed by national staff who have full-time duties elsewhere.

Certain benefits however are received by the national centres. The infrastructural development programme which received impetus during the Interim and First Five-Year Plan phases was initiated and given active support by the Project. Even national centres, which did not join the infrastructural programme, because of other priorities established by their governments, received benefits from the Project in terms of modest quantities of equipment and supplies. Consultant services have been provided to the national centres even though these are limited.

A national centre reaches out to other agencies and groups for aid to perform its functions as in fellowship and research activities. But there are other reasons for going out to the community at large. People have to be informed about the Project's aim and what it is doing. Participation of the national centre director as representative to the CCB requires knowledge not only of his unit but of the country's educational and health policies and programmes and an awareness of national activities which have relevance to the Project.

National Centres have promoted community awareness for the Project even though so far this has been modest. Part of the reason is the fact that the staff at the National Centres all hold full-time jobs outside the centres.

Certain lines of action could be taken to broaden and further strengthen the base of the Project's operation in each member country. The Project's fellowships programme should be related to the Government's own system in order that duplication can be lessened and the criteria for selection placed closer to the country's policy and practice. The Government's and the Project's programmes do not have to be merged or made identical but they can at least be harmonised to meet the country's own needs. The research programme could also be dovetailed along the Government's aims on the understanding that the Project's priority would be given to subjects that have regional applicability.

It is important that each member country should establish a national advisory committee for its national centre. The committee should have representations from agencies such as education, health, research and development and have the further privilege of co-opting representatives from other national and international regional organizations. This body can help the national centre and its director in two ways; provide information input on Project-related problems and needs of the country and advise on matters related to the activities of the country's national centre. A representative body like the national committee should brief the CCB member/director of the national health centre in regard to government policy and positions on issues slated for discussion in the Board.

The position of a member country's representation to the CCB may be briefly reviewed because of the two patterns now being observed, viz., the member is either the director of the national centre and/or a government officer designated by the national authority.

For a long time, the director was the choice because of his knowledge of his own centre. More recently, two countries designated officers not even assigned to the national centre for different reasons: in the first place, the appointee was a former director and CCB member who was familiar with the national centre and the Project; in the second place, the Government appointee was an administrator who was familiar with the educational and health

policies of his country and who was thought to be in a better position to represent his country's views during meetings of the Board.

The original justification for designating the national centre director as the CCB member is as valid today as in the past. However, the criticisms of him focus on this relative unfamiliarity with the government's overall policies and programmes in education and health. The representative who is not connected with the national centre has also his problems: he will never be as familiar with the national centre's activities as its director; also, under current practices, the CCB member represents the Project in the country and this involves the management of certain tasks such as on fellowships, research, etc. which he would be hard put to tackle especially when working in another agency or department of his government. One complication is that the files, accounts and official documents connected with the Project do not have a permanent site for safekeeping. It seems therefore that at present there are valid reasons for retaining the director as his country's representative. The criticism levelled at him could be overcome with the help of a national advisory committee if it were established and/or if the director makes the effort to obtain all information and advice he needs from the official agencies.

The Project can on its own take certain steps to strengthen the national centres. Through the CCB, consideration can be given to the review and definition of the functions of the national centres as an initial step towards their incorporation in the Enabling Instrument later. The Project may, through the combined efforts of the CCB and the Central Office, establish a mechanism that will provide the national centres with guidelines or even recommended minimum standards for such activities as training and research. Such guidelines or standards will carry more weight if drafted by an expert group constituted from within the region or with some technical assistance from the outside, if necessary.

It is an established fact that the national centres in their capacity as autonomous national institutions make their own decisions as will best suit their own interests and needs. It is submitted, however, that making recommendations to them does not constitute an infringement of their right. Based on their past collaboration with the Project, it is very likely that they will receive such recommendation with an open mind, they may even adapt them to their own needs.

3.5 Budget and Finance

3.5.1 Sources of Funds. The Project is financed from various sources, viz., contribution of member governments, the Organisation's Special Funds, contribution of other governments, foundations, associations, commercial firms, and so on.

The donor may contribute in cash, in kind or in direct services. Sometimes contributions in cash are tied to a specific activity and cannot be used for other purposes.

For administrative convenience, the Project has classified its funding into the following categories:

(i) Operational Funds. This is the budget for the Central Office. Since the Second Plan took effect, funding has been derived from contributions of the participating governments. Contributions from donor agencies however are accepted.

(ii) Special Funds. This is administered by the SEAMEO Secretariat. The fund consists of contributions by governments and donor agencies as well as from miscellaneous sources. Some contributions are tied funds. Special Funds are used for activities of the regional centres/projects such as training, regional meetings (e.g., seminars), exchange of personnel and the meetings of the governing board (CCB meetings).

(iii) Institutional Research Fund. This is intended for research activities which are no longer funded from the Special Fund.. Contributions will be solicited from donors and the proceeds used for investigations on tropical medicine on a project-by-project basis.

(iv) National Centres' Development Fund. During the Interim and First Five-Year Plan periods, substantial contributions, on a matching basis with the host government, were made by the United States Government to finance infrastructural development of the national centres. No substantial contributions have since been received.

3.5.2 The Operational Budget. The funding of the Central Office has evolved from full subsidy by a donor agency to full support by the participating governments. During the Interim phase, all expenditures were paid by the United States Government. During the period of the First Five-Year Plan, the participating

governments assumed 50% of the budget while the United States paid the remaining 50%. With the implementation of the Second Phase, full responsibility for the Budget of the Central Office was taken over by the participating governments. The annual budget is estimated at US$56,000 and is to be shared pro rata by the governments. Contribution over and above government contributions are accepted but it is anticipated that the amounts received will be tied to the Central Office programme activities.

Central Office operational expenditures during the Interim and First Plan phases totalled US$379,247. During the First Five-Year Plan contributions from donors outside of the United States totalled US$25,010 or 9.2% of the US$270,854 appropriated for the Central Office.

The operational budget consists of the following items: salaries and wages; travel and transportation; supplies and correspondence; utilities, repairs and maintenance; fund-raising and public relations; and professional services.

Taking the fiscal year 1970/1971 as base of the budgetary provision, for which the index value of 100 is given, the average annual expenditures during the First Five-Year Plan period showed substantial increases in some budgetary items as follows: salaries and wages, 121.7; travel and transportation, 142.6; fund-raising and public relations, 155.5 and clearing house and publication, 151.9.

3.5.3 Special Funds. The total amount spent from the Special Fund during the Interim and First Five-Year Plan periods was US$2,001,768 of which US$424,043 were spent during the former phase and US$1,577,725 during the latter phase.

The breakdown of the allocation by activity during the Interim and First Five-Year Plan periods were as follows:

	Interim US$		1st 5-year Plan US$	
Training and Research Scholarships	209,882	(50.8%)	918,262	(58.2%)
Research Scholarships and Grants..	87,365	(21.1%)	362,484	(23.0%)
CCB Meetings	21,851	(5.3%)	26,655	(1.7%)
Seminars, Conferences, etc	44,002	(10.6%)	160,808	(10.2%)
Exchange of Personnel	50,543	(12.2%)	108,515	(6.9%)
	413,643	(100.0%)	1,577,725	(100.0%)

Sometimes assistance from donor agencies was not budgetted because they were received in the form of direct services. The Central Office however has estimated their dollar values and these are itemised below:

Programme/Activity	Type of Support or Service	Estimated Value US$
TROPMED Activities	Consultants	34,030
National Centre Activities	Consultantships, Scientists	58,620
TROPMED Seminars	Consultantships & Financial Aid	131,130
Conference	Consultantships & Financial Aid	6,000
Seminar-Workshops	Consultantships & Financial Aid	23,740
Technical Meetings	Consultantships & Financial Aid	7,500
	TOTAL	261,020

3.5.4 Costs of Project Administration and Activities. Estimates of the above were made after excluding the costs of administration of national centres and the uncosted direct services of the donor agencies. The estimates cover both the Interim phase and the First Five-Year Plan.

Administration costs include: (i) the net amount of the operational budget after deducting the cost of programme activities operated by the Central Office (viz., publications, clearing house and TROPMED Information) and (ii) the cost of the CCB meetings which are paid from the Special Funds.

Activities will include the following costs: (i) the net amount of all Special Funds allocations after deducting the cost of CCB meetings, (ii) the cost of the programme activities of the Central Office and (iii) the total value of direct services provided by the donor agencies.

On the basis of the above, the figures obtained are:

Administration:

Total Operation Budget ($379,247) minus cost of Central Office Programme activities ($67,055)	$ 312,192
Cost of the CCB Meetings	$ 48,507
Total cost of administration	$ 360,699

Activities

Total-amount allocation from the Special Funds ($2,001,968) minus the cost of CCB Meetings ($48,507)	$1,953,261
Cost of Central Office programme activities	$ 67,055
Estimated value of direct services received from donor agencies	$ 261,020
Total cost of activities	$2,281,336
Total costs of Administration and Activities	$2,642,035

From the foregoing it will be seen that the cost of administration during the Interim and Five-Year Plan period comprised 13.65% of the total cost of the Project.

3.6 **Recommendations**. It is recommended that:

(i) The CCB examine at its next session the Enabling Instrument in the light of the observations made in this report with a view to submitting proposals for amendments of the document, designed to contribute to the strengthening and future development of the Project.

(ii) The CCB consider the suggestions presented which can:

(a) facilitate the transaction of its business including the preparation of the Board's rules of procedures;

(b) enable the Board to secure technical advice in the definition of problems and in the choice of alternative approaches to matters and issues coming for its attention and decision;

(c) urge the body to take a more active and dynamic role in its functions of policy and programme planning and in evaluating the activities of the Project.

(iii) The proposals to systematize and strengthen the functioning of the Central Office be carefully considered for implementation, namely:

(a) producing a manual of operation for its on-going activities;

(b) making use of technical advice on the various technical matters that come for its decision or action;

(c) re-organising the Office so that:

- It will operate solely as a technical unit with all administrative and finance routines being absorbed in phases by the Secretariat
- The unit staff consists of a full-time Co-ordinator, or if not feasible, a part-time Co-ordinator and an Assistant Co-ordinator who will be assisted by the Administrative Assistant and the Technical Assistant, whose posts should be upgraded to professional level, and the necessary secretarial staff.

(d) such non-administrative activities as the Bureau of TROPMED Information and the Museum, which can operate as service and referral units, to be transferred to the level of the national centre.

(e) fund-raising functions of the Central Office to be emphasized in order to give its co-ordinating and technical staff more time for their duties.

(iv) The national centres have clearer and more definitive terms of reference and be provided with:

(a) a statement under the Enabling Instrument of their functions, responsibilities and relationships within the organizational framework of the Project;

(b) a guideline on the promotion of the relationships of the national centre with national agencies participating or having an interest in SEAMEO activities;

(c) a national advisory committee with representatives from national and other interested agencies to assist the national centre in conducting its in-country activities.

(v) Although the operational budget reveals a low administrative cost in relation to the Project's overall activities:

(a) its services component, except for publications be transferred to the national centre level and the savings therefore applied to "b". This has been referred to in (iii) (d) above.

(b) budgetary provisions be made for consultant services to be used in situations when donor consultant services are not available and when it is not possible to charge the consultative services against the provisions for exchange of personnel.

(c) the possibility of direct funding of the operational budget from the proceeds of contributions of member countries to SEAMEO rather than as a separate contribution should be studied.

4. Planning and Development of the Programme/Activities

4.1 Planning

Three phases may be recognized in the development of this project, viz., the interim or "nurturing" phase, the First Five-Year Plan and the Second Five-Year Plan.

4.1.1 The Interim Phase. This period spans the time from the Project's establishment in 1966 up to mid-1970; it was called the "nurturing" phase because at that time new activities were being introduced with funding mostly from external agencies.

Regional courses were started in succession by the national centres (Bangkok, Manila, Kuala Lumpur) while the two others (Jakarta, Singapore) began their courses during the early part of the second phase. Grants became available for research and exchange of personnel was introduced for the staff of the national centres. The Project further engaged consultant services for regional activities, such as surveys and assessments.

4.1.2 First Five-Year Plan (Mid-1970 to Mid-1975). Although started earlier, the preparation of the First Five-Year Plan document was completed only during this period.

Attention was given to the infrastructural development scheme (also called Capital Development) for the national centres because of the availability of funding from a bilateral source (the United States Government). The principle underlying this scheme was the matching of local costs by Government for constructions in the national centre with an equivalent counterpart fund from the SEAMEO-channeled U.S. aid for the purchase of imported commodities, mostly equipment and supplies.

Proposals prepared by the national centres were submitted to the Central Office for review, consolidation and discussion with the assisting agency and SEAMEO. The final outcome was approval of assistance to four member governments (Indonesia, Malaysia, the Philippines and Thailand), which was formalized by a memorandum Agreement between each of them and the Organisation. In Thailand, capital development funds were granted for two buildings, an annex to house the Central Office of the Project and another structure for the use of the national centre in Bangkok.

A summary table of the expenditures under this scheme may be seen in the accompanying table.

It became possible later to allocate funds even to national centres which had no formal agreement with the Organisation; under this arrangement Singapore received $20,000 for equipment and supplies for the new course on Occupational Health. Assistance from other sources was also forthcoming, e.g., Japan contributed assistance in kind, 72 microscopes, which were distributed to Thailand (50%) with the remainder being split by Indonesia, Malaysia, the Philippines and Singapore.

The formulation of the First Five-Year Plan was undertaken concurrently with the planning for infrastructural development. As a co-operative effort the national centres drafted their own individual plans which were considered with proposals for region-wide activities in the Central Office. The infrastructural development scheme was also incorporated into the First Five-Year Plan. A team of Planning Consultants reviewed the consolidated plans and after further revisions the draft document was approved by CCB and forwarded to higher levels for approval of the Council.

Table 1.

CAPITAL DEVELOPMENT COSTS FOR NATIONAL CENTRES BY SOURCE OF FUNDS (AS OF END OF FIRST FIVE YEAR PLAN, 1975)

TROPMED National Centre	Capital Development Items	Contribution in US Dollars		
		SEAMEO	GOVT.	TOTAL
Thailand	Building (library, Laboratory, classroom, etc.) and renovation of Hospital for Tropical Diseases & Annex for TROPMED Office.			
	- Thai Governments Funds		915,000	1,830,000
	Library, laboratory equipment & supplies.			
	- SEAMEO Funds	*915,000		
Indonesia	Building (library, laboratory, classrooms)			
	- Indonesian Government Funds		483,855	833,855
	Library, laboratory equipment & supplies			
	- SEAMEO Funds	350,000		
Philippines	Renovation of library, laboratory classrooms			
	- Philippines Government Funds		147,000	294,000
	Library, laboratory equipment & supplies			
	- SEAMEO Funds	*147,000		
Malaysia	Building space for administration library, laboratory and lodging			
	- Malaysian Government Funds		351,370	702,740
	Library, laboratory equipment & supplies			
	- SEAMEO Funds	351,370		
TOTAL		1,763,370	1,897,225	3,660,595

* Supplements to the Memorandum Agreements are included.

The First Five-Year Plan had the following objectives:

"1. To establish suitable structures and mechanisms for co-ordination of efforts and development of region-wide approaches to solving basic problems;

"2. To plan and operate regional training programmes which would help meet priority manpower needs in the tropical medicine and public health areas;

"3. To promote research on endemic diseases by providing research opportunities to young scientists, thereby increasing research skills and developing the base of research data on these diseases;

"4. To exchange research data and plans through information service activities, seminars and periodic publications; and

"5. To upgrade the programmes and capabilities of the national centres.

Activities introduced to achieve the Plan's objectives were: training courses in selected fields of tropical medicine and public health, grants to staff for studies in the region on tropical medicine and public health; regional meetings (seminars, workshops, conferences, technical meetings) to provide forums for discussion and to promote contact among workers; exchange of personnel especially among staff of the national centres; provision of consultant services; developing "clearing house" functions both within the project network and with outside institutions; and publishing a scientific journal and other technical literature.

4.1.3 The Second Five-Year Plan (Mid-1975 to Mid-1980). Following completion of the First Five-Year Plan, a new proposal, later adopted by the Council as the Second Five-Year Plan, came into force. This Plan does not aim at any major new programmes; its efforts are directed to "extending the Project's capabilities into broader areas of service as the quality of programmes is improved ..... these areas of service may include work for rural communities, joint projects with other Regional Centres ..... the second five years will be more operational, utilizing the framework which has been created for effective implementation of the regional activities while at the same time consolidating the institution building efforts".

The general objectives of the Second Five-Year Plan are:

"1. To utilize extensively and effectively the structure and mechanisms which have been developed for co-ordination of efforts in health and tropical medicine as programme activities are consolidated and upgraded;

"2. To continue the post-graduate regional training programmes which have been established with modest expansion of student intakes and upgrading of courses from the diploma level to the master's degree and/or doctor's degree level as readiness and capability for such upgrading are attained;

"3. To transform research activities from projects carried out by individual researchers to projects of broader regional significance carried out by the centres, either individually or jointly, but as institutional research;

"4. To consolidate, strengthen and expand the information and clearing house activities of the Project (CCB Bureau of TROPMED Information and the Museum and Reference Units of the national centres);

"5. To continue the national centres' development efforts aimed toward improving the capability of each centre to effectively carry on its role in working towards the overall project objectives;

"6. To extend the resource facilities and capabilities of the SEAMEO-TROPMED Project for broader utilization within the SEAMEO Family as regional development activities are undertaken, e.g., postwar reconstruction in Vietnam, Laos, and Khmer Republic, development of the Mekong Basin, etc."

Other provisions of the Second Five-Year Plan contain the following:

The activities, introduced during the First Five-Year Plan are planned to continue with some modifications as indicated in the new objectives; the organizational set-up to carry them out would remain the same; new courses would be developed in Manila and Bangkok and the nutrition course in Jakarta would continue to develop towards a Master's degree level for those who qualify after completing the initial diploma course; the Central Office would expand activities in research, regional meetings, publications and "clearing house" functions.

The activities during the Interim and the First Plan period will now be reviewed.

4.2 TROPMED Training Programmes/Activities

From the start, it was the consensus that training should be one of the principal activities of the Project. Trained manpower was needed to study the varied problems of tropical diseases. Training was further required to staff the on-going national health services which were handling the cases that still occurred in great numbers. Favourable consideration was therefore given to training professional workers to prepare them for undertaking studies that would help in the control of tropical diseases and to strengthen staffing in the health service. It was further expected that the manpower thus trained would have a multiplier effect in the countries through the further training they could initiate either in the teaching institutions or in the course of their supervisory work in the field.

The legal basis for training are explicitly stated under "purpose" in the Enabling Instrument and in the two Project mandates where the texts used are almost identical: ".... to help organize .... instructional courses concerning tropical medicine and public health".

The terms of reference for the organization of the courses are covered in the Memorandums of Agreements signed by the Organization with each of the member countries. In the Agreements recognition is given to the continuing autonomy of the national centres while the Organization, on the other hand, would make use of the national centres for regional training, assist in securing resources for their infrastructural development and render advisory services upon request. Agreement was also reached at the start that each member country would develop and conduct a regional course in a field of regional interest but not available in the other member countries. It was further added that the institution conducting such a course would be designated as a National Centre for Tropical Medicine and Public Health.

The number of individuals who received training during the period 1967-1975 totalled 501 at a cost of US$1,128,144. If only the period covered by the First Five-Year Plan (1970-1975) were considered the number of trainees would be 451 at the cost of US$918,262 a sum that was 58.2% of the total allocation from the Special Funds for the above period for training research, personnel exchanges and other activities funded by Special Funds.

4.2.1 Objectives. The main objective of training is broadly stated under Section II of the Enabling Instrument which is "..... to promot co-operation in post-graduate training .... in the field of Tropical Medicine and Public Medicine and Public Health ....."

Each regional course conducted by the national centres has its own specific objectives which will be taken up as the courses are discussed below.

4.2.2 Implementation

(i) Course Offerings. Thailand was the first to make a selection of a national centre by offering the Diploma course in tropical medicine and public health at the Faculty of Tropical Medicine of Mahidol University in Bangkok. The other countries followed suit: the Philippines selected the Institute of Public Health (Institute of Hygiene then) of the University of the Philippines System; Malaysia, the Institute for Medical Research at Kuala Lumpur; and Indonesia, the Faculty of Medicine, University of Indonesia in Jakarta. Singapore, following its entry into the Projects selected the Department of Public Health and Social Medicine, Faculty of Medicine of the University of Singapore. Vietnam selected earlier the Pasteur Institute of Saigon but later on transferred its selection to the Faculty of Medicine, University of Saigon.

The courses offered by the national centres may be roughly classified as those offered regularly, those offered intermittently and the special courses.

The regularly offered courses are:

- Courses for the Master's degree: Master of Public Health at the Institute of Public Health, Manila; Master of Science in Public Health and Master of Science in Occupational Medicine at the University of Singapore.

- For the Diploma Courses: Diploma in Applied Nutrition at the Faculty of Medicine, University of Indonesia, Jakarta; Diploma in Tropical Medicine and Hygiene, the Faculty of Tropical Medicine and Hygiene, Mahidol University, Bangkok; Diploma in Applied Parasitology and Entomology at the Institute for Medical Research, Kuala Lumpur.

The courses offered only intermittently are for the degrees of Master of Science in Public Health, Manila; M.Sc. in Tropical Medicine, Bangkok; Master of Hospital Administration, Manila. The Master of Science Course in Applied Nutrition in Jakarta is being offered for the first time in the academic year 1976-1977.

Two special courses were organized for Lao nationals at the national centre in Bangkok; these consisted of a 12-month practical nursing course and a two-and-one-half-year course for laboratory technicians. These courses however, were offered only once.

Only brief descriptions of the regional courses at the national centres are given below as more background information is given in Annex V.

Indonesia. The Diploma Course in Applied Nutrition is being conducted yearly by the national centre in Jakarta. The ten-month course has been a [redacted] offering since its establishment in 1971 as a response to the regional need for a course in practical nutrition. The aim is to enable graduates to conduct nutrition improvement programmes in their own countries. The teaching includes nutrition and food science, nutrition in the clinic, public health nutrition, food production, processing and marketing and advanced nutrition. The trainee receives a diploma after satisfactory scholastic and field performance and passing an examination.

The building housing the national centre is nearly complete and will accommodate classrooms, laboratories, library and offices. New equipment and supplies are being delivered for the laboratories and library under a counterpart funding arrangement with the Organization. Excellent facilities for field experience are available and these include the field station at Bogor and its surrounding communities where trainees spend ten weeks of the course.

The teaching staff come from the Medical Faculty of the University and are supplemented by lecturers from such institutions as the Agricultural Institute, Economic Department, and [redacted] Research and Development Centre.

Admission requirements include possession of a B.Sc. degree or completion of a degree course in medicine, agriculture or education. An exceptional candidate may be admitted if his qualifications or technical preparation satisfy the Committee on Admission.

A one-year Master's degree course in Applied Nutrition will be offered beginning in 1976-1977. It is a continuation of the Diploma Course and will take in trainees who performed very well in that course. The main task of the trainee is to undertake a study for the thesis that he has to successfully defend before obtaining the degree.

Malaysia. The aim of the six-month course for Applied Parasitology and Entomology is to enable the trainee to acquire a better understanding of the parasitic and vector-borne diseases of man and domestic animals in Southeast Asia. The subjects include parasitology, entomology and immunology with emphasis on the laboratory. The diploma is awarded to successful trainees.

The laboratories are excellent although there is a little over-crowding at present. However, constructions now in progress promise to make the Institute one of the largest and best equipped in the region. The library is also the largest and most complete of its kind anywhere. Opportunities for field experience are excellent as it is a standing policy of the national centre to expose the trainees to actual field conditions.

The faculty is presently short of the established posts. For this reason lecturers are invited from staffs of laboratories and other institutions in the country.

The possibility of upgrading the diploma course to Master's level is held back by staff shortage and the Institute's heavy commitment to train laboratory assistants for the country's health services.

Philippines. The ten-month post-graduate course in public health was introduced fifty years ago for the purpose of training medical officers for public health duties in the national health service. The course is country-oriented but because of the similarities of health problems and needs among member countries very little adjustment has been made to adapt to regional needs. The aims of the course are to contribute to the knowledge of preventive

medicine and community health; to promote the dissemination of such knowledge and to advance the practice of public health in the Philippines and, through the regional course, to contribute its modest share to the practice of public health in member countries. The subjects taken up are public health administration and practice, including national health planning, epidemiology and statistics, nutrition, medical microbiology, parasitology, public health engineering, community health education and nursing. Two alternative ways of obtaining the Master's degree are to pass a comprehensive examination or to pass the individual subjects in addition to the submission and successful defense of a duly approved thesis by the faculty.

Classroom and laboratory facilities have become rather crowded lately due to the increased enrollment. Further expansion is held back by its pending transfer to a new site at the University of the Philippines campus. Laboratory supplies and equipment have been replenished with the aid of external agencies. The library has been expanded and updated with assistance through SEAMEO.

The faculty staff needs to be increased in number but is in the meantime being supplemented for the regional courses by part-time lecturers from national agencies and institutions. A programme for strengthening the staff through fellowships and provision of consultants is being undertaken with the assistance of WHO. Field practice areas are selected in collaboration with the Department of Health but suffer somewhat from lack of supervisory staff from the Institute.

Admission requirements to the Master's degree course are a medical degree or a degree in the allied medical professions such as dentistry and veterinary medicine. Applicants with a B.Sc. degree are admitted and these include B.Sc. graduates in Engineering, Public Health, Nursing and Education provided they have had one year field experience in public health.

A two-year course leading to the degree of M.Sc. in Public Health is offered to workers wanting to specialize in such fields as parasitology, microbiology and related fields.

Another offering which is the only one of its kind at present in the region is the Master of Hospital Administration Course where the emphasis is on hospital management. Admittance is open to medical and non-medical workers (e.g., business graduates) who are or will be engaged in hospital management.

Beginning with the academic year 1976-1977, the national centre will offer two additional courses on an interim basis, viz., the Master's degree course in Occupational Health and the Diploma course in Medical Microbiology.

Singapore. Since its entry into the Project, the Department of Social Medicine and Public Health has been conducting two regional courses leading to the degrees of Master of Science in Public Health and Master of Science in Occupational Medicine.

The Master of Science in Public Health course, like other courses in the same field, offers such subjects as public health administration, epidemiology, biostatistics, environmental sanitation and disease control. In addition, the course gives instruction in the behavioural sciences and urban health. The degree is granted upon the successful completion of the course, defending a thesis and passing an examination.

As the public health course had been a regular offering on the past and had accommodated foreign trainees there was very little need to make additional adjustments to meet regional needs. The field work includes visits to rural areas in West Malaysia apart from the urban health experience in Singapore.

The Occupational Medicine Course was first offered in the academic year 1972-1973. Its aim is not to prepare candidates as government health officers in occupational health but to train them in the handling of health and medical problems of workers in industry, agriculture and other occupations. The trainees share basic common subjects with the public health trainees before they take up more specialized subjects. The Master's degree is awarded after satisfactorily completing the academic requirements including the successful defense of a thesis and passing the examination.

Facilities improvement has been delayed because no expansion of working space can be authorized until construction work at the new University of Singapore site is started. Laboratory and library facilities however are sufficient. A modest amount of laboratory supplies and equipment has been received from the Project.

Field practice and observation in urban health and occupational medicine are arranged in Singapore and for rural health, including communicable disease control, in Malaysia. Additional faculty posts have been budgetted but not all have been filled.

Thailand. The aims of the six-month Diploma course for Tropical Medicine and Hygiene are to inculcate among trainees a better understanding of health problems in the rural areas of the region and to increase their skills in coping with these problems. The course includes infectious diseases of a parasitological and microbiological nature and medical entomology. Emphasis is given to the clinical aspects of tropical medicine including the preventive, diagnostic and therapeutic aspects but because of limited time only case demonstrations and discussions are possible. Laboratory exercises in parasitology and entomology are required. The trainee must satisfactorily complete the course and pass an examination to qualify for the diploma.

Facilities in the national centre are excellent. The classrooms are modern and ample besides being comfortable; the laboratories are equipped for teaching and research and thus offer more than the trainee's needs. The library has the necessary publications for the trainee's readings and the literature for research. Opportunities for field observations and experience are adequate and use is made of the facilities of the national agencies (e.g., TB and VD clinics). Visits to rural areas complement classroom teaching and laboratory exercises. The faculty members are highly qualified and they are more than sufficient in number to cater to the course's needs.

Admission requirements for the diploma course are possession of a medical qualification or "license of first class practice in general medicine".

The national centre in Bangkok has also offered a course leading to the M.Sc. in Tropical Medicine since 1974-1975. This course gives emphasis to research methods while the subjects to be taken include medical parasitology, medical entomology, microbiology. Successful defense of an approved thesis is a requirement for the degree.

The other course offering of the National Centre since 1974-1975 is the Ph.D. degree in Tropical Medicine but so far no "regional" candidate has been registered. The student has to

register to undertake a higher degree of research and he can take elective subjects during the course. A thesis on the subject of study which has to be successfully defended is required for the award of the degree.

(ii) Scholarships/Fellowships. The allocation of fellowships to countries for the regional courses is determined by the CCB in consultation with the Central Office. The final allocation is made after the Secretariat releases the Special Fund allotment for the Project and after taking into account the individual estimates of country needs by the Board members.

The selection of fellows is made at the country level with the Board member making the decision. When the Board member concurrently holds the directorship of the national centre, he usually creates a committee among his staff to advise him and undertake on his behalf the processing of the fellowships. In the two countries where the Board member is not the director of the national centre, different procedures are employed. In one, the Board member with the help of an associate takes full responsibility for the whole selection process in the country. In the other, the Board member sits in a committee, composed of representatives of national agencies interested in the national centre, which selects the candidates. As soon as a country's allocation for fellowships is received, an announcement is sent by the Central Office to the relevant national centre and CCB members giving the particulars of the regional courses and indicating the requirements for the candidate.

Varying criteria for fellowship selection are used. In general, priority is given to national centre staff; this is followed by nominations from other government agencies. Individuals from the private sector are rarely endorsed. Other criteria include, technical qualifications which are usually specific for each course: good health, age (less than 45 years), adequacy in English and emotional stability to the extent that this can be assessed. One of the problems voiced in some national centres is the delay in sending the fellowship announcements to them with the result that the screening of candidates cannot be carried out properly and no time is left for the candidate to brush up in his English when he needs to.

In each National Centre a certain percentage of the fellowship quota is assigned to nationals taking its course. When all the fellowships allocated for a course cannot be used by other member countries, the CCB member of the country giving the course may request the Central Office to fill the vacancies with national candidates. Fellowships allocated for one regional course are not transferable to another; despite this and by the means mentioned above, the number of unused fellowships has been very small. It is a standard procedure for a fellowship awarded locally to be split for two students; sometimes three local students are assigned to two SEAMEO fellowships.

(iii) Training Activities. There were 501 trainees during the First Five-Year Plan period (1967-1975) distributed as follows:

Indonesia	105
Malaysia	50
Philippines	103
Singapore	6
Thailand	147
Others (Laos, Khmer Republic and Vietnam)	90

Table II shows the distribution of fellowships and the number of nationals and non-nationals attending each course during the same period. It will be seen that out of 501 trainees the largest number (213 or 42.5%) attended the DTM&H courses. (This is followed in a descending order by the following courses: DAP&E, 79 (or 15.7%); DAN, 75 (or 15.0%); the MPH, 52 (or 10.4%); the M.Sc. Public Health, 30 (or 6.0%) and the M.Sc. in Occupational Medicine, 12 (or 2.4%). Subject-wise the combined attendance at the MPH and M.Sc. in Public Health totals 82 (16.4%) which places the Public Health courses in second position for the largest attendance in the training programme.

In the same table it will be seen that overall, the non-nationals totalled 335 (or 66.87%) and the nationals, 166 (or 33.13%) of the total number of trainees.

The outcome of training may be seen in Table III. There were 453 (or 90.42%) who passed, 21 (or 4.19%) who failed, 23 (or 4.59%) who did not finish and 4 (or 0.80%) still have to take the required examination. Note should be taken of the fact that in one national centre (Manila) "failures" and "did not complete the course" were grouped together. It should be noted further that the highest percentages of failures were in the M.Sc. courses in Public Health and Occupational Medicine which together comprised 16.67% of the

trainees. The average failure rate in the other courses was 3.4%. It is much more difficult to have a breakdown of the group which did not complete their courses, because of the mixture of causes which ranged from academic and language difficulties to personal problems.

(iv) Stipends. Up to the end of the recent school year (1975-1976), the stipends paid to each fellow was US$200/month which is the same amount paid to fellows since 1967. The only exception to this practice was for fellows in Singapore who received US$250/month in 1975.

(v) Living and Other Facilities at Venues of Fellows. Accommodation differs from country to country. Trainees at the Institute for Medical Research in Kuala Lumpur live in a hostel although this arrangement may not be possible for future trainees as more nationals will be enrolled in laboratory courses to be conducted by the Institute. In general, the national centre assists the trainees in finding suitable accommodations in private dormitories or boarding houses near their place of study.

The monthly rates differ from a high of $100 per person in a 2-to-3-person room in Bangkok to $64 per person in a 2-person room in Manila. The hostel in Kuala Lumpur charges approximately $18 per person for a 2-person room. In Jakarta, the cost per person is $75 for a 2-person room but when on ten weeks field assignment in Bogor the trainee has to still pay 50% for room rental in Jakarta, besides paying for his board and lodging in Bogor. The cost of food varies according to the locality but Jakarta is the most expensive in this repect.

Medical Facilities. There is no provision for health insurance except in Kuala Lumpur where the national centre has made this arrangement at its own cost. Varying arrangements for medical care obtain at the national centres. In Bangkok, out-patient care is available at the Faculty of Tropical Medicine. In Singapore, medical care services, formerly available to post-graduate trainees at the University, were withdrawn in 1974 and it was planned to arrange for medical insurance in future courses. A medical staff member of the national centre in Jakarta looks after the medical care needs of its trainees, but there are no arrangements for hospital care when needed. The Institute of Public Health in Manila has an out-patient clinic for its staff and trainees; in addition,

Table II

DISTRIBUTION OF SEAMEO-TROPMED TRAINEES BY TYPE AND COURSE ATTENDED (1967-1975)

Course	Type of SEAMEO Trainee		Total
	Nationals	Non-Nationals	
D.T.M.&H.	84 (39.44%)	129 (60.56%)	213 (100.00%)
M.Sc. T.M.	2 (50.00%)	2 (50.00%)	4 (100.00%)
M.Sc. F.H.	-	30 (100.00%)	30 (100.00%)
M.Sc. O.M.	-	12 (100.00%)	12 (100.00%)
DA. Nutr.	26 (34.67%)	49 (65.33%)	75 (100.00%)
M.P.H.	22 (42.31%)	30 (57.69%)	52 (100.00%)
M.S. Hyg.	-	3 (100.00%)	3 (100.00%)
D.A.P.&E.	20 (25.32%)	59 (74.68%)	79 (100.00%)
D.T. Microb.	12 (36.36%)	21 (63.64%)	33 (100.00%)
TOTAL	166 (33.13%)	335 (66.87%)	501 (100.00%)

Table III

DISTRIBUTION OF SEAMEO-TROPMED TRAINEES BY COURSE AND OUTCOME OF STUDY (1967-1975)

Course	Outcome of SEAMEO trainees			Total
	Passed	Discontinued	Failed	
D.T.M.&H.	204 (95.77%)	2 (0.94%)	7 (3.29%)	213 (100.00%)
M.Sc. T.M.	2	1	-	4(+)
M.Sc.P.H.	24 (57.14%)	11 (26.19%)	7 (16.67%)	42 (100.00%)
D.A. Nutr.	71 (94.67%)	1 (1.33%)	3 (4.00%)	75 (100.00%)
M.P.H.	45 (86.54%)	7 (13.46%)	-	52 (100.00%)
M.S. Hyg.	2 (66.67%)	1 (33.33%)	-	3 (100.00%)
D.A.P.&E.	76 (96.20%)	-	3 (3.80%)	79 (100.00%)
D.T. Microb.	29	-	1	33(+)
TOTAL	453 (90.42%)	23 (4.59%)	21 (4.19%)	501 (100.00)

NOTE: (+) One trainee is still working for her M.Sc. in Tropical Medicine programme and three trainees have not done their exam for the Diploma in Tropical Microbiology Course (0.80%)

admission can be arranged at the trainees' ward at the teaching hospital close by; more comprehensive facilities for ambulatory and institutional care including free medicines are available at the University Health Service in the main campus, but the distance practically rules them out for the use of trainees. In Kuala Lumpur, the trainees have access to an outpatient's department run by the Ministry of Health.

- Social Amenities. These are not directly provided to trainees. Recreational facilities are available when the national centre is part of a university. It is a practice of all national centres to meet the trainees at the airport upon their arrival. They are also invited to socials given by the faculty and increasingly by the trainee groups. In some national centres, arrangements are made officially and privately to familiarise foreign trainees with the culture, social usages and interesting landmarks in the country. Field work incorporates some of these visits: occasionally some national centres offer free transport for week-end sight-seeing.

Apart from recreational facilities obtained in the university campuses, arrangements may be made for private facilities at the trainees' cost. The hostel in Malaysia however has a TV set, a pingpong table and a discussion room accessible to the trainees.

- Facilities for Refresher Courses in English. Except for Bangkok and Kuala Lumpur national centres have access to facilities for refresher training in English. In Singapore, this is available at the RELC, in Manila, at the University of the Philippines and in Jakarta, at the University of Indonesia. The problem however is that the trainees are too occupied, and in Manila an additional problem is the distance of the centre from the university. The suggestion has been made by one national centre that trainees who need a refresher course should come one month in advance for English training but this has not been agreed upon.

(vi) Evaluation of the Courses by the National Centres. National centres employ two ways of evaluating their regional courses, viz., through an evaluation questionnaire given to trainees at the end of each course and an evaluation of the course by the faculty staff.

The questionnaire covers a broad area which includes the contents and conduct of the course (including laboratory facilities, library and field practice), the trainees' relations and his reaction to facilities and measures provided for his convenience. The replies enable the faculty members to pick up criticisms and suggestions for their review. Most centres have stated that this method has been responsible for the introduction of changes which otherwise would not have been undertaken. In one national centre, a question box was installed to receive comments and suggestions from trainees. Some faculty members in one national centre had complained that the questionnaire results were not circulated to the staff, but the officer-in-charge qualified this by saying that suggestions or criticisms received were taken up privately with the faculty staff concerned.

Course evaluations conducted by faculty members are initiated by the department heads to review their presentation, the content and impact of their lecture. Their findings are then fed back to the larger faculty committee or to the national director himself where appropriate action is decided upon.

Problems facing trainees are normally received by the individual student counsellor or by the Foreign Students Adviser or his equivalent at the national centre who would then give feed-back to the director as a basis for action.

The Project's role in the evaluation of regional courses has not been uniform. This may be explained by the fact that some national centres may need more frequent assessments as when a course is new. Some centres on the other hand have not invited the Project's participation in their evaluation exercises. When invited, the Project employs consultants as in a new regional course which is receiving a yearly assessment.

The self-evaluation exercises completed by the national centres represent the only written record of an evaluation conducted by national centre staff. Their outputs contain valuable information about their activities, organization and experiences. All but one national centre submitted their reports.

(vii) Accreditation of the Courses. At the beginning, the immediate concern of the Project was to develop courses which would respond to regional needs, hence less attention was given to the question of whether those completing these courses would be entitled to qualify for higher posts or accorded academic credits for the subjects they had taken.

Problems soon arose after the return of the first group of trainees. Some of them requested recognition of their training as qualification for higher positions or at least for a higher step in their salary scale. Others aspiring for higher studies had sought accreditation for the subjects they already passed.

Agencies in the member governments, however have had varied reactions. In general, returned trainees with the Masters' degree were accorded eligibility to higher posts or given salary increments. Diploma awardees on the other hand do not receive qualification for higher position. A member government was initially reluctant in recognizing the M.P.H. degree from one national centre as it was not then recognized as an institution for granting that degree. The problem has since been resolved and that country is now sending its nationals to that centre for the M.P.H. degree.

Except for the Diploma Course in Applied Nutrition in Jakarta, accreditation of subjects taken in Diploma courses remain unresolved. The problem is not only between academic institutions of member countries or in the same country but may even exist in the same institution. One national centre which conducts a regional diploma course has not been able to decide whether it will accord credit to subjects already completed by its Diploma holders who are working for a Masters' degree in the same institution.

4.2.3 Discussion

(i) On the Regional Courses. Based on the gross results of the training programme, the effects and impact of training have been impressive. Five hundred and one (501) nationals, who otherwise would not have had the opportunity, received advanced training in specific fields. Many of them have benefitted through receipt of substantial salary increments or recognition of their eligibility for higher positions. Communications between the training institutions in the Region have increased and a sharing in the use of each other's teaching staff fostered. The national centres have become more acquainted and alert not only to the problems and needs of tropical medicine and public health in their own countries but of the region as a whole.

After almost a decade of operation, the regional course offerings need an assessment not because they have failed in their goals but because of their success in doing so. A further reason is that the progress of events in the past decade requires adjustments in both the objectives and contents of the regional course offerings. A few examples may be cited.

The Project is at present sponsoring scholarships for the post-graduate degree in Public Health. Two national centres have conducted the course and, upon the withdrawal of one recently, another centre was designated in its place.

The demand for this training is one of the largest but it must also be recognized that all member countries are offering the same course for their nationals. The Project is then duplicating individual national efforts in this particular field. In the past, the Project decided that because of certain differences in the problems and approaches to rural and urban health, support for two types of training in Public Health was justified. This intention has never been fully satisfied because the differences brought out were more apparent than real and the national centres concerned continued to expose their trainees to both rural and urban health issues. As national and regional courses are presently running above parallel lines, a decision is need on how best to reconcile these two activities.

While a formal assessment by a technical group would perhaps be helpful it seems evident that two related lines of action can be taken, viz., gradually phase out the assignment of SEAMEO trainees to the post-graduate public health courses and develop with expert assistance a set of minimum standards to promote the maintenance or upgrading of the national courses with the aim of putting them on a par with each other. If the countries agree on the standards each national institution would be obliged, if only for its own advantage, to follow the adopted standards. Periodic assessments and revision of the standards should also be undertaken to keep up with the latest developments.

The gradual phasing out of the scholarships is suggested because in one country at least, it was indicated that its own institution would not be able in the next few years to train all the personnel they needed in the field. In such a situation, perhaps the CCB can agree to give further support to this country's particular needs while discontinuing at an earlier date the other national scholarships for the M.P.H. or M.Sc. Public Health Courses.

The Diploma Course in Tropical Medicine and Hygiene presents a problem of another dimension, At present the course is slanted to clinical orientation of medical workers with a view to giving them a better preparation in the handling of their clinical cases. In general, the trainees work in settings which are at the intermediate (i.e., provincial/district) and local levels.

The objective and the targets of this course are very valid but from the regional point of view the question may be asked: How long will it take this course to train national health personnel of the member countries who are serving at the intermediate and local levels? The inevitable answer should certainly point to the need for a re-definition of the problem and need of the course and to consider whether it is the trainers rather than officers at the service level who should be the "target of this course". If the trainers should become the target then the level of training should be raised and perhaps offerred at the Master's level; the course would then be able to provide more opportunities for clinical experience.

The DAP&E course presents still another dimension. The people it trains are in the laboratory category which are not at the local (e.g. small hospital or health centre) but at the central and regional levels. The total number required at the higher levels would not be very large even from the regional point of view. It is therefore conceivable that the national centre in Kuala Lumpur could, over a reasonable length of time meet the regional demand. It would be desirable to assess in the countries the numbers and specific needs for training in order that the necessary adjustment to the course may be made.

Accreditation has posed a serious problem in the past and although the particular issue has already been resolved this problem is likely to arise again and again until some of the basic problems have been resolved.

The current problem is concerned with the diploma courses under the Project's sponsorship. In general, academic institutions, even in the countries where the diploma courses are conducted are not prepared to accept for any academic credit subjects taken up in these courses; these institutions will not accept the diplomas awarded to the trainees as a certification for a post-graduate degree.

It is hoped that the CCB can give its attention towards clarifying the issues involved. Perhaps, the Project through the CCB can state in more categorical terms that a diploma course is designed to enable the trainee to improve his skills, or in an activity increase his knowledge in a particular field but should not in any case be regarded as qualifying for a post-graduate academic degree. Perhaps, there would be less confusion if the word "certificate" were substituted for "diploma" although it may be anticipated that this may be difficult to introduce at this stage.

A final comment about regional courses is the need for ascertaining the probable demand for each of the regional courses being offered or for new ones being envisaged. The CCB members would be well advised to obtain the assistance of their national advisory committees if these are already established and/or from the health, education and planning bodies of their respective countries. The establishment of a regional team to conduct this manpower survey may not be practical because of the expense and the difficulties to be incurred; the team will need more time than this sub-team had in order to really know the situation and the resources may not permit it. For this reason, it will probably be more practical for the countries themselves to do the job.

(ii) On the Scholarships. Aspects which require scrutiny are the allocation of scholarships to the countries, the selection of fellows, the practice of extending scholarships to nationals in their own countries, the payment of stipends and the provisions for the welfare of trainees during their term of study.

National allocations for each course are based partly on the CCB member's estimate of his country's requirement and partly on the amount available from the Special Fund. It is suggested that a more methodical way be adopted which would involve more accurate estimates of country requirement through prior consultation with the national agencies. Apart from having information on the national demand, the numbers and availability of prospective trainees should also be known before hand.

The criteria for selecting trainees at the country level are available in the national centres and are often used. They are sometimes set aside because of a desire on the part of the country to fill up the quota that they receive. In the receiving national centre, problems again arise because they do not usually refuse trainees recommended from its member countries even though they may have disqualifying features in their applications. The costs of sponsoring unsuitable trainees are rather high. The percentage of failed and discontinued trainees is about 8% while the failure rate of one course is + 16%. For post-graduate trainees or at any rate, trainees of professional grade, such wastage is unnecessary and can be certainly be remedied.

A most sensitive issue is the question of whether a national who wishes to attend the regional courses in his own country should be granted a SEAMEO scholarship. In the Organization's scheme it is a widely accepted practice. One argument advanced for it is to enable local staff to attend training to improve his skills and to qualify him for a higher responsibility. In the Project's scholarship programme approximately one third of the scholarships are awarded to nationals attending their country courses. There are reasons why

such practice should be minimized if not suspended altogether. In the first place, SEAMEO scholarships as a regional programme should in principle, be awarded only to nationals who cannot obtain training in their own countries. Giving a SEAMEO scholarship to a national would, except in rare situations work unequitably in relation to his national colleagues besides being an unnecessary burden to the Organization's resources.

There seems to be a general feeling among the staff of national centres that the stipends given to trainees are inadequate. The rate allowed, which has been the same since 1967, is now obsolete. Neither should the same amount of stipend be paid in each of the national centres because of the different levels of the cost of living in these places. The United Nations has a cost of living index which is updated regularly and could provide a reliable basis for calculating the amount of stipend for trainees according to the sites of the national centres where they study.

Although only a few trainees get seriously sick enough to require hospitalization it would be a good policy to prepare against such a contingency. Arrangements for a medical care insurance for fellows should be made in which the trainee himself can make a contribution provided his stipends are adjusted to the cost of living in his place of study.

4.2.4 Recommendations

Course Offerings. It is recommended that the CCB should:

(i) institute a review of the Regional courses with a view to:

(a) eliminating duplication of course offerings between regional courses;

(b) phasing out regional courses which duplicate those already available in and offered by member countries;

(c) adjust regional courses (in terms of objectives, contents and target groups for training) to the changing demands of member countries.

(ii) take steps towards acceptance by member countries of minimum standards for similar or identical national courses to ensure equivalence of standards.

(iii) establish a policy for the sponsorship of new regional courses which should satisfy the following criteria:

(a) the existence of a regional demand;

(b) availability of teaching staff and facilities, including laboratory, field practice areas, etc;

(c) the recognition and support of educational and related institutions of the member countries.

(iv) clarify in its announcements for regional courses that the diploma courses are not equivalent to the master's degree courses.

(v) pursue arrangements for accreditation through appropriate channels:

(a) for the granting of academic credits for subjects taken in the diploma courses;

(b) for the adoption of mechanisms for the monitoring of the regional courses.

Scholarships/Fellowships. It is recommended that the CCB review its policies and procedures in the award of fellowships which would:

(i) allocate fellowships only on the basis of official estimates of manpower requirements of member governments;

(ii) ensure enforcement of already existing fellowship regulations;

(iii) minimize the granting of fellowships to nationals who will attend regional courses in their own countries;

(iv) adjust stipends as warranted by the changing costs of living in the localities of study;

(v) promote innovative changes in the conduct of regional courses calculated to respond to the socio-economic demands of member countries.

4.3 Research

The importance of research is underscored by the fact that contemporary knowledge on tropical diseases in the region is still insufficient. Only new knowledge resulting from further studies can offer more objective means for further prevention, treatment and control.

An early policy on research discouraged the Project from "getting involved in nationally organized research unless specifically invited to do so". Another guideline adopted by the CCB provided that "research should be confined to specific investigations and should not cover a broad area of research". The suggestion of a consultant in 1968, echoed a few years later, urged the use of research grants "to maintain the interest and stimulate the workers and teachers at the national centres" (without the modest grants, they would not be able to carry out their professional activities or keep abreast of new techniques). At the same time, the consultant had his hope that "the results of their investigations would contribute to the health of the people in the region".

During the period 1967-1975 the Project processed and approved 195 research grants using the amount of $450,840 from the Special Funds of the Organization. During the First Five-Year Plan (1970-1975) $363,484 (or 23% of the total amount from Special Funds) were spent by the Project for research grants. Additionally, 10 research grants were funded from the sum of $30,080.00 contributed by the Netherlands Government. The US/AID gave $28,900.00 for "Studies on nutrition and some related tropical and parasitic diseases arising from water resource development in the Lower Mekong Basin". The latter grant although reported to the CCB was in fact given to the Faculty of Tropical Medicine, Bangkok, as a national institution rather than as a national centre of the Project and for this reason is not discussed further in this report.

4.3.1 Objectives. At the CCB Meeting in Manila in 1972 the Board adopted a document entitled "General Instructions for Research and Training Grants for Development of the National Tropical Medicine and Public Health Centre", that included the following statement: "the principal objective of research grants is to develop the research capabilities" of the national centres.

The Instructions explained that the grants were "intended to provide research experience for junior and intermediate personnel, thereby developing their research skills and their interest in performing research". It was hoped that the "research would be of acceptable quality for publication and that it would help solve some of the medical and public health problems of the region", but stress was given to the policy that "the focus is on the process and the learning experience rather than on the product".

4.3.2 Implementation. The guiding principles of the Instructions defined the geographical limits (i.e., in the member countries) in which the studies would be conducted and that they would be undertaken under the auspices of the national centres. The centre would screen the proposals and forward them to the Central Office for approval by the Regional Research Award Committee. Priority would be given to the assigned specialization of each national centre and to proposals which would deal with tropical endemic diseases and public health problems of regional significance.

The proposal would be submitted in an application form which would describe the plan of study and give a detailed biodata of the applicant. The application would further attach the statement of a senior worker who would confirm his agreement to supervise the proposed study. A favourable clearance by the CCB Member and/or director of the national centre was required before the application could be considered by the Regional Research Award Committee.

Upon approval, a contract would be signed committing the applicant or investigator to submit a report every six months up to the submission of his final report the investigator would further submit a detailed accounting of his expenditures. Expenses above 15% of the value of the grant would not be approved unless previously cleared by the Central Office. Publication of the report would require the clearance of the Regional Research Award Committee. Any deviation from the terms of the agreement would result in the suspension of further fund releases.

Implementing action however did not always conform with the approved regulations. The allocation of funds for research to the national centre was made by the Central Office but since the CCB had not questioned this procedure, there was the implication of its tacit agreement.

A query heard in some national centre was why the Regional Research Award Committee had never been established. It was learned that the Central Office did refer some of the research proposals to outside experts but this had been done ad hoc. Another observation heard at one national centre was that the awards had not always reflected the priorities contained in the Instructions with the result that more had been given to subjects dealing with parasitology than in any other field.

The national centres developed their own procedures for disbursing the grants. In Jakarta, Kuala Lumpur and Singapore, full payment was immediately given to the investigators upon receipt of the grants by the national centre directors. In Manila, payment was made by installment. Bangkok followed both procedures as some received immediate full payment while other received them in installments.

Responsibility for overseeing implementation of the research was assigned to the CCB member in the country. In countries where the Board member served concurrently as director of the national centre (Malaysia, Philippines, Thailand) overseeing of the studies and expenditures posed no problem. When the Board member was not a national centre director and when the investigators were spread out geographically in the country certain problems arose. There seemed to have been no problem in Singapore because the investigators were all resident of the locality and contacts could be made through the National Advisory Committee of the national centre. In Indonesia some studies were conducted in state universities located in other parts of the country thus posing communication difficulties.

A review of the research grants gave the following information:

Subject-wise research grants in Parasitology totalled 84 (or 43.1%) out of the 195 grants approved. This was followed by Microbiology, 31 (or 15.9%); almost the same number of grants were given to Nutrition, 28 (or 14.4%) and Entomology, 27 (or 13.8%). Hygiene had only 6 (or 3.1%). Other investigation included such fields as cardiovascular surveys, venomous sea snakes, etc. with a combined total of 19 (or 9.7%). The countries which received the largest number of grants through their national centres were Malaysia, 53 (or 27.2%); Thailand 47 (or 24.1%); Indonesia, 38 (or 19.5%), and the Philippines, 34 (or 17.4%). Singapore received 6 (or 3.1%). The remaining Indo-Chinese countries had a combined total of 17 (or 6.7%).

The status of research grants in the five active member countries was as follow: 63 grants were completed and published and an additional 69 were reported and have been completed; these two items indicated that 67.7% of the total grants had satisfied the terms of their agreement. There were, in addition, 4 grants (or 2.1%) which had been completed but not yet reported and 17 grants (or 8.7%) which were still continuing. Three (3) grants (or 1.5%) had been discontinued while two (or 1.0%) had apparently been used for other purposes.

Of the total there were 37 grants (or 19.0%) which had not provided any information to the Central Office. The distribution of the un-reported studies were:

Indonesia ..... 12 out of 38 (or 31.6%)
Malaysia ..... Nil
Philippines ..... 2 out of 34 (or 5.9%)
Singapore ..... 1 out of 8 (or 12.5%)
Thailand ..... 11 out of 47 (or 23.4%)
Others: (Vietnam, 9 out of 11, Laos 2 out of 6 and Khmer Republic, Nil)

The ten (10) studies pursued under the $30,080.00 of the Netherlands grant were distributed as follows: Indonesia, Malaysia, Philippines and Singapore, 1 each; Thailand 2; in addition, Thailand entered into collaborative studies with the Khmer Republic, Laos and Vietnam using 4 grants altogether.

4.3.3 Discussion. It may seem academic now to discuss research when funds for its continuation have dried up and when there are no immediate prospects for its resumption. Research, nevertheless, is one of the statutory activities of the Project. There should therefore be some planning towards the time when this activity can be pursued again. One may therefore look back in order to have a better perspective for future planning.

This activity ~~understandably~~ generated much interest in the national centres but two problems became manifest during its implementation, viz., the interpretation of the objective and the management aspects of the programme/activity.

The CCB had adopted the view that inasmuch as the grants were intended to provide research experience for junior and intermediate level personnel "the focus should be on the process and the learning experience rather than the product". With this orientation,

opportunities for substantive, and preferably co-operative research of regional import among the national centres became subordinate to the "focus" on learning experience. Perhaps, the studies also became fragmented and even disparate requiring mostly modest outlays in order to afford a wider distribution of the grants to national staff.

The management became oriented to how equitably the learning experience could be extended to the countries through the national centres and how best to oversee the work. For this reason, even the Regulations which had been adopted by the Board had to be relaxed as they were sometimes viewed in the light of the "learning" orientation as impractical. Thus the Regional Research Award Committee at the Central Office never saw light. The national centres did not receive guidance on the fields of study to be encouraged and much less on the priorities. Supervision was left very much, without further suggestions, to the experience and judgement of the national centre directors or the CCB member.

In the circumstance, some unfavourable results were bound to happen, e.g. the observation that 21% of the grants, even after a few years of their approval, had no information or were discontinued or even misapplied.

There were on the other hand positive outcomes issuing from the experience. The trial at the D.A.P. & E. Course in Kuala Lumpur showed that guided research could be incorporated usefully in the curriculum even if only for six months duration; the experience of this trial further showed that some of the studies turned out to be of such quality that they were suitable for publication in the technical journals. This would point to the advantage of adapting this approach in the other courses, perhaps more meaningfully to grantees of scholarships for the master's and doctoral degrees. Also, through research grants in other national centres some useful special studies had been conducted which eventually were reported at national or international meetings or published in the technical journals.

The lessons to be gained from this programme/activity is that a regional programme for research in tropical medicine and public health would have to be carefully prepared in the first instance. The programme should concentrate on diseases and situations of regional, rather than an individual country's, interest. The studies should also

encourage collaboration among national institutions, if only for the fact that the fields of study are of regional import. In view of the great number and variety of tropical diseases priorities would need to be spelled out depending upon their magnitude as a problem in the region. Another criterion to consider would be the selection of studies that would have more immediate impact to the countries; this means that the studies should be directed to applied, rather than basic, research at least for the immediate future.

A clear cut definition of policy should be spelled out in this regional research programme; for instance, should research continue to be emphasized solely for the learning experience, or should research be concerned with substantive subjects of region-wide relevance which would, at the same time, offer opportunities for junior staff members to gain their experience by collaborating with their more senior and experienced colleagues?

The next requirement would be to adopt a guideline or a standard operating procedure for the initiation, processing and approval of research proposals. In this context, the CCB has approved a set of regulations which can only be reiterated in some and supplemented in other aspects. The Regional Research Award Committee, for example should be set up with memberships from the region consisting of people familiar with research work. The Committee should be able to co-opt other people for consultation from within and outside the region. The Co-ordinator would be the secretary of the Committee. The functions of this Committee would be to pass on the screened applications received from the national centres and to give recommendations to the CCB on research matters. The Committee's decision on the proposals should be considered as final.

At the national centre level, a similar committee should be established and it would screen applications and render advice to the national centre on research matters. Its operation should be guided by the suggested standard operating procedures. The CCB member and/or the national centre director would serve as secretary.

In view of the importance of research to the Project, it is thought that the CCB should review research activities annually during its meetings. The report should be prepared by the Regional Research Award Committee.

To the extent feasible the CCB should make use of consultantships from with in a outside the region in order to receive advice on policy, programme and direction for research activities under its responsibility in the Region.

4.3.4 Recommendations. With a view to preparing for future activities on research in the region, it is recommended that the CCB initiate measures to:

(i) Prepare a regional programme of work for research in the region.

(ii) Establish technical research bodies at regional and national levels to guide the development and administration of research activities under the Project. For this purpose, the Regional Research Award Committee previously approved by the Board be activated with a changed title, i.e., by deletion of the word "Award", because of the proposed wider terms of reference. At the national level, a national research committee is proposed which will advise and assist the national centre on resea ch matters.

(iii) In general, orient the research policy towards studies of regional significance, having a potential of immediate impact. Although opportunities for learning experience should always be borne in mind, the emphasis in research should be on the substantive features from the study of which knowledge acquired can help contribute to the definition and solution of problems on tropical medicine and public health in the region.

4.4 Exchange of Personnel

The basis of this activity is derived from a provision in the mandates of the Project for "the exchange of scientists and students between various institutions." The policy underlying the scope of the activity and eligibility of candidates are covered by a resolution of the Council, by provisions in the Fiscal Regulations of the Organization and the regulations of the Project.

There were 277 individuals who received awards under this activity during the 1967-1975 period at a cost of $159,058.00.

4.4.1 Objectives. The CCB in 1967 stated the objectives as follows: "..... to facilitate exchange of scientific knowledge by assisting workers in other member countries within the Region, who are working in similar or related fields so that they can exchange ideas and discuss techniques and problems of their work. This would help to overcome difficulties and facilitate their further studies and investigations on return to their own countries".

4.4.2 Implementation. The recipient of a grant is paid return travel and per diem but neither a salary nor an honorarium; the duration of his exchange status should not exceed thirty days. The purposes as authorised by the Council are for observation, lecturing or "other programme participation". In the Organisation's Financial Operations Manual, "other programme participation" was interpreted to include "consultant services or other programme participation". The Project defined the following purposes as lying within the scope of exchange of personnel: observations by national staff and by trainees who finished at the top of their class, training, giving lectures, "consultation" and surveys. Priority is given to individuals who will deliver lecturers, undergo service training, and those who will make observation tours. More recently attendance at seminars has been added as another category.

In the past, applications were sent directly to the Central Office. At present, however, requests from member countries must be coursed through the relevant CCB member who will endorse them with his recommendation to the Central Office. After approval the Central Office arranges the visit to the countries. Grantees are required to submit a report upon completion of their visits but this has not always been complied with.

In the early years (1967-1968) the grantees were mostly researchers. In 1969 the Board included trainees who had successful completed their courses but this privilege was modified to include only the top ranking students in 1970. Because of the limitation of funds, the Project reduced, in 1971, the categories of eligibility to those who will give lectures, those who would undertake observation training such as doctors, scientists, research workers, etc. and the top ranking students who would undertake study tours.

Implementation of the activity resulted in 277 exchange awards averaging 34 yearly during the period 1967-1975; the number ranged from 11 awards in 1967 to a high of 56 during 1971.

The country requests for personnel exchange were either for its nationals to visit another country or for nationals from another country to come for a visit. The distribution according to country follow:

Country	Request for Nationals	Request for Non-Nationals	Total
Indonesia	34	23	57
Malaysia	20	44	64
Philippines	20	5	25
Singapore	12	2	14
Thailand	41	11	53

Candidates for exchange of personnel grants were working either in the country's national TROPMED Centre or in other agencies in that country. The respective figures of national centre's personnel compared to other personnel were as follows: Indonesian = 42 and 14; Malaysian = 17 and 16; Filipinos = 21 and 17; Singaporean = 13 and 4; Thai = 71 and 21 and for the three other countries (Laos, Khmer Republic, South Vietnam) it was 36 and 5.

Excluding exchanges falling under observations, surveys and seminars, which made up 66% of all exchanges, the distribution of the 277 grantees according to the purpose of the exchanges may be seen in the following figures: for lecturers, 72 (26.00%): training, 22 (7.9%): "consultations" 43 (15.5%).

4.4.3 Discussion. The principle underlying this activity, i.e., to facilitate exchange of scientific knowledge and techniques among scientific workers has been a long accepted practice. Actually, the principle is the basis for the regular gatherings of scientific groups at national and international settings. Exchange of personnel finds a strong justification in the case of co-operative regional programmes of developing countries because their institutions are geographically far apart and opportunities for contacts are made difficult by both travel and currency constraints.

Exchange of personnel is therefore a requisite element in the activities of the Project. Training and research have been given high priorities in exchange of personnel, e.g., the exchange of lecturers and the giving of training and observation grants.

Research finds an even stronger basis for exchanges because of the dynamic nature of investigative work requiring continuing communication which can be enhanced through personal contacts. These contacts are necessary because demonstrations in the application of methods and techniques are in general considerably facilitated by seeing rather than by reading.

On the other hand, valid objections can be raised against some of the purposes for which exchanges had been granted, viz., the observation tour of top ranking students, some aspects of the consultations, surveys and attendance at seminars.

The observation tour of top-ranking students has been cancelled recently but it is doubtful whether it had valid justification in the past. Laudable though it may have been, the concept of giving a reward to such students is not only a luxury but incompatible with the scholarship programme and resources of the Organization. In practice, the travel and observation tours organized for the students were hurried and left no real opportunities for learning. Another aspect of the award to top-ranking students was an administrative one in that, strictly speaking, the visits of trainees should have been regarded as a continuation of the scholarships and therefore should have been a charge on scholarship allotments.

The problem connected with "consultation" arises from the way the exchange is used. A valid application is exemplified by a senior staff member of one country who is visited by a junior staff member from another country or when the former visits the latter; their exchange of views and experiences will necessarily include the imparting of insights and even suggestions from the senior to the junior member and this is one of the strongest justifications for the exchange. But if, say, personnel exchange is used for merely administrative reasons, then the exchange cannot be justified. In the same manner, it is clear that attendance at seminars or the conduct of survey should not be the purposes of personnel exchanges.

An examination of the number of exchange awards given to national centres will show that there have been more visits than there are staff and this may be explained partly in the uses made of exchange lecturers by the national centres. It is also interesting to note that the Project is extending the exchange arrangements to nationals who have no connection with national centres.

Over the past nine years, the five countries have had a total of 236 exchanges ranging from a low of 17 for Singapore to a high of 92 for Thailand as against an overall average of 47 for the five countries. If the trend in the number of exchanges should continue, it would be possible for each country to send 9 of its nationals.

An investment of $145,391 over the past nine years, or $16,155 per year, would need regular assessment. This cannot be done unless the reports of the exchange staff are duly prepared and submitted. The help of national centres is needed in order to secure these reports as they will be useful in the future planning of the Project.

4.4.4 Recommendations

(i) The CCB should consider reviewing the purposes and outcomes of its exchange programme the results of which can provide the basis for its future programme planning. A requisite to this review is the collection, consolidation and analysis of the reports of the exchange awardees.

(ii) The CCB should consider examining the current practice of granting the exchange of personnel awards in terms of its purposes and the criteria for allocation to each member country.

(iii) Following its review of current operation, the CCB should formulate revised guidelines for strict execution by the Central Office.

(iv) The reporting of exchange awardees should be more strictly enforced.

4.5 Consultantships

The Project draws a distinction between the terms "consultant" and "consultation". A consultant refers to an individual who renders technical service to an institution or country over a short period of time and who may be recruited from within or outside of the region. "Consultation", as originally interpreted at the First CCB Meeting in 1967, refers to the services rendered by a member of the CCB or the national of a member country who is on assignment to another member country for consultation or advice on programmes or subjects approved

by the Board. The Project had given the label of "Consultants and Consultations" to activities within the above referred definitions until 1971 when the CCB decided to incorporate "consultation" services within the Exchange of Personnel activity under Special Funds while retaining "consultant" as a separate activity.

The basis for consultant services was explicit in the first mandate when it stated that the Board, if deemed necessary, could appoint advisers from within or outside the Region while the national centres could call upon the Board for advice and help. The Enabling Instrument has no explicit provision for consultants except perhaps if "making joint approaches for aids" were given a broader meaning.

The Project has made use of 43 consultant services during the period from 1967 to 1975. The costs of these services are not given because they were all provided as direct services by donor countries.

4.5.1 Objectives. Consultant services are sought to provide expert advice on the Project's particular needs and problems.

4.5.2 Implementation. There is no standard operating procedure for initiating a request for consultant services. In the Project's experience, action for initiating a consultantship could come from the national centre or from the Central Office. Requests from the national centres are forwarded to the Central Office which looks for and approaches potential donors. The national centre may suggest the name of an individual for the consultantship. In some instances, a consultant serving the Central Office may be requested to assist a national centre needing advice.

Consultants during the period 1967 to 1975 were engaged for three main activities, viz., training and research in the national centres and assessing the progress of the infrastructural development plans of the national centres. Research activities in the national centres have been so far reviewed only in Thailand (1973-1975). No consultant has yet reviewed the technical administration of the Central Office nor its co-ordination activities as the CCB had envisaged.

A tally of the consultantships made available to the Project since Fiscal Year 1968/69 to Fiscal Year 1974/75 gives a total of 42 consultants with a range of 3 per year in 1971/72 and 1972/73 and 9 and 10 during 1968/69 and 1970/71 respectively. The users of the consultantships in descending order were the Central

Office, 17; the national centre at Bangkok, 12; the national centre at Jakarta, 8 and the national centre at Singapore, 2. Malaysia and the Philippines have had no consultantships. In addition, three consultantships were provided to two regional meetings, two of which were used for a seminar and one for a technical meeting; these consultantships were obtained as direct services from three donor countries.

4.5.3 Discussions. The importance of consultantships in the Project's multi-disciplinary fields of interest cannot be overstated. Nevertheless, "consultantship" is the only listed project activity which has no funding provision from either the operational budget of the Special Fund. All consultantships have been provided so far from direct services provided by donor governments or agencies. It may also be observed that consultantships as a separate activity is difficult to justify because it is really a tool of an activity like training or research rather than a programme by itself.

The lack of budgetary provision for consultantship is a big constraint in the Project's operation. While direct services of consultants have been available from donor agencies there is no assurance that technical help or advice can always be secured with the right kind of expertise when it is needed and for the duration it will be required. Advance planning and early negotiation may mitigate the problem of getting the right kind of consultants from donor agencies but this may only be partial because there can be a lack of donor interest in the particular request; the expert even though available may have other commitments and for the same reason may not stay long enough. The latter is always a problem because the most rational advice or offer of alternative approaches can result only from a full k[illegible] of the problem and circumstance and this may take a long [illegible] uire. Furthermore, certain problems may arise requiring immediate [illegible] urgent action but which may lie beyond the areas of interest of donor agencies.

The Project's needs for consultantships are many. It had been envisaged that advisory assistance on the management and co-ordination aspects of the Central Office could be secured, but this has not been available in recent years. Training and research in the national centres have long been in need of assessment and forward planning but except for one centre no action has yet been taken. There are periodic needs for consultation advice to the CCB and certainly to the Central Office because of its shortage of technical staff in the face of its

many responsibilities but this can never be carried out unless there are aid resources obtainable from donor agencies. Except for the fact that consultant services are being provided from donor sources, consultants need not be recruited from outside the region all the time. There are already a number of individuals in the region with the necessary technical experience and "know how" whose service can be profitably used. If they are government officers, their services can be negotiated on a "consultation" basis under Exchange of Personnel but if they are in the private sector their services can be secured on a consultant basis. Experts from outside the region should of course be availed of if none are available in the region for a particular type of service.

It is hoped that the CCB will find it possible to review its former decision and take steps that will provide a few consultant-months for the Project's needs. As apparently, the Special Fund cannot be utilised for consultant services, only the operational budget can provide the source for this purpose. This action will not conflict with the direct services from the donor agencies because through proper planning they can be made to complement each other.

The objection may be put forward that there are not sufficient funds nor possibilities of saving from the operational budget but this is a function of planning and setting priorities and from the "looks" of the programme activities possibilities for savings do not seem unrealistic.

4.5.4 Recommendations.

(i) The CCB should consider reviewing its policy on consultantships and consider making some provisions for them under the Operational Budget of the Central Office.

(ii) Should the above materialize, guidelines should be elaborated on the priorities to be given in order to allocate services. In preparing these guidelines, attention should be given to the complementation between the budgetted consultantships and those directly provided by donor agencies.

(iii) If funds became available, priority for recruitment should be given to expertise available in the region regardless of whether they are from the public or the private sector.

(iv) Exploratory approaches may be made to donor agencies with a view to making them contribute to a modest fund for consultant services which the Project could use for its urgent needs and in situations where there is no donor interest in areas of particular project needs.

4.6 Regional Meetings

The holding of regional meetings which involves the participation of member countries such as "conferences, seminars, instructional courses" are covered under the mandates of the Project.

The policy governing these meetings does not appear amply defined in the available documents. No explicit statement can be found on how the aims of these meetings should be related to the purpose of the Project or more broadly, to that of the Organization. The statements more often referred to the type and subject of the meetings and their value to participants in providing a forum for the exchange of views and in establishing contacts.

During the period 1967 to 1975, the Project was involved in 21 meetings of various kinds either as a sponsoring agency or in collaboration with other organizations. The number of individuals who attended these meetings is 2700 although not all of them were financed by the Project. The cost of the Project's participation at these meetings during the same period was $204,810. In the First Five-Year Plan (1970-1975), $160,808 was spent by the Project for regional meetings.

4.6.1 Objectives. The paucity of a concrete policy on what these meetings should achieve is further reflected in the organization of the indivudual meetings. In the reports or in the announcements of these meetings no statements had been made about what the specific objectives were even though the subject matter and the agenda had been brought out. On the basis of these announcements the organisers and participants of the meetings made their inference on what the particular purposes were and worked on those

premises accordingly. An exception to the above is a statement on technical meetings which indicated its objective: "A technical meeting is intended to fill the gaps in knowledge on tropical medicine and public health in Southeast Asia with reference to methodology, epidemiology, diagnosis and standardization, life cycles, pathogenesis, clinical functions, treatment, prevention and control and other aspects".

4.6.2 Implementation. There is more information on how the meetings are planned and carried out. Either the Central Office or the CCB can initiate a proposal and upon its adoption by the Board the planning ensues.

An organising committee is consituted by the national centre located at the venue of the meeting. The committee assumes responsibility for the administrative and technical aspects which means mobilising and organising local facilities, preparing the agenda and selecting subjects for discussion including the selection of people to prepare the working papers and processing them for distribution. The role of the Central Office is important since it has the power under the Instrument to exercise ultimate responsibility for this activity. The Central Office decides on the participants that the Project will sponsor and passes its decision to the CCB member/national centre director concerned. The Central Office may provide consultantships as may be recommended by the organising committee and make a commitment such as publishing the report or providing administrative/secretarial assistance. When collaboration with one or more agencies is involved the Central Office serves as the co-ordinating link and in this way it gives further support to the local organising committee.

The frequency of the four types of regional meetings are revealed in the following figures: Seminars, 15; Seminar-Workshops 3; Conference, 1; and Technical Meetings, 2. Figures on the breakdown of regional and outside participants are not immediately available but there is no doubt that both groups have been represented at these meetings. In terms of the number of individuals attending these meetings, the following figures were obtained: seminars, 2,170; seminar-workshops; 300; conference, 150; technical meetings, 80.

No authoritative definitions are available for the categories of the meetings except for a broad description of some of them. For example, the seminar-workshop is explained in terms of how it should be conducted: It is a meeting "of a small group of people (usually about 15) who are interested in a subject and come together for a

concentrated practical discussion lasting 2-3 days. Each participant is asked beforehand to prepare a paper on particular aspect of the chosen subject. The papers are submitted to the Organising Committee in advance of the meeting. When the workshop is in session, each participant is expected to describe briefly in 10-15 minutes the contents of his paper. Each exposition is followed by a short discussion". As already quoted above, the technical meeting has been described mostly in terms of content. There were no explanations about what a seminar or conference would be.

Looking at the attendance in relation to the type and venue of the meetings the following information was obtained:

Indonesia	One seminar with 120 participants;
Malaysia	One seminar and one seminar-workshop with a total of 180 participants;
Philippines	Two seminars with a total 280 participants;
Singapore	Two seminars, one seminar-workshop, and one conference with a total of 510 participants;
Thailand	Five seminars, one seminar-workshop and one technical meeting with 960 participants.

Other meetings not included in the above tabulations were held in Japan which was the venue of one seminar and one technical meeting, the total attendance was 160 participants; Vietnam had one seminar with an attendance of 120 participants; Taiwan had one seminar with 120 participants and Korea had one seminar with 250 participants.

The cost to TROPMED of these regional meetings were as follows: Seminars, $171,182.00; Seminar-Workshops, $14,404; Technical Meetings, $9,818.00; and Conference, $9,406.00 with a grand total of $204,810.00.

4.6.3 Discussions. The pamphlet "What is TROPMED?" states that "the seminars, etc. serve as forums for closer contact among scientific and research workers within and outside the Region". If the total attendance were the sole criterion for the assessment of the regional meetings, the judgement would be that they were successful. A total of 2700 were present of whom 2005 attended regional meetings held in the region. The average attendance at meetings held in the region was 146 with a low of 90 in one and high of 170 in another. It is

estimated that 80% of the participants came from the region and 20% from the outside. There was a wide range of topics discussed in the fields of tropical medicine and public health which no doubt would have left some positive impressions in the minds of those who participated.

Another approach in assessing these meetings would be to determine whether their objectives had been attained leaving thereby an impact on specific target groups with whom the meetings were concerned. From this angle, it is difficult to assess the meetings because except for the technical meetings no express statement of objectives had been formulated.

There has been no precise meaning assigned to a seminar, a workshop or a conference. They are all equated as meetings which should be attended by as many individuals as possible in order to read or listen to the papers, to discuss them and to agree to compile all of them in a report including the abstracts of their discussions. In their procedure, therefore, these meetings have been in the style of national or international conferences or congresses of medical associations on its specialities.

What probably needs emphasizing is the fact that while the above procedure serves very well the purposes of the medical associations it is not effective in serving the interests of the Project. Medical associations are, in general, clinically oriented and the presentation of individual papers dealing with clinical findings or observations are pieces of information which have relevance to the clinical practice of the individual participants; consequently, by their contents, the papers sent before the congress are already ends in themselves.

The regional meetings on the other hand, have a different purpose. Their subjects deal with information or knowledge and approaches to the solution of problems affecting not single individuals but of individuals in the aggregate, in other words, the community. Individual papers presented at regional meetings are to be taken not as ends in themselves but as a contribution to the body of knowledge or to the strategy towards the understanding or solution of specially selected situations or problems affecting the community. It is for this reason that organizations like TROPMED need a statement of objectives to which a particular meeting is to address itself.

The different types of regional meetings can be effective tools in helping the Project attain some of its immediate aims, such as training and research and, complementary to both, the dissemination of educational information to the community at large. To use them effectively attention has to be given to the particular utility of each of them and in this context the generally accepted meaning given to these types of meetings may serve as a guide for their use. A seminar deals with the clarification of already accepted or adopted concepts, procedures and practices; these are presented and discussed with a group who would or could use them in the course of their work or in their participation in a programme. A workshop involves the discussion by a multi-disciplinary group of approaches to mutual problems concerning a programme or activity in which they are involved or have a common interest; in this type of meeting, the group arrives at conclusions through consensus such as on the alternative measures which would be applied to a problem or situation. A conference, as interpreted in some international agencies, has an official feature which it does not share with the other types of meeting; the participants are designated by their respective governments and the decisions they arrive at one the subjects or problems discussed are embodied in recommendations to the governments which participate through their representative in the meeting.

A re-orientation of the purposes for organising regional meetings would be required if the above approaches were applied. There would also be an effect on the numbers attending because obviously the meetings would be more selective and the numbers much less. Their deliberations would be more meaningful and the reports which would include their conclusions/recommendations are likely to leave a stronger impact on their colleagues and in the particular programmes of the community. In principle, technical meetings do not require a very large attendance but it requires people with more experience and expertise.

The aims and conduct of technical meetings of which there have been only two have been more straightforward. The meeting uses regional expertise and outside consultants to dissect specific health problems and issues from which conclusions and recommendations emerge. Their reports are then disseminated to agencies and institutions throughout the region.

The Project collaborates in presenting or co-sponsors regional and inter-regional meetings as a matter of policy not only for their technical importance but because it helps in making new and maintaining old contacts and they are a means of making the Project visible in the area. This policy merits continuing support but the Project's commitments should be limited to a representation through which a technical paper may be presented.

4.6.4 Recommendations. It is recommended that:

(i) The CCB review its policy on regional meetings with a view to adopting specific objectives for each meeting which should relate broadly to the aims of the Project.

(ii) Consideration should increasingly be given at these meetings to subjects which will reflect the activities or undertakings of the Project and in particular the national centres.

(iii) Closer attention should be given to the selection of the most suitable type of meeting which will best facilitate the attainment of the objectives of the meeting.

(iv) Although there is an advantage in the Project's collaboration at meetings organized by other groups or agencies, TROPMED's commitments should be determined on the extent by which such meetings will help achieve the aims and goals of the Project.

4.7 Publications

Under this title are included the Southeast Asian Journal of Tropical Medicine and Public Health, the reports of regional meetings sponsored by, or operated with the collaboration of the Project and other reports and literature prepared and distributed by the Central Office.

The basis for this activity is derived from the mandates which envisaged "clearing house" functions to include the publication of information that will "disseminate knowledge in tropical medicine and public health not only in this area but to other parts of the world."

At its meeting in Jakarta in 1969, with CCB agreed to the publication of the Journal which it welcomed as of great importance in disseminating information and knowledge regarding activities in Tropical Medicine and Public Health in the region.

Another expectation of the Board was that "such periodical will encourage individuals to reveal their scientific work by writing in this Journal and thus it will give a great benefit to the doctors, scientists, parasitologists, etc. in this Region".

The first issue of the Journal was published in March 1970 and since that time there have been 25 quarterly issues, the most recent of which was in March 1976. Other reports published by the Project are distributed as they come off the press.

4.7.1 Objectives. This activity seeks to publish and disseminate technical information on tropical medicine and public health to countries of this region and outside it.

4.7.2 Implementation. The Journal has a technical staff consisting of an Editor-in-Chief and two Associate Editors who are selected by the CCB: each holds a term of one year subject to re-appointment. There is in addition an Editorial Board of seven members who are selected for their technical qualification and taking into account geographical distribution; they hold a term of one year subject to renewal. There is finally an Advisory Board composed of members of the CCB and experts in the field of tropical medicine and public health who are chosen without regard to their geographical origin.

The immediate management of the Journal's affairs is performed by a medically qualified Editorial Secretary who is also Technical Assistant in the Central Office. She handles the copy editing, makes referral of manuscripts to the editors and to referees overseas, consolidates abstracts of technical articles published in other journals and looks after the features section which report on the Project's activities. The Assistant Editor is also responsible for subscriptions and advertisements.

Manuscripts received are distributed to the Editorial Board members for review, according to their technical competence on the subject of papers. Articles, in fields outside the specialization of the editors are sent to referees within or outside the Region with a request for their comments. The Editor-in-Chief, however, is responsible for making decisions on what papers to accept in the Journal.

The Editorial Board establishes the editorial policy in the frame of the CCB guidelines; advises the Editor-in-Chief as to the content, format and means of improving the utility and quality of the Journal; stimulates colleagues in the member countries to contribute

articles to the Journal; reviews on an individual basis technical articles received and prepares abstracts of articles appearing in the country publications and in international publications.

The Journal publishes articles in the specialized fields of Tropical Medicine and Public Health regardless of the place of study and origin of the author but priority is given to work done in the region. Apart from original articles, other features include research notes and news in the SEAMEO region. It was planned to have a space for progress notes of on-going studies and abstracts of articles published in the member countries but on this a more active participation of colleagues from the countries is needed. Each issue has about 120 pages. There is only one page of advertisement appearing on the outside back cover of the Journal.

Responsibility for the publication rests with the Central Office and the cost of publication is included in its operational budget. There is an understanding that advertisements would be solicited to help defray the publishing costs but there has been a feeling of diffidence about the aesthetic and ethical implications of such a move.

About 1000 copies are printed per issue at an average cost of $1,500; it is reported that the cost has now risen to $2,500.

The total number of paid subscriptions is 484 which is almost 50% of the total number of copies; of this number 187 (or about 25%) are sent outside the region (i.e. U.S.A. 80; other countries, 107). Only two member countries have a substantial list of subscribers, viz., Malaysia, 267 copies and Thailand, 30 copies. Exchanges with other technical of medical journals total 56 while free copies exclusive of exchanges total 183 (or 18.3%), including the copies sent to the SEAMEO Secretariat, national centres, some donor agencies and member countries. The remaining copies, averaging 250 per issue, are retained in the Central Office.

Apart from the Journal, reports on regional meetings have both technical and administrative importance because of their respective potential as technical documents and of the labour required for their preparation and the costs involved. Other publications include reports of the CCB meetings, annual reports and occasional technical documents prepared in the Central Office.

The total cost of Publications and Clearing House functions during the period of the First Plan (1970-1975) was $45,128 or 18.2% of the Operational Budget of the Central Office during the same period.

4.7.3 Discussion. The Southeast Asian Journal of Tropical Medicine and Public Health has probably done more to make medical and scientific circles outside the region more aware of the Project than any other of its activities.

The Journal has come out regularly and each issue has maintained the quality that has made it acceptable to professional groups within and outside the region.

The readership outside the region is relatively small but it includes technical groups and institutions interested in the special field of Tropical Medicine and Public Health. Its potential readership outside has been helped by the fact that it has an on-going exchange with 56 other publications.

The picture within the region is less encouraging because outside of the paid subscriptions from two countries (Malaysia, 267: Thailand, 30) there are no other. There are 183 complimentary copies to SEAMEO, relevant national agencies and the national centres which will perhaps be read at best by only the staff of the national centres.

It is certainly useful to have a tool like the Journal for disseminating information to professional circles and institutions outside the region but it should be recognized that the primary target of the Journal should be the region and in this sense the objective of the Journal remains unfulfilled.

Perhaps one way of getting more readership in the region is to reduce the subscription rates or even to send complimentary copies to medical and scientific institutions. This move will mean additional expenses not only for the additional copies but for postage.

Medical and professional publications are not primarily for profit but finding means for reducing the costs is still desirable. The CCB had authorised the solicitation of advertisements but this has not received attention so far. A rough calculation would suggest that if only five pages of advertising could be sold for each issue,

the costs of printing would probably be almost met. There are three ways of doing this : making arrangements with a soliciting agency on a commission basis, asking the help of each national centre to solicit one page for each issue or using both means. Advertisements attract subscribers when the circulation is high; consequently, as soon as it is possible to recover printing costs, the subscription rates can be reduced. Based on the experience of other journals, it should be possible to insert advertising displays into the Journal without affecting its appearance and without compromising the ethical standards set for it.

The publication of the technical reports, however, require further study. The reports of seminars and other regional meetings entail too many man-hours for the small-sized staff at the Central Office. The question may be raised as to whether it might not be a better policy to give a little subsidy to the co-sponsors of these meetings in order that they can assume responsibility for publishing the reports. The Project may however opt to select a few articles or papers for its use which have more relevance to the Project interests and deserve a wide readership.

4.7.4 Recommendations. It is recommended that:

(i) To increase readership for the Southeast Asian Journal for Tropical Medicine and Public Health steps be taken to increase the Journals' advertising potential to help reduce printing costs. When this is achieved subscriptions costs can be reduced and complimentary copies sent to medical and scientific institutions of the region.

(ii) The Central Office consider giving a subsidy to co-sponsors of regional meetings to publish the reports instead of doing it by itself. It should however secure the right of publishing articles presented or read at those meetings which have more relevance to its work.

4.8 Clearing House

Although deriving from the same provisions in the mandates as that of the Journal, the meaning given to this activity refers to (a) the collection, storage and dissemination of information on Tropical Medicine and Public Health and (b) the establishment of a museum bank which would collect specimens of parasites affecting man and animals and catalogue them in an index file to be made available to other teaching and scientific institutions.

The text in the mandates is almost identical except that in the First (the Task Force's report) it was stated that the Project would "..... serve as a clearing house and catalogue, publish and translate into English information on activities .....". The inclusion of a museum bank came much later (1971) when the CCB agreed in principle to join in the agreement made between the Faculty of Tropical Medicine, Mahidol University, Bangkok, and the Department of Parasitology, University of Queensland, Brisbane (Australia) where the parties agreed to collect materials for all tropical endemic and parasitic infections and catalogue them into a reference index; the catalogue would be distributed yearly to suitable journals or on request. Although there is no record of a further review of the tentative agreement given earlier by the Board, the Bureau of TROPMED Information was established at the Central Office.

Recent reports indicate that there is already a substantial collection of documents and materials at the Central Office and the national centres but while the national centres continued accumulating specimens as in the past there has been little growth in their collections because of the lack of resources.

4.8.1 Objectives. It is clear that the objective of this activity is to collect, store and disseminate technical information and material (including specimens of parasites) connected with tropical medicine and public health not only in a multi-way flow among the Central Office and the national centres components of the Project but also with teaching and research institutions outside the region.

4.8.2 Implementation. The Bureau of TROPMED Information was established in the Central Office in 1971. The functions assigned to this Bureau are (a) to collect and catalogue scientific reports and papers on tropical medicine and public health in Southeast Asia which have been published in various journals or monographs since 1921 and record summaries of these articles in catalogue cards; (b) collect biodata of professional staff of the national centres; (c) advise reference centres attached to national centres on collection of materials according to the respective specializations of the national centres in order to assist them to fully establish their museums and reference centres.

In the same measure, a unit will be set up in each national centre to develop a museum and a reference centre for collecting and cataloguing specimens and materials in the area of specialization to serve as clearing house for direct dissemination to users within and outside the region.

In June 1974 the Central Office reported that it had already accumulated 3,500 documents and publications while approximately 3,000 similar materials had been collected by the national centres. Constraints of space were being experienced in the national centre because of the lag in some of their construction plans.

The activities of this unit in the Central Office together with publications has cost, over the past five years, $45,128 or at an average annually of $9,025.00. The funding comes from the Operational Budget of the Central Office.

4.8.3 Discussion. In a broad sense the clearing house functions assigned to the Central Office under the Enabling Instrument would include the publication of the Journal and the other technical reports being prepared under the auspices of the Central Office. Operationally, these activities have been separated into three parts which, apart from the Journal, include the Bureau of TROPMED Information and the Museum.

There is much to be said in favour of the Bureau's function of collecting, storing and disseminating information on tropical medicine and public health. The cataloguing of scientific reports and papers in "tropical medicine and public health" since 1921 which will incorporate summaries in the cards, will require a considerable effort and outlay of funds. It would be desirable therefore to make enquiries whether there are other institutions in the world which have already done this. If so, important information available from these sources can be secured on loan or by other arrangements. More attention can then be given to the collection, storage and dissemination of information available in the region but which, for various reasons, may not be recorded or indexed in the world's literature. The work would require a specialist and perhaps some translation into English from the local language may be needed. The co-operation of the national centres would also be required not only to furnish such information or copies of locally published articles but in order to share with them copies of the indices.

Administrative work on a highly specialized and extensive job like the above is likely to be expensive and the CCB may wish to consider whether this particular job could merge with those being undertaken at the national centre in Thailand. If feasible, the Project can provide a subsidy and make an arrangement to ensure that the purposes of the Bureau are carried out.

In the same manner, the Museum should be placed where it can best be used and it is in a national centre. Logically, the choice should be at the Thai national centre. When the proposal for this activity was originally made the idea then was to involve th national centres because they were service institutions possessing the uniqueness of being located in tropical countries. It is thought that the idea did not include making the Central Office also an active participant because it is basically an administration office.

The idea of including the biodata of national centre staff in the information system is a legitimate one but they should be in the administrative file of the Central Office and not in the Bureau of TROPMED Information.

4.8.4. Recommendations

1. In view of the expenses that will be incurred and the many advantages that can be gained thereby, it is recommended that arrangements be made for the merging of the Bureau of TROPMED Information with the library of the national centre in Bangkok. An agreement can be negotiated which will ensure that the functions for which the Bureau was originally conceived will be continued through an administrative arrangement that will permit the Central Office to oversee the functioning of the Information Unit. The links with the other national centres will also be ensured under the above arrangement. The Project should subsidize the national centre for this purpose.

2. It is though that the Museum being developed in the Central Office is a function and service that is undertaken in a national centre where it can be put to use. It is thus recommended that this be transferred to the national centre of Thailand subject to the same agreement as the above particular case; the transfer of specimens can be effected but a subsidy will not be necessary.

5. General Comments

It only remains to examine the extent to which the main objectives of the First Five-Year Plan have been achieved. Although the Plan had been adopted when the first mandate was still in force, it is interesting to note that its contents were more related to the second mandate wherein such activities like post-graduate training and research were explicitly stated.

The main objectives of the Plan provided the bases for the programmes/activities of the Project during the period and therefore the discussions and recommendations on them are reflections on the Plan itself. In this context, it will be found that the structure and mechanism for regional co-ordination and approaches to regional problems had been forged by the Project's own terms of reference; where they had been short of attainment (e.g., in country co-ordination of TROPMED activities) the reason had been the lack of provisions for such action in the Enabling Instrument itself. The training courses and the nationals attending them are evidences of the active role of the Project in the training activity; that they were all of post-graduate nature were also reflections of the mandate's provisions. Research had been extensively undertaken as shown by the number of grants approved and the number of institutions which participated. It is nevertheless evident that this activity has had the least impact on the region and the reason being that the concept of employing research resources to the learning experience of the junior workers received more attention than for any substantive investigative effort to solve relevant health problems. It had been suggested in the preceding discussions that research efforts could have had a better impact if the studies had been more selective as to content; the junior staff could have joined the effort just the same and gained experience in the process. The promotion of exchange of data and plans was realised partly through other programme activities like the publications (particularly of the Southeast Asian Journal of Tropical Medicine and Public Health), exchange of personnel and seminars. The upgrading of programmes and capabilities of the national centres which were initiated (e.g., the expansion and development of facilities, introduction of new courses, increasing of teaching staff, etc.) were positive moves forward but these were ongoing and no doubt would be further developed.

Under the Second Five-Year Development Plan (1975-1980), TROPMED's aim is to expand the activities already undertaken. The existing structures and mechanisms for co-ordination and concerted approaches to regional problems will of course require some modifications and adaptations over time. For example, the scope of training would need to be broadened beyond the limiting post-graduate courses allowed at present. The approach to research has stressed the institutional rather than the individual disparate studies; its logical implementation should offer more opportunities for co-ordination among the countries in undertaking studies of regional significance. This new orientation, it is hoped, would also channel to more realistic ends the training aspects of research as regards junior staff. The Second Five-Year Plan seeks to expand the services of the Bureau of TROPMED Information and Museum but as stated in the preceding discussions, these activities should be placed at the level of the

national centre where their potential for service and training can be better utilized. One important objective is to participate in the broad development efforts of the Organisation in the field of socio-economic development. Under the limitations of the terms of the Enabling Instrument, the participation would be restricted to "post-graduate" training and research; the Project would not be able to expand into broader areas of service such as "work for rural communities".

What would be TROPMED's future role? One of the queries raised in this regard is that as a project, TROPMED has a limited life and it should therefore terminate when its job is done. The problem then is to determine where the end-point would be. But training is continuing and the demands for research are endless. The ultimate answer would possibly depend on the longevity of the Organisation itself and whether it finds the Project useful for extending its assistance to member countries.

The Project should probably evolve into a technical unit in the Organisation and carry out its functions of promotion, co-ordination and serving as a focus for concerted action programmes in tropical medicine and public health.

The Project's present title is a problem in itself. The CCB had asked this question from the start. The title, as a matter of fact, reflects the vast scope of the Project. The rationalisation of its activities should begin with the consideration of the following: establishment of priorities for its activities and determining the target dates they should be phased out or terminated; establishing and strengthening relationships with national and international health organisations and agencies; and giving a new and more realistic title to the Project.

Either as a project or a technical unit of the Organisation TROPMED's main challenge in the immediate future would be the strengthening of its management processes and promoting the performance of its statutory functions with the flexibility required for the ever growing demands of the rapidly developing countries of Southeast Asia.

CHAPTER 9

REPORT ON THE SECRETARIAT

The evaluation of the Secretariat of SEAMEO of necessity will take a slightly different form than that of the various Regional Centres/Project. Like all secretariats, its position and role is viewed differently in various parts of the Organisation. Like other secretariats of international or regional organisations it has responsibilities that have to be handled with tact and skill, and the present inactivity of three members (cambodia, Laos and Vietnam) has not diminished these responsibilities.

1. Introduction

An overview of some of the elements relating to the Secretariat and its history will provide the background for this chapter. Since documents published by the Secretariat, including the minutes of the Council and all its working papers, provide extensive source material regarding the details of the Organisation's history, only those elements which seem critical to the understanding of the discussion and recommendations contained in this chapter will be quoted, summarized, or used in some way or another.

1.1 Purposes

Like all secretariats that of SEAMEO is expected to be the executive arm of the Organisation with the Director acting as its legal representative. Since there appears to be some ambiguity about the proper role of the Secretariat, it is worth extracting a small portion of the Charter.

> "The Secretariat shall ..... implement the policies and execute the programmes adopted by the Council; .... The Director shall submit to the Council the programmes of work for the Organisation and corresponding budget estimates together with such recommendations as he considers desirable" (emphasis supplied).[1]

Obviously the Secretariat has a responsibility and mandate similar to those of secretariats of many other organisations. As will be discussed later, there is a question in some minds as to how it should meet these responsibilities.

1.2 History and Location

The Secretariat, which is located in Bangkok, is one of the two original organs in the Organization, the other being the Council of Ministers of Education which is the Organization's supreme policy-making organ. When the idea of regional co-operation through an educational Organization was first broached among the Ministers of Education, Thailand offered its resources to help establish a small Secretariat to explore and elaborate the idea. Thus the Southeast Asia Ministers of Education Secretariat, called SEAMES, was created. The following year the Secretariat arranged for the first Council meeting of the education ministers and so SEAMEC, the Southeast Asian Ministers of Education Council was born. It was only following these first two steps that the actual Organization known as SEAMEO, came into being.

Although only seven Southeast Asian countries (Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and South Vietnam) signed the Charter in 1968, it was not long before the eighth country, Cambodia, joined the Organization.

The Charter, among other things, called for the Organization to:

> "Promote and collaborate with the member states, at their request, in joint projects and programmes of mutual benefit concerning education, science and culture and assist the members in the development of educational activities;"[2]

One way through which it was intended to partially meet this goal was through a series of regional centres. The principle followed was to attempt to create one such regional centre in every member country. The first years of the Secretariat were directed towards this goal. Working, on behalf of the Council, with the various member governments, the Secretariat, after allowing for an appropriate gestation period, helped to facilitate these developments. Basically, every SEAMEO Centre began with an interim phase of operation (supported by the United States Government) during which it developed the first five-year plan for permanent operation. This plan included both proposed programmes and a budget for capital and operating costs over this period of time. The Government of the United States agreed to fund 50% of these capital and operating costs with the understanding that in the second five-year phase of full operation the host government of the Centre would bear the responsibility for these capital and operating costs. During the first five year some host countries were able to obtain additional assistance from other contributors to help them meet their commitment for half of the cost. They also continued to seek outside support for capital and/or operating costs in the following years.

Initially there was no uniform procedure for channeling the aid funds provided by the United States. When consistent procedures were established the funds were given directly to the Organization for administration by the Secretariat. This is still a pattern followed by many contributors especially when their aid is to be allocated to several SEAMEO Centres. Thus, traditionally the Secretariat has carried the responsibility for the management of, and accounting for, considerable sums of money involving at the present time, the keeping of more than 70 separate accounts. This task has made the Finance Division of the Secretariat sensitive to the various accounting procedures of the different Centres and as a result a Financial Operations Manual (FOM) was created in the early seventies following a workshop and consultations with the Centres, appropriate government officials and finance experts.

1.3 Funding

The Secretariat itself is financially supported by the member countries although it receives some funds from aid-entities to support its special activities. To find a financing formula SEAMEO eventually turned to the Asian Development Bank (ADB) scheme. This complex formula takes into account factors which reflect the economic well-being of a country, its population, productivity, and the like. The Organization allocated the cost in the same relative proportions as reflected for the eight member countries in the ADB. Although, according to the formula, the Philippines contributes more than Thailand, the latter makes an additional or supplementary contribution so that it pays a total sum as much as that of the Philippines. Thailand also provides the Secretariat with free accommodation in a part of the Darakarn Building, the larger part of which is occupied by UNESCO.

All services, including cleaning and maintenance of its offices, and all salaries, including administrative staff, professional staff, and that for the Director, are a charge against the budget.

In addition to its own funds the Secretariat is responsible for raising and managing Special Funds. These funds, which were in excess of two million US dollars in fiscal year 1974-75 are presently allocated to the Regional Centres/Project for four purposes, namely, training scholarships, personnel exchanges, seminars and conferences and Governing Board meetings. A fifth category, research scholarships, was dropped after 1973 because it was not possible to raise sufficient funds to cover all five areas and this category was not attractive enough to contributors who, if they supported research, wanted their financial aid to flow to clearly timed, problem-oriented projects.

The Secretariat has the responsibility for raising and managing these Special Funds. The amount is determined by the budgets submitted by the Regional Centres/Project and approved by their respective Governing Boards and at the Council meeting of SEAMEO. To facilitate forward planning by all parties a consolidated budget for a three-year period for SEAMEO units is presented annually. There are three budgets, one for capital expenditures, one for operational expenses and the last for Special Funds. Although the United States remains as a major contributor to this fund for those Centres still in their first 5-year period of permanent operation, there are other countries as well as foundations and corporations which also make sizeable contributions. The member countries themselves and the associate members likewise make significant contributions to these funds. Many of the contributions are tied, that is, the donor specifies that the money be used only for a specific Centre (or Centres) or that it be used for a specific activity e.g., training scholarships. The Secretariat provides the services by which the Organization can be made accountable to the various contributors and also deals with the currency problems of working in several countries.

None of the above-mentioned conditions precludes obtaining additional funds for special projects or activities, commonly called "packaged projects" (such as this evaluation), for additional seminars or conferences that have not been budgeted; or soliciting funds to help a given Centre to meet its operating and/or capital expenses. Some of these funds may be given directly to a Centre, whereas some may be given to a Centre or for a project, through SEAMEO, with the Secretariat being required to act as a trustee thereof.

What is important to understand is that the Special Funds are at present absolutely essential for sustaining the regional character of the Organization. Without the training scholarships there would not be the region-wide flow of students and scholars from member countries to the various Centres. Each training scholarship provides, among other items, a return airfare from the scholar's country to the Centre and a per-diem allowance. This allowance is paid to the scholar by the Centre/Project that he is attending after appropriate deductions for tuition charges as well as room and board, where applicable, have been made from the scholarship. Scholars generally continue to receive their salaries from their governments while they are on course (if they are government employees), for such payments are needed for the support of their own dependents at home. The majority of scholars are individuals having families, and as they are, for the most part, not highly paid, their salaries can be expected to provide little, if any, extra money. Furthermore, it is not always easy to move money from their home country to the host country due to various constraints, including currency restrictions.

One final current complication should be noted at this point. The Secretariat's operational budget is shared by all member countries according to the proportions established some time ago through a complicated computation based on an earlier form of the ADB formula. The three Indo-Chinese countries have not been recently active in the Organization nor have they contributed lately their normal share of the required funds. Consequently, after the budget of the Secretariat is fixed it has now to look forward to a shortfall of funds. Quite properly, it attempts of prepare an accurate budget without "padding" and is thus forced to try and make reductions in its actual expenditures. What shortfall existed in the last two years has been met from a modest reserve fund. It is important to recognise that the three Indo-Chinese countries are still members of SEAMEO, though inactive, and the rest of the membership wish to see them fully active and participating again. All actions taken by the Council on the subject have been based on this point of view. The Secretariat is thus operating under extremely tight financial constraints.

1.4 Functions

At the Tenth Annual Council meeting the self-evaluation of the Secretariat was discussed. A detailed set of guidelines had been prepared by a consultant, who developed them after reviewing various documents and consulting with the professional staff at the Secretariat.[3] He identified 47 items under 9 functions which he felt appropriately described what the Secretariat is expected to be doing. When the evaluation team arrived in Bangkok, the first part of the self-evaluation (I. General) had been completed and the second part (II. Implementation of functions) was being undertaken. The team leader and assistant team leader were given a copy of the first part during their initial stay in Bangkok and the full report was made available to them shortly after their return for the final phase of the evaluation.

It would have been tempting to use the same list of functions as were proposed in 1975, namely:

i) Leadership functions;
ii) Administrative functions;
iii) Co-ordination functions;
iv) Support development functions;
v) Public relations functions;
vi) Financial management functions;
vii) Special programmes functions;
viii) Evaluation functions;
ix) Membership development functions.

Taken with the list of items which followed these headings the self-evaluation guidelines provided a highly analytical, detailed set of questions running to 29 pages of single-spaced, typed text.

The self-evaluation has obvious value as a means of improving operational efficiency; judging by a reading of the entire report, it was carried out with care, thoroughness and openness. In order to complement the self-evaluation, it was decided to attempt a more global approach, providing a kind of synthesis as the basis for recommendations. To this end the Charter of SEAMEO (Article V, Section 7) was examined and, based on seven of the eight specific functions, four headings were developed. The eighth explicit function, "carry out other assignments given by the Council" called for a review of all resolutions passed by the Council, which related to the Secretariat. While most of these could well belong under the first four functions, a few could best be described as "service activities".

Following then, are the five broad function areas which the sub-team used to develop its own guides for evaluation:

i) To serve as the executive and administrative arm of the Council;
ii) To provide professional leadership service and expertise to the Council (in regard to its policy-making function);
iii) To act as an agency of the Council for fund-raising and fund management;
iv) To act as an instrument of the Council for the purpose of achieving and maintaining co-operation;
v) To provide service.

Probably, the major difference between the two lists is that the first list tend to more closely reflect the day-to-day activitite of the Secretariat, while the list of functions selected by the evaluation sub-team is more global and reflects the <u>pattern</u> of instructions given to the Secretariat by the Council.

As will be seen in the following sections, the basic question asked is, "What kind of Secretariat is wanted?" When the question is answered, then it is possible to define its functions and establish its priorities.

1.5 Administrative Structure and Relationships

The Secretariat has a Director serving for a three-year term with each new Director coming from another member country. There is also a Deputy Director. Operationally, there is a Finance Division, a Programme Division, Administrative Services, and an Information and Documentation Section manned at present by two staff members. The Deputy Director, the head of the Finance Division, the three Programme Officers (which include the head of this division) and the Information Officer are recruited from the region. The Documentation Officer, the head of the Administrative Services and the Chief Finance Officer are locally recruited. The remaining service staff members, except for three senior secretaries, are used to provide administrative support services and also accounting and book-keeping support for the Finance Division. All of these staff members are locally recruited. All together the Secretariat staff has a total complement of 32 members.

There are three yearly meetings of importance for which the Secretariat is responsible. The first - the only one provided for in the Charter and the most important - is the Conference of the Council, usually held early in the year. Preceding this by about two months is a meeting referred to as the PDM, at which high officials of the member countries and the directors of SEAMEO units participate. Here, the tentative agenda for the Council meeting is prepared, working papers for it are reviewed, issues discussed and, if possible, resolved so that the ensuing Council meeting can proceed smoothly and efficiently. Some time after the Council meeting is the CDM, the meeting of the Regional Centres/Project Directors. This is a recent development having been in existence for only a few years. By report, the meetings are characterized by openness, frankness and forthright expressions of opinion. Here is discussed the implementation of Council resolutions. For example, the basic elements of the external evaluation exercise were considered at the 1975 CDM. It would appear that the meeting provides the Secretariat with the opportunity to have a general understanding with the Centres regarding their respective roles and relationships.

There is one other important provision for the maintenance of relationships which is contained in the Charter. The Director of the Secretariat, or his representative, is an ex-officio non-voting member of the Governing Board for each one of the Regional Centres/ Project. Depending on circumstances and the Director's general approach he may try to attend all Governing Board meetings himself, or have this responsibility discharged by his deputy or by one of

the three staff members of the Programme Division. (Each member of the Programme Division is responsible for keeping himself informed of, and being familiar with two Centres, their history, programmes, activities and problems). When appropriate the Chief of the Finance Division is also called upon to attend the meeting.

As far as each Centre is concerned, the Centre Director is responsible to his Governing Board. The decisions of each Board regarding both programme and budget are forwarded to the Council for its approval at its annual meeting. In practice the Secretariat may submit comments thereon for the Council to consider. In this situation, wherein the Governing Board and the Council usually meet once a year, the effective power of the Centre Directors in the SEAMEO structure is far greater than might at first be imagined.

The Director of the Secretariat currently makes an annual six-to-eight week trip around the world on a fund-raising mission for the purpose of obtaining and maintaining the flow of aid for SEAMEO Special Funds. He also carries with him a variety of proposals for various independent projects - referred to as "packaged projects". There are proposals for special activities put forward by the various Centres. Success in this mission requires a Director who is well informed and who has effective communication with the Centres, particularly with their Directors. While the Centre Directors are encouraged to also function as fund raisers it is of course important to co-ordinate requests for funds, especially if they are addressed to the same donors.

Another area of action and relationships is with international bodies and outside entities e.g., UNESCO, FAO, WHO, etc., which have work programmes that impinge on SEAMEO domains of action. Co-operative links with them have been, or are in process of being, developed by the Secretariat.

Finally, and most important of all, the Secretariat has maintained relationships with Ministries of Education of member states and to some extent educational institutions therein. These relationships are basic to the success of SEAMEO.

2. Procedures

Although this chapter is focused on the Secretariat it is obvious that the Secretariat cannot be treated in isolation.

To evaluate the Secretariat one has to see it in the context of many-sided relationships shown in the foregoing section as a body in a network which must maintain a dynamic contact with the Ministry of Education of each member country, with each Centre, as well as with interested countries, foundations and agencies. Besides contacts with potential sources of assistance, the Secretariat also has a responsibility to provide general information about the Organization, particularly its regional activities. One valuable by-product of regional co-operation is the positive effects it can have upon the member states as they come to see the values of mutual aid and assistance for their own development and benefit.

It was with this broad position in mind that the sub-team developed various interview schedules for a variety of target audiences.

2.1 Data Sources

The sub-team for evaluating the Secretariat consisted of the team leader and assistant team leader. Because of their responsibities for the whole team and also because of their assignment's broad frame reference, it was necessary to review a large collection of printed material. These printed sources included the following: the SEAMEO Charter, Minutes of the Council Meetings, the SEAMEO Digest, Enabling Instruments, most of the Minutes of the Governing Board Meetings for each Regional Centre/Project, Agreements with host Governments, Directors' Annual Reports, and miscellaneous records and publications of the Secretariat and the Regional Centres/Project. More specifically the sub-team sought information relating to the development of the Organization, its goals and strategies, the relationships it was cultivating and the way in which it shared its various responsibilities, and its activities and operating procedures. This sub-team was assisted by the members of the other sub-teams who, because of their specialized focus drew attention to a wide variety of special documents or key decisions reported in the minutes of Governing Board meetings, annual reports, planning documents, reports on special projects, and the like. Some of this material, where appropriate, is referred to in the preceding chapters, however, the part of the evaluation of the Secretariat, based on documentary sources, is mainly the result of the sub-team's search for relevant data.

All the printed material available would not of course be adequate to assess the Secretariat. To better understand its functioning and relationships it was considered essential to interview, usually in depth, various groups of persons. Again, this sub-team was also able to listen to some of the interviews conducted by other sub-team and talk informally with various staff members and scholars at different Regional Centres. The target audiences for interviews are as follows:

Governments of Southeast Asian Member Countries:	Their Ministers of Education and/or their senior officials. The SEAMEO affairs officer or equivalent.
Other Governments:	Representatives of aid programmes in the embassies of associate member countries and donor countries.
United Nations Specialised Agencies:	An appropriate representative of F.A.O., UNESCO, etc.
SEAMEO Secretariat Staff:	The present Director and Deputy Director and all incumbents of senior and professional positions, as well as the Documentation, Information, Administrative and Finance Officers, some previous directors and professional officers.
Centre/Project Staff:	The Director/Deputy (Assistant) Director. (Informal talks were usually undertaken with a sample of key persons such as the Registrar (if any) and project, administrative, finance and information officers).

2.2 Interview Schedules

All interview schedules were prepared in advance and used as a guide to ensure that essential points were sufficiently covered. Different sets of questions were prepared for each target audience and enough copies were prepared so that the interviewees could have a copy at hand to read during the course of the interview in order to facilitate communication.

2.2.1 For Ministers of Education and Ministry of Education Officials: Two interview schedules were used in meetings with Ministry of Education officials. Besides fulfilling the requirements of courtesy, the meetings provided an opportunity both for informally reporting the progress of the evaluation work and obtaining some general views. The team leader, after the appropriate formalities, would briefly describe the process through which the evaluation was being carried out. Because

the Ministers represent the principal audience for whom this report is intended, such a description was considered appropriate. Those interviewed also willingly provided the time and opportunity for answering questions about their current views of SEAMEO, its general level of priority in their current thinking, their opinions of the different Centres and their views of the future. An additional interview schedule was developed to use with the SEAMEO affairs officer. Sometimes this was answered through an interview; at other time written replies to the questions were provided. This schedule was directed to explore the communication channels and relationships with the Secretariat as well as to reveal other concerns necessitated by SEAMEO and the presence of a Centre in a given country.

2.2.2 For Representatives of Other Governments Associated with SEAMEO : Interviews with various aid representatives was a delicate matter since some looked to the external evaluation as a source of information for future decision-making on continuing assistance, while others saw the interview as an opportunity to communicate their points of view through an alternative channel. The interviews themselves were designed to help the sub-team understand the present interests, priorities, and policies of those countries providing aid to SEAMEO. The second element of this interview was an attempt to discover how effectively the Secretariat's information programme was working to obtain positive results.

2.2.3 For Representatives of Related Agencies: As agencies such as UNESCO and FAO work in fields presently covered by SEAMEO's programmes, a brief interview schedule was designed to find out if communication links had been effectively established and if steps were taken to avoid redundancy and duplication.

2.2.4 For SEAMEO Secretariat Staff: An interview schedule was developed to reflect the general functions mentioned earlier and to encourage observations on these broad areas. A second schedule was "issue" oriented and asked the respondents to consider such things as the present organizational structure, the timing and number of annual meetings, the type of qualifications deemed advisable for senior SEAMEO staff and the role of the Secretariat in implementing Council Recommendations.

Another section of the interview schedule dealt with the work load and responsibilities of each interviewee. Supplemental questionnaires were developed for the Director to deal with his unique role, including that for fund raising; for the staff members dealing with information, publications and documentation to examine the present Secretariat operations in these areas; and for finance officers to explore funding procedures and methods of fiscal management and allocation. In addition to all these elements a questionnaire in the form of a rating scale was developed to help explore more specifically in terms of tasks and practices, the various functions covered, in a general way, in the first interview schedule.

With the exception of this last item, the same interview schedules were used with previous Secretariat staff with the only modification being the necessary change in time-frame.

2.2.5 For Centre Directors and Deputy Directors: The questionnaire applied to them was essentially the same as the one for the staff of the Secretariat which deal with the general functions. Appropriate modifications were made in words so that the questions about the Secretariat's functions were presented from the Centre's point of view. These interviewees were also presented with the second schedule used with Secretariat staff to focus attention on certain issues.

2.3 Other Data Collection

Two other data collection instruments were prepared. One of these instruments dealt with finances. The Secretariat had already supplied the team with a detailed table relating to Special Funds. As the sub-team has only administrative experience to rely on, in the financial area, it decided to obtain some simplified summary statistics about each Centre's capital, operating and special funds expenditures, divided to show external aid and host country's support. Although it was known that there would be some limitations in this type of data, regarded as a measure of "inputs", it was felt that this synthesis would be more useful than reviewing annual reports, proposed budgets and detailed audit statements. Furthermore, it was an attempt to obtain data which could be used to provide a summary of cost over the last decade.

3. The Secretariat as the Executive and Administrative Arm of the Council and its Instrument for Co-operation

The Secretariat of any Organization cannot avoid being judged in terms of how well it represents the body when the body is not in official session. This is not a simple matter to assess but there are many elements which deserve comment.

3.1 SEAMEO - a Unique Organization

Any regional Organization needs all the visibility it can get with all recognition focussed on the Organization. Although there are historical reasons for the existence and use of the acronyms SEAMES and SEAMEC, their continued use detracts from SEAMEO, which is the real juridical entity, and occasions some confusion in people

who are unfamiliar with the Organization, such as new personnel in donor agencies and new staff in Ministries of Education as also the large communities of educators in the member countries and the public in general. Most of those interviewed agree that the Council and Secretariat should drop their present acronyms of SEAMEC and SEAMES respectively. It is therefore recommended that:

3.1.1 The use of the accronyms SEAMEC and SEAMES be discontinued and replaced respectively by SEAMEO Council and SEAMEO Secretariat. It appears to the sub-team that this change could be instituted without any revision of the Charter and should provide the Organization with the unmistakable identity. SEAMEO, like any other international Organization will thus have a personality that can more easily be made more visible in a unified form;

3.1.2 All Centres should be instructed by the Council, to include SEAMEO with the same, if not more, prominence as their own acronyms in logos and other identifying marks. A re-examination of the different Centre logos should be undertaken towards the possibility of renouncing presently existing Centre logos and adopting only one logo for all -- that of SEAMEO, for the Centres do not, and should not, constitute a "federation" in SEAMEO;

3.1.3 The President of the Council be known as, "President of the SEAMEO Council"; accordingly the head of the Secretariat should be identified as "Director of the SEAMEO Secretariat".

3.2 The Preparation and Use of Legal Instruments

Legal matter were beyond the sphere of interest of many of the interviewees. Legal instruments in many forms, including the Charter (the most important one), the Enabling Instruments, Memoranda of Agreement, Agreements between host governments and SEAMEO and contracts for different purposes, are considered as vital working instruments by the Secretariat. As regards obtaining legal services, except in a recent case of a political nature, and at times when answers to legal questions arising at meetings are not obtainable due to unavailability of legal advice, there seems to be a general satisfaction in the SEAMEO community with the way most legal matters are handled. Nonetheless it seems that in at least another case,' that for TROPMED, not enough attention and care were paid to the appropriate wording of some parts of its Enabling Instrument. Furthermore, in the case of two Centres -- BIOTROP and RELC -- the Agreement between the host government and SEAMEO has not been signed,

a circumstance which has placed each Centre in a state of uncertainty. It is hoped that the differences in the positions of the contracting parties will soon be ironed out to bring the long-standing negotiations to a successful conclusion.

There are, however, grey areas wherein actualities do not correspond to written provisions in legal instruments. For example the actual position of the Secretariat is not in accord with the Charter's mandate to have it execute the programmes adopted by the Council. In another case the main thrust of one Centre's programme seems to be on training, but this may be open to question, if one takes into account the overriding purpose, enunciated in its Enabling Instrument. Also it is noted that the treatment of SEAMEO funds, especially those supplied to the Centres by host countries are not always treated as international funds which does not agree with the funding principles approved by the Council. In a more general sense it may be said that the continuing viability of the Organization will be better assured if both the member countries and the Centres follow the legal instruments and principles in effect. It is hardly necessary to make this a recommendation but it is of such importance that attention has to be drawn to the issue.

3.3 Maintaining and Increasing Membership

In troubled times an Organisation depends very heavily on its Secretariat. The three inactive members are a major source of concern to SEAMEO and it is unrealistic to expect the Secretariat, unaided, to be able to bring them back to activity. Since Cambodia and Vietnam have already established diplomatic relations with some of the SEAMEO countries this should augur well for SEAMEO.

As for increasing the membership, Burma, with whom demarches have already been made, and (possibly Papua-New Guinea if the definition of Southeast Asia could be extended to include that country) are apparently the only possibilities. On the other hand, any non-Southeast Asian country could apply for admission as an associate member. Either because this role has not been made attractive enough in the Charter, or because some donor countries see no need for this particular status, it has been difficult to increase the number of associate members.

It is suggested that the conditions for associate membership be reviewed to encourage more donor countries to become associate members. It is believed that it would be more appropriate for organisations and agencies not to be considered for associate membership -- a status to be reserved for countries only. Consultative status can of course be accorded to any appropriate organisation or agency.

3.4 Implementing Council Resolutions

Council resolutions approving Centre programmes and budgets are passed on to the Centre Directors for execution. Other resolutions directing the Secretariat to perform certain tasks, such as holding seminars, normally do not pose difficulties. However, when the SEAMEO Council passes certain resolutions "inviting" member countries to take appropriate steps towards implementing certain recommendations (e.g., equivalence of some academic degrees obtained in a SEAMEO Centre), emerging from technical seminars, conferences and the like, a different situation arises. The Secretariat must follow up the resolutions with tactful inquiries addressed to appropriate government officials, sometimes even having to ask the Director of the Regional Centre to contact the government, to see what action was being taken. The process appears to be a slow one, but it is probably the most that can be expected to be done in such a situation where the Council and the Secretariat quite appropriately refrain from "interfering" in the member countries' internal affairs. The general reaction from government officials and Centre Directors was that the Secretariat did all that could be expected of it.

Only when the Council chooses to be more direct in the wording of a resolution can it, in all fairness, expect the Secretariat to act more positively.

3.5 Co-operation with other Agencies

SEAMEO has established formal ties with UNESCO. Its location in the same building as UNESCO has made the development of informal communication links easy. There seems to be adequate communication and sufficient awareness to prevent duplication or overlap. As one moves to other specialized agenices, such as FAO or WHO, communication seems to be more or less limited to the appropriate SEAMEO Centre. The relatively low level of interaction between the Secretariat and other potentially relevant Organizations is a reflection of size and specificity of the Centres. There are no major problems currently seen in this area.

3.6 Administration of the Centres

The fact that the Centres are semi-autonomous within the Organization as provided for in their Enabling Instruments, have their own Governing Boards, interact with the Secretariat in making recommendations, through the latter, for decision by the Council, leads to a minimal administrative role for the Secretariat in the internal affairs of the Centres.

3.7 Administration at the Secretariat

While the sub-team found a hardworking staff, deeply committed to the concept of regionalism and dedicated to SEAMEO, there seems to be a lack of an overall major thrust directed to some definable, common goal, i.e. the continuing development of a long-range, well-integrated overall programme of SEAMEO with strategies appropriate to the Organization. This may partly be attributed to the strength which the various Centres/Project has assumed with each having its own programme to carry out and a separate budget to support it, a strength which they have effectively consolidated with the support of their Governing Board members who enjoy the confidence of the minister-members of the Council. The Secretariat seems to be left with tasks, many of which are of a relatively routine nature, though admittedly necessary. On programme questions the Secretariat generally avoids intervention. Secretariat participation has been directed mainly towards trying to ensure that the Centres adhere to guidelines, instructions and standards approved by the Council in which educational statesmanship is clearly not needed. The result is one where the Centres and Secretariat could almost be described as acting in an adversary role with each other. Without exception the Centres/Project saw the Secretariat as lacking in sympathy and understanding for their unique structures, problems and solutions. In return the Secretariat had a tendency to see the Centres as pursuing their own wishes and local and vested interests, insufficiently giving attention at times to, or even ignoring, some of their regional responsibilities, and trying to avoid some of the necessary requirements of SEAMEO itself. In this situation, complicance was one side's strategy as opposed to the other's thrust for more leeway in action beyond stringent limits. Increasingly this unfortunate course of events has weakened the Secretariat, with the Centres seeing "fund-raising" as its raison d'etre. In the opinion of the sub-team SEAMEO would be better served if a healthier balance is established between its Secretariat and the Centres/Project. Indeed SEAMEO should even go farther; it should work towards a complementation between the broad-gauged educational statesmanship exercised by the Council, assisted by the Secretariat, and the specialized professional leadership already at work in the Regional Centres. The only body that can establish this necessary rapport is the Council itself to which this suggestion is respectfully addressed.

Within the Secretariat itself the senior staff officers deal with a host of matters. Some years ago an effort was made to categorize and group countries, centres, agencies, etc. so that each staff officer had his list and dealt with correspondence and other matters which related to those on his list. To reduce possible isolation

and to encourage a sense of common purpose, staff meetings have continued to be used to deal with major issues. While there is no lack of openness and freedom in the expression of views, which is certainly commendable, these meetings as presently functioning, have had limited success in bringing the disparate individuals closer together and infusing in them a vigorous esprit de corps. Instead, they are more aware of their differences and although they willingly co-operate to the extent of unhesitatingly spending long hours to get assigned tasks accomplished, they nevertheless tend to operate individually within the existing structure. Though it is obviously necessary to have staff meetings to maintain team work, increasing the frequency of, or the amount of time spent at, these meetings has not been an adequate solution.

Through a series of events this state of affairs has evolved and it cannot be changed with ease. It does not seem likely that this situation would change without some restructuring of roles, titles and responsibilities and adding staff where it is absolutely needed. At present, there is hardly anyone, except possibly the Director, who speaks for the Centres collectively. By and large the staff members have not spent sufficient time at each one of the Centres separate from the period spent in attending Governing Board meetings. Furthermore, the strength acquired by the Centres and their Directors has made a useful restructuring of the Secretariat seem unnecessary or even undesirable to some.

Since the Centre Directors are expected to more naturally pursue the interest of their own Centres rather than be preoccupied with that of SEAMEO as a whole, and since it would seem extremely difficult to truly subordinate their Centres to SEAMEO, administratively at least, they could weaken reform actions if these reforms are taken unilaterally by the Secretariat. As long as they look to the Secretariat as "merely" a fund-raiser they may tend to be reluctant to consider a reinvigorated Secretariat. Thus, strangely enough, the reinforcing of the Secretariat is seen as something that will have to be a joint regional effort of the Centre Directors and the Secretariat Director and it is seen as an act which will eventually result in long-term gains for the Centres themselves. At present, because of the seemingly adversary situation, it is deemed unlikely that successful changes can or will be implemented through the Secretariat acting by itself. Moreover, the support of the member states has to be obtained for it is after all the determinant factor. Finally it is to the Council that this problem should go for it is only by its decision that it can be resolved.

It is our opinion that the administrative shortcomings observed by the team can at least in part be attributed to this current state of affairs. The conditions herein perceived affect every phase of the Secretariat's operation. Two recommendations which seem appropriate at this juncture follow:

3.7.1 That the Director or Deputy Director of the Secretariat, or both continue more vigorously the efforts they have made in developing and maintaining close ties with the Centres. To this end the incumbents should spend time at each Centre over and beyond meetings of Governing Boards. At these visits it is expected that they would become familiar with as many as possible of the Centres' staff, programmes, operational procedures and practices, problems and difficulties, as also the host governments' participatory actions.

3.7.2 That the Council consider the reinforcement of the the Secretariat as a subject of priority for careful study by an appropriate group out of which practicable means should emerge for its consideration and approval.

4. Providing Professional Leadership

While a quick reading of the Charter and Council's resolutions led the sub-team to an immediate identification of this role and function, the interviewees were not as quick to respond to this topic. Or if they responded, the ideas advanced on such leadership role are sometimes to negate it or to confine it to near routine and minor tasks.

The paucity of perceptive ideas on this topic is again likely due to the tendency of the Organization to see its strength, resources and leadership as naturally vested in the Regional Centres/Project where professional expertise in many different sepcialized fields is readily available, in contrast to that found in the Secretariat which is obviously limited in kind.

Yet, when the Charter mandated that the Secretariat, under the authority of the Council, shall "execute the programmes adopted by the Council" and "plan and study the feasibility of regional project proposals", it certainly assigned to the Secretariat leadership responsibilities, for those tasks are clearly not routine in character. This function has, however, been gradually eroded first, by the assertion of professional leadership in their fields by the Centres when they were created, and second, by the creation for each Centre of a Governing Board whose members are often highly-appreciated professionals

who also enjoy the confidence of their Ministers of Education. Finally, high education ministry officials of member states, participating in preliminary discussions of issues in the crucial meeting called PDM, before final decisions are taken by the Ministers themselves in the Council, further reduced the Secretariat's leadership role.

4.1 Activities and Outcomes

When the Council wants studies on new proposals or reviews undertaken by the Secretariat, the latter appears to adopt one of two strategies. It either organises a meeting of able and knowledgeable individuals through a conference, seminar or workshop, or it utilizes the services of a consultant. There are some very important reasons for adopting this approach. The Secretariat is patently thin on professional resources now available; the on-going duties of the three programme officers, the Director, and his deputy make it impossible for any one of them to give adequate time for any such study. Even if the staff at the Secretariat had the time to undertake the study it would not always have the necessary expertise for the purpose. Also, there is the ever-present problem of financial capability. By planning a conference or by looking for a consultant, the Secretariat is in a position to seek external financial aid or technical assistance for the task. When this occurs the Secretariat's apparent role decreases because the guidance and leadership it provides, are behind the scenes. Thus it misses out when results obtained are naturally assigned to the work of the planning or reviewing experts. Nor does it get much credit in the field for obtaining the funds fo. the exercise because these are not available for expenditure bv the Centres.

The Centre Directors have come to play an important role in shaping resolutions of their Governing Boards. At the PDM the Centre Directors and high officials of the Ministries of Education of the member countries are brought together. It is in this meeting that draft resolutions and the tentative agenda for the Council meeting are agreed upon in an "acceptable" form, based on those prepared and put forward by the Secretariat. Thus outcomes, which should be attributed to the Secretariat's activities, sometimes requiring long hours of gathering and organizing information, examining options for possible courses of action, and recommending one that offers the most advantage to the Organization, are submerged in the more visible discussions or debates at the meeting. Do such activities not constitute, at least in part, tasks expected to come under professional leadership?

Interviews with previous employees have provided evidence that the staff of the Secretariat have indeed had worthwhile and sound ideas which have been put forward and have been implemented, that leadership has truly been provided. But because these ideas are usually considered and reviewed at both the CDM and PDM they become a group proposal no longer attributable to the Secretariat. Nevertheless, it appears that the fountain head of new proposals is in the Ministry of Education of each country. A further source lies in seminars. The Secretariat, saddled with a heavy workload, tends to be a catalizer and less of an innovator of ideas. This is consistent with the position taken by some of present staff members of the Secretariat. When asked about their leadership role the answers included statements similar to the ones that follow, each one representing a different respondent. "It is the Secretariat's responsibility to facilitate the work and ideas coming from the centres, consultants' reports, etc." "It exercises leadership to the degree that it sees these ideas do not get bypassed or overlooked;" "It is up to the Centre, not the Secretariat to initiate." Since the Secretariat as the executive and administrative arm of the Council has a responsibility to review the Centres' work and comment on it where appropriate, it exercises a limited amount of leadership in this way.

4.2 Discussion

There would be little value in listing the various leadership activities of the Secretariat, since the pattern seems similar in every case. The obvious question is whether such a pattern is a good one.

The answer depends on whether one wants the Secretariat to be strong enough to effectively perform its assigned functions. The individual Centres have a great deal of strength and most of them are in a position to bring considerable resources to bear on an issue that is important to their Centre. It is to the Centres' advantage to ensure that the Secretariat does not get too big, or too strong, or too powerful. Indeed the emphasis on the Centres' independence and strength has had many positive outcomes for their own growth as well as for enhancing their usefulness to the region, but may it not be legitimately asked whether for the future, these goals could be achieved even more effectively with a strong Secretariat, and also whether SEAMEO should not look to the Secretariat as a means of developing a total, dynamic programme and preventing it from being congealed into the domains presently covered by the Centres?

The use of the CDM as a "negotiating" ground for discussions "with no holds barred", as one interviewee described it, helps to give the Organization regional strength and minimizes unhealthy rivalries between individual Centres.

At present, the result seems to be that the Centres, as represented by their heads, do not hold the Secretariat in very high regard. They recognize the need for centralized co-ordination; they appreciate the importance of encouraging co-operation and the maintenance of regionalism but they do not fully accept the Secretariat as a means, more advantageously positioned than theirs, for achieving these ends. On its side the Secretariat has resorted to developing "common procedures" to follow, or "common standards" to measure up to, or "common safeguards" to maintain the Organization's integrity. This is done quite properly through the CDM after which the Secretariat tends to direct some of its efforts to "reminding" the Centres of their agreements, of the Council resolutions, and the way that things should be done in general in consonance with legal instruments. In making this comment, the evaluators do not suggest that their role is unproductive, but it is seen essentially as one having a negative thrust towards holding Centres in check -- a role which hardly falls under high-minded leadership.

There is one other serious problem. Good staff is essential for the senior posts at the Secretariat. Such good people find it difficult to operate repeatedly in a minor role, for it can dampen enthusiasm and initiative -- a condition which encourages the development of non-creative bureaucratic modes of operation.

Is this situation a healthy state of affairs in an Organization which seeks a dynamism so as to be able to adequately respond to the continually evolving educational conditions of Southeast Asia?

4.3 Possible Directions

Unfortunately there are no easy answers. The Centres should not be weakened nor should the Secretariat usurp their present roles as innovators and professional leaders in their domains. To this sub-team it is obvious that the Secretariat has to be strengthened in some way. This has to be achieved in a manner that will not conflict with the existing Centres. One answer which is long-term is for the Secretariat to develop an integrative programme strategy. This means starting afresh with the purposes of the Organization, defined in the Charter, as targets for putting together a meaningful integrated

programme for the Organization, instead of just having the present collection of separate Centre programmes. This task has to be done jointly with Centre Directors in close consultations with Ministry of Education officials. Where the programme needs reshaping towards new directions, or streamlining by shedding off parts that duplicate what member states have acquired new capabilities to perform, the programme has to be appropriately reconstructed. Another answer appears to be one which would assign the Secretariat some regional projects and responsibilities of the network type of associated institutions. Thus the sub-team sees the emerging project of Fine Arts and Archaeology (which was to have been based in Cambodia) as one in which the project leadership responsibilities might remain in the Secretariat, given the appropriate staff for the purpose.

The above observations are not to be taken as definitive recommendations but rather as suggestions. With these thoughts in mind it is recommended that:

4.3.1 The Secretariat reexamine its leadership role and prepare a plan indicating appropriate action which it sees as strengthening the Secretariat's leadership role without adversely affecting the operation of the existing Centres. This should be regarded in the light of the mandate of the Charter on the role of the Secretariat. It would seem clear that this activity has to be undertaken in close co-operation with Ministry of Education officials of the member countries.

4.3.2 The Council closely examine the question of a centrally-based leadership in the Organization and see how the above-mentioned plan will reinforce the collective leadership of its minister-members for the educational development of the region.

5. The Secretariat as a Fund Raiser and Fund Manager

For the Centres this is regarded as the Secretariat's major role. This chapter's introduction already indicated the importance of the Special Funds which are raised and administered by the Secretariat. The general issue of funding is sufficiently complex and important that it will also be dealt with in the final chapter; however, here the Secretariat's present role is examined.

5.1 Activities and Outcomes

The two activities of fund raising and fund management will be covered in two sections as these responsibilities tend to be quite clearly separated within the Secretariat.

5.1.1 Fund Raising. It is the practice for the Director of the Secretariat to go on an annual globe-circling, fund-raising mission usually during the September-October period. As the Director serves a three-year tour of duty with practically no prospect for reappointment, this comparatively short term of service leads to several consequences in fund raising. For a new director the first fund raising mission is, at least partly; a familiarization exercise. On his second trip one can expect to see campaign skills, developed by experience, being put to work; and by the third trip, it should be clear how effective the incumbent is as a fund raiser. But by then, regardless of success, the Secretariat is anticipating the arrival of another Director. If fund raising is such a vital function of the Director his present short tenure does not work to conserve, for the benefit of SEAMEO, the acquired skills. Moreover one interviewee pointed out that success as a fund-raiser depended not only on the Director's strengths and leadership qualities as an individual and knowledge of the programmes he is putting forward, but also on previous personal contacts and professional prestige that he commands.

In recent years, the Secretariat has fairly well succeeded in raising sufficient Special Funds. To do so, however, it has dropped the category of "research" from Special Funds because some donors have taken a negative attitude thereto. Furthermore, it has kept the allowance for students tightly restricted so that after paying for tuition, food and accommodation, only a very minimal amount remains for transportation, laundry, postage, stationery, toiletries, etc., and essentially none for clothing, recreational activities and the like. Shortage of money is a common complaint among course participants. The problem arises in various specific ways depending on local costs, whether meals are purchased separately from accommodation, and of course the length of the trainee's programme is also significant.

Though there has been an encouraging response among donors to the Special Fund there is a pervading feeling that donations will not be as easy to obtain as in the past. It would be wise then to be prepared for "harder times" ahead. That the Secretariat is aware of the situation is not to be doubted. It might be well for it to consider certain views expressed by some interviewees. One said that

a year-round contact scheme be considered with particular attention to the representatives of donor countries or agencies in Bangkok. Since the dates for making decisions among donors may have a wide spread during the year, according to another interviewee, this fund raising mission may be able to time appropriately its visits in some but not in other countries. These and similar other observations would be worthwhile considering in developing a fruitful fund raising plan which the Secretariat appears to be preparing.

The Secretariat also appears to have been reasonably successful in finding external support for its own conferences and special projects, such as this external evaluation, and technical assistance for itself in the form of consultants (a number of them aided the Secretariat in the past) and experts to serve on the present evaluation team.

On the other hand, through no fault of its own, it does not seem to be in as good a position as Centre Directors to obtain funds for such things as the packaged projects, proposed by the individual Centres.

5.1.2 Fund Management. The Financial Operations Manual (FOM) is intended to be the reference guide for the financial aspects of all Centres and their operations. Although there is some unhappiness in Centres with the FOM mainly due to the insufficient flexibility of certain requirements, imperfections can be remedied and are being attended to by the Secretariat. There are existing procedures for revision and plans to reexamine the FOM at regular intervals.

Its introduction provides some standardization of accounting procedures. The use of an international audit firm for the Centres provides another strategy for obtaining consistent and accurate reporting. The same firm has been employed for a management audit and it appears that the Secretariat favours the continuance of a management audit at least every two years.

Not all Centres welcome these procedures. Some, complain that there is not enough place for making adjustments, when absolutely needed, in the FOM. Others do not wish to pay the fees for the international firm which are higher than those of national firms that they can employ for the purpose. There are situations where requirements of the host government complicate things for the Centre. This is true where certain local accounting and auditing procedures require a second set of financial records. Finally, the management audit has received mixed comments. In at least one Centre the suggestions were found to be helpful. In another Centre it was seen

as an unnecessary interruption by young staff who could well have learned from the well-organized, existing procedures.

5.2 Discussion

It is understandable, but unfortunate, that clearly designed, consistent procedures were not established at the beginning of SEAMEO. Probably, some of the Centres and host governments tend to underestimate the importance of some of these procedures. One of SEAMEO's strengths is that donors and supporters from outside South East Asia have generally a high level of trust in SEAMEO. Their continuing technical and financial support of SEAMEO projects is one manifestation of this trust. Many of these donors have had unhappy experiences, elsewhere with financial support that was not used in accordance with their wishes. They are more willing to support SEAMEO when they know that their money has been spent as promised. In addition, we must report that some donors prefer auditing work performed by any competent firm having a reputable regional coverage. It is not that they do not trust local, private auditors, but that they have raised the question as to whether these auditors would go deep enough into fiscal affairs in which host governments are greatly involved. Inappropriate as this attitude may be, SEAMEO has a large stake in doing everything within its power to retain its excellent reputation for honesty with donors.

The sub-team was also struck by the different ways in which the Centres dealt with the resources they receive. Nonetheless, it should be possible for the Secretariat to see in summary form the continuing patterns of support for the Centres. The forms devised by the sub-team are not adequate for that purpose. (See Appendixes 1, 2, 3, 4, 5, 6, 6a and 7 in ANNEX VI)

5.3 Recommendations

Participation in regional programmes assumes some small sacrifice of national control. Host countries have already found ways of accommodating this as evidenced in the Charter, the Enabling Instruments and the Agreements for hosting a Centre. Although it is accepted in the Funding Principles of SEAMEO that the funds which support a Centre in a given country be treated as international funds, in practice, in certain Centres, the funds for operation and capital expenditures provided by the host countries are still subject to those countries control procedures. It is recommended that:

5.3.1 Funds, once they are made available for appropriation for the Centres, be formally declared by a resolution of the Council as SEAMEO funds, subject only to the uniform SEAMEO auditing procedures. This requirement would give a greater measure of regionality to each Centre and avoid the impression that the Centre, because it is largely supported by its host government, is therefore a "national" contribution to SEAMEO. The financial contribution is, but not the Centre.

5.3.2 Following from the FCM, devices should be developed for recording both the flow-through of funds and also the flow-through or all services, technical assistance and donations in kind.

5.3.3 In the development of such procedures an effort be made to maintain a sense of tolerance and flexibility by all parties concerned.

5.3.4 The Secretariat should consider the normal practice adopted by aid-fund recipients of setting aside part of the aid-fund to meet the cost of administering the project to be assisted. This course has to be done with the consent of the aid-fund donor.

5.4 Comment

The above recommendations may be viewed as difficult or even unpleasant to carry out. Each Centre has developed a modus vivendi which it would not want upset. In looking to the future these recommendations are seen as one strategy for maintaining a healthy measure of regional emphasis and regional control. If the member governments wish to maintain, and possibly strengthen, their regional thrust, then there should be a Secretariat that has appropriate authority and a Secretariat that they and the Centres can rely on and appreciate.

6. The Secretariat as a Provider of Service

The service role of the Secretariat which seemed to be clearly present in some resolutions of the Council was not as clearly present from the point of view of the field.

6.1 Management of Council Meetings, CDM, FDM and Conferences

Questions on this topic were for the most part passed over quickly by respondents with, "I guess they do okay". A few respondents were not quite as positive. One Centre Director felt that the attendance of so many of the Secretariat staff members at Council meetings was unnecessarily costly. Another saw the quantity and length

of the reports and other documents considered at the Council Meeting as excessive. Still another saw the management aspects as a routine which should be easily handled by any normal organization's secretariat.

The questions posed by the sub-team regarding alternative meeting schedules (e.g. scheduling the PDM just before the Council meeting) got an unenthusiastic response with two exceptions. Of those many persons interviewed one did agree that a revised schedule of meetings was workable. In spite of the general lack of support for this point of view the sub-team will suggest it, if only to try and stimulate more thought towards other strategies of meetings. Also the scheme should result in a saving of time and effort now devoted to reproducing working papers. The Secretariat's positions indicated in its working papers should be presented to the Council and comments from the PDM could be presented as a separate accompanying document. This procedure not only saves effort and time but also enables the Council to benefit from the results of the thinking of two bodies particularly when trying to solve serious problems and alternative options have to be considered.

Finally, there were concerns about the PDM. The high officials have no formal place in the structure of SEAMEO as defined by the Charter, yet they sometimes are reported to exercise an overwhelming influence in the meeting. This is an extremely sensitive issue since some Centre Directors, although recognized as SEAMEO officers, are in fact technically still government employees on secondment to the Centres. The sub-team believes that the mixing of implementors in the person of Centre Directors and High Officials who are closely associated to decision-makers in the person of the Ministers of Education, with the Secretariat playing the role which is somewhat like that of broker, is open to question. Is there an alternative? The sub-team will attempt to present one such alternative structure in Chapter 10.

6.2 Service to the Centres

This function is generally seen by the Centres as a small one but the Director of the Secretariat (or his representative) is seen as providing certain services at the Governing Board meetings when he explains to them, interprets for them, or advises them about the decisions and resolutions of the Council. Nevertheless properly discharged, this service could be very useful, for the Secretariat Director can communicate to each Centre the experience obtained in other Centres or elsewhere concerning common problems. This is an area of service in which the Secretariat could make a more significant contribution.

The sub-team observed also that during INNOTECH's temporary stay in Bangkok the Secretariat had to provide a variety of services and assistance which were demanding of time and resources. Further, and more significantly, the initiatives the Secretariat has taken in an emergency and the resourcefulness it has applied to keep INNOTECH alive are not merely service activities but indicators of leadership.

6.3 Service to Member States

The Secretariat acts as the communication centre for the member states, acting collectively through SEAMEO, on SEAMEO matters which they need to consider, or study, or act upon, and on which the Secretariat provides relevant information, comment and advice. Furthermore, the Secretariat is the body which communicates their SEAMEO Special Fund and other aid requirements to interested donors. It works to obtain such assistance, without which the training and other programmes beneficial to them (the member states) would be seriously reduced. Through the Secretariat's special activities, such as seminars and meetings, professionals from and outside the region in SEAMEO's fields of education, science and culture have come together to exchange ideas and in some instances to make plans and recommendations to SEAMEO concerning new projects. The assessment of the Secretariat's services in this regard has been generally very favourable.

6.4 Information Services

No amount of tact can conceal the fact that the information, public relations, and publications programme of the Secretariat leaves much to be desired. Although some respondents tend to be apologetic about this problem, it must be stated that the sub-team sees this sector of the Secretariat as understaffed undersupported and generally unappreciated.

The documentation centre has become a repository of indexed items. Even some of the staff members at the Secretariat do not seem to fully appreciate the amount of work required to maintain a collection of documents to which they can have ready access. Using the plea of shortage of staff, which is true, the Secretariat has made only modest efforts to publicize the Organization in Bangkok and little if any effort in member countries. The supplement to the Bangkok Post was a good idea but it was only in English and only in Bangkok. The Secretariat's only regular publication -- the Digest -- could be made more attractive and interesting. There should be fewer photographs of persons sitting behind tables and articles about award ceremonies. There should be more articles on programmes especially activities that have a "developmental" story to tell. The Centres

generally have their own newsletters of one sort or another. The best articles in the Digest at present deal with summaries of conference papers, or a description of some programme. There is a real place for theme articles, or for interpretative ones. What are some of the implications of the external evaluation project? What was the significance of the report by the consultant who reviewed the Centres'self evaluations? What is the relationship between UNESCO and SEAMEO? These are just samples of the kind of topics that could be explored for the Digest. Surely there is no shortage of possible ideas which could make the Digest a journal worth reading.

The documentation task is a joint undertaking. Programme officers and those in finance prepare working papers and reports in their areas of responsibility while the Documentation Officer looks after the production of prepared documents for Council Meetings. As a whole this Secretariat activity has been considered adequate. However, the whole public information programme seems to be fragmented and operated without a clear design or plan. For this reason it is unanimously criticized as generally ineffective.

It is the opinion of this sub-team that a regional Organization should have a good information and publications programme. Because the individual Centres are strong and the place "where the action is", then some of the information may even be taken directly from the Centres' publications; it can appropriately be re-published in a modified form under the SEAMEO banner to reach a very different, wider audience. We agree with the prevailing opinion in the Secretariat that its information programme is the sector in most need of immediate and major improvement.

6.5 <u>Discussion</u>

The services provided by an organisation's secretariat are often the sole basis by which outsiders judge an organization. Measured against this criterion the Secretariat needs to do much more to obtain high praise. The Secretariat has established a good reputation in providing services for meetings which have been generally seen as well managed. It is also true that many member country officials are appreciative of the Secretariat's services and some of those outside the member countries appreciate the carefully prepared documentation that they have received, yet the performance leaves room for improvement, particularly in providing information about SEAMEO.

6.6 Recommendations

The recommendations which follow are suggestions for improvement. If they are seen as difficult to implement then it is the wish of this sub-team that alternatives be developed to meet the problems being dealt with.

6.6.1 On a trial basis, the PIM if it is to be continued, be held shortly before the Council Meeting. Since the Secretariat brings several staff members to the Council Meeting they could be pressed into service to prepare notes on the recommendations agreed upon which could be quickly summarized for use at the Council Meeting in "covering" documents accompanying the Secretariat-prepared working papers. This way the Council can see for itself how each body has discharged its responsibility. In addition it can consider the options, if any, offered by each body on a given problem.

6.6.2 The PIM be held in the same country as the Council Meeting. This could provide an opportunity for the high officials to involve their staff more directly in SEAMEO affairs at least as observers.

6.6.3 The information and publications programme of the Secretariat be strengthened as soon as possible. The addition of a senior position responsible for both information and documentation is seen as a necessity. The addition of an editorial officer to look after editing, and such details as producing the Minutes of the Council Meetings should be considered.

6.6.4 A programme of information dissemination about SEAMEO and its activities be planned for application in the member countries. This could be done in the appropriate languages of the member countries and would be intended to raise the awareness of SEAMEO among at least the educational segments of the general population.

7. Is the Present Organization of the Secretariat Appropriate in Discharging Its Functions?

In answering this question, the evaluators examined three issues: Firstly, is the Secretariat's place in SEAMEO's total Organization in accordance with the functions which the Charter has assigned to it? Secondly, is the principle role of the Secretariat only that of secretariat to Council meetings and other conferences

of SEAMEO? Thirdly, is the present internal organisation of the Secretariat adequate to enable it to perform effectively its assigned role and functions?

As regards the first question, the evaluators have found a wide gap between what the Charter has mandated the Secretariat to do -- to execute the Council-adopted programmes -- and its actual performance. The bulk of SEAMEO's programme is carried out by the Centres. Only that part of the programme, not within the specialised fields of the Centres or that which involves domains of two or more Centres, falls under the Secretariat's present responsibility. By contrast regional projects of UNESCO have not been separated from its total programme and remain under the "execution" responsibility of its Secretariat acting through its field staff. The SEAMEO Secretariat, in theory as provided by its Charter, is a programme-execution body and should be staffed accordingly; in practice it is made to occupy itself with programme residues. May the SEAMEO Secretariat not act through the Organization's Regional Centres which perform directly the acts of execution?

Concerning the second question, again a quick reading of the Charter should settle any doubt that the Secretariat's main role is not that of just servicing conferences. Unfortunately, three conferences -- CDM, PEM and Council Meeting -- requiring voluminous paper work before and after each event, have taken what the evaluators believe to be a disproportionate part of the Secretariat's time and energy, and as a result the Secretariat is not regarded as much more than a conference Secretariat.

The answers to the first two questions appear to converge towards having a capable, programme-oriented Secretariat. It should not be too difficult to find an appropriate reply to the third question of Secretariat internal Organization. Should the professional staff, therein be subject specialists, broad-gauged educationalists, administrators, or strictly management operators with a background in business administration and economics? Interviewees gave varied answers to this question. One was of the opinion that competence in a given field should not be given undue weight, for the high educational qualifications required presumed professional competence, but instead the Secretariat should seek the most capable individuals. Others do not think much of staffing the Secretariat with just administrators; the preference is for professionals, probably broad-gauged generalists who, though lacking the specialist expertise available in the Centres, are nevertheless able to "understand" the

Centres and be positive in attitudes towards them. Probably the appropriate answer to the staffing problem, assuming that the Charter-assigned role of the Secretariat has to be carried out, lies in having a corps of broad-gauged educators in the expressed domains of SEAMEO (education, science and culture) with appropriate knowledge and skill in SEAMEO's total programme areas.

With the limited financial support furnished by the member countries it would of course be unrealistic to expect a greatly expanded Secretariat. The present structure should be maintained with certain changes which will be taken up in the next chapter where SEAMEO as a whole, will be examined.

8. General Observations and Comments about the Secretariat

Having surveyed the roles and functions of the Secretariat, its modes of operation, and its structure in relation therewith the evaluators will now attempt to deal with its major accomplishments, the overall cost of its operation and a general assessment of it as one of the principal organs of SEAMEO.

8.1 What has the Secretariat Accomplished during the Last Ten Years?

Council action making Centres separate from the Secretariat instead of operating units thereof in accordance with the Secretariat's Charter-assigned function "to execute the programmes of the Council", has not only weakened the Secretariat, but also has created a gray area of relationship between it and the programme-oriented Centres. The result is that the Centres lay a claim, obviously legitimate, on the outcomes of their programme operation as due to their own efforts with the Secretariat assigned only a very minor credit corresponding to the input effect of Special Funds. Even here success in effectively utilising these funds for training scholars, conducting research, and carrying out exchanges is ascribed to the Centres' own action. Within the limitations thus described it is nevertheless possible to ascertain outputs which can justly be cited to the credit of the Secretariat. These are briefly enumerated below:

When the Secretariat was just a small body of SEAMEO, it set about the task of obtaining the member states' co-operation in project development which led to the interim operation, and establishment of the Centres/Project. It should be plain that, although the establishment of these regional Centres/Project are the product of co-operation of many countries and agencies the Secretariat was the one body working continuously to have the various resources put together. The initiation of these Centres/Project consitute, without doubt, the Secretariat's major accomplishment.

When the Centres started their programme activities it was with the expectation that these activities would be continuing on a regular basis. This was accomplished by means of the support provided by Special Funds which became the Secretariat's responsibility to raise every year. Except in one year, when there was a shortfall, the Secretariat was able to raise enough Special Funds which from mid-1970 to mid-1976 have reached the respectable total of US$7,791,607. The Secretariat deserves praise for this accomplishment.

Under the guidance of the Council it has also succeeded, through meetings and seminars, to obtain valuable information, and expert recommendations for SEAMEO's programme and co-operative action in a variety of educational fields. It should be mentioned here, however, that the obtaining of recommendations, no matter how sound these recommendations may be (e.g. recognition by member countries of diplomas or degrees earned in SEAMEO Centres/Project) does not automatically result in benefiting the region, for there still remain two tasks: acceptance in some form and implementation. So any success discernible in this area depends on the readiness of the member states to respond to the Secretariat's follow-up efforts. In addition it should be repeated here that it was mainly the prompt action of the Secretariat which saved INNOTECH from extinction.

By far the most difficult area of accomplishments to assess is regional co-operation for two reasons: First, results obtained in this domain are attributable, not just to the Secretariat, but to every organ or unit of SEAMEO. Second, many outcomes are less than apparent, often invisible. The value of having educators from the region study, think, discuss and work together cannot be measured directly. The results which increase human tolerance and understanding, as well as leading to the development of better education in the member countries, are by no means insignificant but extremely elusive to assess. One can say that as the Secretariat is the Council's centrally-positioned body to ensure that all other SEAMEO units give due regard to regionality in their activities it must receive credit for helping facilitate activities leading to regional understanding and co-operation.

One could continue with this enumeration of achievements, however, in its self-evaluation the Secretariat has made a quantitative assessment of its accomplishments and they are listed in the Annex. The list is long and impressive. Both the Secretariat, in its candid self-evaluation report, and the sub-team in several preceding sections of this chapter have dealt with some deficiencies in the Secretariat. There have been creditable achievements which have drawn scant notice and praise and the sub-team wishes them recognised.

8.2 How Much Has the Secretariat Cost SEAMEO?

Productivity entails cost, hence it is logical to ask the above question. In 1975-76 the total amount received by the Secretariat to support itself was US$387,545 out of which US227,621 came as contributions of member states for operational costs; US$32,502 from the host country for different purposes; US$17,987 from associate members, also for different purposes; US$109,434 from various donors for special projects (e.g. this external evaluation). The funds for operation mentioned above are now caught in a tight squeeze because of the non-receipt of contributions from three inactive member states. This financial constraint has forced the Secretariat to forego even necessary expenditures (e.g., non-adjustment of the basic salaries of its personnel for many years), which cannot but have adverse effects on its efficiency in the long-run. In order to continue operating it therefore has had to make "forced savings" amounting to approximately 18%. In the circumstances one would be inclined to question whether its viability would not suffer irrepairable damage.

Over the last nine years it has used funds amounting to US$1,376,508 for operation; US$853,918 for special projects and activities; US$265,795 for other purposes, all making a total of US$2,496,221 (See Table 1 Chapter 10), compared to the total cost of SEAMEO (combined costs of BIOTROP, INNOTECH, RECSAM, RELC, SEARCA, TROPMED/CCB and the Secretariat), the Secretariat's cost is approximately 7%! Judged from its productivity in raising Special Funds for the Centres/Project (the amount of US$1,749,895 was raised in F.Y. 1975-1976) the corresponding year's cost of the Secretariat, indicated in the immediately preceding paragraph, is indeed small! And this productivity, it should be noted, is in only one of its major functions.

A few of the recommendations that will be made in Chapter 10 will require a modest increase in the level of the Secretariat's expenditures.

8.3 Concluding Statement

Secretariats of many organizations seldom get full credit for thier activities which often go unnoticed and unappreciated yet which provide for the organizations' own stability, continuity and even dynamism. Nonetheless, as has been noted, while lack of appreciation of a secretariat is common it was somewhat surprising to find SEAMEO field units viewing the Secretariat almost in an adversary role.

This chapter has been written from the point of view that the Secretariat should be strengthened in order to change these less than healthy relationships. There is an alternative point of view. The Regional Centres/Project, having their own Governing Boards, lead a nearly autonomous existence although their decisions are subject to a final review by the Council which often than not approves. If this rather loose situation, in which the collective leadership of the Council members is to be exercised in a less active manner, seems acceptable then the Secretariat has to remain essentially as it is now, but if the original scheme, as embodied in the Charter, has to be achieved, then there is a case for reform. The sub-team supports the latter position for two reasons: First; if the Secretariat is to be an effective tool in helping the Ministers of Education exercise collective leadership as regards matters of regional import in their domains of action, no other SEAMEO unit is better situated to help. It is in a central position, not dependent on any member country, and can have a clearer view of the general educational problems and needs of the region for all areas than a specialized institution or Centre. Second, if the Secretariat is to be a credible contact body for other organizations, donor countries and agencies, which would find it somewhat less convenient and perhaps less fruitful to have to deal with so many different Centres, each wanting outside assistance, then a strong Secretariat enjoying the confidence and respect from within the Organization itself is a necessity. For the Secretariat treated as not much more than a fund-raising agency, would gradually lose its effectiveness.

It is of course recognized that the issue of strengthening the Secretariat, to comply with the important role assigned to it by the Charter, is not one that can be easily resolved. The professional, senior staff at the Secretariat tend to be more transient than at the Centres, although exceptions can easily be cited. This too has likely affected some of the relationships. The rather frequent change of Directors at SEAMEO (there have been six during a ten-year period if an Acting Director is to be included in the counting), in itself, may be regarded as a factor contributing to weakness, expecially so since it would seem to the Centres that the Secretariat Director's primary role is to raise funds and, only secondly, to promote regionalism. Leadership is not considered to be a Secretariat function from this point of view or even from some of the Secretariat's professionals.

It would seem pertinent to suggest that for SEAMEO two kinds of leadership should be distinguished clearly: firstly, that exercised collectively for the region in the field of education by the Ministers of Education -- a broad, statesman-like type of leadership characterized by a perceptive vision of what is good for the whole region for which the Secretariat has to give assistance. Secondly, the professional

leadership in specialised domains required at the Centres. These two kinds of leadership are not adversary to one another; they are complementary.

It is up to SEAMEO to decide the extent to which it wishes the present situation to continue. Some team members who evaluated strong Centres feel that the Centres are so well established that from the Centres' point of view a strong Secretariat is not seen as necessary. Be that as it may, if SEAMEO wishes to grow and develop, or even just maintain its status, it will require a stronger Secretariat, albeit not necessarily cast in the present framework which has a programme division as the "professional" arm of the Secretariat. To the region and the outside world, SEAMEO's total programme cannot and should not be presented to be "just" a collection of different, individual Centre programmes. A professional body is required with expertise in synthesizing these programmes and their parts on training, research, etc., meaningfully relating them to the Organization's goals; and suggesting appropriate, overall priorities and strategies so that the one total programme resulting from the process is truly SEAMEO's own and not just individual Centres'. Furthermore, and more importantly, even before such synthesis is attempted, the professional staff has to construct a total, coherent programme proper to the Organization in which the present Centre projects are seen as meaningful parts and in which other priority areas for further action are shown as emerging domains for SEAMEO action. Such a professional body has to work continuously and not just in an ad-hoc, task-force manner. Such a body can be no other than SEAMEO's own Secretariat.

In conclusion, it is the sub-team's opinion that considerable thought should be given to the legitimate roles for the Secretariat and that the changes needed to achieve them will, in the present climate, have to be fully acceptable to, and supported by, the Centre Directors themselves. But only by Council action can such changes be authorized. The SEAMEO Secretariat is not merely a conference secretariat; it is a regional organization's secretariat with important executive and programme responsibilities assigned to it by SEAMEO's Charter.

CHAPTER 10

GENERAL OBSERVATIONS AND COMMENTS

The preceding Chapter 9 has dealt with the Secretariat considered as a SEAMEO operating unit, besides being its headquarters, while the six chapters before that have dealt on the Centres/Project taken separately, namely, BIOTROP, INNOTECH, RECSAM, RELC, SEARCA and TROPMED. In compliance with the mandate to apply an integrated approach in evaluating all the SEAMEO units, it is therefore necessary to regard them all together in SEAMEO.

The planned purpose of this chapter was to identify those observations which were common to the various Centres/Project and synthesize them within a series of general suggestions. This intention has been slightly modified to focus attention also on issues of vital import affecting the very existence of SEAMEO. As the team leader and assistant team leader had the widest scope in their assignment, they were able to view the Organization as a whole. Their ideas resulting from this vantage point are set forth in this chapter; they -- and they alone -- are responsible for them. Before doing this however, it would seem helpful to understand the general character of SEAMEO.

SEAMEO is an organization of Ministers of Education of Southeast Asian countries and its history tells the rationale behind this accent on the personal element. It was an expression of the desire of the founding Ministers of Education for <u>collective leadership in education</u>. In reality, as evidenced by its Charter, SEAMEO is an organization of the Southeast Asian states, but in this obviously wider context the Education Ministers had hoped to work closely together to advance the cause of education in the region.

It was thought that this collective leadership would take the form of <u>technical co-operation</u>. While the political factor is clearly present since the members are sovereign states, the Organization's thrust in its acts as well as in its programmes is towards technical co-operation.

SEAMEO regards itself in its Charter as one regional Organization having a <u>single juridical personality</u>. However, the development of separate regional centres, corresponding to different educational domains, formulating and implementing their own programmes in a largely autonomous manner under their respective Enabling Instruments, has tended to create the impression of a "federation" of regional centres, especially so since these Centres, though identified as SEAMEO subordinate bodies, are governed by Governing Boards whose members are from the different member states. Though

the Council retains the ultimate power of control over the Centres, their Governing Boards act as decision-makers, at their level, and their decisions are normally approved.

In its early years SEAMEO did not develop one integrated programme corresponding to its domains, identified in its Charter as education, science and culture. Instead the Organization identified sectors of strength which its member countries already had in their educational systems. Then these countries offered them as possible nuclei for building SEAMEO programmes. Although the resulting programmes have flourished, they do not cover all areas of vital importance and priority; they seem to be a collection of programmes covering specific subject fields.

The emergence of the Centres with large autonomous powers, exercised by their Governing Boards, has in effect diminished the original Charter-granted authority of the Secretariat to execute programmes adopted by the Council. Hence there is a fragmentation of authority. There is therefore an obvious problem of clarifying responsibilities particularly in the gray area of relationships between Governing Boards and the Secretariat as well as between the Secretariat Director and the Centre Directors.

Although SEAMEO is a comparatively small organization in terms of membership coverage and budget, it has developed considerable diversity and complexity in its operations, judging from the many legal instruments which it has had to use as basis for applying resources to orderly day-to-day actions. Nowhere is such diversity more evident than in the sources and flow of funds and in the operational practices of its regional Centres/Project.

Keeping in mind the characteristics of SEAMEO described in the preceding paragraphs it is now time to discuss a number of issues which concern two or more of the Centres/Project, or have implications of a general character. For better presentation the first three clusters of issues listed below are identified as major concerns and the rest as other concerns of SEAMEO

Major Concerns
1. Political Concerns
2. Concerns about Regionalism
3. Concerns about the Structure and Programme of SEAMEO

Other Concerns

4. More Structure and Programme Concerns: "Models"
5. Some SEAMEO Financial Concerns
6. Productivity (Input and Output) a Concern of the Whole and Its Parts
7. Concerns over the Projection of SEAMEO's Image of Usefulness: Information Dissemination and Public Relations

Part 1 Major SEAMEO Concerns

1. Political Concerns

Determined from the start to focus joint efforts and resources on regional technical co-operation, the Organisation has managed to stay as free from politics and one could possibly hope for a regional Organization. There was little evidence of inter-country rivalries and disagreements having serious effects on the Organization. Instead one generally found tolerance and understanding in the Member States, the Secretariat and the Centres which should be present in a regional Organization. Nevertheless there are some politically tinged concerns felt in the Organisation which are too important to be ignored.

1.1 Inactive Member Countries

One such concern lies with the three, presently inactive, Indo-Chinese members. It is our considered opinion that even though a modus operandi has been put into effect, to provide a temporary way of continuing operations, the present situation could not continue for an indefinite period of time. If one or more of these three members returned to active status within two years at most, then the problem would tend to be adequately resolved. On the other hand, if it develops that none of these countries returns to active status within that period then it seems to us that some action should be taken to remove the Organization from its present position as regards regional coverage. The sub-team does not presume to suggest the form such future action should take. Furthermore, we agree that at present all efforts are properly directed towards bringing the three countries back to an active status. However, if, by the Council meeting in 1978, the present status continues, then the member countries should be prepared to discuss alternatives in order to take appropriate steps, so that the Organization can be fully active and there would be absolutely no uncertainly concerning the legality of the decisions taken by its highest organ -- the Council. Moreover, the resolution

of the problem is necessary, since the continuing non-collection of the contributions of the inactive members would eventually place the Organization in an embarrassing financial position once the reserve now being tapped to cover the non-collected contributions is exhausted.

1.2 Withdrawal from a Major Project

As of this writing one member country has withdrawn from TROPMED, which is a project consisting of a network of existing National Centres. Apparently there is no question about the member state's prerogative for such withdrawal, for a member state can even withdraw from the Organization in accordance with the Charter. The problem is political only because this lapse into "inactive" status by a member country in a major project, after having been an active participant for several years, reveals a disharmony which, in spite of laudable efforts so far exerted to resolve the issue(s) involved, remains as a crack in the solidarity of SEAMEO. The effect of the withdrawal is mainly to increase the share of the remaining participating countries in their contributions to support the project office.

Are there other possible reprecussions of a withdrawal of a member state from a major project of SEAMEO? We sincerely hope that there would be no further withdrawals, for they portend a weakness in regional co-operation. Unpalatable as it may be, it appears to be one of those problems which have to be faced, albeit treated with infinite tact and patience. By ignoring it one tends to rest unprepared with measures that should be given a great deal of forethought. Does the event mean that a member country could or should be selective in the major projects in which it wished to actively participate? What should be the proper disposition of the scholarships normally given before to the withdrawee? These and other questions cannot be evaded by the Organization. The sub-team believes that the issue is so important that it would be better to have it studied separately and with utmost care. We suggest that this first step be taken.

1.3 SEAMEO and ASEAN

Another possible area of concern, involving political considerations, is the recent reactivation of ASEAN into a more powerful regional grouping of states supported by heads of governments. ASEAN's domains of action, according to its Treaty of Amity and Co-operation as well as its Declaration, include assistance to

one another among its members "in the form of training and research facilities in the social, cultural, technical, scientific and administrative fields". As SEAMEO's fields of activities are in education, science and culture, there is here a great amount of overlapping. What will happen then to SEAMEO?

Obviously, as has already been mentioned, the issue will be decided at the highest political levels. Meantime one can only touch on possible options. Firstly, SEAMEO, having convincingly proven its viability and worth, having a different membership pattern (eight member states, and three associate members), having links with a large number of donor countries and organizations, may be allowed to continue on its present course in order to conserve these patently valuable gains. Secondly, SEAMEO might have a relationship (it could be formalized by some form of agreement) under which it may continue to function in a manner similar to that of UNESCO vis-a-vis the UNITED NATIONS. Thirdly, for reasons of economy SEAMEO might be integrated into ASEAN where the present SEAMEO Centres would find a new home.

Of the above-mentioned alternatives the first and the second were found by the sub-team to be the most popular choices among interviewees a few of whom did not feel disposed to express an opinion. One interviewee put forward the view that if SEAMEO cannot be left alone as it is now operating, then he would like to see the second alternative implemented. Another advanced the opinion that it does not really matter how SEAMEO would turn out in the end so long as its present regional Centres could function as effectively as they do now. The sub-team does not see any incompatibility between SEAMEO and ASEAN, and therefore they can only express here the wish (for it is not their concern to make a recommendation) that SEAMEO, which they found to be a widely-accepted Organization, presently enjoying the confidence and trust of many countries and entities even outside the region, would be allowed to carry on.

1.4 Member Country Contributions to Support the Secretariat

One last concern, basically financial in nature but having a political implication, is about the formula for computing the contributions of member states for the support of the Secretariat. The subject appears to have been thoroughly studied by a competent body, authorized by the Organization for the purpose, and as a result a new formula has been recommended to replace the present one. It is understandable, of course, that changes of this nature, viz., that increase the relative burden of some contributors and decrease

that of others, may pose a problem of acceptance -- sometime a difficult one -- for those in the first group. Nevertheless, to an observer, it would appear that if the moving spirit of regional co-operation is to continue its fine influence throughout Southeast Asia, then ways will have to be found to accommodate changing times; the cost seems relatively small, especially when set against the benefits.

2. Concerns about Regionalism: Regional Co-operation for Educational Development of Member Countries

Regional co-operation can both be an end and a means. In itself regional collaboration is a valuable ideal for it brings in its wake worthwhile human relationships in the form of friendship, mutual understanding, reciprocal respect and the like. On a more worldly level it is a tool to enhance development of the collaborating parties. It is chiefly in this latter sense that regional co-operation will be discussed in this section with SEAMEO being treated as an instrument for educational development.

2.1 SEAMEO's Concern about Sharing of Resources in Training and Other Regional Schemes

To keep SEAMEO strong and flourishing entails some sacrifices by the individual member countries. If a meaningful participation in a truly regional operation is desired, it will entail some small relaxation of national control in projects being hosted by the member states. These comments are not intended to be negative; rather they are to set the stage for some of the suggestions and recommendations that follow. They are, in fact, taken to indicate that the sub-team believes in the regionalism of SEAMEO and they know that there is a "cost" involved and furthermore are willing to suggest that the "cost" is worth paying. They would like to see SEAMEO flourish with its Centres and Project both present and future, a source of pride to the region and a source of genuine aid to the member countries themselves.

2.1.1 Sharing the Responsibility to Provide Staff at the Regional Centre. An analysis was made of the ways in which SEAMEO through a regional Centre mainly designed for training (with relevant functions in research, information dissemination, etc.) should relate to serving the needs of member states. While the regional Centre would, in certain respects, have to differ from similar national institutions in the member states the differences, if any, are mostly of degree or emphasis. They are nonetheless important. In both settings one would require competent, capable, qualified staff

but the competency at the regional Centre should stand in comparison with that in national institutions throughout the region. While one would expect the staff of the regional Centre to be recruited from beyond the borders of the host country one would especially expect all staff to be particularly interested in, and capable of dealing with, content that is of a regional character, not only with purely local content. The member countries are expected to share in the responsibility of staffing the Centre by sending well qualified professionals. This is a problem that has been long felt by all the Centres. The measures suggested to resolve the problem have been brought forward again and again. It would seem of little value for the sub-team to present them here. It is only the member states themselves that can solve this problem and it is to them that this appeal is being addressed.

2.1.2 Sending Course Participants to the Centres Who Possess a High-Multiplier-Potential. The scholars or course participants should be drawn from the region and there should not be a disproportion of scholars from the host country. Furthermore, the scholars at a regional Centre would often be at a more advanced level of study, would hold more responsible positions and consequently be older than typically one might find at a national centre. They would be more mature, more certain of their needs and more "mission oriented". Most important of all is the consideration that by their assignment or position, by their experience or training, and by their ability, they command enough influence in their home countries to give them "seed" quality in disseminating the new and better ideas and techniques obtainable at the regional Centre. Here again the problem of having key people as course participants is a general plaint in all the Centres. Again, as in the case of Centre staff, the plea for better selection of course participants is persistent and clear, and practical measures have been repeatedly voiced. The sub-team can only add theirs to that plea in the hope that national authorities will continue examining the problem with a view to minimizing it.

2.2 Training Courses at the Centre to Complement, Not to Compete with or Duplicate Courses at National Institutions.

The courses offered would typically reflect the above state of affairs. They would be oriented towards regional concerns and issues, but national needs found to be common and urgent to the member states would also be seriously taken into account. They would likely change in content and orientation oftener than at a

national institution. There would likely be a heavy emphasis on short courses and highly specialised "topical" courses or workshops and seminars in contrast to the more "traditional" courses that might be found at a national training institution which is naturally geared to serving more sharply defined national interests. Above all when national institutions have acquired the capacity to conduct the same courses given in the regional Centre, such courses should be phased out at the regional Centre to be replaced by new, urgently needed courses. Some regional Centres have given short courses many times. Is the regional Centre acting as an effective development agent in such a case? No criticism of a specific Centre is intended here but it might be worthwhile to develop a strategy to identify such courses.

2.3 Location and Support of a Regional Centre

The actual location of a regional centre is expected, ideally, to be close to international transportation, and appropriate information sources such as first-rate libraries, laboratories, appropriate field settings, etc., (some such resources have, of course, had to be developed by the Centres). For two of the SEAMEO Centres the important problem of location was decided by a more important consideration - the availability of a well-regarded institution to which that Centre was linked to help it make a good start.

More important than location are funding and support. Even where a regional centre depends on a host government for much of its funding it should not be treated as another national institution. Although the host government has a limit to the resources it can bestow on a regional centre these should not be directly tied to the type of programmes required by the host government, nor should it expect the funds to be spent according to its own priorities. In addition, it would be expected that, in one way or another, a regional centre would see a clearly identifiable portion of its resources and support coming from outside the host country.

It is not intended in this section to dwell on the common financing concerns of the SEAMEO Centres. Suffice it to mention here that the principle of regional co-operation would strongly suggest the principle that all funds for the Centre, whether coming from the host government or any other source should be treated as SEAMEO funds. In this sense SEAMEO has to be taken as a regional entity and the fund supporting the Centre as regional funds. It is extremely important that this principle be accepted so that there would be no equivocation as to whom the Centre Director is answerable in the management of the funds.

2.4 Some Principles/Strategies regarding the Application of Regional Co-operation in SEAMEO Centres' Operations.

Some of the principles which regional centres might then be expected to follow would be that they:

- Meet the member countries' most urgently felt requirements.
- Satisfy the needs common to the greatest number among the member countries.
- Complement and reinforce similar undertakings in operation in the member countries. Duplication and competition should be avoided.
- Yield results readily transferable to end-users in the region.
- Relate to the socio-economic development of the member states.
- Be regional in representation as regards participants and, as far as possible, the training and research staff.
- Result in the improvement of participants, including the teaching staff, in terms of growth in knowledge, more productive skills, and desirable attitudes.
- Provide practical experience in solving work-related problems, particularly those that make the assisted individuals or entities acquire self-development capacities to be able to stand on their own.
- Pool regional, technical and administrative talent in their (the activities) management.

One should hasten to add that, as desired in the Charter of SEAMEO, educational development through regional co-operation should be development-oriented, viz., in joint undertakings. The focus should be on maximising the development of the capabilities of aid-recipients so as to eventually enable them to be on their own in any given area of need.

2.5 Recommendations

To particularly emphasize some points which have appeared in reports regarding the individual Centres some of the above points will be repeated in the form of recommendations. It is recommended that:

2.5.1 The member countries periodically review (and thus improve) their selection procedures of potential course participants so that those chosen will come closer to the criteria set forth by the Centres, mainly in terms of their participants' previous experiences, and likely positions of responsibility on return to their own countries.

2.5.2 The member countries increase their efforts to find highly competent staff to serve at the various regional Centres and the Secretariat. Furthermore, the member countries are expected to continue making the necessary provisions to ensure that an individual serving at a regional Centre does not lose tenure, retirement benefits, opportunity for promotion and so on.

2.5.3 In the continuing search for such staff, the member countries not limit their search to any one source such as university staff, government employees, including those in the Ministry of Education, and so on. (It is recognized that this is already done in many instances, however, the situations existing in most of the Centres and the Secretariat still point to the need for a more vigorous action.)

2.5.4 A study be made to arrive at a common and acceptable understanding of the meaning of SEAMEO regional co-operation and its implications in programmes, operational procedures, funding, relationships, and so on. There are too many interpretations of the phrase "regional co-operation", which sometimes are confusing, or even conflicting, when applied to specific situations. If the broad vision of co-operation that SEAMEO had from its beginning is to continue it would seem appropriate to take steps to give it real meaning in specific actions.

3. Concerns about the Structure and Programme of SEAMEO

The structure of SEAMEO can no more be divorced from its programme than that programme can be divorced from the Organisation's goals. In this section the goals will be kept in mind while attention will be focussed on the closely related concerns about structure and programme.

3.1 Need for Drawing Regional Centres More Closely to SEAMEO Central Leadership

As has been noted before, the individual Centres and CCB wield considerable power and independence within the Organisation. The initial attempt to develop strong, important Centres for the most

part has been remarkably successful, especially in terms of the relatively modest financial investment which has been made. It is the evaluators' opinion that now is an excellent time to re-examine the present structures. As the Council considers possible changes in general programme strategy, it may wish to consider tying the centres more closely together under its own leadership. To see where and how this may best be accomplished, while maximising the Centres' usefulness, might well be considered in the present state of affairs.

3.2 Vital Role of High Ministry of Education Officials in SEAMEO Central Leadership

Southeast Asian Ministers of Education, like their counterparts elsewhere, are leaders burdened with weighty matters of state; to them SEAMEO is but one of many responsibilities. Their Council meeting, except for emergencies, is held annually. In this regard the Secretariat is required to furnish the professional service that will aid them in the exercise of collective leadership in policy making for SEAMEO. High ministry officials accompanying them to the Council meeting also provide them advice. In performing such task the high officials may in turn, be assisted by SEAMEO affairs officers and Governing Board members of their respective countries.

The working papers at the Council meeting will have been discussed at the meeting of PDM/HO (The Project Directors and High Officials). This group is convened by the Secretariat and is chaired by its Director. Although, in principle, it has no official status and can thus have only an advisory capacity, it is a meeting of considerable importance, for it lays the ground work for the Council meeting. Interviewees have reported on this meeting from various points of view. These opinions which were expressed by different interviewees illustrate some of the confusion which exists: "The Secretariat dominates the meeting too much". "In certain instances, the high officials exercise their authority too strongly". "The Secretariat sometimes ignores comments of high officials when it prepares the working papers for the Council". "The opinions of Centre Directors can neither be fully nor freely expressed in this meeting since the high officials can speak from a position of authority as representatives of member countries". "This meeting is important and is required to provide proper planning for the Council Meeting". "The PDM could well be scheduled immediately before the Council meeting as the working papers do not

need to be rewritten - let the high officials express their points of view to their ministers". "SEAMEO desk officers should be present at the FEM/MO and the Council meeting". The mixing of high officials and Centre Directors as full participants in the meeting has produced mixed reactions which do not add to the clarification of responsibilities of the Secretariat to the Council. The recommendation that comes later, regarding an Executive Committee, may offer a solution to the situation.

3.3 Important Role of Centre Directors

What has preceeded the FEM/MO? The Centres have had the meetings of their Governing Boards. From these meetings have emerged working papers and recommendations to be forwarded to the Council. Officially no change should be made in papers which are initially the products of Centre Directors and their staffs. Although these presentations are sometimes sharply questioned by the Governing Board it appears that in the end most of these proposals are accepted with modest changes, if any; major attention is however paid to cost implications for the host government.

The Centre Directors meet annually with the Secretariat Director and his senior staff (CDM). This meeting appears to be the place where the Secretariat and the Centre Directors discuss and negotiate ways of proceeding in carrying out the directives of the Council. Through this meeting agreements can be reached in developing common practices such as the FOM which was the result of a painstaking study. Decisions from the CDM can appear later in draft working papers forwarded by the Secretariat to the FEM/MO.

3.4 The Essential Role of the Secretariat at Central Leadership Level

To the evaluation sub-team the circumstances described above seem to leave the Council of Ministers in a position where they are more likely to deal with the respective Centres and various issues on an item-by-item basis without having an opportunity to view matters within the framework of a general programme for the whole organisation (as distinguished from the existing collection of programmes on a centre-by-centre basis). It is in this regard that the Council should be turning to its Secretariat for assistance, for the Charter has provided that it is the Secretariat that executes the programmes adopted by it (the Council).

3.5 Suggestive Scheme to Make Goals, Programmes, Structure and Functions Fit One Another in a Coherent Whole

If the Council agrees that it is now time to shift from a consideration of each Centre and programme thrust separately, then it is suggested that the following might represent the kinds of reorganization that might be contemplated. (See figure 1)

The recommendations which follow are intended to accomplish several things. It is to be emphasized that the sub-team does not want to weaken the various Centres which are either strong and thriving, or well on their way to becoming so. The sub-team also wishes to see the Governing Boards fully meeting their heavy responsibilities and being helpd effectively for the purpose. Moreover, the sub-team believes that as SEAMEO moves into its second ten-year period there is a need for arranging matters to put the Council in a position to exercise its authority over the Centres to avoid the possibility of leaving each country with all the major decisions regarding the Centre it hosts. If the latter should happen the host country is left in an exceedingly awkward position of essentially monitoring a regional Centre while being left unassisted through full regional consultation. This would then dampen their desire to exercise collective leadership which as the early history of SEAMEO has pointed out, is the strength of the Organization.

In addition there seems to be a need for clarifying the position of the Secretariat giving it a more clearly defined position so that it would become a more effective SEAMEO organ. At the same time it is necessary to introduce a mechanism for control of the Secretariat by the Council.

3.6 Proposal for an Executive Committee of the Council

It was only after considering the need to develop a more effective alternative to the PDM/HO that it was discovered that the idea of an Executive Committee was not new. The Kirkwood Report (Minutes of the Second Meeting of Legal Advisors from Member Countries) in 1970 made the following statement.

> "After long discussion, the meeting agreed that it was both legally necessary and practically desirable that ultimate control of the Regional Centres be at all times vested in the Council of the Organization. However, the degree of autonomy to be enjoyed by the Centres, the degree to which SEAMEC should delegate authority to the Centres and the degree to which the

> Council should retain control should be specified clearly. In view of this special funding arrangements should be (sic) made between the host government and the Regional Centre and the way in which the existing Centres have been set up. The council should pay due regard to the wishes of the host government concerning the activities of the Centres.
>
> The meeting accepted that the Council should retain the power of review of the activities of each of the Centres and the suggestion was made that a special permanent committee be set up and be called the "Executive Committee" comprised of representatives from all the Member Countries, and that this Executive Committee should be charged with responsibility on behalf of the Council for co-ordination and review of the operations and finances of the Centres. The Council through the medium of the Executive Committee, when not in session, should have ultimate control over the budget, programmes and administrations of the Regional Centres and always be the final arbiter". (p. 13)

It is quoted at length because it very ably presents a proposal with which we partly agree. It will thus be recommended that an Executive Committee be established by the Council. This committee of the Council shall exercise for the Council such duties as are customarily assigned to such a body. It is understood that such duties shall not constitute an abridgement of, or an infringement on, the responsibilities of the Secretariat as provided by the Charter. With the establishment of the Executive Committee the PDM will no longer be necessary.

3.7 For a SEAMEO Long-Range, Overall Programme

Finally the team is concerned that SEAMEO does not appear to have a long-range, integrated and cohesive programme; instead it has excellent but specialized and independent programmes. The result is a tendency to examine programme development within the separate framework of each Centre/Project. It is true that new needs emerge and begin to be met by the development of new projects such as SPAFA and Non-Formal Education. Once again, however, in the absence of a general programme these items are considered independently, on their own merits without reference to any overriding general set of priorities. To build such a framework at this point in time would be, in the sub-team's opinion, a healthy activity. The general framework would

Figure 1

S E A M E O

(Seen As An Integrated Whole)

Ia. Purposes

Cooperative effort of member countries of Southeast Asia for regional educational development.

Cooperation to be done through education, science and culture in order to further respect for justice, for a rule of law, and for human rights.

Purposes to be carried out through :

- Advancing mutual knowledge and understanding of peoples of South East Asia.
- Collaborating with member states in joint projects in education, science and culture.
- Maintaining, increasing and diffusing knowledge.
- Helping to articulate education to the economic and social goals of each member state.

Regional Programme

- A total, basic long-term programme to be constructed and aimed at SEAMEO goals and purposes but based on high-priority needs.
- Periodically planned overall programme to consist of :
  - Projects in course of planning, or in gestation, or in interim operation stages such as :
    - SPAFA
    - Sub-Project for Mekong
    - Non-Formal Education
  - Projects in operation :
    - RECOFTC
    - INNOTECH
    - RECSAM
    - RELC
    - SEARCA
    - TROPMED

Strategies

Regional action to complement not to duplicate, or compete with ongoing, well-functioning national institutions and activities.

Development-oriented action to assist member countries to develop their own institutions.

Concentrating on member countries' needs which are most commonly felt as urgent and vital.

Restructuring existing centres in due course to shed off activities no longer needed and to meet new demands; associate well-developed national centres in an appropriate project for TROPMED - type activities.

- Having new Centres emerge to meet needs.
- Pooling regionally available expertise for development tasks.

Structure

- SEAMEO-Charter created organs :
  - Council[1]
  - Secretariat[3]
- Operationally-created bodies meetings
  - Executive Committee of the Council
  - Centres[3] with their Governing Boards created by the Council
  - Project Directors and High Officials Meeting[2]
  - Centre Directors Meeting

Cooperating Body (outside SEAMEO structure)

- A cooperating national body in each member state to take charge of SEAMEO affairs therein, to be created, where one does not exist.

Notes 1 & 2 :

- Establish an Executive Committee appointed by the Council to function on the working level. (See last column for its function.) If desired this committee may consist of high officials serving as alternates of Minister Members and appointed by them.
- Replace the PDA or Project Directors and High Officials Meeting as an advisory body to the Secretariat with this Executive Committee.

Note 3 :

- SEAMEO staff includes both headquarters' staff and field staff in Centres (including TROPMED/JCB Staff) : appointments are made by respective Directors.

Distribution of Functions

- The Council is SEAMEO's supreme decision-making body covering the whole range of SEAMEO action.
- The Executive Committee to act for the Council in providing policy guidance to the Secretariat in the execution of the total SEAMEO programme.
- Secretariat to execute the programme as mandated by the Charter.
- Each Governing Board to provide more detailed policy guidance to corresponding Centre Director.
- Chairman of Governing Boards to act as resource persons at Council and Executive Committee meetings.
- Centre Director to execute Centre's programme.

include the programmes of the Centres and much more. It should be noted that, by its Charter, SEAMEO has indeed science and culture besides education, among its domains. There is no suggestion that SEAMEO should now be engaged more actively in these areas, rather it is suggested that SEAMEO should have an overall programme including such elements so that the Council can develop appropriate strategies and see what elements have received little or no priority. Such a total programme will, in the sub-team's opinion help develop a stronger regional outlook, give a rationale for co-ordinated action among all SEAMEO units, and draw the countries closer together in working for the success of the whole that is SEAMEO.

It might be argued that the Organisation has the "SEAMEO Educational Development Programmes for the 1970's". In the view of the sub-team this worthwhile set of programmes is not the general programme described in the preceding paragraph.

3.8 Recommendations

To achieve the various ends discussed in this section the following set of recommendations are proposed; once again reference to Figure 1 may help clarify the relationships and processes which these recommendations are intended to achieve. It is recommended.

3.8.1 That after each Council meeting the Secretariat prepare a précis of the proceedings and recommendations which will be sent to all Governing Board members. (It is believed that a brief document written specially for this group of persons, a document that selects the material most interesting and relevant to Board members will be more helpful to them than the more detailed, full report of the Council meeting.)

3.8.2 That, except for the CDM, the Chairman of each Governing Board attend such meetings as Council Meetings and Executive Committee (or PDM/HO) meetings to act as resource persons. (It is hoped that this will be an effective strategy for keeping the Governing Boards more closely tied to the whole Organisation).

3.8.3 That each member country continue its laudable efforts in developing a suitable national body for co-operation with SEAMEO. Such a body in the country would keep appropriate Ministry of Education high officials, the SEAMEO affairs officer and members of the various Governing Boards in touch with each other. Such a

national body need not be limited to Ministry of Education personnel and Governing Board members but could well include other key people according to the issue under discussion. (It is of course recognized that each member country is to be left to develop its own strategies which will help its Minister of Education stay in closer touch with the Secretariat and all Centres as well as obtain a perceptive view of the Organization's overall programme and its major components in the Centres. It is hoped that this and other recommendations in this section will help reduce the length of time spent for Council meetings and make the general information flow in all directions a more continuous one, not overly concentrated towards each annual meeting which has then to deal with a year's accumulation of problems, with their attendant train of working papers).

3.8.4 That, under Art. IV-1 of the Charter, an Executive Committee of the Council be established to act for it when it is not in session, to give the Secretariat policy advice/guidance but not to make or implement policy. If desired, its members could consist of Ministry of Education high officials serving as representatives of Minister-Members and appointed by them. This would replace the PDM/High Officials Meeting. The Executive Committee would have official status. It would have to meet at least twice a year, or more, depending upon circumstances, but in any case a meeting should immediately precede the Council Meeting. The Director of the Secretariat will still be directly responsible to the Council in accordance with the Charter. Through this committee a more effective forum for consideration of Governing Board recommendations could be developed, a forum where the Director of the Secretariat might be in a better position to obtain feedback from member states regarding decisions that he has to implement and also to provide his comments and observations on the acts of Governing Boards.

3.8.5 That the Council instruct the Secretariat to develop a broad, comprehensive programme for SEAMEO and that the Council examine and consider this programme so that it may establish priorities. This unified programme would of course be subject to review, but its breadth would minimize the alterations that needed to be made; the changes would primarily be in the areas which were given priority. With such a strategy, it should be possible to determine how much and in which general areas Centres should grow, diversify, decentralize, and/or fade away from.

3.9 The SEAMEO Affairs Officer

In the preceding section, the national body (or an equivalent mechanism) set up in some of the member countries' Ministries of Education, to co-operate with SEAMEO, was mentioned and on which a recommendation was ma The present section deals

with the SEAMEO Affairs Officer, who in several of the member countries occupies a key position that affects considerably the fruitfulness of the countries' co-operation with SEAMEO.

Every country has made some arrangements for handling SEAMEO affairs, arrangements which reflect the organizational structure of the government offices. Though these are not a part of SEAMEO they are a co-operating counterpart, hence exceedingly important in the collaboration scheme. In some instances the present arrangements are less effective than they might be. The difficulty in such cases seems to lie in an ambiguous understanding of SEAMEO and its units as also the duties and responsibilities expected of a SEAMEO affairs officer by the staff at both the Regional Centres/ Project and the Secretariat. The Ministries of Education have had few suggestions from SEAMEO to help them appreciate the tasks that may revert to this officer. At present, some SEAMEO affairs officers are not in a position to fully know and understand SEAMEO as a whole, nor are they necessarily in a position to make recommendations about steps that would make them more effective in their present role. It should be added that the sub-team found the SEAMEO liaison officers as a whole deeply interested in serving, as best as they could, and ready to extend liaison assistance. The team has nothing but praise for the full co-operation received from them. It is <u>recommended</u> that:

3.9.1 A brief paper be prepared by the Secretariat, in consultation with appropriate Ministry of Education officials and the Centre Directors, to suggest tasks and functions which typically would be expected of SEAMEO desk officers to perform. It may be that in order to carry out these tasks there are special requirements desirable or necessary for the person carrying this title; if so, these should be identified.

3.9.2 The Ministries of Education be requested to see that, based on this information, appropriate steps be considered towards having the position of SEAMEO affairs officer placed in as effective a location as possible within their present organization.

3.9.3 Procedures be established to permit SEAMEO desk officers to communicate with each other when necessary. Further, that a new incumbent be given a chance to visit the Secretariat, at least one other SEAMEO desk officer in another member country, and a few Centres which are of the most interest to his country.

3.9.4 At an opportune time a meeting of SEAMEO affairs officers be held and hosted by a member country, assisted by the Secretariat.

Part 2 Other SEAMEO Concerns

4. More Structure and Programme Concerns - "Models"

4.1 Associated National Centres

It is interesting to note that SEAMEO, from its earlier years to the present, has utilized various "models" in establishing centres or projects. Its first project, TROPMED, is a network of associated National Centres located in the member countries' institutions which make available to the region their well-regarded specializations in tropical medicine and public health. There are organized in a mutually advantageous arrangement where the present active participating member states are both receivers and givers of assistance at not so great a cost in capital assets and at a modest expenditure, if any, for additional operational requirements. Special funds have of course to be provided for the scholars who are trained in the National Centres. As has already been noted in a previous chapter, there are problems in operating a network of associated institutions which, however, can be solved.

4.2 Grafting a Regional Centre to a Large National Institution

Two Centres, SEARCA and BIOTROP, which like TROPMED are dealing with training and research at the tertiary level, were both grafted to well-developed national institutions enjoying an excellent reputation and widely respected in their respective fields of agriculture and tropical biology. SEARCA flourished in its "marriage" with the University of the Philippines at Los Banos (UPLB), but BIOTROP has had to dissolve its union with the National Institute of Biological Research at Bogor and subsequently go on its own. In the first case the unification is in academic programme at graduate level -- a relationship yielding mutual benefits to both though there have been problems which up to now have fortunately been resolved in an admirable spirit of give-and-take and understanding. In the second case the dissolution of the original union was in the main the result of confused lines of administrative and programme responsibility which tended to erode the personality and identity of the uniting parties. BIOTROP, it seems, was tending to become a "funding" body for some projects which though admittedly worthwhile and acceptable to both would hardly give BIOTROP a role consistent with its terms of reference. Perhaps the unification into one person of the directorships of national and regional centres, which earlier appeared to be attractive in theory, turned out to be less workable in practice.

Recently BIOTROP began to reconsider its position and is exploring the possibility of conducting a degree-course in collaboration with the Agricultural University at Bogor.

4.3 A Regional Centre Not Tied to Any National Institution

Two Centres, RELC and RECSAM were developed as Regional Centres independent of any national institution. Both Centres have incurred quite considerable amounts for capital and operational expenses which are now the responsibility of the host government in the case of RECSAM and will soon be in the case of RELC. The latter receives on-going income from rentals of a size expected to cover a very large part of operational expenditures. Financially, in this respect, it seems to be the most stable among SEAMEO Centres. RECSAM has no plans to give very long courses, much less a degree-type course for, according to some interviewees, it would be better for it to remain very responsive to the school systems of the member countries by running its present wide variety of short, practical courses. RELC recently is now moving in the direction of jointly developing a degree course with the University of Singapore. In this respect RELC and RECSAM fundamentally differ. Such a difference in strategy could well be examined by SEAMEO from its wider perspectives.

4.4 Other Types

INNOTECH was given a broader mandate for programme development than any other Centre. Due to circumstances beyond its control INNOTECH has had to move its home from one country to another (it is now in its fourth) -- a condition which has made its operation difficult. As a "model" it is impossible to assess at the present time.

4.5 Are There Suggestions for SEAMEO to be Drawn from Its Experience with Different "Models"?

The initial optimism that the team had for identifying optimal models for new centres has slightly faded. Clearly the member countries are not eager to incur additional costs and there is no apparent donor waiting to share the costs of capital requirements and initial operating expenses. Still there may come a time when one of the Centres will have served its regional goals, the facilities and resources could then be redirected to a new goal and the Centre would be transformed, or a new centre would be created. The host governments' responsibility to the existing staffs and their pride

in their Centres make a new centre an unlikely alternative in the foreseeable future. Furthermore, even if any one of the present Centres has to phase out some of its major training activities, because the countries being served may have developed their own institutions to undertake such activities effectively, the Centre may have to continue its meaningful work for the region in such areas as research, clearing house activities, seminars and so on.

The TROPMED model looks less costly. Many of the costs would be hidden in existing national centres. They operated in the past, and would continue operating in the future with or without TROPMED. Indeed most of the institutions can accommodate a few students without an increase in budget; in fact the additional tution fees bring in a little more money. There is however an increasing load on staff, laboratory equipment, libraries, etc., which tends to be greater the more specialized and advanced is the student's level of study.

Regardless of the model, any additional regional centre or project will require additional money from Special Funds and for some kind of co-ordination whether from an independent body like CCB or within an expanded SEAMEO Secretariat. Under the present circumstances, of the two choices we favour the latter as probably being less expensive and certainly, from our prespective, the more desirable.

Unless there is external assistance for capital costs, the evaluators do not see any other model as currently of potential attractiveness to SEAMEO. In large measure the development of future regional centres/projects depends entirely on member countries' willingness to increase their financial support of regional co-operation.

In continuing to support SEAMEO, it is expected that countries would be maintaining the first priority now assigned to the present Centres as well as to the provision for Special Funds at an adequate level. After that commitment has been made then the appropriate model for the next regional centre or project can rationally be dealt with. This question has to be faced when the suspension of action in the development of the project on archaeology and fine arts is lifted.

In the light of the foregoing discussion the following <u>general observations</u> might be drawn:

4.5.1 No one "model" appears to suit all major projects of SEAMEO or any new one which might hereafter be established.'

4.5.2 A SEAMEO Regional Centre, serving changing needs of member states, appears to be relatively less permanent than comparable national institutions which have long-established, recurring functions, especially in training, geared to their own specific national requirements. Any "model" development has to take account of this factor particularly when the regional centre acts as an assisting development agent vis-a-vis analogous institutions in member countries.

4.5.3 A regional centre has to adopt a dynamic character in its activities and be prepared, therefore, to make changes therein (taking the form of renovation, renewal, innovation, redirection, etc.) to suit conditions in member countries which may vary from one another or change in each country from time to time. In this context any of the SEAMEO "models" would likely profit by a continuing review of its training and other schemes to keep them in an on-going position of relevance to the member countries.

4.5.4 At the tertiary level it seems out of the question for a SEAMEO Regional Centre, which cannot grant a degree and which is not to duplicate, or compete with, existing national institutions, to develop itself into an independent institution of higher learning. If it is to develop tertiary-level courses it would likely have to do so in co-operation with an existing, well-regarded national institution. The "grafting model" could well be the practical "model" to follow.

4.5.5 Where comparable institutions are already existing, able to associate themselves, to provide a more comprehensive pattern of courses for the region, the "TROPMED model" could suggest a future strategy. Furthermore if an existing Regional Centre succeeds as a development agent in helping counter-parts in member countries the abovementioned "model" suggests a means for fruitful concerted action.

5. Some SEAMEO Financial Concerns

It was not intended by the sub-team to delve into the whole range of financial concerns of SEAMEO. Furthermore financial matters are beyond their special fields. Nevertheless comments from some officials in Ministries of Education and preliminary observations on the relationship between the flow of funds and current practices suggested to the team leader that this area could not be ignored. Moreover, some team members having experience in administration agreed that finances are too important to be excluded in the evaluation. Such being the case, it was decided to

undertake two tasks: first, to obtain data to give a picture of the cost of SEAMEO's seven units (this is treated in the latter part of this Chapter in relation to output); second, to select certain financial matters which pose some concern to the Organization. These financial matters are the ones dealt with in this section.

It is but a short time until all Centres will have entered their second five-year period of permanent operation. We are informed that at that time no funds of the magnitude made available to SEAMEO from the largest donor, on the 50-50 matching funds basis, are likely to be forthcoming after 1978. Host countries are already carrying the full financial responsibilities for operational and capital costs if the Centres they are hosting have completed their first five years of permanent operation. Although the material in the following sub-sections is not new to SEAMEO, the sub-team, being external, did want to make some comments, observations and suggestions.

5.1 Some Financial Concerns on the Secretariat

The sub-team would not wish to enter any debate on the "proper" formula for funding the Secretariat on which a revised proposal has not received a unanimous acceptance. There appears to be some resistance to increasing the cost of the Secretariat but if SEAMEO is to continue to enjoy the high regard of its numerous friends with which its Secretariat is in close contact it would seem wise to look at the Secretariat's expenses as not only necessary for centrally-based operations but also as an investment. Under the conditions now obtaining in the Secretariat it would seem that additional funds be provided for the following purposes:

- To develop and maintain salary scales and terms and conditions of service that are attractive to all potential senior staff members in everyone of the member countries. It goes without saying that all other staff members be accorded due treatment, in this respect, which is expected from an employer of the high status enjoyed by SEAMEO.
- To improve its publication and information programmes.
- To help it in carrying out new responsibilities which may be assigned by the Council.

Although the necessary mechanisms and staff do not presently exist it is considered desirable to work towards a time when member countries will channel through the Secretariat all funds that they contribute for their Centres. It is also viewed as desirable to make sure that no more "small secretariats", as one interviewee described the CCB, be allowed to develop for the obvious reason that it would seem unpalatable to finance authorities to make two separate contributions: first to the Secretariat of the Organization and second to a little secretariat of a unit thereof.

As a first step towards achieving these goals the following recommendations are made to the effect that:

5.1.1 Salary scales at the Secretariat be improved so that in senior positions they are attractive enough to obtain the services of highly qualified, competent individuals from any one of the member countries.

5.1.2 Funds be found so that the Secretariat can be restructured to strengthen its programme division to the extent of enabling it to initiate moves in the direction of building an overall SEAMEO programme, to staff the new projects, and to implement the Charter's provision that the Secretariat is SEAMEO's organ for executing the programmes adopted by the Council. The last mentioned task should be done in a manner that will maintain the present strength of the Centres. It means that the Secretariat should not act directly in the Centres' domains but should work through the Centres regarded as SEAMEO's units.

5.2 Some Centre Financing Concerns

The capital and operating costs of the regional Centres place a load on the host governments which varies tremendously. Furthermore, the various accounting and reporting procedures for certain types of support tend to cloud the picture. Because these varied procedures are strategies, normally used within governments around the world to present expenditures in the most favourable possible light, it is hard to argue for a more strict procedural consistency. It seems however, that the more the Centres are involved in these strategies the more likely they are to respond to shifts and changes of national priorities than to regional priorities. It is then recommended that:

5.2.1 The host governments fund the centres in their country through the SEAMEO Secretariat by having their support contributions regarded as regional funds in accordance with existing funding principles.

5.2.2 Once the contributions are made their control should completely pass over to SEAMEO and all financial transactions chargeable thereto be subject only to the Organization's sound management principles and procedures already in effect.

5.3 Some Special Fund Concerns

It is in the Special Funds that the greatest leverage of the Organization lies for responding to regional needs and for obtaining external support.

In FY 1974/75, the member countries contributed about 28% of the Special Funds and the USG contributed about 32%. It is the sub-team's opinion that, with inflation, the demands for Special Funds will increase without any changes in the volume of SEAMEO's programme. Furthermore, it is anticipated that future external funds in sums sufficient to fully replace the diminishing contributions of the United States Government on the original matching basis will be increasingly difficult to raise. This estimate of the situation is based on the interviews with some SEAMEO donors who, though finding SEAMEO a good user of aid, are not very optimistic about increased assistance. This means either a reduction in the Centres' programmes (and/or the number of participants), or an increase in the amount of money contributed by the member countries, especially through the SEAMEO Educational Development Fund (SEDF). This fund has higher returns to the member countries than may be seen at first. Each country can be shown that its contribution is "attracting" contributions from the other member countries. Furthermore, this contribution, more than any other funds spent on the Centres by their host countries, can be demonstrated to non-Southeast Asian countries as a convincing measure of good faith the members have in regional co-operation. As such it has a good chance of attracting increased and/or additional funds from outside the region, given the necessary impetus that the member countries themselves will give. The "seed" quality of such a contribution is too valuable to lose sight of.

With this in mind the following recommendation is made in full awareness that it may touch delicate areas of relationship. It is recommended that:

5.3.1 The Director of SEAMEO be authorized and encouraged to visit appropriate authorities in member countries as well as interested entities therein with a view to: obtaining an increase in the country's support of the Special Funds; ensuring adequate

support of the Regional Centres Project, where there is a need, as regards the funding for their second and third five-year periods of permanent operation; developing a better understanding of local circumstances so that he may be able to make even stronger representations to non-Southeast Asian countries; promoting better understanding of the relationship of the various Centres' packaged projects and training programmes to the needs of the member countries.

5.3.2 The Secretariat study the advisability of modifying the present strategy of raising special funds and the annual fund raising mission be carefully reviewed to take into account the views of donors as to timing, effective presentation of projects and so on.

5.4 Concern Over Research Projects Funds

Although some Centres would find it attractive to place research activities and various kinds of packaged projects back under the umbrella of Special Funds, this change does not seem feasible at present. If the bulk of Special Funds came from the member countries, then there would be less of a problem. Countries which have made donations to the Special Funds seem to take one of two positions. The first position is that they are interested not in research but in training, wherein the benefits from the "multiplier effect" is easily demonstrated. Research, when brought forward as a general area for aid, appears to be an open-ended, unplanned funding scheme which as such is unattractive. The second position is that they are prepared to consider research project but they want to look at each one separately in terms of its merits and their own priorities in supporting research. To further complicate matters, research funds seem more likely to flow from other agencies, organizations, or branches of the government. With this in mind it is recommended that:

5.4.1 Bearing in mind its avowed purposes, each Centre be encouraged to treat its research priorities within the framework of packaged projects so that funding may be sought accordingly for each item. However such projects should have a valid place in SEAMEO's total programme.

5.4.2 The Secretariat and the Centre Directors together consider the best strategies for "marketing" the packaged projects of the various Centres, bearing in mind that "marketability" should not be allowed to determine the shape and thrust of the Centres' programme.

5.4.3 Where outside funds are obtained for a project or a contract, an "overhead" component of a size that is generally accepted, i.e., 15%, should always be included, if possible. It should be directed towards the project operating costs and be credited to the respective Centre, or the Secretariat as the case may be.

5.5 Need for Curricular Material Development Funds

These are similar to research funds except that in this report, development funds are thought of primarily for the purpose of creating new instructional or curriculum materials -- teachers' manuals, textbooks, visual aids, exercises for teacher use, training materials for staff in member countries and so on. Some of these projects could well be treated as "packaged projects" and the recommendations of the preceding section would apply. In addition, following the example of some Centres, the use of a revolving fund for publishing and sale of the finished products might make such activities, at least in part, self-supporting. Furthermore, when services are provided to any member country, free of charge, or at a nominal fee (e.g. to meet expenses only), an actual dollar value should be assigned to these services and such value should be publicly reported, if only to better apprise the member countries of the value they receive from SEAMEO and its Regional Centres/ Project.

6. Productivity (Inputs and Outputs) - A Concern of the Whole and Its Parts

As mentioned earlier, as the exercise evolved, an attempt was made to get some picture of the financial costs of each Centre as a part of the input-process-output inquiry into its productivity. The resulting figures can be misleading if over-interpreted because each Centre has its own particular complex of buildings, associated costs and revenues. Hedged with limitations as they are, the tabulated figures, taken in the aggregate sense to cover roughly a nine-year period from the middle of 1967 to the middle of 1976, gives approximately the global cost of SEAMEO. By itself such financial input does not have much meaning until it is set against the productivity output of SEAEMO, or the sum of the beneficial results obtained from all its operational units. This section deals therefore with two items; financial input and beneficial output.

6.1 Financial Input - the Cost of SEAMEO

The following statements indicate in part the danger of making direct dollar comparisons even within one Centre's summary report. They are made to apprise the reader of the limitations of the data obtained.

INNOTECH is temporarily homeless, scholars must pay for their food and accommodation locally. The previous expenditure for capital expenses have a limited meaning at present.

BIOTROP has just started to house its students in its new compound. Their tuition fees and money for food and lodging go to BIOTROP which also supplies an inexpensive laundry service, but no transportation between the compound and the present borrowed premises for research and instruction. No direct rental is paid for this accommodation but a dollar value is assigned which is counted as part of the host government's contribution for matching the United States Government dollar contribution. The picture will change when laboratories and administrative quarters are build at the compound and must be maintained.

At RELC the management of the International House represents both a cost and sources of revenue. At 2/3 occupancy, it was reported the management was at a break-even point. Students pay RELC for tuition and accommodation. They rarely use the restaurants on the premises, perferring to seek chaaper food. Rental from the auditorium, restaurants, etc., apparently is treated as income ascribable first to the Government of Singapore.

In SEARCA there are dormitories, staff housing and apartments for married students. Tuition goes to the University of the Philippines at Los Banos (UPLB); rental for housing goes to SEARCA and the maintenance is a charge against SEARCA. In the dormitories students pay for their meals at a cafeteria. At the guest house there is normally a charge for food and lodging. The gust house is sometimes used for single staff members. To further complicate the matter, tuition is enough only to cover a small part of per-student instructional cost, the much larger part being borne by the University. Thus to make up for this University "subsidy", SEARCA provides some additional support to the University and its staff by paying for two visiting professors, providing part-time employment and paying honoraria to certain outstanding staff recommended by the University as well as obtaining some equipment and supplies that will be used by SEARCA scholars and others. Finally with its numerous

packaged projects, SEARCA wisely charges an administrative fee of 15%. The total income from the "packaged project" is properly represented in their records as additional income, but it is hard to compare it with the income of those Centres which do not have any such packaged projects.

It might also be noted in passing that students at SEARCA have taken as long as three years for their M.A. and four to five years for a Ph.D. degree. Each student, therefore, from SEARCA's standpoint, can represent a long, continuing obligation against future Special Funds. However, the reader is reminded that SEARCA does offer some short courses and provides some non-formal education within at least one of its packaged projects.

TROPMED has its National Centres; each one receives the appropriate student tuition while the costs of food and lodging are directed to the appropriate place depending on the local arrangements. Where students have to live outside the Centre, field work costs for the students are sometimes higher and in at least one case the National Centre subsidizes these additional living expenses. One must not overlook the fact that the host government of each National Centre makes a contribution to the CCB. In contrast to SEARCA, where the numerous students represent a significant load on the UPLB, it appears that the relatively small number of TROPMED students per centre does not place as great a comparable load on the staff and school facilities.

RECSAM, during some years, appears to have had, proportionately, the largest amount of technical assistance among the Centres to support it in its offerings of short courses. The students again pay for tuition and lodging with courses being conducted by RECSAM staff and the building accommodation being maintained and serviced by RECSAM. RECSAM arranges to have an outside food caterer provide meals and collects the charges thereof from the students. The housing supplied to the staff by RECSAM is not a source of revenue; however, the student residences are available, on some occasions, for rental to other people, such as teachers coming to Penang.

Governing Board meetings are budgeted under Special Funds. Two Centres have two Board meetings per year, the rest have one. Some Centres rotate the place of meeting, others do not (which affects costs); some have had meetings that lasted for a week or longer; others meet for less time. No mention has been made here of the generally valuable conferences, seminars and workshops run by the Regional Centres/Project which are financed by Special Funds. These also vary in frequency, length and cost. Similarly, the category of personnel exchanges under Special Funds has been used variously by different Centres.

Further, when examining capital costs for each centre, one must consider what types of buildings and equipment were developed and used. One had also to determine whether there are other buildings, rented or given free of charge, which the Centre currently uses. Similarly, each group of buildings, building or portion thereof has maintenance costs attributable to it; however many of these units generate income which may be more or less the than the maintenance costs. Again, the costs of providing instruction, even when a number of staff members are made available under technical assistance (which is not a fixed quantity), may be an example of a relationship between "costs" and "income" which does not quite correspond to an equation. Figure 2 may be helpful in seeing the major patterns of the flow of funds. For example, it illustrates why the "total" figures may become inflated when Special Funds are added to operating costs.

6.2 SEAMEO's Output : Beneficial Results Obtained from its Units

The reader may feel a little more comfortable in dealing with the matter of outputs. Some Centres have, as a course requirement, a major project or paper, a piece of research, a thesis, or the preparation of curriculum material. Many of these have been considered good. However, particularly with the smaller or shorter types of work, they tend to be fragmented and unco-ordinated. Their value lies not as sub-parts of a major development programme, but in their utility to the individual student when he returns home. Thus where there is a long list of titles, their value as "output" is sometimes hard to assess and it may be unfair to compare the long list with shorter lists from other Centres. Nonetheless, taken in bulk, the data obtained give a whole picture, though somewhat rough, of SEAMEO's output.

For these reasons our attempts to obtain data on input and output have many limitations and we have decided to display the information we received in ANNEX VI. It is our hope that the exercise would be regarded as a first step in helping the reader understand the unique funding patterns of each Centre and that it would be followed by other attempts to describe more accurately the circumstances under which each Centre operates and the flow of money that is associated with it.

With all these caveats it is therefore with some reservations that we have summarized the data we received. It is our hope that, in spite of its limitations, there will be some sense of the magnitude of the operation in which SEAMEO is engaged. Equally important may be the realization of the importance of Special Funds. Nor should it be over-looked that the Organization has developed capital assets of some very considerable value. Table 1 summarizes approximately a decade of operation. It includes the low level of expenditure during the first years of operation. It has not taken into account the future construction costs of buildings being undertaken at three of the Centres.

Tables 2 through 4 give a picture of the "consequences" or "outputs" of the different types of programmes operated by the different Centres. Many short courses produce a rapid flow-through of graduates while a few much longer courses produce a lower rate of graduates. If is our considered opinion that the variation among the Centres' programmes is so great that any attempt to "equate" them through a formula of "number of man-days of study versus costs" would at present be even more misleading than the figures presented and would encourage Centres to concentrate on an artificial formula rather than on significant programmes.

The general impression from the various tables is that SEAMEO units have indeed been productive. On the whole SEAMEO has a record of achievement well worth its cost, a very fruitful performance that it can justly be pround of.

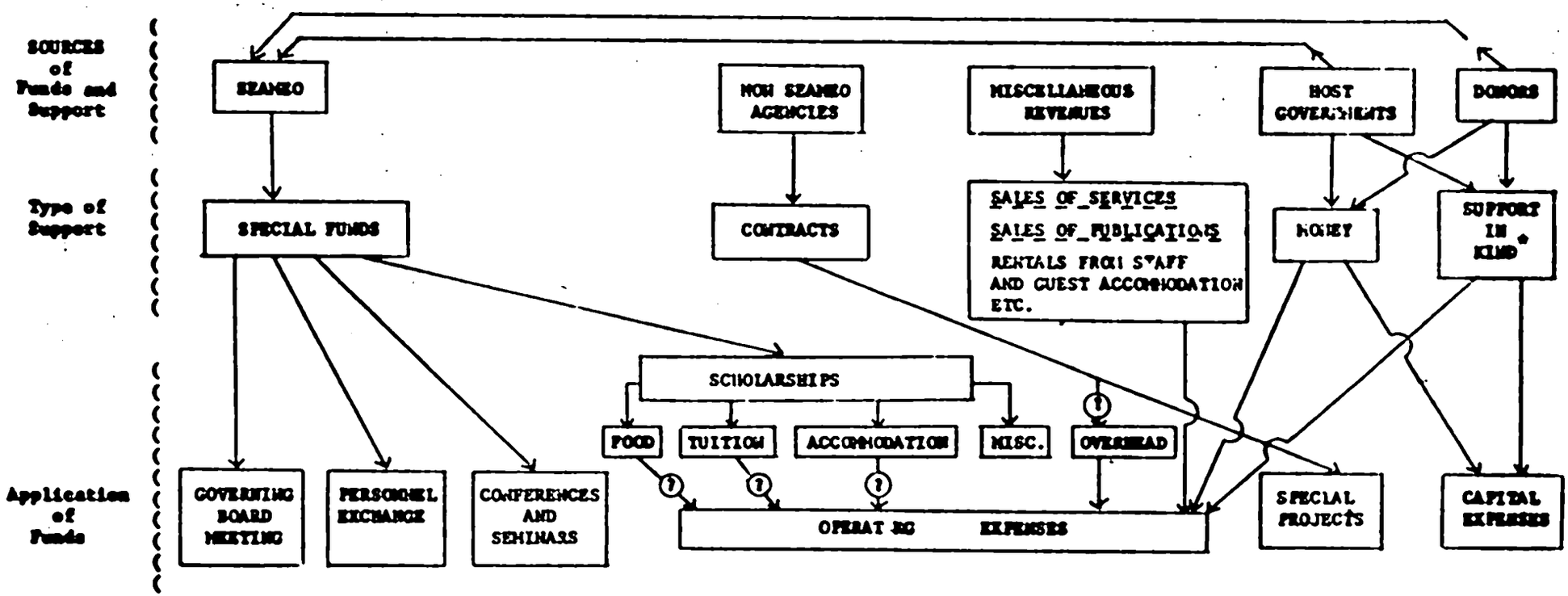
6.3 Recommendations

It is recommended that:

6.3.1 Effective techniques be developed and maintained for producting summary data to display the type of information which has been dealt with in this section and that such summary data be made available to the Council and the Centres on an annual basis.

Figure 2

Simplified Diagram to Illustrate Flow of Support According to Its Source and Its Application



* Includes: Technical Assistance
Provision of land &/or accommodation
Books
Equipment
Supplies

(?) Varies from centre to centre

Table 1

Summary of Funds from Different Sources Which Were Used for SEAMEO Units from the Start of the Interim Operation to June 30, 1976
(In Thousands of US Dollars)

SEAMEO Unit	Period Covered	Operation Cost			Capital Cost			Operation & Capital Costs			Special Funds from Secretariat	Other External Aid	Total Used from all Sources
		Host Country	External Aid	Total	Host Country	External Aid	Total	Host Country	External Aid	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
BIOTROP	Mid 1967 to Mid 1976	390	1,301	1,691	787	231	1,018	1,177	1,532	3,709	785	352	3,846
INNOTECH	1970 to 1974	20	1,702	1,732	7	192	199	27	1,894	1,921	497	275	2,693
RECSAM	Mid 1967 to Mid 1976	1,600	230	1,830	217	1,563	1,780	1,817	1,793	3,610	962	227	4,799
RELC	Mid 1967 to Mid 1976	2,607	1,317	3,924	1,078	1,945	3,023	3,685	3,262	6,947	1,555	-	8,502
SEARCA	Mid 1968 to Mid 1976	1,308	460	1,768	1,270	1,234	2,504	2,578	1,694	4,272	1,808	1,199	7,279
TROPMED and CCB	1967 to mid 1976 1967 to mid 1976	942[a]		942[a]	1,688	1,688	3,376	1,688	1,688	3,376 942[a]	2,224	28	5,628 942[a]
Sub-total		6,867	5,010	11,877	5,047	6,853	11,900	10,972	11,863	23,777	7,831	2,081	33,689
SECRETARIAT	1967 to 1976			1,376[a] 102[aa]	164[b]		164[b]	164[b]		1,540[b] 102[aa]	854[c]		2,496

(a) From SEAMEO member countries' contributions.
(aa) Contributed by associate members and used for liaison work with them, fund raising, publications, etc.,
(b) From host country, used for maintenance and improvement of the building premises, etc.
(c) Used for special activities related to SEAMEO programme development and implementation.

Table 2

Number of SEAMEO-Held Longer Courses, Number of Specializations Covered, and Number of Participants

SEAMEO UNIT	PERIOD	1-Year Course			At least 2-Year Master's Degree Course			At least 3-Year Doctor's Degree Course		
		Number of Courses	Number of Specializations	Number of Graduates	Number of Courses	Number of Specializations	Number of Graduates	Number of Courses	Number of Specializations	Number of Graduates
BIOTROP										
INNOTECH				-			-			-
RECSAM				-			-			-
RELC[1]	Mid-1967 to Mid-1976	1	1	168			-			-
SEARCA[2]	Mid-1967 to Mid-1976				1	14	90	1	7	32
TROPMED[3]	Mid-1967 to Mid-1976	6	6	161			-			-
TOTAL		7	7	329	1	14	90	1	7	32

[1] RELC conducts a diploma course on the teaching of English a second or foreign language.

[2] SEARCA co-operates with the University of the Philippines at Los Banos, in conducting a master-of-science course with specializations in 14 fields, e.g. agricultural engineering, animal science, etc.; also a doctorate course with specializations in 7 fields such as soil science, agricultural economics, etc.

[3] TROPMED co-operates with national training institutions (as TROPMED National Centres) in conducting various courses in tropical medicine and public health.

Table 3

Number of SEAMEO-Held, Short Training Courses[1], Course Frequencies and Course Participants

SEAMEO Unit	Inclusive Period	Less Than 3 Months			3 to Less Than 6 Months			6 Months to Less Than One School Year			TOTAL		
		Number of Courses	Course Frequencies	Number of Participants	Number of Courses	Course Frequencies	Number of Participants	Number of Courses	Course Frequencies	Number of Participants	Number of Courses	Course Frequencies	Number of Participants
BIOTROP	Mid 1968 to Mid 1976	15	20	337	6	7	35	3	11	65	24	38	437
INFOTECH	1970 to Mid 1976	2	2	48	1	11	324	1	3	46	4	16	418
RECSAM	1968 to Mid 1976	34	88	1,095	-	-	-	-	-	-	34	88	1,095
RELC	Mid 1967 to Mid 1976	20	20	314	7	21	405	1	5	168	28	46	887
SEARCA	Mid 1967 to Mid 1976	10	13	260	3	12	89	1	2	14	14	7	371
TROPMED	Mid 1967 to Mid 1976							2	15	295	2	15	295
TOTAL		81	143	2,062	17	51	853	8	36	588	106	230	3,503

[1] Examples of short courses are: Ecological and Economic Plant Taxonomy, Weed Science, etc., (BIOTROP); Integrated Science for Lower Secondary Schools, Modern Methods of Teaching Physics, etc. (RECSAM); The Teaching of English as a Second or Foreign Language, etc. (RELC); Technical Agriculture and Social Organisation, Multiple Cropping, etc., (SEARCA); Tropical Medicine and Hygiene, Applied Parasitology, etc. (TROPMED)

Table 4

Number of SEAMEO-Held, Seminars/Workshops/Professional Meetings and Number of Participants

SEAMEO Unit	Period Covered	Number of Seminars/ Workshops/ Meetings	Number of Participants
BIOTROP	Mid-1968 to Mid-1976	8	408
INNOTECH[1]	1968 to 1974	12	938
RECSAM	Mid-1968 to Mid-1976	16	665
RELC	Mid-1967 to Mid-1976	13	2,103
SEARCA	Mid-1967 to Mid-1976	22	783
TROPMED	Mid-1967 to Mid-1976	20	2,620
TOTAL		91	7,517

[1] INNOTECH sent, at the last minute, data which were only a small part of the data obtained from secondary sources. The report from INNOTECH contained the remark "In view of the lack of complete files and other records there were some difficulty in furnishing the data required". The much larger figures from the secondary sources are the ones shown above.

6.3.2 The techniques so developed be used as part of the periodical evaluation of the operation of each SEAMEO unit.

7. Concerns over the Projection of SEAMEO's Image of Usefulness: Information Dissemination and Public Relations

As has been apparent all Centres/Project either serve as a clearing house in their specific speciality or have some thoughts and plans in that direction. Most of the Centres have printed materials which they are attempting to disseminate among appropriate institutions and key people throughout the region. Finally, several of the Centres exert serious efforts to publicize themselves and their activities through the press, television and other means.

In this regard the reports on the individual Centres have dealt with the subject as appropriate, however there are some issues which go beyond the sphere of individual Centres' action.

7.1 Clearing House Problems

It seems that the clearing house functions of the Secretariat and the Centres/Project could probably be better co-ordinated. When INNOTECH moved temporarily to Bangkok the only copies of its own materials which were readily available were those that had been deposited in the Secretariat's Documentation Service. From this point of view the Secretariat should have a complete set of all materials produced by the Centres/Project. On the other hand the Secretariat is not the place where one should expect to readily locate more specialized materials such as dissertations written by scholars. The Secretariat should have a master list or card catalogue of all materials produced by, and available in the Centres. This would include the materials shown on the lists assembled for the team by the various Centres/Project which appear in the ANNEXES. There is however a real question in the sub-team's minds as to whether a published catalogue of all these various materials such as the impressive but "outsize" "Catalogue of SEAMEO Publications" is worth the cost of, and effort spent on, its preparation. We saw little evidence of its use or utility. Would specialized or selective catalogues be more useful?

Naturally the Secretariat should hold multiple copies of official documents such as the reports of the SEAMEO Council conferences and Governing Board meetings as also other general publications, viz., journals and newsletters. Again one can raise a question about the

value of centrally depositing copies of all documents, such as curriculum materials, being produced by the Centres. Possibly a useful criterion could be formulated based on the distribution of these published materials. Certainly documents being distributed in member countries by a Centre should also be sent to the Secretariat with some indication of who are being furnished copies (e.g. "this publication has been sent to all Ministries of Education, six copies; all teachers' college libraries, one copy each".) etc.

It is actually the problem of distribution which some team members have found to be serious enough to merit remedial attention, for any publication should reach it target audience, if it is to be of any practical value. There are Centres which send multiple copies of certain publications to the member countries' Ministries of Education. They do so with the hope that the documents will reach the appropriate people, whether they are engaged in teacher training, curriculum development, educational research and planning or whether acting as consultants in a particular field. The multiple copies are not always moved efficiently and dependably to such a wide target audience. Some interviewees have suggested that, to alleviate this problem, it might be better to mail material directly to the appropriate readers. This could be done if the Organisation were willing to approve this action as well as the relevant principles of distribution for each Centre.

7.2 Public Information

Finally in the matter of publicity it seems that there is a real place for co-operative efforts. Certainly the Centres engaged in public information activities should be applauded. The question is whether any of the materials can be used in other member countries outside the host country. Can the Secretariat prepare material about SEAMEO which could be added to the Centres' own information releases? Furthermore, can the Secretariat prepare material about SEAMEO which the Centres could distribute in their own countries? It is generally accepted that a good public information programme depends on the maintenance of personal contact with the media. Even if the Secretariat prepares first rate material, it cannot maintain such personal contacts in all member countries, nor can it necessarily provide suitable translation where required. These are issues which seem worthy of serious study with a view to obtaining appropriate action.

7.2.1 Recommendation

It is recommended that the Council instruct the Secretariat to call at a suitable time, a second meeting of the Information Officers of all Centres/Project to: further clarify clearing house activities at all Centres/Project and the Secretariat; develop more efficient strategies of distribution of materials from the Centres; and work towards a more comprehensive and integrated information programme for SEAMEO as whole.

LOOKING FORWARD

In concluding this report the evaluators would like to make a few observations about alternative structures and procedures for the next external evaluation if there is one. It may seem too early to think that there would be another external evaluation. However, the team feels that, generally, the idea of an external evaluation was welcomed. Although some of the Centres regarded their own operations to be in good shape and not in need of evaluation they pointed to other aspects of the Organization which they felt warranted review. Furthermore, though this report might not be greeted with widespread enthusiasm it is believed that the exercise as a whole yielded positive results. With this point of view in mind it would seem desirable to undertake an external evaluation between fairly long periods of operation.

Scope

If an integrated external evaluation is to be done the primary focus of effort should be the whole SEAMEO programme. Consequently the individual programmes of SEAMEO Centres/Project should be assessed in the perspective of their contribution and relationship to the total programme developed over the years in accordance with the decisions and policies of the SEAMEO Council. Future terms of reference should therefore reflect this conceptual frame. The experience gained in the present exercise demonstrated all to clearly that the most difficult problem faced by the team was to achieve a fair degree of integration.

Evaluation Models

To implement an integrated evaluation as described above requires a coherent framework. There are several possibilities available but not all of them fit easily within the constraints which are likely to exist. When an evaluation team is composed of specialists matched to each Centre's area of expertise there are several consequences. The specialists will generally base their evaluation on what can best be described as "expert opinion". While they will accept a general frame of operation they are not always in a position to operate effectively with the various models and procedures advocated by "curriculum evaluators". Experts in evaluation will not always be able to agree on what model is best to use for the exercise. As one seeks highly competent, experienced people to serve on the team one is likely to choose people who, however flexible, will have developed strong defensible positions that will not necessarily be easily adapted to a singular model for the whole exercise.

This may be the best place to note a very different type of evaluation model that would provide a useful supplement to the kind of evaluation that has been undertaken. That would be an examination of SEAMEO from an economic and administrative point of view. A small team of two or three members with backgrounds in specialities such as economics and administration could do this. They could explore such questions as, "Are the present arrangements for training people regionally really cheaper than sending them overseas?" While they would naturally examine the management audit reports they would be considering the Organization from a much broader point of view. Such a team, for example, could be asked to develop and suggest a "regional" fiscal policy for SEAMEO.

As the exercise moved forward, and after there had been agreement on a general set of procedures and a framework for reporting, there was still a search for an all encompassing model. An input-process-output model was developed and a consideration of it may be helpful to the next team. Briefly the team attempted to get some indication of the resources that were provided for the Organization. These were applied to a set of goals (identified at the beginning of each chapter, or sections thereof, in this report). The specialists examined the <u>process</u> through which these inputs are applied and appraised the results against a set of standards. For the experts this is almost always placed against standards of quality but one should also consider quantity. In addition there are the more far-reaching effects often referred to as the "multiplier effects". The latter type of output is difficult to assess under the best of conditions and is impossible when one is faced with a regional organization where people are widely dispersed, where different official languages are used, where return rates for questionnaires is on the low side and when the evaluation team is working under a tight time schedule.

In spite of these problems the use of an input-process-output model was helpful to this team and an elaboration of it can be found in the accompanying three charts.

<u>Composition of the Evaluation Team</u>

Experience has convincingly shown the unwieldiness of having a team of fourteen specialists divided into sub-teams of two specialists for each SEAMEO unit to be assessed. It would be more economical and manageable, without sacrificing effiency, to have a team composed of one person for each Centre, (organized in two sub-teams) with a separate sub-team for the TROPMED Project. The first group will consist of the specialists to deal with RELC, RECSAM and INNOTECH while the second, those for SEARCA and BIOTROP.

SUGGESTIVE MODEL "A"

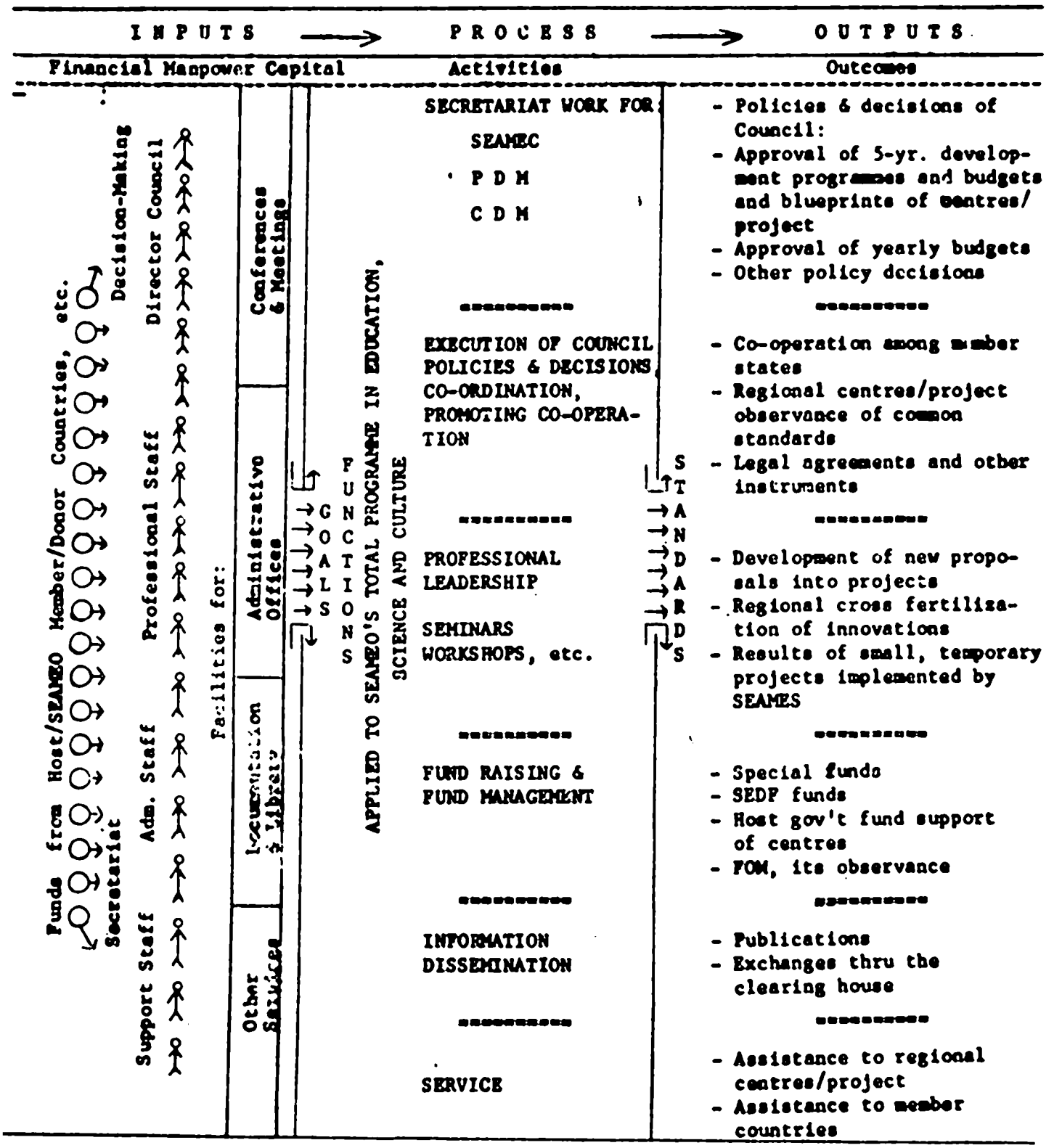
FOR EVALUATING THE TOTAL SEAMEO PROGRAMME

INPUTS →	PROCESSES →	OUTPUTS
Resources	**Action of the:** COUNCIL as implemented by the SECRETARIAT GOVERNING BOARDS as approved by the COUNCIL and implemented by the respective SEAMEO Centres/Project: BIOTROP, INNOTECH, RELC, RECSAM, SEARCA, TROPMED	**Outcomes**
FINANCIAL SUPPORT Funds from Member States to support Council meetings, the Secretariat and the CCB Office Funds from host countries to support corresponding SEAMEO Centres/Project Fund donations of aid entities: countries, foundations, etc.	PROGRAMME ACTION: Training Research Instructional material construction Seminars, workshops, etc. Technical exchanges: staff, documentation Information dissemination	Trained manpower: - key personnel) who in turn - trainers) transfer their - supervisors) new knowledge - specialists) & improved skills to end-users
OTHER SUPPORT Expert, fellowship/scholarship, technical literature, and technical equipment donations of external-aid entities Technical and administrative staff made available to SEAMEO Centres/Project by their respective host states Capital assets (land, buildings, libraries, laboratories, and other material facilities made available to Centres by host countries	STRATEGY in: Re-structuring SEAMEO Programme strengthening, re-direction, renovation Fund raising and management	Enriched fund of:) disseminated through: - New Knowledge - New Techniques Wider application of new knowledge new/improved techniques JOURNALS, REPORTS, RESEARCH, DISSEMINATIONS New/improved learning aids: textbooks, workbooks, etc. New/improved teaching aids: syllabuses, teaching guides, etc. Improved libraries laboratories, and other educational infrastructure Closer regional technical co-operation and strengthened self-reliance of member countries in education

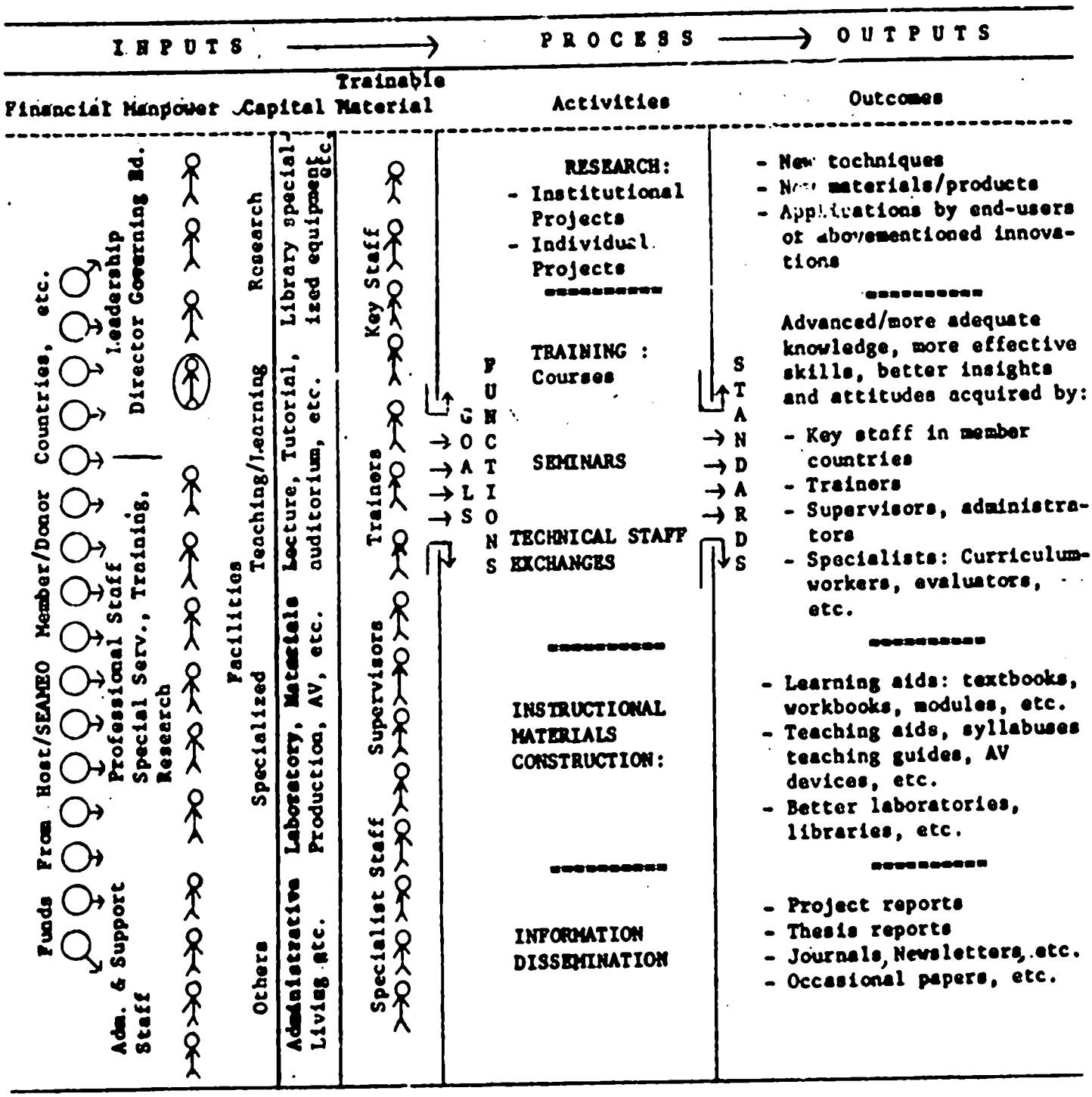
GOALS → STANDARDS

EDUCATION-SCIENCE-CULTURE

SUGGESTIVE MODEL "B"
FOR THE EVALUATION OF THE SEAMEO SECRETARIAT
(SEAMES)



SUGGESTIVE MODEL "C"
FOR EVALUATING SEAMEO REGIONAL
CENTRES/PROJECT



A team leader and an assistant team leader would form a fourth sub-team. Besides being responsible for formal matters, problems of protocol and so on, they would be responsible for carrying out the overall examination of SEAMEO and its Secretariat.

The issue of whether or not non-Southeast Asians should be members of such a team should be considered. There are two practical reasons for including them. Firstly, they may be easily obtained for one or two of the specialist posts. Secondly, if they can be obtained under technical assistance it reduces the butgetary burden on SEAMEO for the project. In addition, some would argue that non-Southeast Asians would add breadth to the team. This broader perspective could be of particular value when examining such matters as regional co-operation and its implications.

A further possibility is to have a still smaller team of not more than five evaluators who would all travel together to every Centre. While it may be hard to staff, such a small team does offer some attractive features, among which are economy, easier co-ordination and simplified operation and management. The difficulty in staffing may partly be overcome if in each Centre someone could be assigned to the team, not as an evaluator, but as a research associate whose function should include the gathering of pertinent data, assembling and collating them, and so on in accordance with a pre-arranged system commonly applicable to all the Centres.

Probably the ideal solution would be to utilize a two-step process. First, the Centre/Project would be assessed by the three sub-teams of experts, earlier mentioned, who would be given a fairly general set of guidelines. The second stage would utilize a small team who would have these reports available and who would examine the whole organization.

It is extremely important that all evaluators be prepared to serve for the whole period required for the exercise as well as start and finish at the times set for the job. The Secretariat should take early steps in the recruitment to avoid certain difficulties such as shortened services of evaluators due to the requirements of their home-country employers, or late arrivals due to insufficient time allowed for travel arrangements, and so forth. Finally, it is hardly necessary to mention that by their high qualifications they are presumed to be articulate in group sessions and interviews as well as adept in using the written word.

Supporting Staff

The need for administrative support is essential. An Administrative Officer would seem mandatory even though the workload tends to be light while the team is travelling. Similarly a first-rate typist is indispensable. These support services have to be supplemented in the early stages of the exercise when working papers, questionnaires, formats and a host of other materials are prepared. They also have to be supplemented as team members write and rewrite the final drafts of their parts for the final report. It should be noted that such administrative assistance and logistical support should also be made available again in the Centres. The provision of a first-rate professional editor for the final weeks of the evaluation would be of great assistance and value as the reader of this document will have observed.

Schedule of Work

The following matters deserve consideration in organizing a time-table for the next exercise even though it is hard to accommodate all the elements in one plan.

It is desirable to have a considerable amount of preplanning which is complicated by the fact that an external team has to find out many things that are well known to the staff at the Centres and the Secretariat. The number of official documents will have greatly increased in ten years; there may be additional programmes, projects and/or centres. Much of the preplanning can be done by one or two persons. The team leaders could be brought in earlier for this purpose but the time allotted for it should be at least twice the single week provided in the present exercise. In addition to the reading and study of documentary sources of material they would draft plans for the whole team to consider. Such plans would include the terms of reference, an appropriate evaluation scheme, and a general, integrative report format. To insure a coherent appraisal the team leaders should also prepare for the consideration of the whole team certain devices such as an evaluation model applicable to the Centres/Project; a "core" set of questions for interviews; a common pattern for tables, charts, and forms, a tentative timetable of activities, and so on.

The full team would then assemble for three weeks instead of the four weeks given the present exercise. During this time the team members would review relevant documents, and finalize the plans and their materials for the exercise. Part of the last week would be used to visit key people in Thailand as well as to make the official visit to the Ministry of Education.

It is considered essential to provide an opportunity for the specialists to visit selected people in the various member countries such as Governing Board members, supervisors of special national projects that are tied to the regional centre, where possible government officials who have relationships either with the centre or with its graduates. (In this evaluation such supplementary visits were deemed essential and they were accommodated with some difficulty because they were not originally seen as necessary so neither budget nor time had been prearranged for the purpose). There has to be a provision for official visits with the Minister of Education of each member country by the team leaders accompanied by those team members who are going to be working in that country. From a logistical point of view things are simplified the smaller the team is and the more they can travel together. It is considered desirable to schedule one or two weeks for sub-team members to visit the member countries other than those hosting the Centres they will evaluate.

Three weeks would just be sufficient time for the sub-teams to visit each of their respective Centres. The TROPMED pair could divide and spend a week to ten days at each of the Centres outside Thailand where they should spend three weeks at the Project Central Office. Similarly the team leader and assistant team leader should spend two weeks at the Secretariat to conduct interviews therein as also with representatives of aid programme agencies based in Bangkok. Afterwards they should make a brief visit to each Centre to stay in touch with team members and study the Centre as a whole, as well as interview appropriate Ministry of Education officials, Governing Board members and other appropriate persons.

Two weeks for writing their reports should then be provided for all sub-teams, after which important issues touched upon by more than one team could be discussed and resolved, during a further period of one week, so that the sub-team reports will have coherence and consistency as much as possible. Where there are well-grounded alternative views, not acceptable to a sub-team, on which responsibility and competence are shared, such views should be considered for inclusion in a suitable form in the report. However this procedure would apply only to vital issues.

It is suggested that the team leader and/or the assistant team leader remain for one additional week to make a final review of all matters relevant to the report. Furthermore plans should provide for the Administrative Officer to stay at least one more week to fully organize and index the records of the exercise for documentation purpose. The secretary and editor would likely have to stay about a month to produce the final draft in the form desired by the Secretariat.

In making the above post-evaluation review, with what may be regarded as an unseemly long string of suggestions, the evaluators make no claim for any special wisdom. No criticism of the planning is implied. This exercise, being the first one undertaken by SEAMEO, ran the normal course of similar human endeavours and illustrates, all too well, the truism that hindsight is much easier than foresight. Hence the team is appreciative of the planning which was done for it by the Secretariat and the SEAMEO field Centres. From the Secretariat it obtained valuable support and assistance. From the Centres the team was readily helped in organizing interviews as again in securing required data. What needed to be done by all the SEAMEO units was done in the spirit of regional co-operation.

Finally, to those who may follow, if SEAMEO would in the future decide to have another external evaluation, the following words of a famous teacher are passed on :

> "I am bound by my own definition of criticism: a disinterested endeavour to learn and propagate the best that is known and thought in the world."