DOCUMENT RESUME

ED 350 213 SO 022 362

TITLE	[UNESCO] Regional Consultation Meeting on the Asia and Pacific Programme of Educational Innovation for Development (APEID) (12th, Chaing Mai, Thailand, August 20-27, 1990). Final Report.
INSTITUTION	United Nations Educational, Scientific and Cultural Organization, Bangkok (Thailand). Principal Regional Office for Asia and the Pacific.
PUB DATE	91
NOTE	95p.
AVAILABLE FROM	United Nations Educational, Scientific, and Cultural Organization, P.O. Box 967, Prakanong Post Office, Bangkok 10110, Thailand.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	*Developing Nations; *Educational Development; Educational Policy; Foreign Countries; International Cooperation; *International Education; *International Educational Exchange; International Organizations
IDENTIFIERS	*Asia Pacific Programme of Educ Innovat for Develop; *Asia Pacific Region; UNESCO

ABSTRACT

This document is the final report of a Regional Consultation Meeting (RCM) on the Asia Pacific Programme of Educational Innovation for Development (APEID), a mechanism developed by UNESCO to bring about regional cooperation in education in Asia and the Pacific. This RCM was attended by 55 participants, resource persons, and observers from Australia, Bangladesh, China, Democratic People's Republic of Korea, Fiji, India, Indonesia, Iran, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Socialist Republic of Viet Nam, Sri Lanka, Thailand, Tonga, Turkey, and the USSR. The report is divided into five parts. While part 1 is an introduction, part 2 reviews APEID activities conducted from January, 1987-1990. Part 3 presents ideas emerging from the regional symposium for future APEID programming. Part 4 offers materials concerning the education of disadvantaged groups undertaken by countries in the region. Part 5 discusses future directions of APEID, including the proposed program areas for the 1992-1996 programming cycle of APEID. Five annexes also are included: (1) Agenda; (2) Addresses; (3) List of participants; (4) Members of the working groups; and (5) List of documents. (DB)

Twelfth Regional Consultation Meeting on the Asia and Pacific Programme of Educational Innovation for Development

Chiang Mai, Thailand, 20 - 27 August 1990

Final Report

[UNESCO] Regional Consultation Meeting on the Asia and Pacific Programme of Educational Innovation for Development (APEID), 12th, Chiang Mai, Thailand, 20 - 27 August 1990.

Final report. Bangkok, Unesco, 1991.

85 p. (Asia and Pacific Programme of Educational Innovation for Development)

1. EDUCATIONAL INNOVATIONS – ASIA/PACIFIC. 2. EDUCATIONAL INNOVATIONS – PROGRAMME PLANNING – ASIA/PACIFIC. I. Unesco. Principal Regional Office for Asia and the Pacific. II. Title. III. Series.

APEID

ASIA AND THE PACIFIC PROGRAMME
OF EDUCATIONAL INNOVATION FOR DEVELOPMENT

TWELFTH REGIONAL CONSULTATION MEETING
ON THE
ASIA AND PACIFIC PROGRAMME
OF EDUCATIONAL INNOVATION
FOR DEVELOPMENT

Chiang Mai, Thailand, 20 - 27 August 1990

F I N A L R E P O R T

UNESCO

UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC
BANGKOK, 1991

Published by the
Unesco Principal Regional Office for Asia and the Pacific
P.O. Box 967, Prakanong Post Office
Bangkok 10110, Thailand

Printed in Thailand

The designations employed and the presentation of material throughout the publication do not imply the expression of any opinion whatsoever on the part of Unesco concerning the legal status of any country, territory, city or area or of its authorities, or concerning its frontiers or boundaries.

TABLE OF CONTENTS

INTRODUCTION

Part One

INTRODUCTION

Background

In February 1971, the Unesco Regional Office, Bangkok, convened a seminar in Chiang Mai, Thailand, to discuss the need to constitute a more effective mechanism for regional co-operation in education. The seminar decided to face the challenge and forge a co-operative endeavour among countries towards being contributors rather than mere recipients of assistance. Thus was born the forerunner of the concept of "Technical Co-operation Among Developing Countries (TCDC)". The recommendations of the seminar were then endorsed by the Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia (Singapore, 1971). The Ministers' Conference recommended to Unesco and the Member States to take appropriate steps within the framework of a regional mechanism for inter-country co-operation. The Unesco General Conference, at its 17th session (Paris, 1972), approved the setting up of the Programme, and authorized the Director-General of Unesco to create an Asian Centre of Educational Innovation for Development (ACEID) to facilitate its implementation. Thus the Asia and Pacific Programme of Educational Innovation for Development (APEID) was launched, and it became operational in 1973.

APEID continues to be designed, developed, implemented and evaluated by the participating Member States themselves, through regular contacts and consultations with the national authorities designated by the governments, such as the National Commissions for Unesco, the National Development Groups (NDGs) for APEID, and the APEID Associated Centres.

Every two years, the Unesco Principal Regional Office for Asia and the Pacific (PROAP) convenes a Regional Consultation Meeting (RCM) on APEID, at which Chairpersons or senior members of the NDGs review past performances of APEID and provide guidance for adjustments and/or new directions of APEID.

The present meeting, the twelfth in a series, was held at Chiang Mai Phucome Hotel, Chiang Mai, Thailand, from 20 to 27 August 1990. The meeting was co-hosted by the Faculty of Education, Chiang Mai University, which is an APEID Associated Centre.

The Twelfth RCM was particularly significant in that it took place one and a half years before the end of the fourth programming cycle of APEID (1987-1991). It had the task of providing guidelines for APEID's future directions for its fifth programming cycle, covering the period 1992-1996. The RCM also turned itself into a Programme Development Meeting (28-31 August 1990) which developed APEID's work plan for operational actions of APEID in more detail, based on the guidelines given by the RCM.

The terms of reference of the Twelfth RCM were:

a) to review the progress of APEID during the last three years and a half (1 January 1987 - 30 June 1990), which will constitute a Tripartite Review of the UNDP-assisted component of APEID, i.e., project RAS/86/170 (Improvement of National Education Programmes through the Network of APEID), and project RAS/86/051 (Improvement of Science and Technology Education);

through the Network of APEID), and project RAS/86/051 (Improvement of Science and Technology Education);

b) to propose programme areas for educational innovation for development for the fifth programming cycle of APEID (1992-1996);

c) to consider means for strengthening and/or redesigning the APEID networking mechanism and/or strategies for APEID's fifth cycle.

The agenda of the meeting is at Annex I.

To assist the Unesco Secretariat in the substantive preparation for the RCM, a small group of resource persons was invited to an APEID Technical Working Group Meeting (TWG) in Bangkok from 7 to 15 August 1990. Their names appear at Annex III (List of Participants).

Immediately prior to the RCM, Unesco PROAP organized from 16 to 18 August 1990 in Bangkok, an APEID Regional Symposium on Qualities of Education Required Today to Meet Foreseeable Demands of the Twenty-first Century. The purpose was to invite eminent thinkers of the region - educators, socio-economic planners, economists, medical doctors, community leaders, mass media persons - to present their views on the topic and interact with the participants of the RCM, so that the problems foreseen for the future and recommended strategies for educational actions emanating from the speakers' presentations and exchanges of ideas would be a substantive input for the deliberations of the RCM in providing future directions of APEID for the fifth cycle.

Participation

The meeting was attended by 55 participants, resource persons and observers from Australia, Bangladesh, China, Democratic People's Republic of Korea, Fiji, India, Indonesia, Iran, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Socialist Republic of Viet Nam, Sri Lanka, Thailand, Tonga, Turkey, USSR, SEAMEO-INNOTECH, SEAMEO-RECSAM, ILO, SEAMEO and UNDP.

At Unesco PROAP's invitation, Dr. Raja Roy-Singh, Former Assistant Director-General/Director of the Unesco Regional Office for Education in Asia and the Pacific, and Asst. Prof. Prasit Malumpong, Dean, Faculty of Education, Chiang Mai University, Chiang Mai, Thailand, participated in the meeting as special invitees.

At the session on Mid-Term Evaluation (Tripartite Review) of the UNDP-assisted projects RAS/86/170 and RAS/86/051, UNDP was represented by Mr. F. Ossella, Deputy Regional Representative, UNDP, Bangkok.

The list of participants is at Annex III.

Inauguration

The meeting was inaugurated in Bangkok, in conjunction with the APEID Regional Symposium mentioned earlier, by Dr. Vichai Tunsiri, Secretary-General, Office of the Teacher Civil Service Commission, on behalf of H.E. General Mana Ratanakoses, Minister of Education, Thailand. Dr. Vichai congratulated all the institutions and individuals involved in the work of APEID, which, he said, is an important regional mechanism for the promotion of educational development. APEID laid an innovative groundwork for an effort towards the provision of education for all,

highlighted by the World Conference on Education for All held in Thailand earlier in 1990. In his view, the Symposium would highlight crucial issues and concerns for the future, to which education would have to respond. Dr. Vichai mentioned three areas for educational action : literacy, universal education, and science and technology. He also expressed his appreciation of UNDP's funding assistance, and looked forward to increased co-operation from all funding agencies. (Full text of his address appears at Annex II)

Mr. Hedayat Ahmed, Director, Unesco Principal Regional Office for Asia and the Pacific (PROAP), in his address, referred to Programme 1.2 of Unesco's Second Medium-Term Plan entitled "Education for the Twenty-first Century", in relation to which APEID had taken the initiative to organize the Regional Symposium.

In making comparisons between countries in this region, he said, economic criteria are almost exclusively used as the yardstick for indicating the level of advancement. Education has a very important role to play in helping improve the standard of living and the quality of life. However, national development activities often neglect the human dimension of development. Recently, a new Human Development Index (HDI) for UNDP has been developed to quantify key aspects of the overall human condition, focusing on life expectancy, literacy, and purchasing power.

Educational institutions, Mr. Ahmed stressed, do not exist in social, cultural or economic isolation from the rest of the society, but actually exist to serve the needs of both the individual and society. Therefore, in order to adjust education systems, it was necessary to know what types of societies were emerging or are likely to emerge. In addition, education must satisfy individuals' quest for self-actualization.

In conceiving the futures, one can think in terms of possible futures, probable futures, and preferred futures. The choice of the nine speakers of the Symposium indicated that Unesco PROAP favours the preferred futures. It was hoped that the RCM would discuss how education could be instrumental in pursuing the preferred futures, helping to make things happen; to act rather than to react; to create rather than only adapt to changes. (Full text of Mr. Ahmed's address appears at Annex II)

On 20 August 1990, a welcome ceremony was arranged in Chiang Mai, presided over by H.E. Dr. Prasit Chaiyasri, Vice Governor of Chiang Mai, and attended also by Prof. Dr. Kasem Watanachai, President of Chiang Mai University.

The Vice Governor of Chiang Mai welcomed the participants on behalf of the city and people of Chiang Mai. He mentioned that Chiang Mai is a major city in the north of Thailand, where several regional and international conferences are held. The city is renowned for people's hospitality, arts and crafts, and local industries such as silk weaving, silverware, wood carving, umbrella making, ceramic ware, etc.

Prof. Dr. Kasem Watanachai, President of Chiang Mai University then welcomed the participants on behalf of Chiang Mai University. According to him, the work of APEID was exciting and challenging, because it was designed not merely for educational purposes but also for human, community and national development. The Consultation Meeting enabled Member States to share ideas and experiences. He was glad that the Faculty of Education, Chiang Mai University, is an Associated Centre for APEID, and would benefit from the discussion. The innovations and creative insights would then be further shared among members of other faculties as well. (Full text of the address appears at Annex II)

Mr. F. Ossella, Deputy Regional Representative of UNDP in Bangkok, was invited to make a statement, on behalf of Mr. Alan Doss, the UNDP Regional Representative. He referred to the long association of UNDP with APEID since the early 1970s, and indicated that UNDP wished to see the Programme grow in self reliance and determination. External assistance, he said, should no longer be seen as an essential element for the network to pursue its objectives. Of particular interest to UNDP was the review of the effectiveness and efficiency of UNDP assistance to APEID through two regional projects, and in strategies and innovations instrumental to achieve the goal of education for all. In the spectrum of development activities, UNDP places the utmost priority on human development. UNDP was one of the four sponsors of the recently held World Conference on Education for All. Follow-up actions to the Conference recommendations were being undertaken in several countries.

Mr. Ossella informed the meeting that UNDP had published a report on the status of human development worldwide, which stressed the importance of placing people at the centre of development policies. UNDP would be ready to help bring about a reallocation of more resources to education, he said. The Governing Council of UNDP held earlier this year had mandated UNDP to concentrate on the following themes in the context of sustainable development:

a) poverty eradication and grassroots participation in development;

b) environment and natural resource management;

c) development management;

d) technical co-operation among developing countries;

e) technology for development; and

f) women in development.

(Full text of Mr. Ossella's address appears at Annex II)

In his statement, Mr. Hedayat Ahmed, Director, Unesco PROAP, gave the historical background of APEID since 1971 when the idea of a networking mechanism for regional co-operation in education based on self-reliance and mutual sharing of experiences was mooted.

With the recent joining in APEID of three more Member States : Democratic People's Republic of Korea, Mongolia and Myanmar, the number of countries participating in APEID has now grown to 29. This exemplified the effectiveness of the Programme.

The usefulness of the funding support provided to APEID by UNDP was acknowledged, as also the Japanese Funds-in-Trust and voluntary contributions of Australia, China, India, Iran, Japan, New Zealand, Republic of Korea, and Thailand.

Mr. Ahmed emphasized that creativity and innovativeness are significant in sustaining and strengthening APEID. He therefore hoped that the Twelfth RCM would have a fresh look at the programme areas and mechanisms of APEID in terms of the changing futures, as envisioned by the eminent speakers of the Regional Symposium. (Full text of his address appears at Annex II)

Officers of the Meeting

The meeting unanimously elected Mr. A.N.M. Eusuf (Bangladesh) as Chairperson; Dr. Kowit Pravalpruk (Thailand) and Mr. H. Nishinosono (Japan) as Vice-Chairpersons; and Ms. Fran Hinton (Australia) as Rapporteur-General. The Secretary of the meeting was Mr. Leonardo de la Cruz (Head, Unesco PROAP/ACEID).

Working methods of the Meeting

The meeting held 11 plenary sessions and 3 group sessions. Group A considered the programme areas of APEID for the fifth cycle (1992-1996), while Group B concerned itself with the mechanisms of APEID for the future. The names of members of the two Working Groups appear at Annex IV.

The draft report was considered in the final plenary session of the meeting, and was adopted with modifications to be incorporated in the final report.

The draft report was then used by the APEID Programme Development Meeting (Chiang Mai, 28-31 August 1990) as a basis for developing a work plan of APEID for its fifth programming cycle (1992-1996).

REVIEW OF APEID ACTIVITIES, JANUARY 1987 – 1990

Part Two

REVIEW OF APEID ACTIVITIES JANUARY 1987 - JULY 1990

A. MID-TERM EVALUATION (MTE) AND TRIPARTITE REVIEW (TPR) OF

1. **RAS/86/17O: Improvement of National Education Programmes through the Network of Asia and the Pacific Programme of Educational Innovation for Development (APEID).**
2. **RAS/86/051: Improvement of Science and Technology Education.**

Introduction

Since its inception, the Asia and Pacific Programme of Educational Innovation for Development (APEID) has received assistance from the United Nations Development Programme (UNDP). APEID aims at promoting self-reliance in the region for undertaking educational innovations for development. In the fourth cycle of APEID's operation (1987-1991), UNDP supports two inter-country projects: RAS/86/170 entitled "Improvement of National Education Programmes through the Network of APEID" and RAS/86/051 - "Improvement of Science and Technology Education". UNDP is providing US$1.4 million for RAS/86/170 and US$0.8 million for RAS/86/051.

The project documents for the implementation of the UNDP-assisted projects provide for joint evaluations to ensure effective interaction amongst all APEID project partners, namely, UNDP, Unesco and the participating Member States. The joint evaluation to be undertaken during the fourth cycle provides a mid-term review and an end-of-cycle evaluation.

A survey design and a questionnaire was developed for the mid-term review. The questionnaire was sent to 22 Member States participating in the two UNDP-supported projects on 14 July 1989. The responses to the questionnaire from 17 Member States were analysed and written up by a consultant. The report based on the analysis is found in the document PROAP-90/APEID-RCM/WD.7, entitled "Mid-Term Evaluation of Two UNDP-Assisted Regional Education Projects RAS/86/170 and RAS/86/051".

The Mid-term Evaluation (MTE) and Tripartite Review (TPR) Meeting on the two projects was undertaken on 20 August 1990, the first day of the Twelfth Regional Consultation Meeting (RCM) on APEID, held in Chiang Mai, Thailand (20-27 August 1990).

The agenda for the MTE and TPR Meeting was as follows:

1. Brief presentation of the project activities to date by the Executing Agency and by country representatives;
2. Review project implementation against planned objectives and outputs taking into consideration the following issues:
   a) appropriateness of project concept and design;

b) the effectiveness of project activities towards achievement of project objectives;

c) impact of project activities on national development; and

d) factors which facilitated or impeded project implementation;

3. Implementation of remaining project activities;

4. Conclusions and recommendations for the future and follow-up activities by executing agency and governments;

5. Other matters.

The MTE and TPR meeting was conducted by Mr. F. Ossella, UNDP Deputy Regional Representative in Thailand.

A.1 Tripartite Review of RAS/86/170: Improvement of National Education Programmes through the Network of APEID

Brief description of the project

The implementation of the project RAS/86/170 started in early 1987. The programme areas and the activities for this project were developed by Member States (through their representatives to the Tenth RCM in May 1986) as a response to their concerns.

The main concern of the project is to contribute to the strengthening of national capabilities for undertaking co-ordinated sets of changes and qualitative transformations of the education systems, in order to enhance the contribution of education to the realization of development goals, defined by the Member States in the context of their political, social, and economic systems.

The programme areas covered by the Project are as follows:

1. Universalization of primary education;

2. Continuing education;

3. Education for the world of work;

4. Restructuring secondary education;

5. Educational and communication technology; and

6. Professional training including professional support services and distance education.

The Project Performance Evaluation Reports (PPER) have been submitted to UNDP as follows:

- PPER for 1 January - 31 December 1987: at the end of 1987
- PPER for 1 January - 30 June 1988 : at the Eleventh RCM
- PPER for 1 January - 31 December 1988: at the end of 1988
- PPER for 1 January - 31 December 1989: at the end of 1989, and as working document No. WD.5 of the Twelfth RCM
- PPER for 1 January - 30 June 1990 : as appendix A.1 to Part One of this report.

Progress of the Project

The major thrusts of the six programme areas of RAS/86/170 are on the transfer of regional experiences to the national level and vice versa, and on the linking of new activities to past achievements, at the national level.

The programmes use a variety of strategies including:

- Assessment of the problems;
- Regional meetings/workshops;
- National follow-up action;
- Attachments/internships;
- Exchange of resource persons and materials;
- Sub-regional/thematic review meetings.

An action programme review (1987-1990) was presented to the Twelfth Regional Consultation Meeting as working document coded PROAP-90/APEID-RCM/WD.4(a).

Review of the implementation against planned objectives

The project objectives are being attained through action programmes as follows:

1. Within the development objective of, "Contributing through innovations to the strengthening of national actions of the Member States to achieve within a decade universal primary education of progressively enhanced quality, efficiency and effectiveness, ensuring in particular the provision of educational facilities for all girls and for all children in population groups which are disadvantaged socially, economically or by reason of geography", APEID is undertaking a wide range of innovative programmes and activities for universalization of primary education. The main focus is on in-country programmes, studies and innovations with reference to promotion of primary education for girls, disadvantaged and underserved population groups especially in remote rural areas.
2. Within the development objective of "Contributing through innovative approaches to the national efforts to develop non-formal education avenues and methods for continuing education in particular for early primary school leavers, and young people out of school", APEID actions have concentrated on two main thrusts: continuing education for early school leavers, and education for promoting enterprise competencies of children and youth.
3. Within the development objective of "Promoting education relevant to societal requirements, in particular through innovations undertaken in the Member States aimed at incorporating work skills and experiences in general education and the reorientation or restructuring of secondary education in order to make it responsive and relevant to the development needs defined by the modernizing transformations in the countries", APEID actions include the following:

   a) In the area of education and the world of work, activities focused on introducing work as an integral component of general education, including vocationalization of general education, aiming at harmonious and holistic personality development of the learners.

b) In the area of restructuring secondary education, actions are in two broad categories; i.e. (i) the development of alternative models to increase the relevance efficiency and effectiveness of the secondary education provided in order to make it more responsive to societal requirements; and (ii) the Joint Innovative Project on raising the quality of learning of secondary school students.

4. Within the development objective of "Contributing to the Member States' efforts to develop innovative structures and systems of support services for the development of education, in particular those related to the capacities of education systems to devise and sustain innovations related to development, notably the utilization of communication technologies (including distance education), multi-media instructional resources, and personnel training", the APEID actions include the following:

   a) In education and communication technology, the activities focus on the use of information and communication technology in education; computer educational software development, training of teachers in the use of informatics in education; training of teachers in computer education, and the use of educational technology in distance education in teacher education.

   b) In the training of educational personnel and professional support services, the activities focus on upgrading training of teachers, teacher educators and other educational personnel, and providing professional support services, to ensure that the systems of teacher education in member countries are responsive to the types of education innovations and reforms occurring in schooling systems, and that they function effectively to prepare the personnel required at the school level to implement these changes. The emphasis in the programmes is on the actual classroom situations, especially in disadvantaged environments for which special competencies are required by teachers, including those for overcrowded or multigrade classes; multidisciplinary situations arising out of solving real-life problems; developing low- and no-cost learning/teaching materials; establishing home-community-school links; preventing/remediating learning difficulties; nurturing talent; nurturing empathy.

For the detailed review of the programme activities, the following working documents were prepared for consideration by the Twelfth RCM: (i) PROAP-90/APEID-RCM/WD.4(a) entitled "Action Programme Review 1987-1990" which briefly describes the activities funded under the projects; (ii) PROAP-90/APEID-RCM/WD.7 entitled "Mid-Term Evaluation of two UNDP-assisted Regional Education Projects, RAS/86/170 and RAS/86/051". The second document describes the reactions of APEID Member States to the programmes and project activities organized from 1987 to mid-1989.

Assessment of project implementation

a) *Project concept and design*

It was unanimously agreed that the project as conceived continues to be relevant.

The six programme areas were found to be consistent with the needs of the Member States, and the main thrusts of the programmes continue to remain appropriate to the national priorities of APEID Member States.

APEID's role in educational innovation for development in the region assumes even greater importance, especially in the context of the World Conference Declaration on Education for All for co-operative and joint actions under the aegis of UNDP, Unesco, UNICEF and the World Bank. There is a renewed commitment in countries of the region to realize Education for All.

The emphasis of the project is on the need for developing national capabilities of the countries to generate and implement appropriate innovations for dealing effectively with critical issues and problems of educational development faced in the countries, are adequately encompassed by the programmes of APEID in the current programme cycle.

APEID's emphasis on co-operative planning and development of educational programmes and operational modalities, which rely primarily on the use of the rich reservoir of existing resources and capabilities of its Associated Centres, continues to produce excellent outcomes for the development of education in the Asia and Pacific region.

b) *Effectiveness of project activities in achievement of project objectives*

The PPERs submitted in December 1987, 1988 and 1989 described the various activities including regional, sub-regional, national activities in various programme areas. Summaries of the programmes and activities implemented for the same period were also provided in the document PROAP-90/APEID-RCM/WD.4(c): "APEID Action Programme Review 1987-1990".

Member States assessed the programme areas to be effective in the following ways:

- The activities organized and supported in the area of 'universalization of primary education' have focused on the disadvantaged population groups including girls and those located in rural and isolated areas. They are contributing significantly to national efforts at reaching out to educationally disadvantaged population groups and in the qualitative improvement of primary education.

- The programme activities organized in the area of 'continuing education' are instrumental in enabling the development of a conceptual framework and initiation of the development of innovative methods and materials for training and for the promotion of continuing education especially for those who prematurely leave primary schools.

- The programmes and activities supported in the area of 'education and the world of work' are helping promote educational structures and methods which incorporate work skills in general education and furthering national efforts for introducing work as an integral part of general education.

- The programme activities implemented in the area of 'restructuring secondary education' are making a significant contribution to the promotion and development of alternative models for reorientating and restructuring secondary education with emphasis on improving its relevance to societal requirements, qualitative improvement and integration of vocational skills in general education and to the revitalization of vocational and technical education.

- The programme activities in educational and communication technology are helpful in assisting the development of national capabilities, especially in the use of computers and other media materials.

- The programme activities in 'professional training, including professional support services and distance education, contribute significantly in promoting innovative methods and techniques for training and retraining of teachers and other educational personnel.

Impact of project activities on national development

The UNDP-funded APEID project "Improvement of National Education Programmes through the Network of APEID" is an important and integral part of the overall programme of APEID. UNDP inputs are very substantial in the six programme areas covered by the project. These complement and reinforce the action areas of the overall programmes of APEID, in three major areas of concern laid down by the Tenth RCM on APEID. They are: education for all; making education relevant to societal requirements; and supportive activities and infrastructures common to all education levels and systems. These three overall areas of concern constitute the total programme concentration of APEID and are supported by funds drawn from the Regular Programme of Unesco, Member States' Voluntary Contributions to APEID, the Japanese Funds-in-Trust and UNDP.

The financial support received from the UNDP-supported project of APEID, whilst relatively small, has served as an important catalyst for setting in motion educational innovations in the six programme areas covered by the project.

In most cases the small sum of money from the UNDP-supported project has served to mobilize substantial financial resources from the Government and other funding bodies. In this regard, the example of the Joint Innovative Project on Raising Achievement Level of Children in Primary Education in Gansu, China was cited. In Gansu the project was started in 100 primary schools, 80 per cent of which were located in remote rural areas in early 1987 with very modest financial support and technical assistance from APEID. It has now been expanded to 500 schools, and four other provinces have also launched similar projects without any financial contributions from Unesco, except some limited support to involve specialists from those provinces in a national workshop to exchange and disseminate the experiences of the project. This example serves to illustrate the impact of APEID and the impetus provided in the Member States by UNDP input. The quantum and degree of impact varies from country to country, but common to all participants was the recognition of the importance of the multiplier effect of UNDP funds.

The participants from the Pacific island countries observed that APEID's assistance for developing literacy programmes in local languages, improvement of multigrade teaching in small primary schools and materials development for improvement of teaching and learning have been valuable and were highly appreciated.

It is to be noted too that through the UNDP-supported project many key personnel from APEID Member States have been trained as shown below:

	Regional	National
1987	300	1,367
1988	314	5,901
1989	152	2,109

A range of publications which were the outputs of regional and national activities, are widely used and have been translated into the national languages of Member States in the region.

Many of the important educational reforms in a number of countries were seen to be traceable to the programme activities of the UNDP-supported project. The APEID had helped to create a reservoir of expertise and of relevant experience which Member States can now draw on to launch relevant educational programmes in their countries. In fact, this experience and expertise could now be

utilized for achieving the goal Education for All. This would, however, require support from international and other funding institutions, particularly for the least developed countries.

The participants stressed that the influence of APEID in the development of education in the participating countries is often underestimated in the written reports and documents. Many positive gains which had accrued had long-term implications, the impact of which could not be precisely identified in the short run.

c) *Factors which facilitated or impeded project implementation*

The project is being implemented with budget support from UNDP amounting to US$1,400,000 covering the period 1987 to 1991. Other funds reinforce the implementation of the programmes and projects, i.e. Unesco regular budget, Japanese Funds-in-Trust, and voluntary contributions from Member States.

Another factor that contributed immensely to the implementation of project activities is the co-operation and support (financial and technical) from National Development Groups (NDGs) of APEID and many Associated Centres.

In 1989, however, delayed responses from a few Member States had affected the implementation rate. This has now been resolved, and the implementation rate of RAS/86/170 as of July 1990 is already 62 per cent. With the proposals already being considered, there is very likelihood that the project support would have to be augmented.

Implementation of remaining project activities

The APEID fourth programming cycle is in the fourth year. Some planned activities have yet to be implemented. These will take place during the remaining period, from September 1990 to December 1991, as planned.

Recommendations

The participants were of the view that the UNDP-supported project has been closely linked to the national and country projects at the grassroots level, and is sufficiently flexible to meet the needs and local conditions of the participating countries. There was, therefore, no need for major changes and alterations in the original concept and design of the project at this state. However, the Meeting made the following recommendations for enhancing further the effectiveness and impact of the project in its remaining period up to the end of 1991:

- In view of the varying stages of development attained by different countries of the region participating in APEID, consideration should be given to the development of flexible groupings of a number of countries on the basis of common interests and/or problems.
- The development of specific indicators for measuring success would require a consideration of the intermediate achievement and the realization of the final objectives. The success or otherwise of the programme could be judged on both criteria, the former primarily from the point of view how and in what form it contributed to the latter.
- The APEID programmes and activities in the present context of resource constraints appear to have limited coverage. It might be desirable to ensure in future greater programme concentration in priority programme areas.

- Experiences over the last few years have shown that the modality of Joint Innovative Project is proving to be an increasingly effective mode of operation for generating country-based action projects within the regional co-operative framework of APEID. In future programming of activities, increased use of this modality is recommended, wherever it is appropriate.
- Increased emphasis should be given to follow-up actions at the national and grassroots levels so that experience from innovative activities is fed into the process of making the system more efficient and relevant.
- ACEID may consider undertaking area-based pilot projects which could serve as growth points for more meaningful development.

Appendix to A.1
Project Performance Evaluation Report (PPER)
on Project RAS/86/170
for the period 1 January - 30 June 1990

I. Universalization of Primary Education

Regional/sub-regional activities

Technical Working Group Meeting on Work-oriented Primary Education. The TWG Meeting is to be organized in conjunction with the Regional Seminar on Innovative Measures for Overcoming Socio-economic Obstacles to Primary School Attendance scheduled to be organized in Pune, India in December 1990.

The Meeting will study and review country experiences on primary school attendance patterns in rural areas with reference to work orientation of primary school curricula vis-a-vis socio-economic background and educational needs of children who leave the primary school early without completing it; and explore possible designs and models for introducing innovative contents and methods focused on functionality and work orientation in primary school education.

National Activities

In-country workshops on work-oriented primary education. Two Member States, namely, India and Indonesia, have been provided financial support and guidelines for organizing in-country workshops focused on analysis of educational needs of early primary school leavers, with particular reference to functionality and work orientation of primary school curriculum.

The outcomes of the two in-country workshops will be direct inputs to the Regional Seminar on Innovative Measures for overcoming Socio-economic Obstacles to Primary School Attendance scheduled to take place in Pune, India in December 1990.

II. Continuing Education

National Activities

1. Continuing education for early primary school leavers:

As a follow-up of a regional meeting held in 1988, six countries have been given financial support for national activities: Bangladesh, China, India, Indonesia, Nepal, Pakistan. Two more, Philippines and Thailand, will be sending their work plan to permit contracts to be issued.

2. Education for promoting the enterprise competencies of children and youth

As a follow-up of a Planning Meeting held at the end of 1989, which resulted in the launching of a Joint Innovative Project on this theme, seven Member States: China, India, Indonesia, Papua New Guinea, Philippines, Sri Lanka and Thailand, have been offered financial support for organizing follow-up national activities. For this purpose, each Member State will prepare a blueprint of its national action plan. Of these seven, China has already sent its action plan, and a contract has been established.

III. Education and the World of Work

Regional/sub-regional activities

A Review and Evaluation Meeting on Integration of Education and Work is planned to be organized in the third quarter of 1990, in India

National activities

Negotiations (suspended from last year), with Pakistan, are under way, to organize a national training workshop on improvement of methods, forms and structures of technical and vocational educaion. In 1990, invitations have been sent to Iran, Philippines, and Papua New Guinea, for similar national workshops. Contracts have been awarded to Iran and Philippines on receipt of the action plans.

Invitations have been sent to Mongolia, Democratic Republic of Korea, and Lao PDR to organize national training-cum-production workshops on technical and vocational education. However, contracts have been awarded to Mongolia and Lao PDR.

Attachments/internships

Attachments programmes have been arranged as follows: (i) four nominees from People's Republic of China, Socialist Republic of Viet Nam, Democratic Republic of Korea, and Lao PDR, participated in the International Conference on the "Role of Women on Technical and Industrial Development", from 11-15 June 1990, in Manila, Philippines; and (ii) two specialists in technical and vocational education from Afghanistan will be attached to the National Council of Educational Research and Training (NCERT), India, for 3 weeks in October/November 1990.

IV. Restructuring Secondary Education

National activities

In continuation of the 1988 Regional Study Group Meeting which developed the design for a Joint Innovative Project on Raising the Quality of Learning of Secondary School Student, invitations have been sent to Bangladesh, Bhutan, India, China, Indonesia, Iran, Republic of Korea, Mongolia, Nepal, Pakistan, Philippines, Samoa, Thailand, Turkey and Viet Nam to organize national workshops to prepare country-based designs of the JIP. Contracts have been awarded to Bangladesh, China, Nepal, Philippines, and Viet Nam on receipt of the action plans.

Attachments/internships

Two educators from China are proposed to undertake study visits to the Philippines and Thailand. The two educators will make a study of secondary education in these two countries, with special emphasis on raising the quality of learning of secondary students.

V. Educational and Communication Technology

Regional/sub-regional activities

The Regional Training Workshop on Computer Educational Software Development, Evaluation and Dissemination is planned to be organized from 13 to 21 September at the Asian

Institute of Technology in Bangkok, Thailand. Twelve countries of the region, People's Republic of China (2), India (2), Indonesia (2), Malaysia (2), Nepal (3), and Viet Nam, have been invited to nominate participants. Following the Regional Training Workshop, support will be provided to conduct national workshops and pilot projects.

VI. Training of Educational Personnel including Professional Support Services (TEP)

Regional/sub-regional activity

A Regional Study Group Meeting on Teacher Education was organized in Chiang Rai, Thailand from 25 June to 6 July 1990, in collaboration with the Department of Teacher Education, Ministry of Education, Thailand, and the Chiang Rai Teachers College. Thirty-three participants and resource persons from Australia, Bangladesh, China, India, Indonesia, Iran, Lao PDR, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Sri Lanka, Thailand and Viet Nam took part in the meeting.

The meeting identified mega trends in curriculum development and the implications of these for new competencies required of teachers. The participants also developed prototype strategies and illustrative examples of how to develop those competencies.

The meeting also reviewed and evaluated the training of educational personnel for strategic development tasks through distance education.

National activities

Support was provided to: (i) Indonesia and Pakistan to organize the follow-up national training workshops on teacher education via distance education; and (ii) India and Philippines to undertake studies on indigenous teaching/learning modalities.

Attachments/internships

An attachment programme in teacher education is being provided to a teacher educator from the Philippines who will be attached to a Faculty of Education in Australia in October 1990.

Inter-country exchange of resource persons

In the Regional Study Group Meeting on Teacher Education (cited earlier), resource persons from Australia, Malaysia, Philippines, Sri Lanka and Thailand assisted at the Meeting.

A.2 Tripartite Review of RAS/86/051: Improvement of Science and Technology Education

Brief description of the project

The project RAS/86/051 started in March 1987. The project activities were designed and developed by the Member States themselves (through their representatives to the Tenth RCM), keeping in view the envisaged priority support to national science and technology education development programmes.

The project aims at contributing, through innovations in science and technology education, to the strengthening of national capacities of Member States to achieve relevant science and technology education for all.

The Project Performance Evaluation Reports (PPER) have been submitted to UNDP as follows:

- PPER for 1 January - 31 December 1987: at the end of 1987
- PPER for 1 January - 31 December 1988: at the end of 1988
- PPER for 1 January - 30 June 1989: at the end of 1989, and as a working document No. WD.6 of the Twelfth RCM
- PPER for 1 January - 30 June 1990: As appendix A.2 to Part One of this report

Progress of the project

The major thrusts of the science and technology education programme are on the transfer of regional experiences to the national level, and on the linking of new activities to past achievements, at the national level.

The programme uses the following overall strategies:

- Development of low-cost and cost-effective high quality, functional science and technology education in the context of Education for All, and within it, Science for All;
- Development of futures in science and technology education.

An action programme review (1987-1990) was presented to the Twelfth Regional Consultation Meeting as a working document coded PROAP-90/APEID-RCM (WD.4(a).

Review of the implementation against planned objectives

The project objectives are being attained through action programmes as follows:

1. Within the development objective of "relevant science and technology education for all", actions include: (a) innovation for raising the quality of science and technology education through curriculum renewal - methods, materials and evaluation, and activities included regional/national workshops on quality improvement of science/mathematics education at primary/secondary levels; and (b) developing competencies for science teachers and science teacher educators through national training workshops and regional workshops.
2. Within the development objective of "developing scientific and technological literacy for all", actions involve (a) provision of learning opportunities in science for young people in the formal school system, and activities geared towards production of low-cost learning equipment; and (b) provision of learning experiences at the work place for out-of-school youth and the educated adults including girls and women, through national workshops on out-of-school science.
3. Within the development objective of "promoting education in science and technology relevant to societal requirements", actions involve (a) promotion of educational forms and methods and structures which incorporate applications of science and technology to

development, through national workshops on application of out-of-school science for in-school populations, and a regional workshop on curricular reform for lower secondary education; and (b) promoting the re-orientation of school education in science and technology in order to enhance its quality and revitalize it to respond to the needs of the modernizing economies and the emerging new technologies. The activities regional and national workshops on use of computers, analysis of futures science, and nurturing of talent.

4. Within the development bjective of "promoting, orienting and encouraging the acquisition of scientific knowledge and skills by all sections of the society", actions involve: (a) promotion of innovative methods and techniques for the training and re-training of science and technology personnel, including co-operative network arrangements through national and regional workshops, and (b) promoting the development and application of communication technologies in education, by conducting regional and national workshops on use of computers for science and mathematics education.

For the detailed review of the programmes, working documents were prepared for the 12th RCM. These are: (1) PROAP-90/APEID-RCM/WD.4(a) entitled "Action Programme Review 1987-1990" which describes what APEID has done; (2) PROAP-90/APEID-RCM/WD.9 entitled "Mid-Term Evaluation of two UNDP-assisted Regional Education Projects, one of which is RAS/86/051. The second document describes what APEID Member States participating in APEID think about the programmes and project activities organized from 1987 to mid-1989.

Special activities include the following:

A beginning was made in regard to science education for the disabled and early childhood education in the context of Science for All, which needs to be followed up. Technical documentation and service for these areas need to be supported.

Many countries in the region are deeply concerned about promoting science education in future. They are anxious to move ahead in the development work. The need for a thorough content analysis has to be considered in respect of science in secondary schools, on new issues and development such as bio-technology, macro-environmental concerns, immunology, electronics, lasers, renewable energy sources, super conductors, etc.

A new area investigated in the project was the implications of ethics and values, and which would need follow-up. The major emphasis here is the development of a world view that encompasses especially the new discoveries of science, the ethics and values intrinsic to science itself and the implications for ethical and value behaviour in relation to the consequences of the use of science and technology unthinkingly.

Much further work requires to be done in the incorporation of the process skills of science in curricula; in problem solving and application of science and technology learnings in real life, essentially for improving the quality of life; of creativity; of incorporating morals, ethics and values in science and technology education.

Similarly, the achievement evaluation instruments required in these new areas are potential innovations.

The set of outcomes of the project, e.g., number of portfolios/handbooks on science and technology education innovations, teacher competencies, low-cost science equipment, out-of-school

science and science talent are now available and need to be collated into the respective coherent documents, with the principle that the documents illustrate options rather than prescriptions for the different areas.

Assessment of project implementation

a) Appropriateness of project concept and design:

The project activities were designed and developed by the Member States themselves through their representatives to the Tenth RCM. During the Eleventh RCM, the representatives from Member States reinforced the validity of the project design.

b) Effectiveness of project activities towards achievement of project objectives:

The programme activities in the area of science and technology education were found effective by the countries in:

- developing innovations for progressively raising the quality of science and technology education through curriculum renewal with regard to methods, materials and evaluation;
- developing the competencies of science teachers and science teacher educators; providing learning opportunities for young people in the formal school system;
- providing learning experiences at the work place for young people out-of-school and the educated adult section of the population including girls and women;
- promoting educational forms, methods and structures which incorporate applications of science and technology to development;
- encouraging the re-orientation of school education in science and technology in order to enhance its quality and make it more responsive to the needs of modernizing economies and emerging new technologies;
- promoting innovative methods and techniques for the training and retaining of science and technology education personnel, particularly through co-operative network arrangements (both at national and regional levels) for mutual support and sharing in training systems; and
- the development and application of communication technologies in education, at different levels of development ranging from multi-media materials to distance education and computer applications.

c) Impact of project activities on national development:

Almost all countries were very positive in their assessment of the UNDP-supported project. The representatives from MemberStates indicated that the project:

i) is highly relevant to meeting the scientific and technological needs of the countries, and has made a significant contribution to upgrading of science education in their countries;

ii) is assisting in the formulation and revision of their innovative projects, resulting in useful exchanges of ideas and experiences in areas such as adapting science education to the new technologies, and has helped develop new training proj[illegible]

iii) is beneficial and helpful with regard to the fulfillment of basic needs in terms of various national, sub-regional and regional training, inter-country exchanges and workshops;

iv) is helping countries to become more self-sufficient with regard to the teaching and learning materials.

d) Factors which facilitated or impeded project implementation:

The project is implemented with a budget support from UNDP of US$800,000 for the period 1987-1991. There are other sources of funds to reinforce the implementation, e.g., Unesco regular budget, Japanese Funds-in-Trust, and Voluntary Contributions from member countries. The project has achieved much more than what is shown in the project document.

Despite the indications that the projects are being implemented effectively, there are still other areas which warrant additional support, especially those which pertain to the development of competencies of science teachers and science teacher educators; the provision of learning opportunities for young people in the formal school system; the promotion of educational forms and methods and structures which incorporate applications of science and technology to development; and the promotion of the development and application of communication technologies in education at different levels of development, ranging from multi-media materials to distance education and computer applications.

Implementation of remaining project activities

The APEID fourth programming cycle is only in its fourth year. Some activities have been planned to be implemented later in the year from 1990 to December 1991.

In the above and other areas, attention is required to be given to the enhancement of competencies of teacher trainers and teachers who will implement innovations.

There is a need to develop further a production-cum-training modality which has been found to be significant and which has led to positive results, in implementing the project.

Other issues

The project being implemented is not only using UNDP funds, but also funds from Unesco's regular budget and voluntary contributions from Member States. UNDP resources have, however, provided a steady source of funding over the years. It has provided "seed money" to keep the programmes going. The contribution made by the project might not be easily quantifiable, but can be measured in qualitative terms. Following on the expression of the success of the project so far, more efforts are necessary. Furthermore, there is a need to review critically the programmes in terms of usefulness, effectiveness and relevance, in the context of new demands and new dimentions and nations' needs.

Appendix to A.2
Project Performance Evaluation Report (PPER)
on Project RAS/86/051
for the period 1 January - 30 June 1990

Regional/sub-regional activities

Regional Workshop on Science and Technology Education at Lower Secondary Level, was organized from 12-21 March 1990 in Nepal. The objectives of the workshop were to analyse science and technology education policies at the lower secondary level for curriculum implications, (including ethics and values); share experiences of reforms already undertaken at this level in selected countries; develop guidelines for curriculum reform; learning sequences; teacher training; and for evaluating learner achievement (including the affective domain). The movement of design from policy through learning sequences, teacher training and learner evaluation became an inter-learning training of curriculum specialists. A monograph for the region is an outcome of the workshop. There were 13 participants from Bhutan, People's Republic of China, India, Indonesia, Lao PDR, Malaysia, Maldives, Nepal(2), Pakistan, Philippines, Thailand(2) and two resource persons, one each from Australia and India. The services of a resource person from Australia were made available on a cost-sharing basis with the Government of Australia.

Regional Operational Workshop on Identifying Primary/Lower Secondary Level Science Curriculum Specifications Derived from Real-Life Experiences of Learners has been planned to be organized from 15-25 September 1990 in Pakistan with the emphasis on the science content analysis of life work situations of children ages 6-14 years in rural/urban disadvantage areas (before entering school and during schooling) as a basis for science and technology curriculum development; and techniques for mobilizing these for curriculum development. Preparatory work has been started with such analyses being made and recorded on video in People's Republic of China, India, Malaysia and Philippines. The products will appear as a regional source book.

National activities

Contracts were awarded for the following national training workshops: (i) development and use of exemplar teacher training materials for new innovations in science and technology education, in particular, science process skills; application of learning; values and ethics (India, Indonesia, Philippines, Thailand) (ii) manuals for curriculum renewal related to interaction of science, technology and society; futures content (People's Republic of China, India); (iii) development of materials for out-of-school science and technology learning activities for in-school learners with particular emphasis on the use of environment/application of learning (Bangladesh, Lao PDR, Socialist Republic of Viet Nam); (iv) curriculum renewal - science specifications derived from life and work experiences of learners/application of learning (Malaysia, Philippines); (v) non-formal science and technology education activities for out-of-school populations (Bangladesh); (vi) non-formal science and technology education for girls and women (People's Republic of China); (vii) training for science communicators (Thailand). The products of these national workshops/activities will be incorporated into regional portfolios/guidebooks. Funds for the organization of national workshops in the South Pacific were decentralized to the Unesco Office in Apia.

Attachments/internships

An attachment programme on training evaluation of the affective domain was arranged for four interns, one each from People's Republic of China, Indonesia, Malaysia and Thailand at the

Institute for Science and Mathematics Education Development (ISMED), University of the Philippines, from 17-30 June 1990. The materials produced in the training will be field tested at the national level in the countries of the region.

Study visit

A study visit to Australia has been arranged for two specialists from the Philippines during the period 24 June-8 July 1990. The main objective of the study visit was to contribute to the professional development of the ISMED and the College of Education, and establish functional twinning arrangements with appropriate institutions in Australia. Supplementary funds were provided by the Government of Australia on a cost-sharing basis.

Provision of science kit

It is planned to purchase and provide to each of the following countries: Afghanistan, Bhutan, Indonesia, Cambodia, Lao PDR, Maldives, Sri Lanka and Socialist Republic of Viet Nam, two sets of science kits developed by the Institute for the Promotion of Teaching Science and Technology (IPST), Thailand, as the first phase of exchange of designed learning/teaching materials across countries in the region.

B. OVERALL REVIEW

APEID held its First Regional Consultation Meeting in 1974. Programmes were identified in relation to the long-range objectives stated during the first Programme Development Meeting held in Bangkok from 6-14 August 1973. These were:

a) to promote awareness of the need for innovation and of possibilities for change;

b) to promote the understanding of the processes and practices of innovation with a view to encouraging systematic experimentation and accelerating the adoption of educational innovations in response to problems of development;

c) to assist the Member States in creating and strengthening national capabilities in terms of personnel, techniques and management capacity for the development and use of innovations in education linked to the needs of national development;

d) to identify and stimulate innovative activities and co-operative action among the Member States: and

e) to promote inter-country transfer of experiences.

To further the stated objectives, eleven Regional Consultation Meetings have already been held.

The Twelfth Regional Consultation Meeting, held in Chiang Mai, Thailand from 20-27 August 1990, reviewed and evaluated the work of APEID during the three and a half years of APEID's fourth cycle (January 1987 to July 1990). The review was made on the basis of the guiding principles enumerated in the Tenth and Eleventh RCMs, all of which found manifestations in the activities; at the specific and significant overall design aspects and strategies that were utilized to undergird the very many individual activities in the current cycle; and at the participation of the Member States.

The review covered the selected seven out of the fifteen (15) programme areas for action recommended by the Member States during the Eleventh RCM held in Bangkok, 2-8 August 1988. These seven areas had been prioritized on the basis of ACEID's available resources and in consideration of the fact that some of the programme areas not chosen as specific APEID programmes were covered by the chosen APEID programmes or by other PROAP service units, such as those in literacy, special education, educational planning and management services.

The current action areas which were reviewed are:

1. Universalization of Primary Education
2. Continuing Education
3. Education and the World of Work
4. Restructuring Secondary Education
5. Educational Technology and Information Technology
6. Training of Educational Personnel including Professional Support Services and Distance Education
7. Science and Technology Education including Science for All.

Funding

One of the major programmes of the Unesco Principal Regional Office for Asia and Pacific is APEID. The secretariat is the Asian Centre of Educational Innovation for Development (ACEID). The salaries of personnel in the secretariat are financed by Unesco's regular programme budget.

Supplementary funds are provided by voluntary contributions from some participating Member States. The Japanese Funds-In-Trust also contribute to the programmes. Two major projects receive support from UNDP. These are:

RAS/86/170 : Improvement of National Education Programmes through the Network of APEID.

RAS/86/051 : Improvement of Science and Technology Education.

Participation of the Member States

During the period January 1987 to July 1990, four countries joined the APEID network, namely: Bhutan, Democratic People's Republic of Korea, Mongolia, and Myanmar. There are now twenty nine (29) participating Member States and a total of one hundred ninety six (196) Associated Centres, twenty four (24) of which joined the network during the period 1987 to 1990.

Progress of work in the seven (7) programme areas of APEID

During the period from January 1987 to July 1990, several regional and sub-regional workshops were organized, with focus on the seven programme areas of APEID. They were participated in by educators and professionals associated with educational innovation.

The participants to the regional and sub-regional workshops then organized follow-up programmes in their countries. There were also a number of inter-country exchanges and study programmes through attachments, study visits and exchange of resource persons.

The main emphasis and the achievements in the implementation of the seven programme areas are as follows:

1.*Universalization of primary education (UPE)*

The UPE was identified as a priority area of very high importance to many Member States in the region. From the Eighth to the Eleventh RCM, the participants recommended that APEID accord UPE special provision and support in its regional co-operative programme. The foci of UPE are on access to primary education for all school-age children with particular emphasis on girls and disadvantaged groups; retention of children for the full cycle of primary education; and improvement of the quality of primary education.

Regional, sub-regional and national workshops were held during the period January 1987 to July 1990. The areas covered included education in difficult contexts; multigrade teaching in primary schools in rural areas; promotion of girls' education in the context of universal primary education; promotion of equal access and equality of educational opportunity for girls; learning and achievement of children in primary education; and equal access to education of disadvantaged population groups.

Financial support was also provided to some Member States for the conduct of research and in-depth studies, and the organization of national workshops on areas promoting UPE.

2. *Continuing education*

This programme area was identified for action by APEID in the fourth cycle. The focus of the activities is on those innovative strategies and programmes in continuing non-formal education, which provides "second chance" educational opportunities for early primary school leavers, and which have a high potential for a multiplier effect at the country level.

APEID actions have concentrated on two main thrusts areas: continuing education for early primary school leavers, and education for promoting enterprise competencies of children and youth. For the former, a Technical Working Group developed sample operational models of continuing education programmes and methodological guidelines for materials preparation. Funding support was provided to eight countries for follow-up national activities.

As regards education for promoting enterprise competencies, a Planning Meeting was convened to develop a conceptual framework and strategies of a Joint Innovative Project on the topic. As a follow-up, seven countries have been offered finanical support to try out activities at the country level. The experience from the Member States' activities could help to determine the directions in which work in this area could be taken up.

3. *Education and the world of work*

This was identified as a major area of concern during the fourth cycle of APEID. Among the significant developments in this area are: (i) practical activities relating to the world of work are regarded as an integral part of the learning process; (ii) participation in work activities helps develop and strengthen the value of work ethics; and (iii) there should be a provision for a transition from school to work.

Regional and sub-regional workshops are being organized on the integration of education and work, and vocationalization of general education. Member States participating in the workshops are provided with financial support for organizing national-level workshops on the development of instructional materials, software and multi-media packages for in-school and out-of-school youth, and improvement of methods, forms and structures of technical and vocational education.

4. *Restructuring secondary education*

Major concerns in educational innovation in this area relate to diversifying the second level; effectiveness of second-level schooling and improvements to the quality of learning; increasing access to second-level education via formal and non-formal modes, especially for deprived populations; and coherent holistic planning including that of the first and second level together. Innovations in this area are focused on vocationalization of secondary education and the development of entrepreneurship capabilities, especially among those students likely to join the world of work after completion of secondary education.

Pilot national training workshops on reorientation and reform of secondary education were held in ten countries. These workshops provided training and orientation for high-level officials to restructure secondary education to make it relevant to societal requirements, including the vocationalization of secondary education, development of entrepreneurship and strengthening of

5. *Educational technology and information technology*

An important area of educational innovation under APEID is the use of new information and communication technologies in education. Innovation in this regard includes the use of computer, radio and television and video systems for the enhancement of learning achievement.

Regional and national workshops were held focused on the utilization of information and communication technology in education, development and preparation of training packages and reference materials for teacher training through distance education, development, evaluation and dissemination of computer educational software, and training of teachers in the use of informatics in education, and training of teachers in computer education.

6. *Training of educational personnel including professional support services and distance education*

The professional development of teachers has been a major area of activity in APEID's previous programme cycles. This programme focuses on training of teachers, teacher educators and other educational personnel, and on providing professional support services. The purpose is to ensure that systems of teacher education in member countries become responsive to the types of educational innovations and reforms taking place in school systems, and that they function effectively to prepare the personnel required at the school level to implement these changes.

Regional/sub-regional workshops were organized on reforms in teacher education and distance education in teacher education. The workshops stressed the training of teacher educators and teachers involved in development tasks and the development of innovative educational programmes to prepare young people for productive work. The participating Member States organized national follow-up activities and were also provided support to undertake co-operative research on school-based and practicum-based teacher education; linkage of pre- and in-service education; upgrading of teachers' qualification and ensuring sustained professional growth of teachers via distance education.

7. *Science and technology education*

Science and technology education has been a major concern during all the four cycles of APEID, from 1974 to the present. This project was designed to build on the strengths and competencies generated in science and technology education, through the preceding programme cycles of APEID, in accordance with the needs, emerging problems and concerns of the participating Member States. It is contributing to strengthening national capabilities for undertaking co-ordinated sets of changes and qualitative transformations in the education systems, for enhancing the contribution of education to national development. Specifically, it has helped in the promotion of education in science and technology relevant to societal requirements, particularly through innovations undertaken in the Member States aimed at applying science and technology to the improvement of health, eradication of poverty, achievement of social harmony, etc.

The project is also contributing, through innovative approaches, to the national efforts to include science and technology learnings in literacy programmes, and in early childhood education and the education of the disabled; and to the improvement and expansion of learning opportunities to provide access to science and technology education to all sections of society, namely, the formal school population, the out-of-school population, including out-of-school youth who have dropped out of school, the work force and the educated adult section of the population including women and girls. These are being addressed through regional, sub-regional and national workshops. Furthermore, modest financial assistance was provided for in-country studies on curricula and indigenous science,

development of exemplar materials, provision for low-cost equipment in schools, in-country visits and personnel exchanges.

Information services

Information about APEID activities is disseminated by the secretariat (ACEID), through newsletters, monographs, occasional papers, manuals and reports. These publications are distributed not only to the Unesco National Commissions, National Development Groups and Associated Centres, but also to centres and institutes of education and development, educational research institutes and teacher training colleges, mainly in the Asia and Pacific region, but elsewhere as well. These publications help to promote inter-country exchange of experiences in educational innovations, and serve as sources of ideas for educational innovation for institutions and individuals.

Member States' assessment of APEID's progress, 1987-1990

The Member States recognize that APEID is a regional mechanism to assist in shaping up education for the future. The objectives and over-riding principles which were designed and developed for APEID by the Member States are still found to be valid. It should continue to: (i) promote innovations in education for development; (ii) contribute to the strengthening of national capabilities for undertaking co-ordinated sets of changes in the educational system in the context of their political, social and economic conditions; and (iii) undertake innovative educational activities which pertain to preparation and exchange of personnel, development and production of training programmes, development of new teaching and training materials, try-out of teaching strategies, etc.

There was a clear consensus that the APEID projects have made valuable and catalytic contribution to the development of national programmes. APEID is fulfilling its role as an effective forum for innovating, planning and administering educational innovations in the region. It has proven itself as a viable and cost-effective regional mechanism for promoting in-country and inter-country co-operation and collaboration for educational innovation and development. The regional activities were seen as an important means of exchange and cross-fertilization of ideas and experiences for educational development through innovations in learning from other countries in the region in ways that benefited the national programmes.

The seven programme areas recommended by the Member States during the previous RCMs were executed rigorously by ACEID. Although the capacity of individual Member States to contribute to the Programme varies, each one of them had made substantial financial commitment in support of the activities mainly because they believe that the thrusts and emphases correspond to their priority areas of concern.

Representatives from the Member States believe that the UPE programme has been effective in the development of innovations related to (i) providing access for all school age children, particularly girls (who are the largest population group without adequate educational provision); (ii) providing education for children in population groups which are disadvantaged/deprived in forms and methods (both formal and non-formal) which are responsive and sensitive to their specific needs; and (iii) progressively raising the quality of primary education reflected in higher achievement levels of children, the elimination of premature withdrawal from schools, and higher efficiency.

The Member States also noted that the planned activities to promote universalization of primary education are helpful in developing a repertoire of experiences which would assist countries to move towards the universalization of education.

The various activities in the area of continuing education are helpful in encouraging and providing learning opportunities for young people who prematurely drop out of school, particularly through the development of self-learning instructional materials, the development and try-out of prototype instructional materials and methods and the training of personnel who will make use of innovative methods and materials to provide continuous learning opportunities for out-of-school youth and adults, particularly through non-formal means.

Some Member States found the programme area on "Education and the World of Work" relevant and effective with regard to their particular situation. The activities implemented in this area have been highly effective in helping: (i) to achieve the provision of learning experiences at the work place for out-of-school young people and to facilitate the movement from work into educational place and vice versa; (ii) the promotion of educational form, methods and structures which incorporate work skills in general education, in order to equip education for the world of work; and (ii) the furthering of national efforts for introducing work as an integral part of general education and the inculcation of employable skills in school leavers to respond to the changing needs of technological developments.

Some Member States noted that national efforts to expand general education (including schooling for the world of work) have been restricted by resource constraints, and that ACEID should explore the possibility of providing further assistance, for instance by donating equipment and materials required to teach agro-technology and vocational education in schools. Furthermore, there is a need for greater assistance if structural change is to be achieved in technical education to make it more in line with the facilities available for general education. There is also a need to make greater effort to introduce new technologies such as computers and microprocessors. Efforts need to be made to reach early school leavers who drop out of the education system, and also the unemployed youth.

On the restructuring of secondary education, the Member States found the programme effective in: (i) enhancing quality, in the integration of vocational skills in general education, and in revitalizing technical and vocational education to respond to the needs of modernizing economies and the emerging new technologies; (ii) promoting the development of the co-operative effort of Member States through existing resources and developing additional resources to enable the introduction of national programmes for restructuring of secondary education and re-organizing of secondary school curriculum relevant to societal requirements; and (iii) developing alternative models to increase the relevance of secondary education to make it responsive to societal requirements and raising the quality of secondary school students.

The Member States believe that the programme activities in educational and communication technology are effective in the promotion of development and application of communication technologies in education, at different levels of development, ranging from multi-media materials to computer applications; and in the development of new systems and structures for the optimum utilization of educational technology materials, including the use of information technology for formal and non-formal education and distance learning. It is recommended that follow-up activities be conducted in the form of international joint research programmes, the exchange of resource persons between countries, and follow-up seminars to discuss implementation strategies.

In relation to professional training, including professional support services and distance education, the activities are effective in promoting innovative methods and techniques for the training and retraining of educational personnel. They also help in developing co-operative network arrange nents both at the national and regional levels, for mutual support and sharing of experiences in contributing towards the training of educational personnel and in the development of professional support services, particularly through the design of alternative structures. Furthermore, Member States have indicated that workshops, seminars, and other programmes related to distance education have been very effective in helping to promote the view that professional development of teachers should be a career-long process apart from helping in the development of co-operative networks between countries in the region with regard to teacher education.

The activities in science and technology education including Science for All are effective in developing innovations for progressively raising the quality of science and technology education through curriculum renewal with regard to methods, materials and evaluation; developing the competencies of science teachers and science teacher educators; providing learning opportunities for young people in the formal school system; providing learning exeriences at the work place for out-of-school young people and the educated adults including girls and women; promoting educational forms, methods and structures which incorporate applications of science and technology to development; encouraging the reorientation of school education in science and technology in order to enhance its quality and make it more responsive to the needs of modernizing economies and emerging new technologies; promoting innovative methods and techniques for the training and retraining of science and technology education personnel, particularly through co-operative network arrangement (both at regional and national levels) for mutual support and sharing of experiences; and also on the development and application of communication technologies in education, at different levels of development ranging from multi-media materials to distance education and computer applications.

The regional activities geared towards promoting quality and efficiency in science and technology education were found to be an important catalyst for the further development of in-country activities by using resources available in the countries themselves. This is an indication of the movement towards self-reliance in designing and implementing innovation. However, there are indications that Member States would need assistance in forms of financial and human resources, for the incorporation of innovative ideas and practices on a system-wide basis.

There were indications of satisfaction on the implementation of the two UNDP-supported regional projects, namely RAS/86/170: "Improvement of National Education Programmes through the Network of APEID", and RAS/86/051 "Improvement of Science and Technology Education". The Member States have benefited from these programmes, and would like UNDP to continue its support to APEID.

It was suggested that ACEID shoudl disseminate information on APEID by bringing out documentation on major activities which have affected and influenced the Member States. An inventory/catalogue of educational innovation outlining the educationally innovative strategies used by various countries would be very useful. To improve APEID's visibility, ACEID should involve representatives of funding agencies in the conduct of particular activities of APEID.

The Member States were requested to systematically and regularly undertake evaluation and monitoring of their programmes, and keep ACEID informed of the in-country activities, so that its secretariat could provide support and assistance, if needed. Such reporting by Member States would also help ACEID keep UNDP and other funding agencies informed of the impact that APEID was having on education systems.

APEID activities, including those funded by UNDP, have focused appropriately on promoting educational innovation in the region. While the design of APEID projects has served the region wel to-date, it was suggested that it might be appropriate now to consider building strategies for the incorporation of innovations on a system-wide basis, into the basic project design. Another approach considered in relation to the implementation was the possibility of pilot projects aimed at implementation of mutually supportive and reinforcing educational innovations in designated areas with particular concentrations of the disadvantaged people. Such an approach, preceded by base-line data, would provide significant evidence of the changes that were being brought about by innovative programmes.

IDEAS EMERGING FROM THE REGIONAL SYMPOSIUM FOR FUTURE APEID PROGRAMMING

Part Three

IDEAS EMERGING FROM THE REGIONAL SYMPOSIUM FOR FUTURE APEID PROGRAMMING

The Regional Consultation Meeting discussed in detail main innovative, futuristic and other ideas relevant to APEID's operation emerging from the Regional Symposium on Qualities Required of Education Today to Meet Foreseeable Demands in the Twenty-First Century. Most of the members present in the Regional Consultation Meeting had participated in the Regional Symposium. They had also access to the following documentation, to assist them in their discussions:

- the Symposium presentations;
- the summaries of the presentations and of the post-presentation discussions.

The participants noted two major and recurring themes of the Symposium. First, that while change has been happening ever since the beginning of the Planet Earth, change of the current magnitude, pace, scope, variety and impact, was unprecedented. Secondly, that the changes taking place affected education in one form or another, and made new demands that had also never been so urgent as at present. Both themes clearly exerted a powerful influence on the discussion in the Regional Consultation Meeting.

The suggestions for future APEID programming, drawn out of the Symposium deliberations, recognized that many of the changes have given, and are giving rise to massive crises, some of which are global in scale and pervasive in their positive impact or their potential for danger, to countries and people in the Asia and Pacific region.

Thus, the discussions by the participants repeatedly referred to such serious problems as the population explosion, the information and knowledge explosion, environmental degradation, marginalization, illiteracy, social and cultural disruptions, following in the wake of development. These crises formed an ever-present backdrop to the suggestions that emanated from the discussions.

Many participants used their own country scenarios as the basis and frame of reference for suggesting future actions. This approach resulted in a rich array of options, specified in practical detail, that were firmly anchored to the contexts and feasible realities in the Member States, as well as to their emerging concerns and action priorities. Having their genesis at the country level, and not in contrived and idealized situations, a great deal of concensus was achieved about most of the suggestions.

The following three ideas may be said to have found overwhelming convergence of agreement in the discussions regarding their imperative needs for innovation in education:

i) The removal of marginalization of disadvantaged populations, by the empowerment of all learners, in the specific cultural contexts of the different Member States. In this context, the eradication of illiteracy and the provision of the first level of education for all, were considered a fundamentally important action. This action would include access, (covering both formal and non-formal modes); and quality (covering more than the "3Rs" and incorporating learning to learn, rationality, creativity, science and technology, and other competencies for constructive living and contributing to development).

ii) The enhancement of affective learnings for learners at all levels, from literacy and the first level of education, across the entire education system, in both formal and non-formal modes, and pervasively through all learning content, related to values, ethics and morals, including education that would make learners humane, compassionate, caring and responsible, and provide for harmony and understanding in personal and national life, as well as in regional and international perspectives, incorporating globalism and international understanding.

iii) The learning of science and technology, with a focus on the application of learning, problem solving in daily life, sensitivity to the implications of environmental protection, sustainable development, critical thinking, planning for and taking action in regard to solving of real life problems.

The other major suggestions that were also generally accepted by most of the participants, may be classified under the following two categories:

Planning and management

Decentralized educational planning and management was often suggested as means for relating educational intervention actions to the real needs of especially disadvantaged and marginalized populations. Such actions also provided constructive opportunities for enhancing the resource base for education, including financial and human inputs. Convergence of inputs from agencies outside the education sector, in the spirit of "all for education" and integrated area-based growth point action, may also be facilitated at decentralized levels. By far the greatest benefits from decentralization were the opportunities that became available for participation by the target populations in the planning, execution and monitoring of interventions, ensuring a high degree of relevance in, and personalized commitment to, those interventions. Such involvement can form the foundations for self-reliant development of disadvantaged populations.

While decentralization can provide for the mobilization of hitherto untapped resources, steps have also to be taken to syphon funds for education from savings produced as a result of changing national and international circumstances. The reduction of military budgets, in the wake of the ending of the Cold War, for example, may provide excellent opportunities for enhancing education budgets. Regional actions that would stimulate such transfer would be particularly helpful for educational development. Other sources could be industry, which may be encouraged to contribute to the further education of its employees.

Underpinning and behind many of the above discussion points on planning and management were implicit policy implications associated with emphasizing a priority commitment to de-marginalization. Disadvantaged populations of many kinds, including the female populations in some countries, had to receive special attention in educational planning and management, and in consequent educational intervention.

While the above enriches, and makes the entire planning and management processes, more functional in terms of needs, innovations are correspondingly required in the new planned implementation scenarios for such management aspects as supervision, quality control, evaluation, feedback and consequent re-planning. This would particularly be the case for area-based educational development.

Quality improvement

The debate on quantity vs quality has not been definitively settled, as was clear during the discussion. Some participants referred to the insufficiency of financial and other resources to confront the extensive components of both problems simultaneously. Others emphasized the unacceptable wastage of precious investments, if quality is sacrificed, even temporarily, in favour of quantity, noting the long-term inequity and inefficiency of focusing on a minimalist approach to basic education.

Nevertheless a range of innovative quality improvement ideas emerged from the discussions.

A strong case was made for pedagogical strategies, in all educational interventions, that would facilitate the empowerment of learners to be autonomous and self-regulated life-long learners. Other competencies that the new pedagogics needed to stress were flexibility, adaptability, capacity for critical thinking, creativity and coping with expected and unexpected problems and crises. Process skills, especially those related to problem solving, and the application of learning to solve real life problems, were also required pervasively. The development of proficiencies in learners regarding the above, required practice by learners, and not preaching to learners.

While these new innovative pedagogies were being considered, further work on currently initiated pedagogical innovations have to be continued, particularly those related to improving the quality of education in disadvantaged areas, such as in single teacher/multi-grade situations and for alternatives to the "standard" primary school education geared to the needs and requirements of the learners and their life-situations.

Special mention was made for the imperative need for pedagogical strategies that will place educational interventions, consciously strongly and soundly in the cultural context of the learners and of the nation. Here, too, critical decisions are required in regard to the particular cultural contexts to be used, and their relationships to national harmony, and globalism.

Pedagogics for the development of the affective domain would include hands-on and real-life action experience. This was particularly important in the affective areas of ethics and values.

Pedagogics that generate perspective views and visions of the future were also needed, and their introduction may take place even at the primary level, via such areas as environment education.

A number of suggestions were made regarding quality improvements to curriculum organization.

No doubt new "content" such as globalism, and new competencies such as those required for enterprise education, have to be accommodated. The knowledge explosion also signals the need for significant innovative curriculum decision making regarding content, depth, scope and coverage. The serious acceptance of life-long education logically relieves the school of the impossible burden of providing "all" learning outcomes for the current and future life of the learner.

A few participants advocated a radical departure in curriculum organization, to make it interdisciplinary and integrated, and focused upon social problems and issues, to approximate to and simulate the real life situations that learners would have to face. Associated would also be a departure from a behaviourist design that converts learners into manipulable entities, processed (in factory production terms) to possess uniform predetermined attributes and specifications. The behaviourist model would be replaced by one that is squarely humanistic. Such a change would move the education system towards creating a learning society of autonomous human beings with the very capacities and competencies recommended earlier.

There was considerable agreement that even small portions of the above innovations for quality improvement relied heavily on corresponding quality improvement in the training of critical personnel, such as teachers and other facilitators of learning. Considering the current provision of pre-service training and grossly inadequate opportunities for teachers and key personnel to update their skills in countries in the region, the challenge to design appropriate innovations in this area is powerful indeed.

The need for quality improvement underscores the desirability of developing a national system for continuous and comprehensive evaluation. The emphasis has to shift from achievement in terms of mere cognitive development of skills, attitudes and values required by an individual for functing in a world of change. The need is for a systematic and disciplined study and investigation including diagnostic and action research.

Overarching all the above suggestions is the imperative need for making the quality improvement in the education system supported by research and evaluation, so that innovation will become the offspring of systematic and disciplined investigation. Such a process would assist in realizing APEID's long-term objective of developing the critical mass of persons and institutions committed to, and competent in, educational innovation for development. The research actions themselves may be considered in a regional co-operative networking perspective, thereby enhancing the sharing of experiences, and the professional association and solidarity among innovators in the Asia and Pacific region.

Presaging such regional planning and design efforts with the kind of substantive Symposium involving outstanding thinkers in the region that preceded the current efforts, was itself a well-appreciated innovation that should be repeated. Topics for such symposia may be identified through consultations with the Member States.

EDUCATION OF THE DISADVANTAGED

Part Four

EDUCATION OF THE DISADVANTAGED

Introduction

The concern with reducing educational disadvantage within member countries in the Asia and Pacific region has always been implicit in all APEID programmes. It is now widely recognized that the most formidable obstacle to the achievement of universal literacy and the realization of the goal of Education for All is the existence of millions of people who belong to various educationally disadvantaged population groups.

The discussion of the item started with a summarization of the major findings of the studies that had been commissioned in 1989 under APEID. Out of the 26 Member States who had been supported, only six, viz., Australia, China, India, Philippines, Republic of Korea and Viet Nam had sent their reports by 10 August 1990. Three more reports had now become available, from Lao PDR, Malaysia and Indonesia. The findings from these three studies could not be incorporated due to lack of time in the current interim report.

While the studies from six Member States did provide information on the groups identified as disadvantaged, the incidence of the disadvantaged and some of the policies and approaches that are being implemented, they did not present a comprehensive picture of the position and/or the steps taken to deal with the problems faced in educating the disadvantaged. In some cases the reports did not reflect adequately on what was being done to improve participation rates (access, retention and achievement) of the specific categories of the disadvantaged. The data base data base which would allow a sufficiently precise categorization of the disadvantaged and the difficulties experienced by them was also inadequate. Such data were needed for mounting initiating efforts in specific directions.

Definitional issues

A clarification of the concept of "being disadvantaged" and a more precise definition of the term was considered necessary for pinpointing the problems and specific courses of action. It was observed that a distinction had to be made between the educationally disadvantaged and the educationally deprived. While the educationally deprived referred to those specific groups for which the society had been unable to provide educational facilities adequately, the educationally disadvantaged belonged to a category which, due to certain factors in their environment, were unable to take advantage of even those facilities which were available. Another term which had often been used was "culturally disadvantaged". It was felt that it reflected a bias on the part of the dominant group (culture). All cultures represented the accumulation of traditions, practices, artifacts and experiences which provided the basis for their distinct life styles and behaviour patterns. All cultures adopted mechanisms for adaptation to change which the communities considered worth incorporating in their cultural heritage.

The need for undertaking systematic research was emphasized. Apart from identifying the groups that need special attention, studies should aim at identifying the specific nature of problems which prevented their participation in education. The objective should also be to determine the efficacy

or otherwise of specific educational activities in the context of the socio-cultural setting of the communities.

A reference was made to the definition given in the interim report of the educationally disadvantaged populations. The report stated:

> "Educational disadvantage refers to the adverse situation experienced by particula people in society whereby their access to (and enrolment in) schools and/or non-formal education is affected in a negative way by socio-economic and cultural characteristics such as their gender, race, ethnicity, occupational status of family and geographic location".

The emphasis is on inadequate participation rates that are largely the consequence of their situation. It is recognized, for instance, that mere belonging to a category (ethnic minority) does not place a child in an educationally disadvantaged situation. Within the categories there are variations in the economic and social situation of individuals and families.

Irrespective of the definition that might be adopted for categorization, the data indicated that certain specific groups in various countries of the region had, compared to other sections, lower rates of participation in education (unequal access to facilities, premature withdrawal from basic education and lower levels of achievement). Any programme of Education for All would have to identify such groups and their problems and provide for their educational needs. Without these unreached groups being brought within the fold of education, the goal of universal primary education would not be realized in the Asia-Pacific region.

It was felt that there was an urgent need to sensitize Member States and regional and international organizations to the problems experienced by these groups and the measures that are required to ameliorate their educational condition. The Member States also need to remain informed of the approaches to solve the problems of the disadvantaged which were being implemented in the region. It might be useful for this purpose to organize biennially a conference on the education of the disadvantaged under the auspices of Unesco.

Categorization

Given the goal of the provision of basic education for all, countries have adopted educational disparity as the main criterion for categorizing certain groups as educationally disadvantaged. Although in some countries such as Australia, New Zealand, China, Republic of Korea, Democratic People's Republic of Korea and Sri Lanka, the goal of universal primary education has been "achieved" (or nearly so), in terms of access to education, there were certain geographical areas and certain sections of the population in whose case the participation rates were still low. The New Zealand report states:

> "Despite steady improvements in educational attendance and attainment levels of young New Zealanders, significant differences in education and training are still evident between certain groups in the population. For instance, proportionately fewer females than males continue their education beyond the secondary school level. New Zealand Maori and Pacific Island Polynesians also have lower levels of educational attendance and attainment, compared with the remainder of the population. Although improvements have occurred for these groups, the gap between them and the rest of the population has not diminished".

While in respect of other groups universal enrolment has been reached in New Zealand, in the case of Maori children of the age group 5-15, the percentage is 87. As they progress in the education system, the participation rates for them become lower, to almost one third of the rate of other groups in grades XI and XII. In Australia, the Aborigines and Torres Strait Islanders, who constitute about 1.5 per cent of the total population, form the major category of the educationally disadvantaged. For many of them, the first language is not English, which is the medium of education. Compared to other groups, their participation in compulsory education is low.

In China, the realization is that "there is no point in talking about equal opportunities to education and universal primary education if we do not attach adequate importance to the education for the disadvantaged groups and take conscientious efforts in promoting their development". Both in access as well as in retention, the participation rates for girls are lower in China. In 1988, for instance, 2.24 million girls did not attend school, accounting for 83 per cent of the total number of out-of-school children of school age. Over 70 per cent of the 2.6 million drop-outs were girls. China has 56 nationalities; 93.3 per cent of the total population belongs to Han nationality, while the other 55 nationalities, scattered over 60 per cent of the land, constitute 6.7 per cent of the population. Most of the minorities live in the remote, mountainous, pastoral areas. "Their dispersed dwelling, backward economic and cultural conditions, poor transportation facilities and the diversity of languages have for long rendered their being in an educationally disadvantaged state". The other major category of the disadvantaged are the disabled; 8.17 million of them are children of ages 0 to 14. The percentage of children suffering from various disabilities was 2.2 per cent for the blind, 14.2 per cent for the deaf, 66 per cent mentally retarded, 7.6 per cent with incomplete bodies and 9.9 per cent comprehensively disabled. "Due to the level of our economic development, financial resources put into the running of courses for the disabled are not much" and education of the disabled "remains one of the weakest links in the whole education system of China".

In Bangladesh nearly 4 million children are not in school. The three major categories of the disadvantaged are the rural poor, street children and girls who, in spite of considerable improvement, still constituted 44 per cent of enrolment in primary schools. In their case the traditional social attitude towards the education of females is the major reason for their poor participation in education. Other reasons include the lack of adequate number of female teachers, particularly in rural areas and the absence of separate toilet facilities in schools. Most of the street children come from urban slums and cannot attend schools during regular hours since they have to supplement the meagre resources of their families. In Sri Lanka, while universal primary education has become available, some groups, like slum and street children and children of plantation workers, are still not adequately participating in education. In Lao PDR, the distribution of the population is : 60 per cent in midland Lao PDR, 30 per cent Khmers, and 10 per cent Tibetan and Burmese. There are 68 ethnic minorities. Considerable disparity exists in the provision of facilities and enrolment of children among various groups. The participation rate of girls in education in these groups is particularly low. "It has been noted that the education system has difficulties reaching the minority groups because of the geographical, financial, language and cultural obstacles".

In India, girls and the poor constitute the major categories in whose cases the participation rates were low. An estimate had indicated that nearly 44 million children were engaged in various types of work, including domestic help.

In Indonesia, there are territorially-based ethnic minorities which have their own languages/dialects, traditions, culture and religion and, in the case of those living in isolated locations, their economic system. Some of them live in isolated areas, such as jungles, where communication facilities, in the form of a network of roads, are not yet developed.

In Viet Nam, the three groups identified for special effort are the ethnic minorities, those who for various reasons cannot attend school during regular hours, and the disabled. In Pakistan, girls, the rural poor and nomads constitute the main segments of the population whose participation in education needs to be enhanced. In Malaysia, universal provision of primary schooling has been achieved for both boys and girls and in respect of all segments of the population. The educationally disadvantaged are, therefore, those who are denied opportunity to receive education, particularly beyond the first level of education, those who, despite their ability, drop out of education, and those who have learning difficulties.

"The Republic of Korea study indicates that about 600,000 people live in isolated mountainous areas and about 400,000 in 557 small isolated islands. These population groups are (on average) much poorer and more educationally disadvantaged than is the rural population as a whole". Six groups have been identified for special action: girls, urban slum dwellers, people living in isolated areas, the disabled, illiterate, and slow learners.

In Papua New Guinea, primary education is available for 73 per cent of the age group 7-12. However, "many isolated rural districts and villages could not afford to provide better classrooms, nor provide adequate teachers, materials and supplies to effectively provide primary education to all". Primary education in the country is neither free nor compulsory. The goal of universal primary education has yet not been reached in the case of girls and communities living in isolated and remote areas with inadequate communication facilities.

The information available from country studies as well as presentations made would indicate that, broadly speaking, the following would constitute the disadvantaged categories:

i) Girls in whose case the participation rate in primary education is lower, particularly in South Asian countries of Afghanistan, Bangladesh, Bhutan, India, Nepal and Pakistan.

ii) Low income groups in rural areas, such as the landless workers, and communities engaged in subsistence farming.

iii) Socially disadvantaged, such as the scheduled castes in India who have for centuries suffered from social and economic inequality and deprivation.

iv) Urban slum dwellers and other groups who do not have a permanent residence and often live in conditions of utter deprivation.

v) Communities living in remote and isolated areas where access to schooling is not easy, partly because of the lack of adequate facilities for schooling and/or the generally deprived nature of schools.

vi) Nomadic/migratory groups who are always on the move and in whose case such educational arrangements as mobile schools have to be considered.

vii) Ethnic and/or other minorities who have their distinct identity in terms of social organization, traditions and values, onomic patterns of living, etc. These groups often live in isolated areas with poor means of communication. They might not succeed "in a school system where the dominant culture is the only one that is valued." Such groups may

be educationally disadvantaged due to their linguistic, ethnic, racial, tribal or religion characteristics.

viii) Disabled which form a significant segment of the population in different countries of the region. In their case, precise statistics about the number suffering from various disabilities are often not known. Some idea of the magnitude is, however, available from studies made in India, China, Republic of Korea, Philippines, Sri Lanka and Viet Nam. In India approximately 12 million (based on National Sample Survey conducted in 1981) suffer from some form of physical disability. The physically disabled were particularly more numerous in rural as against urban areas. Of the disabled, 81 per cent were in the former and 19 per cent in the latter, indicating the poor nutritional and health conditions of rural areas. Nearly 2 per cent of the total population were mentally disabled.

In China, approximately 50 million people are disabled, of which 8.17 million are children of ages 0 to 14. The various categories of the disabled children were: 180,000 blind, 1.16 million deaf, 620,000 crippled and 140,000 mentally retarded. The study from the Republic of Korea states that about 2.5 per cent (or 915,000) of the total population were disabled (1985). In the Philippines, there are currently about 3.14 million disabled children. The UNICEF's situation analysis of children and women (1987) in Sri Lanka "estimated that 12 per cent of all primary school children suffer from a variety of learning handicaps, including vision, speech, hearing and psycho-motor problems". The Viet Nam study reveals that in 1989, nearly 2.38 per cent of the total population was disabled and that there were nearly 1.5 million handicapped children and youth in that country.

ix) Refugees constitute a sizeable group in some countries of the region such as India, Philippines, Pakistan, Thailand and Nepal, for whom adequate educational arrangements might not yet be available.

One of the categories identified, whose educational needs were not being met, was the gifted. It was pointed out that uniform curricular offerings and rigidities of institutional structure and operations, do not prove to be stimulating to a gifted child. Often the school programme demotivates her/him for learning which might result in some form of deviant behaviour.

Reasons for non-participation

In the case of girls, their utility to the household (looking after cattle, domestic chores, sibling care) often prevents their enrolment or stay in schools for a specified duration of primary education. In some countries, social attitudes and social practices (girls not being taught by women teachers, perceived roles, early marriage, preference in families for education of the male child) put hurdles in their obtaining basic education. "Parents and the community tend to perceive girls exclusively in their domestic role in the household economy as potential child-bearers and rearers, and accordingly, to devalue female education and to prioritize the education of boys in the context of scarce resources".

Poverty of the household, whether in a village or an urban slum, has many adverse effects. It leads to malnutrition, affecting physical and mental growth. The large-scale deprivation from which the household suffers, creates a sense of hopelessness. The motivational syndrome "characterized by reluctance to take risks, stagnation of aspiration and strong fear of failure" prevails. Children

are particularly vulnerable. Malnutrition during the critical years of their lives affects their growth and potential to profit from education. "Both in scale and in severity, it is the child who is most affected by malnutrition. By the age of five, most of the growth of the child's brain is complete. There is no second chance". In the case of urban slum dwellers, the lack of emotional support from closely knit relationships - as in villages - leads often to deviant behaviour among children of school going ages.

The prescribed norms, for instance, for establishing institutions or posting teachers, restrict the availability of educational facilities in remote and sparsely populated areas. In scarce resource countries, the preference, understandably, is to locate schools where there are large catchment areas. The establishment of schools in areas where a sufficient number of children is not available increases per capita costs, particularly when teachers' salaries have been fixed under government regulations and cannot be varied in relation to varying educational situations. Even when established, schools located in "difficult" areas remain perpetually in a state of deprivation.

Ethnic minorities, who remain at the periphery of the so-called cultural mainstream, are unable or find it difficult to take advantage of schooling that is available. In some cases these groups live in isolated locations, which increases the problem of providing education to them. The disadvantaged generally suffer from psycho-social deprivations which adversely affects their participation in education, particularly their motivation to stay on in school and reach levels of attainment, compared to other children in school. The deprived state of the household - inadequate availability of nutrition and unhealthy environment in the neighborhood, illiterate parents and their long absence from home because of work conditions, etc. - does not provide a congenial environment for physical, cognitive and emotional developments. Interactions in the home and in the neighbourhood are not stimulating enough to promote adequate development of cognitive and social skills, and acquisition of language required by the education system. Children belonging to the disadvantaged communities suffer from what is called the motivational syndrome, characterized by low aspiration level, strong fear of failure and lack of self confidence in dealing with problems.

The school and its programme do not take into cognizance some of the strengths of the children who belong to these groups - high degree of psycho-motor competence, possession of survival skills, low incidence of emotional instability, flexibility in social relationships, ability to work in groups, and so on. Nor do they provide for compensatory mechanisms to redress the weaknesses from which these groups suffer vis-a-vis the school system. There are also such factors as low parental support for education, malnutrition, etc., which affect the ability of these groups to participate meaningfully in education.

Apart from girls, in some countries there are groups who suffer from a variety of social disabilities. A significant case is that of the scheduled castes in India, whose participation in education is handicapped by their status in the village community. They are primarily engaged in the so-called "unclean" occupations, as scavenging, cattle slaughter, care of animal hides, and so on. Being poor, their ability to utilize the various facilities is low. Such marginalized communities exist in other countries also.

For want of early immunization and adequate health facilities and due to malnutrition, a sizeable proportion of children in developing countries suffer from disabilities of various kinds. There are "many millions of children who are now being killed or maimed in mind or body by the 'silent emergency' of readily preventable illness and malnutrition". While certain kinds of disabilities require specialized institutional care and rehabilitation, children suffering from less severe disabilities can be educated in normal school settings with some marginal addition and adaptation of facilities. The recognition of their needs and provision for them are yet not adequate.

Efforts in the region

Realizing that the goal of universal primary education will require enhancing the participation of the groups which have so far remained marginal to educational effort, countries of the region have adopted a variety of approaches. In some cases, the approach is comprehensive insofar as the effort not only encompasses educational measures, but it also aims at economic, social and cultural development of the communities. In others, special educational provisions have been adopted as the main instrument for improving their access to education, completion of the entire cycle of first-level education, and attaining reasonable levels of achievement.

It is being increasingly realized that educational services for them would have to be supplemented by other programmes for which other agencies are responsible, such as those for health, nutrition, rural development, training in small-scale industries and crafts, agricultural extension and so on. This could be done more easily by identifying specific areas with a predominance of the disadvantaged and designing and implementing a multi-agency programme.

a) **Girls**

Girls constitute the major category which has remained outside schools in South Asian countries of Afghanistan, Bangladesh, Bhutan, India, Nepal and Pakistan. In these countries, therefore, the effort to universalize primary education has concentrated on increasing the participation of girls. The efforts include:

- substantial increases in the recruitment of women teachers, particularly for rural areas, where social prejudices prevent the girls' enrolment in co-educational institutions beyond a certain age;
- non-formal/part-time educational facilities for school age girls who cannot attend school during regular hours due to pre-occupation with domestic chores and looking after siblings;
- provision of incentives such as free meals, school uniforms, textbooks and stationery, attendance scholarships;
- improvement in the physical environment of schools for girls, for instance, by the provision of separate toilet facilities;
- use of alternative modalities for educating children such as organization of classes in religious places and private homes;
- differentiated curriculum for meeting the special needs of girls, such as home crafts, care of babies, training in crafts, nutrition, etc., as part of the school curriculum;
- use of distance education through self-learning packages and radio and television broadcasts;
- free education for girls in the case of some countries up to the end of the secondary stage to motivate them to continue in education and to prevent their premature withdrawal from education;
- early childhood education and care centres where siblings are looked after to give girls opportunities for primary schooling.

b) **Economically disadvantaged**

For those children who, due to poverty of the household, are unable to enrol in schools or drop out before completing the first cycle, non-formal education centres, often with condensed curriculum, evening classes, part-time education courses, have been provided in the countries where participation rates are low. In some cases, as in India, the number of non-formal education centres is large. It was reported that more than 260,000 such centres had been established. The central government was providing differential grants to state government - 50 per cent for centres enrolling boys and girls, and 90% for centres established by the state governments exclusively for girls. For centres operated by non-government organizations, the central government meets the full cost.

c) **Isolated area communities/tribal areas**

For the communities living in isolated areas, the principal measures being adopted are:

- the establishment of residential schools with education and residence being fully subsidized by the State;
- provision of hostels;
- additional allowance for teachers posted in isolated and other similar difficult areas;
- recruitment of locally available educated persons as primary school teachers even with lower educational qualifications;
- more liberal criteria for the establishment of schools than prescribed for other areas (for instance, availability of a smaller number of children, non-insistence on community contribution);
- use of multigrade teaching;
- use of educational broadcasts.

In Indonesia, an innovative programme implemented by a voluntary organization, aims at providing education to communities living in isolated/jungle areas of West Irian, which could be reached only by helicopters. Volunteers, apart from collecting information on dialects/languages used in these communities, were educating them through their dialects/languages. Specially prepared booklets, designed to raise communities' awareness about their problems, were being used. A communication network had been set up which allows the volunteers to remain in touch with their base.

d) **Nomadic/migratory groups**

For nomadic/migratory groups, the principal approach adopted has been that of mobile schools. The teacher moved with the community, carrying with him educational materials and a tent. Such horseback and/or boat schools are being used in China, India, Pakistan, and Thailand for educating school age children of nomadic communities.

e) **Urban slums**

Non-formal part-time education centres have been set up for children living in urban slums. These centres functioned at a time when children were free from various economically gainful activities. In Bangladesh a trust has been created which set up schools for street children. Apart from first-level education in the three Rs, these schools provide training in useful skills. The government provides financial support to the trust which also receives contributions from other sources.

f) **Socially disadvantaged**

For the socially disadvantaged, such as scheduled castes in India, protective discrimination exists, in the form of reservation of places in educational institutions and in employment. Education has been made free for these groups; incentives are also provided in various forms.

g) **Ethnic and other minorities**

In the case of ethnic minorities, the major programmes being implemented include:

- curriculum development in relation to the problems and needs of these groups;
- preparation of materials for use in schools;
- training of teachers for tasks required of them, including training of young men and young women from these groups for the teaching profession;
- reservation of places in institutions of higher learning to motivate them for higher education;
- establishment of residential facilities.

In Australia, particular efforts have been made to involve Aboriginal people in educational decision making, to provide professional support to teachers and to increase the number of Aboriginal teachers and teaching assistants. All Aboriginal students are eligible to receive financial assistance in the form of living allowances, fees support, excursion and fare allowances. Priority is given to developing management and enterprise training packages that can be used by Aboriginal communities, particularly those in rural and remote areas.

In New Zealand, effort for equity for all the disadvantaged groups involves not only meeting their expectations, but also lifting expectations, maintaining them once raised, and then meeting the resulting new learning needs. Measures taken in relation to education for the Maori (ethnic minority) include allocation of 25 places in teachers' colleges for mature trainees fluent in Maori, development of bi-cultural resource materials for teachers and students, and improvement of the learning environment in schools.

Efforts have been made to step up the construction of teachers' training centres for minority nationalities in China. Several inland universities and colleges have been chosen to train teachers for the remote minority-inhabited regions of the country. The Central Committee of the Party decided that beginning from 1985, the inland provinces should run schools for Tibet and train personnel with knowledge and talents for that region. The enrolment in these schools is about 1,300, and the children are of ages between 11 to 14 years.

h) **Disabled**

The educational needs of disabled people have not yet been adequately addressed. In many countries there are data gaps about the exact magnitude of the problem. Resource constraints, lack of trained manpower and parental and societal attitudes also affect the provision of educational opportunities for them.

In discussing education for the disabled, the meeting was of the view that the problem had to be viewed from two angles:

- the category of disabled who are educable through the normal school setting; and
- those severely disabled who require special institutional care and rehabilitation.

There is need for:

- research in designing the modalities that could facilitate integration of the disabled in existing schools;
- teacher preparation specifically directed to education of the disabled;
- the provision of aids to facilitate learning; and
- the provision of schools with facilitating equipment.

Other initiatives

Management of schools

In India there is an innovative programme under which the schools in a specific locality have been handed over to the young community leaders for management and/or organization of instructional activities. This was done to combat the phenomenon of teacher absentism. A preliminary assessment has revealed considerable improvement in enrolment and achievement of children.

Earn while you learn

In a State in India, earning facilities have been provided in formal schools and non-formal education centres, in collaboration with development departments. Apart from the opportunity to earn by engaging in such activities as making of jute mats and chalk sticks, repair of furniture, etc, children are provided first-level education. One of the most innovative features of the scheme is its being open to both non-enrolled children and those who have dropped out prematurely. Since children engage in remunerative activities, there is parental and community support for their being enrolled in schools.

The Member States have also adopted a number of other measures for ensuring the participation of the disadvantaged. Among others, these include:

Teacher training, both for improving the learning of children generally and also specific training directed to the educational shortfalls of the disadvantaged. In Malaysia, resource centres have been set up where teachers assemble and exchange their experiences. These centres have facilities which help teachers to upgrade their professional competence. India has established District Institutes of Education which will provide support to the teachers in improving the quality of primary education and participation rates of the disadvantaged. A massive programme of orientation of over 1-5 million teachers using a multi-media approach has been implemented.

Library facilities. These have been provided to schools. In Malaysia, floating libraries have been set up to meet the educational needs of communities living close to the rivers.

Involvement of the communities: Community support for and involvement in school management and school activities is considered necessary for promoting the education of the disadvantaged.

Summary statement

Despite the variety of approaches that have been adopted, a sizeable proportion of children of primary school ages continue to remain outside the reach of schools and/or non-formal education centres. The situation in respect of the disadvantaged is particularly grave and calls for concerted effort on the part of Member States.

It is expected that most, if not all, the country studies on the educationally disadvantaged will be completed before the end of 1990. The RCM recognized that a compendium of country studies on the educationally disadvantaged will establish baseline data for assessing progress in respect of ameliorating the condition of the disadvantaged, and in sharing forward-looking policies and innovative educational programmes among countries in the region.

It should be noted that the disadvantaged, especially the disabled, would not be in such numbers if interventions in sectors other than education took place to prevent these disabilities. Even then a measure of education would still be needed, such as for the parents to ensure that the services are not only utilized, but also demanded.

FUTURE DIRECTIONS OF APEID

Part Five

FUTURE DIRECTIONS OF APEID

A. Proposed programme areas for the fifth programming cycle of APEID, 1992-1996

In considering programmes for APEID's fifth cycle, during the Twelfth Regional Consultation Meeting, the Member States were able to draw upon the following:

- Advisory Committee recommendations;
- Experiences from previous cycles;
- Regional Symposium on Education for the Twenty-first Century;
- Regional Study on Educational Disadvantage;
- Deliberations of the Tenth and Eleventh Regional Consultation Meetings;
- Needs of Member States; and
- Document prepared by the Technical Working Group.

In preliminary discussions the need to focus programme efforts to achieve maximum impact was highlighted. It was considered that all future programmes should be practical, concrete and relevant to national needs.

The Meeting was conscious of APEID's unique role in supporting educational innovation for development. The function of regional efforts is to strengthen national capacities for innovation in education. The outcome of the process should be that educational innovation for development is a functioning reality in each Member State.

Considerable time was devoted to highlighting the fundamental importance of morals, ethics and values in any future educational programmes. There was total consensus on this point. The solutions to many of the most serious crises, such as environmental pollution, consumerism, discrimination, poverty, exploitation and the marginalization of peoples, to name a few, are to be found not only in the eradication of ignorance about these crises through knowledge change, but also in regard to facing up to their intrinsic moral and values implications. It was recognized that in many countries there was an inextricable link between values and religion.

Various ways in which morals, ethics and values could be kept at the forefront of programme planning were considered. Consistent with the long- term objectives of APEID, it was agreed that morals, ethics and values education should be a pervasive feature of all programmes.

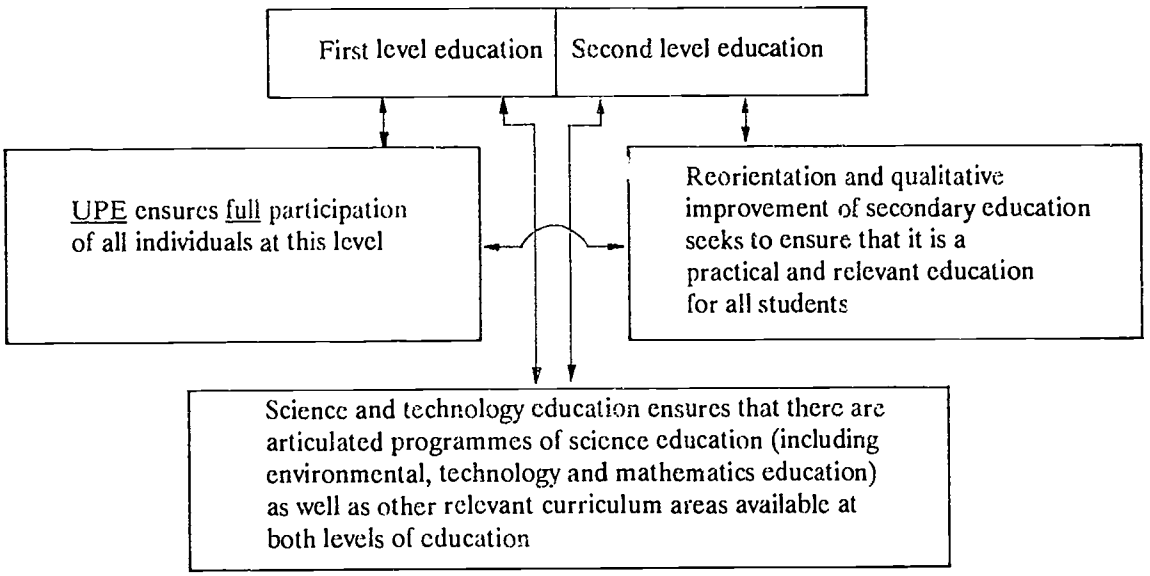
In reaching this position, the Meeting was aware of the emphasis that had been given to morals, ethics and values during the APEID Regional Symposium on Qualities Required of Education Today to Meet the Foreseeable Demands in the Twenty-first Century, which was organized in Bangkok from 16 to 18 August 1990. It was agreed by the Meeting that any preferred future would have to be one in which morals, ethics and values would be an integral part of every aspect of life.

The Meeting identified three priority areas of concern:

1. Universal Primary Education (UPE);
2. Science and Technology Education; and
3. Reorientation and Qualitative Improvement of Secondary Education.

These were not seen as highly compartmentalized. Rather, they are linked by a common concern for social justice and for the rights of individuals to have access to knowledge, skills and values that will equip them as citizens for the twenty-first century. Conceptually, the areas of concern are complementary, focusing as they do on the needs of all individuals to have access to education, which will empower them to be active participants in the development process.

In terms of programme implementation, the programmes are also complementary. UPE focuses on the first level of education, with the reorientation and qualitative improvement of secondary education focusing on the second level. Science and technology education rightly contributes to both levels. From this perspective the programmes might be depicted thus:



Universal primary education (UPE)

With inadequate emphasis on equitable distribution, the fruits of development have not percolated to all sections in equal measure. Communities, with inadequate resources or a paucity of political and economic power, have been bypassed by development. In education too, although considerable expansion of facilities has taken place, sizeable numbers of children continue to remain outside the reach of schools. This is particularly so in the Asian region, where large numbers of school-age children in many countries are either unable to enrol at the first level of education, or drop out without completing it. Even in the educationally advanced countries of the region, certain segments of the population continue to remain marginalized - ethnic minorities, communities living in isolated localities, hilltribes, nomads and so on. In South Asia, girls constitute a large proportion of the non-enrolled school-age children.

The goal to provide universal primary education can be realized only when the hitherto unreached groups and locations are brought within the ambit of educational development. The

Medium-Term Plan of Unesco has identified universal primary education as a priority programme for action. The strategy suggested is the strengthening of regional programmes, assistance to Member States and concentration of effort on (i) the disadvantaged and disabled groups, who remain marginal to the development effort in education; (ii) innovative education which is responsive to learners' needs.

The inclusion of these groups - by bringing them into the mainstream through enhancement of their competencies to participate meaningfully in the development process - requires widening their access to an education of high quality and assurance of their high achievement after obtaining access.

The proposed areas of action for UPE are:

1. Disadvantaged and disabled population groups;
2. Innovative education responsive to learners' needs;
3. Co-operative review of UPE national programmes;
4. Innovative partnership networks at school, community levels (parental education, school clusters, learning group networks);
5. Education of teachers and other professional personnel;
6. Co-operative action-oriented research on UPE problems;
7. Information exchange networks.
8. Co-operative review of country programmes and experiences in morals, ethics and values education;
9. Inter-country development and exchange of materials and experiences including those related to morals, ethics and values.

Science and technology education (including Science for All, mathematics, and information processing at the primary and secondary levels)

In the last two decades, there has been a growing awareness and realization that science and technology are the key factors for the improvement of the quality of life. Considerable efforts have already been directed towards the improvement of science and technology education (including mathematics and education in information processing technology) in almost all APEID countries. The programme "Science for All" has been launched and can therefore be drawn upon.

Science and technology education has a close association with economic development and with current crises such as population, quality of life and health, and the destruction of the environment. Science education has intrinsic potential for generating rational and critical thinking. It provides many opportunities for developing skills of observation, problem recognition, problem solving and decision-making. All these skills have been recognized as important and functional for education for the future. Equipped with the competencies developed in science and technology education, learners can be expected to take action with respect to (a) improving the quality of their life and of the community; (b) management of environmental risks and uncertainties; (c) rational use of resources; and (d) enhancing the resource base through the use of appropriate technologies. These same actions could also become the bases for initial learning of the subject matter as well. Taking action would involve proficiencies outside the science and mathematics disciplines, for example, communication arts, social studies, human relationships, values, ethics and morality, and concern for others and the environment.

The proposed areas of action are:

1. Co-operative programmes for developing model curricula and materials:
   a) emphasizing process skills, applications, creativity, morals, ethics and values;
   b) related to the environment;
   c) related to future science content.
2. Innovative methods of teaching and those facilitating learning;
3. Co-operative action-oriented research on science and technology education;
4. Use of information processing technology for science and technology education including computer education.

Reorientation and qualitative improvement of secondary education (including general education and technical/vocational education)

In many Member States, education for all is being consolidated at the first level of education. Yet it is becoming clear that an education of five or six years will not be enough to cope with the demands of the twenty-first century. To some extent, this has been recognized by Member States and transition rates from the first to the second level education have generally, although not uniformly, increased, between 1980 and 1990. Coupled with this realization is the social pressure to widen the access to the second level of education. Attention, therefore, needs to be focused on the second level of education through formal and non-formal mechanisms and its capacity to provide a practical, relevant and useful education that will assist young people meet the demands of the twenty-first century.

The reorientation and qualitative improvement of secondary education is essential to ensure that it can meet the needs of all students rather than the few. The emphasis should move away from traditional academic curricula, to curricula that are practical and relevant. Yet, this does not mean merely the vocationalization of secondary education. Rather, it means that the emphasis should be on the provision of a general education designed to equip young people with critical competencies, such as thinking and analytical skills. It should enable them to leave school as flexible, adaptable, creative and innovative individuals, who can participate effectively in the social, political and economic life of the local community and of the nation. Education for and about the world of work, including the development of enterprise skills, should be an integral part of such a general education. At the same time, consideration might have to be given to parallel forms of secondary education (formal or non-formal), with emphasis on skills training, in respect of new and emerging skill areas.

In a programme of skill development, consideration will also have to be given to the need for constant upgrading of skills and adaptation to occupational changes brought about by technological developments. These call for enhancing the capability of secondary education to meet new challenges.

The proposed areas of action are:

1. National level educational assessment/evaluation programmes with regional co-ordination;
2. Education reform initiatives (relative to new developments in curricula, skills development, enterprise education and examination reforms);
3. Creative methods and alternative structures for quality secondary education (including teacher education);

4. School-based innovations leading to qualitative changes;
5. Education and work responsive to national needs;
6. Non-formal education, including community and adult education;
7. Distance education;
8. Innovative programmes for promoting morals, ethics and values;
9. Education for nurturing talent;
10. Co-operative action-oriented research on reorientation and qualitative improvement of secondary education.

Generalized modalities

The proposed areas of action in all the programme areas, i.e. (i) universal primary education; (ii) science and technology education; and (iii) reorientation and qualitative improvement of secondary education would be undertaken, using a range of generalized modalities including the following:

I. Identifying status parameters: investigating the current status. and state of the art by way of designs, techniques, methodologies; dimensions of the focused problems; delivery systems, and institutional and other functional infrastructures; relevant personnel; undergirding policies; planning priorities, through surveys and research, both incorporating anthropological and participatory designs.

II. Collective regional consideration: regional analysis, synthesis and classification of emphases on a thematic basis, of the dimensions of the focused problems, in terms of interests of clusters of countries and commitments to innovative educational actions in the area; thematic design frameworks for national action, through regional technical working group meetings, thematic groupings of countries (sub-regional) for national-level action.

III. National action: research-based conversion of thematic (sub-regional) frameworks into national level action designs in terms of national priorities, at a development growth point (pilot) site(s), to investigate systematically alternative innovations to solve the focused problems in the programme area, as well as to develop innovations for mass national implementation of the solutions.

IV. Periodic considerations by collective thematic groups(sub-regional): monitoring the progress; in-course corrections, evaluation, through thematic (sub-regional) technical working group meetings.

V. Continuation of national action: applying in-course corrections and development of indigenous, self-reliant, capacity for research and innovation in regard to the focused problems; development of systematically tested solutions to the problems; transitions into mass implementation at the national level, through a variety of national actions including planning/designing workshops, technical sessions including training, field actions and operational research, reviews, monitoring, evaluation, discussions with policy makers and mass implementators, dissemination and communication of innovations.

VI. Resource flows: Both material/financial, and human resource enhancement especially at stages I, III, V, through modalities such as study visits, attachments, fellowships,

consultancy services, documentation, and inter-country co-operative monitoring and evaluation, networking, including electronic networking.

VII. Regional review: collation of design lessons of national and thematic grouping (sub-regional) results and regional synthesis; regional portfolio of practical innovative actions in regard to the various selected dimensions of the focused problems including relevant theoretical backdrops, in sufficient detail to be a resource for consideration by countries in the region which did not participate in the activity, and for sharing internationally.

All action areas would need to consider, in their individual contexts, a general design framework that would take into consideration:

1. Access

   - providing relevant policy directives;

   - creating and nurturing the demand;

   - providing the facilities to meet the demand;

   - sustaining the demand.

2. Quality

   - ensuring relevant policy directives;

   - ensuring the relevance and depth of learning of intended learning outcomes;

   - ensuring the availability of optimal pedagogical strategies and situations for initial learning, reinforcement of learning and application of learning;

   - ensuring the availability of optimal physical facilities and environments for learning;

   - ensuring the facilitating human proficiencies, relationships and interventions by institutional, and home/community persons.

3. Achievement

   - ensuring relevant policy directives.

   - ensuring the availability of evaluation instruments and modes consistent with the intended learning outcomes, and infrastructures for their use with target populations.

   - ensuring the acceptability and accreditation of the achievement results.

Finally, in relation to programme implementation, the spirit of collective co-operative effort among Member States should be maintained through their involvement in the design, execution, supervision and evaluation of the activities that are undertaken. This relationship must continue to be based upon reciprocity for mutual self-learning and self-reliance.

B. APEID mechanisms

Introduction

APEID provides a major mechanism for assisting Member States in enhancing their capabilities to meet creatively and innovatively the challenges of educational development. It is "significant as much for what it does as for the way it works". It encourages innovation and its

incorporation in the education system so that the educational and development needs of the Member States can be met.

Through the mechanism of APEID, a reservoir of expertise has been created in the Member States, in the form of individuals and institutions which have participated in APEID activities and, therefore, enhanced their capabilities. The expertise and experience of these institutions and individuals can now be utilized by most Member States in bringing about substantial transformation of the education system through the adaptation and adoption of innovative experiences.

The APEID mechanisms are developed to enable the following objectives to be met:

a) to promote awareness of the need for innovation and of possibilities for change;

b) to promote the understanding of the processes and practices of innovation with a view to encouraging systematic experimentation and accelerating the adoption of educational innovation in response to problems of development;

c) to assist the Member States in creating and strengthening national capabilities in terms of personnel, techniques and management capacity for the development and use of innovation in education linked to the needs of national development;

d) to identify and stimulate innovative activities and co-operative action among the Member States; and

e) to promote inter-country transfer of experience.

To ensure maximum effectiveness, the main foci in APEID programme development and implementation are:

- an emphasis on identifiable actions and their outcomes;
- the development of programmes within the perspective of the total system of education and its key variables;
- a preference for programmes involving a number of Member States;
- the strengthening of each country's capacity to overcome problems;
- the tailoring of programmes to meet specific needs and circumstances of the countries;
- the narrowing of the gap between education systems and the pressing social and economic demands of society; and
- an emphasis on integration, multidisciplinary and multi-agency approaches.

The major institutional frameworks of APEID are:

- National Development Groups in Member States (NDG)
- Associated Centres (AC)
- Regional Consultation Meetings (RCM)
- Asian Centre of Educational Innovation for Development (ACEID)

They were seen to have served the above-mentioned objectives and foci of APEID's programmes well. They should be retained and their functional efficiency, especially in terms of system interaction, enhanced.

The concept of National Development Groups, Associated Centres and the Regional Consultation Meetings may be briefly described as follows:

National Development Groups

The composition and role of National Development Groups vary in Member States. In some, the membership is confined to personnel working in the education system, while in others representatives of agencies other than education are included, such as health, nutrition and rural development. The principal function of the National Development Group is that of fostering "a climate favourable to educational innovation". It provides a mechanism for identifying, stimulating, promoting and co-ordinating innovative programmes. It also provides a forum for innovators to meet and exchange their experiences, and assists in the monitoring and evaluation of programmes initiated by the Associated Centres. It liaises with ACEID in formulating and executing APEID activities.

Associated Centres

Associated Centres are the educational institutions which play a leadership role in the Member States in promoting educational innovation for development. Most of them were in existence before they joined the APEID network. They have taken the added responsibility of the identification, development and implementation of APEID programmes. They compile inventories of innovative ideas and practices, disseminate information to Associated Centres in other countries and educational institutions in the country, and facilitate the execution of APEID activities in the country and in other countries by providing the services of experts, hosting seminars and workshops, participating in joint research programmes, providing facilities for attachments and training of personnel, etc.

Regional Consultation Meetings

The Regional Consultation Meetings which take place every two years bring together high level, national decision-makers, administrators and educators drawn from all the participating Member States. These meetings assess APEID objectives, review the progress and execution of programmes, recommend priorities for APEID action and suggest specific activities for the programming cycle. The exercises undertaken at these meetings provide feedback to APEID. Since programme development takes place through joint consultations, the priorities and actions reflect the needs and requirements of the participating Member States and, therefore, the possibilities for the implementation of programmes are enhanced.

It was noted that countries establish the linkages between Unesco PROAP and ACEID on the one hand, and National Commissions, National Development Groups and Associated Centres on the other, in different ways. Country positions in this regard were to be respected in recommending innovations in structural relations.

The success of APEID was attributed to dynamic Associated Centres and an energetic, catalytic ACEID, with supportive intermediate National Commissions and National Development Groups. Critical to APEID's operational success is an efficient and effective communication system for this network.

As effective as communication presently is, proposals for innovation in communication were discussed and a number of models were proposed. Principal among these was the notion that, in matters of policy, communication was clearly a matter between Unesco PROAP and National Commissions, with copies to National Development Groups and Associated Centres.

In terms of programme implementation, it is recommended that countries consider a proposal which would allow direct communication between ACEID and National Development Groups, with copies to National Commissions and Associated Centres. Such a proposal could be considered within each country for action, with the suggestion that the innovation, if adopted, be reviewed at the next Regional Consultation Meeting.

Direct contact between ACEID and Associated Centres was not supported except in areas where an Associated Centre had been nominated to participate in a particular programme, or for the dissemination of publications and general information (with copies to the National Commission and Development Group concerned).

Discussion on National Development Groups

The roles and functions performed by a National Development Group depend upon the mandate given to it, the resources (particularly manpower) placed at its disposal, and the centrality of its operations in educational development. The status as well as scope of authority that a National Development Group enjoys vary in Member States. While no single model can be prescribed, it would seem necessary to consider measures which will enable them to perform more effectively their role in educational innovation. A close linkage between the National Development Groups, the Associated Centres and other institutions is necessary for the former to keep themselves informed of the critical needs of the education system and the innovative solutions that need to be considered. The need is for continuous dialogue and sharing of information between the National Development Groups and the Associated Centres in a Member State.

The Regional Consultation Meeting reviewed the Preamble to the "Guidelines for National Development Groups", Appendix to Part Four of the Ninth Regional Consultation Meeting on APEID, Bangkok, 1974. (Reproduced in this report as Appendix A to Part Five) It was agreed that more co-operation and interaction than that proposed in item 4 of the Preamble, namely, the publication of a newsletter for dissemination among National Development Groups was required. At the same time, the provision for inter- National Development Group meetings was acknowledged to be desirable but resource costly.

The review of National Development Groups was regarded as being essential to their efficiency in contributing to APEID goals and their advancement. A number of modalities was suggested for such review including:

a) self-review on self-determined criteria;

b) self-review on an APEID-designed checklist of criteria; or

c) review in collaboration with one or more collegial reviewers from other NDGs.

Given the impact of national, regional and more global challenges, the last proposal was considered the most desirable, although its financial implications were also noted.

Linkages between National Development Groups and Associated Centres were addressed by the Regional Consultation Meeting as an issue raised and possibilities were canvassed. These included:

a) regular meetings between National Development Group and Associated Centres;

b) dissemination of information (in both directions) between National Development Group and Associated Centres; and

c) the requirement that Associated Centres report regularly to National Development Group.

A further function of the NDG was considered desirable for National Development Groups, namely, that they should engage in reviews of Associated Centres at least once in every five years. The reasons for this are explained below.

The Regional Consultation Meeting discussed the relationship between the National Development Group and its national government, and agreed that there was a need to relate APEID activities to governmental interests and needs so that governments could be made aware of the emphases and objectives of programmes, and that the outputs of APEID programmes made effective inputs to national programmes in the national interest.

The strengthening of the infrastructure of the National Development Group and Associated Centres was discussed, and it was agreed that this was a country responsibility. One matter commented on was the need for National Development Groups and Associated Centres to retain an up-to-date database of information to ensure efficient communication between ACEID and National Development Groups, and National Development Groups and Associated Centres.

The need for a strong, permanent and distinct National Development Group secretariat was agreed upon, to ensure effective communication, particularly where there were changes of personnel in the secretariat.

Discussion on Associated Centres

The number of Associated Centres, which are the institutions in the Member States responsible for initiating and implementing innovative programmes for educational development, has risen to 196. The centres in the Member States are in various stages of growth and development. While some are fully equipped and can undertake, without difficulty, innovative activities in diverse areas, others are in the process of building up infrastructure and staff resources. Most of the centres have been set up by national authorities to provide support on a continuing basis for enhancing the capability of their education systems to meet new challenges.

Considerable attention was given to the question of the review of Associated Centres and several modalities for effecting reviews were explored. There was agreement that the review of centres would be efficacious in maintaining the dynamism of the APEID network. It was also agreed that reviews should concentrate on the effectiveness of Associated Centres in contributing to the programmes of a cycle, and that changes in cycles provided an opportune time to undertake reviews to enable centres to redirect their energies and competencies to the new areas and priorities of a cycle.

It was also suggested that the number of Associated Centres should remain principally as at present, with encouragement being given to the establishment of Associated Centre consortia to encourage breadth and depth in centres' participation in APEID.

Of particular interest is the capacity of Associated Centres themselves to develop independently educationally innovative programmes proactive to any existing ones.

It was recommended, in summary, that National Development Groups undertake a review of each Associated Centre at least once in every five years, based on the criteria mentioned below, in consonance with programming cycles to ensure that centres implement more effectively the APEID programmes.

Criteria for selection of Associated Centres

The criteria for the selection of Associated Centres were discussed and the following agreed upon, subject to the addition of the previously discussed recommendation that Associated Centre be the subject of review by the NDG every five years. The criteria were:

a) the mandate provided to them by the authorities to consider and deal with problems of educational development;

b) the basic infrastructural facilities;

c) the staff resources which can enable an institution to undertake such functions as research, training, materials preparation, extension and so on;

d) the credibility that the institutions have developed in respect of the quality and worthwhileness of their work.

These and other such criteria are, however, relative to the educational situation in a country and its ability to find manpower and material resources to establish institutions with enough expertise. Some countries have Associated Centres with plentiful infrastructural resources and staff expertise, while others are still in the process of building them. In the context of the basic objective of the APEID programme, i.e., the development of national capabilities, there is a case for linking many more centres to Associated Centres consortia. This is particularly important for undertaking system-wide adoption of innovation which requires working with local educational institutions and managerial and supervisory personnel. The strengthening of the Associated Centres should become a significant programme under APEID. In particular, the possibility of a distinct programme for strengthening the Associated Centres in the least developed countries needs consideration.

Networking. There is need for establishing more networking arrangements among Associated Centres, both within the country as well as among Associated Centres of different countries. These networking arrangements could be on the basis of institutional initiatives and/or under the auspices of APEID. Associated Centres, particularly those with substantial resources, should design activities for augmenting the capacity and capability of less developed Associated Centres both in the country as well as in other countries, and provide resources for the purpose. Programmes between countries could provide a mechanism for enhancing the capability of Associated Centres of the least developed countries.

Strengthening Associated Centres

There was agreement that a programme for strengthening Associated Centres in the least developed countries should be identified by ACEID. Suggested modalities for consideration were:

i) inter-country assistance;

ii) networking support;

iii) cross-centre support with experienced centres adopting less-experienced centres.

Discussion on the consultation process

The Regional Consultation Meeting modality was regarded as a critical and positive factor in the enhancement of APEID, particularly, as in 1990, with the innovation of a preceding symposium to activate innovative considerations from outside as well as from within education.

It was agreed that PROAP and ACEID should develop all possible linkages with cognate units and agencies to avoid duplication of effort and enhance the effective use of scarce resources.

Task-oriented groups and grouping of Member States by which task-oriented or interest-oriented approaches to problems were considered appropriate means of providing mechanisms for consultation, in addition to the regular Regional Consultation Meeting and consultations in the context of programmes.

Discussions on ACEID

ACEID serves APEID in three principal ways: as a resource base, as a secretariat and as a co-ordinating body. "It is not a 'headquarters' in the conventional sense, and much less a 'command post'. APEID's members, working on an equal footing, recognize neither hierarchies nor leading centres". It does not, however, function merely as a postbox. It works as a facilitator for educational innovation, promotes exchanges of experts and materials, disseminates information, provides technical and advisory services for both inter-country activities and to Associated Centres, and undertakes, supports and co-ordinates studies.

APEID should strengthen its ties with regional organizations in the region such as ASEAN and SAARC. These organizations have educational development as a major concern for collaborative action. Such sub-regional collaboration, with ACEID as one of the significant partners, could help in promoting co-operation among countries which have broadly similar educational and cultural contexts.

ACEID should also consider the possibility of incorporating its innovative activities in inter-country programmes, which would augment the resources and the capability of various countries, particularly the least developed ones.

Other support it could provide to Member States include:

a) assistance to Member States for developing projects for submission to funding agencies;

b) assistance in negotiating financial support with international financial institutions;

c) undertaking of and support for sector studies on education;

d) promotion of technical co-operation among Member States;

e) assistance for regular monitoring and evaluation of APEID programmes in Member States; and

f) special assistance to least developed countries for enhancing their capacities for innovations.

Strengthening of ACEID. The resources of ACEID - financial but much more, professional staff resources - have been depleted. This has affected ACEID's ability to work closely with National Development Groups and Associated Centres. Consideration should be given to the steps that can be taken to enhance the capability of ACEID to have regular interactions with National Development Groups and Associated Centres. Such enhancement will be needed if ACEID takes up the additional functions suggested above.

It was strongly recommended that Unesco, Paris decentralize its staffing and make more human resources available in PROAP, Bangkok.

Other issues

In the course of implementing APEID activities, issues have emerged for attention. These included the selection of participants for various activities and the flow of information to different levels. As regards participants, there is need for more careful selection by the Member States. Among others, the following criteria could be considered:

- that the participant is generally a staff member of an Associated Centre;
- that he/she has the required specialization/expertise for APEID activity;
- that he/she will likely remain committed to an Associated Centre for a significant period after the APEID activity;
- that he/she is committed to the programmes of the Associated Centre and the objectives of APEID; and
- that he/she is likely to have an opportunity for promoting system-wide adoption of innovation.

In order to ensure follow-up action of regional activities, the National Development Group should remain in constant touch with the participants and expect of them regular reporting of the activities that have been initiated as follow-up action to regional/sub-regional and national activities.

The flow of information through APEID is of great importance. APEID projects are designed and implemented according to the needs of participating countries. The experiences and expertise gained through project implementation should be shared by all countries. It is in this context that collection and dissemination of information by ACEID and by Associated Centres become important. While there is considerable effort at dissemination, the flow of information requires further enhancement, particularly to Associated Centres and the system as a whole. This might require support for enhancing the capabilities of the National Development Groups and the Associated Centres, for instance in terms of hardware and software required for the purpose (word processors and training of personnel in their use). There is also need for greater use of innovative measures for disseminating information. Video cassettes can be used as aids for training personnel, particularly in the teaching of science and mathematics. A gradual development of electronic networking (using computers) may also be considered, along with relevant hardware and software.

Conclusion

The present modalities underpinning the APEID programme and network appear to be appropriate for the purpose. Of increasing importance, however, is the need for regular and efficient evaluation of such procedures, along with that of the APEID programme.

Appendix A to Part Five

GUIDELINES FOR NATIONAL DEVELOPMENT GROUPS (Reproduced from Appendix A to Part Four of the final report of the Ninth Regional Consultation Meeting on APEID, Bangkok, 20-26 March 1984)

Preamble

In the establishment of guidelines for National Development Groups, it must be emphasized that these are in no way intended to undermine the sovereignty of each Member State. They should be read in terms of the requirement of each Member State for the administration of education within that country.

1. That the NDG may consider including in its composition one representative each of the National Commission for Unesco and of the educational policy-makers in states/regions, apart from those of the Associated Centres, etc.;
2. That the NDG may hold regular meetings, at least once every three months. Where this is not possible for some special reasons, the executive committee may meet at least once every three months, and the full NDG may meet at least twice a year;
3. That the decisions of the NDG may be promptly supplied to all the Associated Centres, and ACEID Bangkok, to ensure early implementation on one side and timely information on the other;
4. That the NDG or clearing house, as the case may be, may undertake the publication of a periodical newsletter which, apart from ACEID, may be supplied to the entire fraternity of Associated Centres;
5. That the NDG may consider making use of the media such as radio and TV in further dissemination of APEID;
6. That the NDG may select specific material from APEID publications, and regularly circulate both in English as well as the national language if need be, to the concerned Associated Centres and institutions for wider dissemination;
7. That the NDG may consider the preparation of a futuristic long-term programme in collaboration with the Associated Centres, etc., so that this could constitute the basic material for the preparation of a long-term APEID programme;
8. That the NDG may regularly undertake an assessment of the innovative needs of the country together with an evaluation of innovative work already undertaken. These reports may be widely disseminated;
9. That the NDG may carefully scrutinize all nominations for the programmes conducted through ACEID with a view to ensuring that the candidates meet the requirements of the activity and maintain the highest level of participation;
10. That the NDG may endeavour or ensure expeditious supply of all the locally published reports and returns requested by ACEID; and
11. That the NDG may examine the feasibility of holding a regular annual convention to examine its performance.

ANNEXES

ANNEX I

AGENDA

1. Inaugural session
2. Election of Officers of the Meeting
3. Review of APEID programmes and activities, from 1987 to mid-1990:

   3.1 Tripartite Review of the UNDP-assisted Projects RAS/86/170 and RAS/86/051

   3.2 Overall review of APEID for the period 1987 to mid-1990
4. Discussion of the main innovative, futuristic and other ideas relevant to APEID's operation emerging from the Regional Symposium on Qualities Required of Education Today to Meet Foreseeable Demands in the Twenty-First Century
5. Consideration of the Study on Educationally Disadvantaged Population Groups, with particular reference to educational innovations essential to achieve the goal of Education for All, which could be facilitated and promoted through APEID
6. Future directions of APEID

   6.1 Identification of programme areas for the fifth programming cycle of APEID, 1992-1996

   6.2 Strengthening and/or redesigning of the networking mechanism and/or strategies for the fifth programming cycle of APEID
7. Consideration and adoption of the draft report
8. Closing of the Meeting

ANNEX II

ADDRESSES

Inaugural Address of Dr. Vichai Tunsiri
Secretary-General, Office of the Teacher Civil Service Commission
on behalf of H.E. General Mana Ratanakoses
Minister of Education, Thailand
Bangkok, 16 August 1990

The Director of PROAP, Mr. Hedayat Ahmed,
Distinguished Delegates and Observers,
Ladies and Gentlemen,

The Minister, H.E. General Mana Ratanakoses asked me to convey to all of you at this gathering his sincerest apologies for his absence today, due to his being granted an audience with Her Royal Highness Princess Maha Chakri Sirindhorn. However, he has sent his warmest welcome to Thailand to both participants and observers of the APEID Regional Symposium and its Twelfth Regional Consultation Meeting.

May I take this opportunity to extend my heartfelt congratulations to you all for your unreserved contributions to what is an important regional mechanism for the promotion of educational development. You have achieved so much already in the sixteen years since APEID's inception that I can only look forward with great expectations to a successful conclusion of this year's symposium and consultation meeting.

Ladies and Gentlemen, I would like to point out that, if not for the tireless preparation and innovative groundwork laid down through regional co-operation in APEID, it would not have been possible for the World Conference on Education for All, held earlier this year, to turn into a remarkably successful event as it did. Indeed, the World Conference was a milestone of great importance for everyone involved in education.

Both the "World Declaration on Education for All" and the "Framework for Action to Meet Basic Learning Needs" adopted at the World Conference serve to reflect a worldwide consensus on an expanded vision of basic learning needs in our time. I am therefore glad to see that the theme of this symposium which is "Qualities Required of Education Today to Meet Foreseeable Demands in the Twenty-First Century" helps highlight one of the very crucial aspects in our current provision of education.

By "brainstorming" the likelihood of future trends and needs in our region, based on this global framework, this symposium will be able to identify certain areas which merit priority attention, suitable for our region.

The outcome, I am certain, will be reflected in appropriate strategies for sound basic education which is fundamental to any qualitative improvements upon higher levels of education as well as upon scientific and technological literacy.

Regarding illiteracy, the Member States in the Asia and Pacific region have relentlessly co-operated in order to eradicate it. Thanks largely to the help and innovation provided by APEID programmes, Thailand's National Literacy Campaign began to achieve a steady rate of progress three years ago. Now, combined with the fresh impetus of the World Conference and International Literacy Year, 1990, we can truly believe that illiteracy is an enemy we will finally defeat.

Ladies and Gentlemen, the fifth cycle of APEID will decide how we will enter the twenty-first century. With the continued acceleration of economic development in the region, APEID's fourth cycle progress in the promotion of science and technology has been welcome and no doubt will continue through the fifth cycle.

However, universal education is a concept that should be approached through the development of a comprehensive system which covers the spectrum of individual requirements, rather than as a blanket which covers a multitude of inadequacies. As the twenty-first century rapidly approaches, illiteracy may well be eradicated but other enemies of human development remain to be conquered; other avenues to be explored.

Finally, of course, none of the progress made so far could have really been achieved without the steadfast funding of the UNDP. My congratulations to all contributors to the programme. I look forward to increased co-operation from all funding agencies so that the directions discussed this week will bear fruit.

At this juncture, I take great pleasure in inaugurating the start of the Regional Symposium and the Twelfth Regional Consultation Meeting and wish all participants good luck in their deliberations.

Thank you.

Address of Mr. Hedayat Ahmed, Director, Unesco PROAP at the inaugural session Bangkok, 16 August 1990

Ladies and Gentlemen,

"Education for the Twenty-First Century", is the attractively speculative and all embracing title of Programme 1.2 of Unesco's Medium-Term Plan, a title that encourages us all to engage in some creative, lateral thinking about what type of futures we would like to see occur at the national, regional and global levels with regard to human activity and endeavour. The Asia and Pacific Programme of Educational Innovation for Development (APEID) has taken the initiative to organize this Regional Symposium on Qualities Required of Education Today to Meet the Foreseeable Demands in the Twenty-First Century, because we believe that the issues involved are of fundamental importance as we think about appropriate programme areas for our forthcoming fifth cycle (1992-1996).

While it is true that this Meeting is a sequel to the International Symposium on the same topic, which Unesco Paris organized in Beijing in December 1989, this Symposium is different to the earlier one in that the eminent thinkers and futurists invited to make presentations at this Meeting will be interacting with high ranking education officials who are themselves at the helm of education policy and decision-making in APEID's 29 Member States in the region. In referring to "futurists" we mean those people who are very interested about what may happen in the future and who are genuinely concerned with taking action to make possible a future that will improve human conditions over the long term.

Reference is often made to the fact that Asia and the Pacific region is one of great diversity in terms of the socio-economic status, cultural background and ethnic-racial characteristics of the population groups who make up the various countries in the region. In making comparisons between countries in the region, economic criteria are almost exclusively used as the yardstick for indicating level of advancement, reference being made to the fact that the region contains some of the most economically developed countries in the world, such as Japan with a GNP per capita of US$22,879 and Australia with US$16,050, and also some of the least developed and poorest countries in the world with a GNP per capita of less than US$200, as is the case with Afghanistan, Bangladesh, Bhutan, Laos (People's Democratic Republic), Nepal, and Socialist Republic of Viet Nam.

In addition, while some countries in the region are experiencing an unprecedented period of economic growth, others are falling further and further behind. One of the major challenges for all of us in planning for a preferred future is to take action to help improve the standard of living and quality of life of those people who are living in the poorest countries in our region, and in so doing, to reduce the gap between the richest and poorest, both within and between countries. Education, I believe, has a particularly important role to play in this regard.

However, having referred to GNP per capita as the main yardstick used to measure a country's economic status, one of the main problems associated with using this as the main criterion for charting a country's national development activity is that it often neglects the human dimension of development. It is therefore pleasing to see that a team of leading scholars have recently created a new Human Development Index (HDI) for UNDP which quantify key aspects of the overall human condition, ranking countries according to their success in meeting human needs. The HDI is a triple component index which focuses upon life expectancy (not only for its own value, but because it refers to health care delivery and the ability of people to live long enough to achieve goals), literacy (because it not only helps people to get and keep jobs, but to understand their surroundings and culture), and purchasing power (which demonstrates the relative ability to buy commodities and meet basic needs).

What the nine eminent futurists taking part in this Meeting will have to say will no doubt establish invaluable sign posts to mark a clear path for the future directions of education deemed necessary to meet the foreseeable demands of the twenty-first century. We anticipate that there will be a lot of discussions about the future of education and education for the future.

But dealing with the future is both a difficult and controversial matter. Some educators by virtue of the existing difficult political and socio-economic conditions prevailing in their country are so absorbed with trying to cope with the current situation that they may feel that they cannot afford the luxury of worrying overly about the future. Others are highly sceptical about our ability to accurately predict the future and say that predicting the future is rather like weather forecasting: that is, when the Weather Bureau people say there will be a storm and rain, often the sun shines and a beautiful day occurs.

However, if we adopt such attitudes, we are loosing a marvellous opportunity to try and achieve the types of societies we would ideally like our children to live and work in, and at the same time we are not giving the human spirit a chance to find expression in a preferred future.

I am of the strong belief, Ladies and Gentlemen, that we cannot afford to adopt an "Ostrich position", with regard to this important matter. This pressing need not to "bury our heads in the sand" is especially important when it comes to the operation of our education systems. The reason is that educational institutions do not exist in social, cultural or economic isolation from the rest of a society,

but actually exist to serve the needs of both the individual and society. We therefore need to know which type of societies are emerging, and what types of societies we would like to see emerge in order to ensure that any necessary adjustments are made to the education systems to help meet the needs of such a society. At the same time we at Unesco PROAP believe that education must satisfy the needs of the individual in their quest to achieve self-actualization, while at the same time accommodating broader societal goals such as human resource development.

All of this requires us to pay careful and particular attention to the characteristics, and changing requirements, of our "emerging new societies" so that in planning our education systems, we are looking forwards rather than backwards. As Alvin Toffler pointed out some time ago, in his book Future Shock, one of the problems that occurs if we are not sufficiently "futures-oriented" when designing and operating our school systems is that we may be looking backwards rather than forwards. As a result, we are preparing young people to live in a type of society that is already out-of-date, and a society which will be (to use Toffler's words) "dead before they are".

In conceiving of possible futures it is important that we bring to our deliberations a mixture of optimism, realism and positive thinking; and that we accept that although what is achievable in the future will no doubt be heavily influenced by what has gone before (for, in a very real and significant sense, each new generation stands on the shoulders of the previous generation), we also know that the extent of human creativeness and inventiveness is such that in another sense the future is also wide open, in terms of possibilities, for us to choose what directions it should take.

However, in conceiving of the future, we should not be so optimistic as to close our eyes to the harsh realities of life. What we need is a balanced view to develop an appropriate "mental set". We can think in terms of possible futures, which is a creative act, based on trends and information about the outside world, human imagination, and intuitive insight; probable futures, which is a subset of the first and are those possible futures that can be seen now to be the ones that are most likely to occur; and preferable futures, which is a subset of the possible and the probable futures that would lead to desirable outcomes for humankind.

Futurists who accumulate ideas in the preferred future's mental file are by and large those who believe that since the future does not as yet exist, it can be significantly shaped, and even controlled, by humankind. Human beings cannot change the past, but they can certainly help chart the future, the human mind and heart having the capacity to determine the destiny of humankind.

Our choice of nine eminent personalities from Asia and the Pacific region, who will be dialoguing, during the next three days, with those who will be later attending the APEID Regional Consultation Meeting, clearly indicates Unesco PROAP's particular bias in favour of those who belong to the preferred futures school of thought.

However, such efforts on our part to achieve preferred futures requires "perspiration" as well as "inspiration" on our part for as Burt Nanus has so clearly put it: "the futures-creative leader not only imagines the preferred future, but works to create it". I think that our nine eminent personalities, as well as those who are in this audience today, are exemplars in this regard.

From Unesco PROAP's point of view, one of the pressing matters that needs to be accommodated in terms of "preferred futures" is the notion that a good quality primary schooling, and the provision of essential knowledge and skills for adults to cope with the diverse demands of the modern world, should be available to all people, regardless of socio-economic status, cultural background, gender, race, ethnicity or geographic location.

Nowhere should this commitment to achieve 'education for all' be greater than in Asia and the Pacific region, which contains approximately two-thirds of the world's population and 75 per cent of its illiterates.

Another cluster of factors that warrants special attention at the current time is the various global concerns which, if left unresolved, will threaten the very future of humankind. I am particularly thinking in this regard about problems associated with the contamination and pollution of our natural environment, and the much talked about "green house effect" which could result in the earth's temperature rising to such an extent that coastal settlements throughout the world would be wiped out.

It is our sincere hope, Ladies and Gentlemen, that our discussions and deliberations over the next three days will not only strengthen our resolve to achieve preferred futures, but will also invigorate us to work effectively to pursue our preferred futures through education. It is for this reason that this Symposium is linked to the Regional Consultation Meeting on APEID, the ideas arising about the future of education and education for the future (that are distilled and crystalized from the Regional Symposium) being invaluable inputs into the Regional Consultation Meeting on APEID. (RCM). Subsequently, the Programme Development Meeting which follows the Regional Consultation Meeting will then have the responsibility to convert those ideas into programmes that will help us achieve our immediate preferred futures. This RCM is particularly important because one of our tasks is to determine the programme emphases and activities for APEID's fifth cycle (1992-1996) in order to ensure that we implement those qualities of education that are required for a preferred 21st century.

It has been said that the decade of the 1990s is a crucial decade in the history of humanity, for it will be a period of stunning technological innovations and changes, unprecedented socio-economic opportunities and surprising political reforms.

I trust that we all want education to help create our preferred futures by helping to make things happen: to act rather than to react; to create rather than only adapt to changes. To adopt the analogy of a train, the decade of the 1990s is the last chance we have to prove that education can be the engine that propels development and progress, rather than the carriage that simply trails along behind. But if education is to be able to achieve this challenge, we educators must adopt an educated foresight of what might happen in the twenty-first century.

I trust that such educated foresight will be part of the outcomes of this Symposium, for an educated foresight can go a long way towards helping decision-makers to wisely steer education in the direction of the preferred futures.

I am confident that your deliberations on the "Qualities Required of Education Today to Meet the Foreseeable Demands in the Twenty-First Century" will be an interesting one.

Address of Prof. Dr. Kasem Watanachai
President, Chiang Mai University, Chiang Mai
at the welcome ceremony in Chiang Mai
on 20 August 1990

Dr. Prasit Chaiyasri, Vice-Governor of Chiang Mai,
Mr. Hedayat Ahmed, Director of Unesco PROAP,
Mr. F. Ossella, UNDP Deputy Regional Representative,
Dr. L. de la Cruz, Head of ACEID,
Asst. Prof. Prasit Malumpong, Dean, Faculty of Education, Chiang Mai University,
Distinguished APEID Participants,
Ladies and Gentlemen,

It is my great pleasure and quite a privilege to be addressing colleagues and friends from many countries in the Asia-Pacific region this morning. I have learned that as associated members of APEID, you all here as well as colleagues at home have been involved in many important educational projects with not only national, but regional and possibly global implications as well. I am particularly intrigued by the fact that those educational projects and innovations are not designed merely for educational purposes. They are, if I am not mistaken, ultimately aimed at human, community and national development. This is what makes APEID's work exciting and challenging.

At the same time, I think it is a great idea that representatives of APEID Member States, like this group, have a chance to meet every two years to learn from each other's successes and failures. This globalization of ideas and experiences in itself is certainly an imperative, particularly given the fast-changing world which countries in this region are experiencing.

As President of Chiang Mai University, I am very much delighted to witness the role, however small, of the Faculty of Education in this Meeting. I am quite certain that the members of that Faculty including the Dean and Associate Deans will benefit from this experience to a certain degree. At the same time, I do hope they will share developmental implications they have learned from associating with APEID with colleagues both within their faculty and in other faculties who are also in need of new innovations and creative insights generated outside their immediate professional boundaries.

Ladies and Gentlemen, I am also proud to say that the globalization of ideas and experiences is at present an active working principle of Chiang Mai University. Therefore, I can say without hesitation that I wholeheartedly support meetings of this nature. And I do hope both the Consultation and Programme Development Meetings will certainly come up with more promising plans of activity for the countries in the region. Again let me repeat, not only for the benefit of educational development per se, but for human, community and national development as well.

Thank you.

**Statement of Mr. F. Ossella, Deputy Regional Representative
United Nations Development Programme (UNDP), Bangkok
at the welcome ceremony in Chiang Mai
on 20 August 1990**

Your Excellency, Dr. Prasit Chaiyasri, Vice Governor of Chiang Mai,
Prof. Dr. Kasem Watanachai, President of Chiang Mai University,
Dr. Prasit Malumpong, Dean, Faculty of Education, Chiang Mai University
Mr. Hedayat Ahmed, Director of Unesco PROAP,
Distinguished Participants, Ladies and Gentlemen,

I am indeed very pleased to have the opportunity of addressing the Twelfth Session of APEID'S Regional Consultation Meeting. I am here on behalf of Mr. Alan Doss, the UNDP Regional Representative, who unfortunately was not able to address personally this meeting due to prior commitments.

UNDP indeed feels very close to this important regional network, given its long association with it dating back from the early 1970s, when APEID was first established. Together we saw APEID grow from just 12 participating institutions to over 190 national and regional centres which comprise the network today. As already indicated by UNDP at the Eleventh APEID Consultation Meeting in 1988, we naturally wish to see APEID grow from strength to strength, grow in self-reliance and determination, to solve common problems leading to expanded and sustainable human development in the region. However, in spite of the many years of activity, APEID has not yet achieved a satisfactory degree of self-reliance. External assistance should no longer be seen as an essential element for the network to pursue its objectives. For the network to be successful and effective, it must be self-sustaining.

In the course of this meeting, you will be discussing matters which are expected to have far-reaching impact on the development of education in the region. Personally, in my capacity as UNDP Deputy Regional Representative in Bangkok, I am particularly interested in the review of the effectiveness and efficiency of UNDP assistance to APEID through the two regional projects, scheduled to end next year. I shall be interested also to learn of the main innovative, futuristic and other ideas concerning APEID which will emerge from the Regional Symposium. Above all, I shall be interested in strategies and innovations instrumental to achieve the goal of education for all, and particularly those which could be promoted and supported through APEID. As you are aware, in the spectrum of development activities, UNDP places the utmost priority on Human Development. In this connection I should like to take the opportunity to highlight some of UNDP's regional and global efforts in promoting sustainable human development.

In partnership with Unesco, UNICEF and the World Bank, UNDP convened a World Conference on Education for All which was held in Jomtien, Thailand, in March of this year. Judging by the level of participation, the success of this World Conference has been considerable. The highlight of the conference was the adoption of a Declaration making education a right for all. Steps are already

being taken by several countries to adopt the recommendations of the conference . In Thailand, for example, the Government has decided to extend compulsory free primary education from six to nine years. A national workshop is being convened in October of this year, with the assistance of UNESCO, UNICEF and UNDP, to map out a national strategy regarding the relevant curricula. As it concerns the UNDP, the Administrator requested all Resident Representatives to follow up on the recommendations of the conference and assist Governments in their effort to provide education for all.

To further stress the importance of education in the context of development, in May of this year, UNDP launched a report on the status of Human Development worldwide. The report shows that true development occurs only when the Governments place people at the centre of development policies. The report has been distributed worldwide as the first step in a campaign to send a crucial message to the world, namely, that human development, defined as the process of expanding people's choices, should be the primary goal of development. The report also shows that both rich and poor countries are the primary factors in the improvement and in the promotion of human development. To provide education for all and to improve the quality and relevance of education, there is need for budgetary restructuring. In this context the UNDP wishes to contribute to bring about a reallocation of resources from armaments to education, to meet the needs of the majorities which still are deprived access to education.

The purpose of the report and of the Human Development Index is not to criticize any government. The index is intended to heighten focus on the human element of development and stimulate new development options. It aims at making all countries realize where they stand with regard to "human development" and hopefully induce governments to be more critical of their own policies. So far to much attention is given to aggregate economic indicators and too little to social indicators.

The 37th meeting of the Governing Council of the UNDP held in July of this year, has mandated UNDP to concentrate on the following themes in the context of the all imbracing concept of "sustainable development":

- poverty eradication and grassroots participation in development;
- environment and natural resource management;
- development management;
- technical co-operation among developing countries;
- technology for development; and
- women in development.

With these thoughts in mind, I wish you all a successful meeting and a fruitful conclusion to the benefit of the people in all the countries we serve.

Thank you.

Statement of Mr. Hedayat Ahmed, Director
Unesco Principal Regional Office for Asia and the Pacific
at the welcome ceremony in Chiang Mai
on 20 August 1990

Your Excellency Dr. Prasit Chaiyasri, Vice Governor of Chiang Mai,
Prof. Dr. Kasem Watanachai, President of Chiang Mai University,
Dr. Prasit Malumpong, Dean, Faculty of Education, Chiang Mai University,
Mr. F. Ossella, UNDP Deputy Regional Representative,
Distinguished Participants,
Resource Persons and Observers,
Ladies and Gentlemen,

In this beautiful city of Chiang Mai, in February 1971, there was a historic Unesco Seminar. in which the Member States of Asia, inter alia, realized the need to constitute a more effective means of dealing with the problems of education in the region. In that Seminar it was noted that millions of children and adults alike, still did not have even nodding acquaintance with the three Rs; hence they were unable to participate in nor benefit from the fruits of development efforts. In that Seminar the Member States decided to face the challenge and agreed to forge a co-operative endeavour towards being contributors rather than mere recipients of assistance - the forerunner of the concept of "Technical Co-operation Among Developing Countries (TCDC)". It was in fact the recommendation of that Unesco Seminar in Chiang Mai that became the basis of the recommendation of the Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia in 1971 to create a regional mechanism to promote and support inter-country co-operative efforts in educational innovation directed to development. Hence APEID was born, the leitmotif of which is educational innovation for development.

APEID became operational in 1973 under the able guidance of my most esteemed predecessor, Dr. Raja Roy-Singh, who is in our midst today. APEID is therefore already 17 years old - soon going to miss the teen. Like many teenagers, more than ever it needs careful guidance, and I am happy to note that such is what many Member States of APEID are so doing, i.e., looking at the programme with a critical appreciation. Such scrutiny of APEID from the Member States is in fact self-criticism, for APEID belongs to the Member States of this region.

It is to be noted that 29 Member States have joined APEID, which exemplifies the effectiveness of the programme. Incidentally, I wish to mention that three Member States are participating in the Regional Consultation Meeting for the first time. These are the Democratic People's Republic of Korea, Mongolia and Myanmar. We extend to them a very warm welcome to APEID.

During the 17 years of its operation, APEID has succeeded in helping develop high-level commitment to educational change, in providing a model of institutional collaboration, and in generating significant innovation processes within countries. There are visible indicators that national authorities are committed to educational innovations for development.

Part of the success of APEID is of course the continuing financial support which UNDP has provided to it since its inception. We are most grateful to UNDP, which is represented in this Meeting by Mr. F. Ossella and Ms. Amara Rattakul. The Japanese Funds-in-Trust also continue to be a big source of funding support. However, perhaps the most important source of funding of APEID, besides the Regular Programme of Unesco, is that which is coming from the Member States of this region, in the form of Voluntary Contributions such as those from Australia, China, India, Iran, Japan, New Zealand, Republic of Korea, and Thailand. Incidentally, I wish to mention that we have just received US$20,000 contribution from the Republic of Korea, which is part of their US$100,000 commitment for the fourth programming cycle of APEID. I also understand that in the course of this Meeting China will be presenting us its Voluntary Contribution. While the total amount of the Voluntary Contributions constitutes only about 10 per cent of our annual regional budget for APEID, we consider it very important, as it is a manifestation of the Member States' support to APEID. I would like to place on record the warm appreciation of the UNESCO PROAP to UNDP and the Member States for nurturing this challenging programme.

The Twelfth Regional Consultation Meeting is another milestone of APEID. Its significance is perhaps only equal to that of its conception in 1971. The transition from the fourth cycle (1987-1991) to the fifth cycle which starts in 1992 is a crucial turning point. If we continue to have the same programmes or the same emphasis in its current programmes, and if we use the same mechanisms, then where is the creativity and innovation for which APEID has been associated with? It seems to me that creativity and innovativeness are the twin ingredient that can sustain and strengthen APEID. Creativity enables us to generate novel ideas, and innovation provides us the means to transform those new ideas into something concrete and useful. To create anything new is not necessarily innovation. Neither is it the case that everything old is worthless and has to be discarded. New ideas must help solve existing problems. Implied is the need for any creative educational idea to address the right problems, at the right time, and that the proven and the new educational ideas are blended and orchestrated to optimize the impact on national development efforts.

This RCM is also crucial as we prepare for the twenty-first century. After all, the school children of the 1990s will be the citizens and leaders of at least the first half of the twenty-first century. It is for that reason that we organized the Regional Symposium on Qualities Required of Education Today to Meet the Foreseeable Demands in the Twenty-First Century just before this RCM. That Symposium gave us a lot of ideas, for not only the possible and probable futures, but also of the preferable future of education and education for the future. I trust that we shall make use of those futuristic and innovative ideas in preparing programmes for the fifth programming cycle of APEID. Since only one and a half hours were devoted to the presentation and discussions of each of the papers of the eminent personalities in the Symposium in Bangkok, we propose to discuss those ideas further under Agenda item 4 of this Meeting which is scheduled on Tuesday afternoon up to Wednesday morning.

It seems to me that our nine eminent speakers in the Symposium could be categorized into two main schools of thought - the visionaries and the realists. Both orientations need to be blended carefully - fixing our eyes upon the heavenly stars up above, while keeping our feet firmly on the ground.

One of the harsh realities in the Asia-Pacific region is the existence of millions of educationally disadvantaged population groups. There are about 666 million illiterates in the region. There are about 60 million primary school age children who are out of school. The educationally disadvantaged groups include girls and women, rural dwellers in remote and isolated areas, the poor or low income groups, nomadic tribes, ethnic/religious minority groups and the handicapped, who in many countries are not afforded basic and good quality education and who therefore neither can effectively contribute to development nor have a fair share of the outcome of development. Hence, Agenda item 5 of this Meeting is the "consideration of the interim report of the study on educationally disadvantaged population groups with particular reference to educational innovations essential to achieve the goal of education for all, which could be facilitated and promoted through APEID".

Ladies and Gentlemen, we in APEID are the pioneers in educational innovations, and the National Development Groups on APEID and the APEID Associated Centres form a core group in Member States that make things happen. Nicholas Murray Butler aptly put it when he said, "people can be placed in three classes: the few who makes things happen, the many who watch things happen, and the overwhelming majority who have no idea what has happened".

By working co-operatively together in this Meeting, we can make APEID enter into the new era emboldened with indomitable spirit and enthusiasm and renewed vision of the future. I am confident that through our concerted and sustained efforts, we shall be able to instil in the overwhelming majority the awareness to see and understand what has happened and why.

Ladies and Gentlemen, the future of APEID is in your hands!

Thank you.

ANNEX III

LIST OF PARTICIPANTS

A. Participants

AUSTRALIA	Ms. Fran Hinton, Director, School Literacy and Retention Programs, School and Curriculum Division, Department of Education, Employment and Training, Derwent House, Canberra City, ACT 2600
BANGLADESH	Mr. A.N.M. Eusuf, Secretary of Education, Chairman of the APEID NDG, Ministry of Education, Dhaka
CHINA	Mr. Cao Yuanju, Secretary-General, Chinese National Commission for Unesco, Chairman of the APEID NDG, 37, Damucanghutong, Xidan, Beijing
	Ms. Dong Jianhong, Programme Officer, Educational Co-operation Division, Chinese National Commission for Unesco, 37, Damucanghutong, Xidan, Beijing
DEM. PEOPLE'S REP. OF KOREA	Mr. Chae Ryang Il, Director, State Education Commission, Democratic People's Republic of Korea, Chung-District, Pyongyang
FIJI	Mr. Amraiya Naidu, Acting Deputy Secretary of Education (Administration/Finance), Ministry of Education, Marela House, Suva
INDIA	Prof. J.S. Rajput, Joint Educational Advise. Ministry of Human Resource Development, Department of Education, Shastri Bhawan, New Delhi 110001
INDONESIA	Prof. Dr. Harsja W. Bachtiar, Head, Office of Educational and Cultural Research Development (BALITBANG DIKBUD), Chairman of the APEID NDG, Ministry of Education and Culture, Jalan Jenderal Sudirman, Senayan, Jakarta 120001

IRAN	Dr. Mahmoud Mehrmohammadi, Research and Curriculum Adviser to the Minister of Education and Head of Center for Educational Research, Ministry of Education, Bldg. No. 4, Iranshahr Shomali Avenue, Teheran
	Mr. Abbas Sadri, Director-General of Higher Technical/Vocational Education Bureau, Ministry of Education, Teheran (alternate)
JAPAN	Prof. Haruo Nishinosono, Senior member of the APEID NDG, Kyoto University of Education, Kyoto
	Prof. Shigekazu Takemura, Hiroshima University, 1-1-89, Higashisendamachi, Naka-ku, Hiroshima-shi, Hiroshima-ken (alternate)
LAO PEOPLE'S DEMOCRATIC REPUBLIC	Mr. Khamtanh Chanthala, Vice-Minister of Education and Sports, Chairman of the APEID NDG, Ministry of Education and Sports, P.O. Box 67, Vientiane
MALAYSIA	Tan Sri Datuk Wira Abdul Rahman Arshad, Director-General of Education, Ministry of Education, 7th floor, Block J. Damansara Town Centre, 50604 Kuala Lumpur
	Dato Abdul Hamid Ayob, Director, Educational Planning and Research, Ministry of Education, 7th floor, Block J. Damansara Town Centre, 50604 Kuala Lumpur (alternate)
MONGOLIA	Mr. Z. Ulzikhutag, Director, Research Institute of Pedagogical Science, Ministry of Education, Ulan Bator-48
MYANMAR	U Khin Maung Yin, Principal, Hlegu Teacher Training School, Hlegu
NEPAL	Mr. Gauri Narayan Bachhar, Under-secretary, Nepal National Commission for Unesco, Ministry of Education and Culture, Kaiser Mahal, Kantipath, Kathmandu
NEW ZEALAND	Ms. Edna Tait, Principal, Tikipunga High School, Chairman of the APEID NDG, Box 7041, Tikipunga, Whangarei
PAKISTAN	Dr. Mian Abdul Qaseem, Secretary-General, Pakistan National Commission for Unesco, Plot No. 30, Sector H-8, Opposite University Grants Commission, Islamabad

PAPUA NEW GUINEA	Mr. John Poha, Senior Executive, Education Department, Port Moresby
PHILIPPINES	Prof. Edna F. Formilleza, Assistant Secretary, International Education, Programs and Projects, Department of Education, Culture and Sports, Palacio del Gobernador, Intramuros, Manila
REP. OF KOREA	Dr. Chung Chan-Young, Director, Educational Foundations and Policy Research Department, Korean Educational Development Institute, 92-6, Umyeon-Dong, Seocho-Gu, Seoul 137-791
SAMOA	Mr. Tupae Esera, Assistant Director of Education for Personnel and Training, Department of Education, P.O. Box 201, Apia
SOCIALIST REP. OF VIET NAM	Dr. Pham Minh Hac, First Vice Minister of Education and Training, Chairman of the APEID NDG, 49 Dai Co Viet Street, Hanoi
SRI LANKA	Mr. S.M.D. Perera, Acting Deputy Director-General, School Development and Non-formal Education Division, Ministry of Education, "Isurupaya", Sri Jayawardanapura - Kotte, Battaramulla
THAILAND	Dr. Kowit Pravalpruk, Deputy Director-General, Department of Curriculum and Instruction Development, Ministry of Education, Bangkok
TONGA	Mr. Paula Bloomfield, Director of Education, Ministry of Education, P.O. Box 61, Nuku'alofa
TURKEY	Prof. Dr. Eyup Isbir, National Co-ordinator of APEID, Director of Public Administration Department, Selcuk Universitesi, Konya
USSR	Mr. Boris Vinogradov, Deputy Secretary-General, Commission of the USSR for Unesco, Secretariat of the Commission, 9, Kalinine Avenue, Moscow
SEAMEO-INNOTECH	Dr. Minda C. Sutaria, Director, SEAMEO Regional Centre for Educational Innovation and Technology (INNOTECH), P.O. Box 207, Commonwealth Avenue, University of the Philippines, Diliman, Quezon City, Metro Manila

SEAMEO-RECSAM	Hj. Mohd. Khairuddin Ashaari, Director, SEAMEO Regional Centre for Education in Science and Mathematics (RECSAM), Glugor, 11700 Penang

B. Observers

AUSTRALIA	Prof. I.K.F. Birch, Chairman, Western Australian APEID Centre Consortium, Centre for Research in Rural Education, University of Western Australia, Nedlands, W.A. 6009
CHINA	Mr. Liu Dezheng, Chinese National Commission for Unesco, 37, Damucanghutong, Xidan, Beijing
JAPAN	Mr. Ryo Watanabe, Chief, International Educational Co-operation Division, National Institute for Educational Research (NIER), 6-5-22 Shimomeguro, Meguro-ku, Tokyo
	Mr. Shinpei Takuma, Director, Department of Education Technology, National Institute of Special Education (NISE), 2360 Nobi, Yokosuka, Kanagawa
	Mr. Kazuhiko Okada, Deputy Director, International Affairs Planning Division, Science and International Affairs Bureau, Ministry of Education, Science and Culture, Tokyo
THAILAND	Dr. Ruang Charoenchai, Secretary-General, Thailand National Commission for Unesco, Ministry of Education, Thailand
	Ms. Valapha Yoothong, Agricultural Colleges Division, Department of Vocational Education, Ministry of Education, Bangkok 10300
	Mr. Anan Chankawee, Institute for the Promotion of Teaching Science and Technology, 924 Sukhumvit Road, Bangkok 10110
	Ms. Nongsiri Chotirat, Educational Research and Planning Division, Department of Curriculum and Instruction Development, Ministry of Education, Bangkok

THAILAND (cont'd)	Ms. Wannarat Wattananimitkul, External Relations Division, Office of the Permanent Secretary for Education, Ministry of Education, Bangkok
	Ms. Weeranut Maithai, Chief of External Relations Section, Office of the National Primary Education Commission, Ministry of Education, Bangkok 10300
USSR	Ms. Shamsha Berkinbaeva, Deputy Minister for Education, Alma-Ata, Kazakh Republic
	Mr. Vladimir I. Kurilov, President, Far Eastern State University, Vladivostok
ILO	Mr. R. W. Duffy, Regional Adviser on Vocational Training Systems, ILO Regional Office for Asia and the Pacific, G.P.O. Box 1759, Bangkok 10501, Thailand
SEAMEO	Dr. Minda C. Sutaria, Director, SEAMEO-INNOTECH P.O. Box 207, Commonwealth Avenue, University of the Philippines, Diliman, Quezon City, Metro Manila, Philippines

C. Resource Persons

Prof. Kerry Kennedy, Dean, School of Education, University College of Southern Queensland, Post Office Darling Heights, Toowoomba, Australia

Dr. T.N. Dhar, Former Chief Technical Adviser (Unesco), 170 Vigyan Vihar, Delhi 110092, India

Dr. Milagros Ibe, Professor of Science and Mathematics Education, College of Education, University of the Philippines, Diliman, Quezon City, Philippines

Dr. Panom Kaewkamnerd, Director-General, Department of Curriculum and Instruction Development, Ministry of Education, Bangkok, Thailand

Mr. J. Ratnaike, Consultant to ACEID, Unesco PROAP, Bangkok, Thailand

D. Special Invitees

Asst. Prof. Prasit Malumpong, Dean, Faculty of Education, Chiang Mai University, Chiang Mai 50002, Thailand

Dr. Raja Roy-Singh, Former Assistant Director-General/Director of the Unesco Regional Office for Education in Asia and the Pacific, 2769 Asbury Street, Evanston, Illinois 60201, U.S.A.

E. United Nations Development Programme (UNDP)

Mr. F. Ossella, Deputy Regional Representative, UNDP, United Nations Building, Rajdamnern Avenue, Bangkok 10200, Thailand

Ms. Amara Rattakul, Programme Officer, UNDP, United Nations Building, Rajdamnern Avenue, Bangkok 10200, Thailand

F. United Nations Educational, Scientific and Cultural Organization (Unesco)

Unesco Principal Regional Office for Asia and the Pacific (PROAP), Bangkok

Mr. Hedayat Ahmed, Director

Mr. Leonardo de la Cruz, Head of ACEID and Specialist in Training of Educational Personnel, ACEID

Mr. Prem Kasaju, Specialist in Developmental Research in Education, ACEID

Ms. Lucille Gregorio, Specialist in Science and Technology Education, ACEID

Ms. Charatsri Vajrabhaya, Programme Specialist in Educational Innovation, ACEID

Mr. Takao Kamikeppu, Associate Expert in Developmental Research in Primary Education, ACEID

G. Organizing Committee

Faculty of Education, Chiang Mai University, Chiang Mai

Dean	Prasit Malumpong
Asso. Dean	Annop Pongwat
Asso. Dean	Amnat Chanpan
Asso. Dean	Supawat Cheunchob
Lecturer	Paiboon U-Panno
Asst. Prof.	Prayad Saiwichien
Lecturer	Mayuree Anukamol
Asst. Prof.	Anek Changnoi
Lecturer	Sawet Tajoompa
Librarian	Tassanee Srimongkol
Secretary	Apiratee Panpachon

ANNEX IV

MEMBERS OF THE WORKING GROUPS

Group A. APEID Programmes for the Fifth Programming Cycle

1. Dr. Kowit Pravalpruk (Thailand) - Group Chairperson
2. Ms. Edna Tait (New Zealand) - Group Rapporteur
3. Mr. A.N.M. Eusuf (Bangladesh)
4. Mr. Cao Yuanju (China)
5. Prof. J.S. Rajput (India)
6. Mr. Shigekazu Takemura (Japan)
7. Dato Abdul Hamid Ayob (Malaysia)
8. U Khin Maung Yin (Myanmar)
9. Mr. Abbas Sadri (Iran)
10. Mr. G.N. Bachhar (Nepal)
11. Dr. Mian Abdul Qaseem (Pakistan)
12. Mr. John Poha (Papua New Guinea)
13. Dr. Chung Chan-Young (Rep. of Korea)
14. Dr. Pham Minh Hac (Soc. Rep. of Viet Nam)
15. Mr. Paula Bloomfield (Tonga)
16. Mr. Boris Vinogradov (USSR)
17. Mr. Liu Dezheng (China - observer)
18. Mr. Shinpei Takuma (Japan - observer)
19. Ms. Valapha Yoothong (Thailand - observer)
20. Mr. Thawil Bua-Ngam (Thailand - observer)
21. Ms. Nongsiri Chotirat (Thailand - observer)
22. Ms. Wannarat Wattananimitkul (Thailand - observer)
23. Dr. Kerry Kennedy (resource person)

24. Dr. Milagros Ibe (resource person)
25. Mr. J. Ratnaike (resource person)
26. Dr. Raja Roy-Singh (special invitee)
27. Asst. Prof. Prasit Malumpong (special invitee)
28. Mr. Leonardo de la Cruz (Unesco PROAP/ACEID)
29. Ms. Lucille Gregorio (Unesco PROAP/ACEID)
30. Mr. Takao Kamibeppu (Unesco PROAP/ACEID)

Group B. Mechanism of APEID

1. Prof. Haruo Nishinosono (Japan) - Group Chairperson
2. Prof. I.K.F. Birch (Australia - observer) - Group Rapporteur
3. Ms. Fran Hinton (Australia)
4. Ms. Dong Jianhong (China)
5. Mr. Chae Ryang Il (DPR Korea)
6. Mr. Amraiya Naidu (Fiji)
7. Prof. Dr. Harsja W. Bachtiar (Indonesia)
8. Dr. Mahmoud Mehrmohammadi (Iran)
9. Mr. Khamtanh Chanthala (Lao PDR)
10. Mr. Z. Ulzikhutag (Mongolia)
11. Prof. Edna F. Formilleza (Philippines)
12. Mr. Tapae Esera (Samoa)
13. Mr. S.M.D. Perera (Sri Lanka)
14. Prof. Dr. Eyup Isbir (Turkey)
15. Hj. Mohd. Khairuddin Ashaari (SEAMEO-RECSAM)
16. Mr. Ryo Watanabe (Japan - observer)
17. Mr. Kazuhiko Okada (Japan - observer)
18. Ms. Weeranut Maithai (Thailand - observer)
19. Mr. Anan Jantawee (Thailand - observer)
20. Assoc. Prof. Dr. Padoong Arrayavinyoo (Thailand - observer)
21. Ms. Shamsha Berkinbaeva (USSR - observer)

22. Mr. Vladimir I. Kurilov (USSR - observer)
23. Dr. T.N. Dhar (resource person)
24. Dr. Panom Kaewkamnerd (resource person)
25. Mr. Hedayat Ahmed (Unesco PROAP)
26. Mr. Prem K. Kasaju (Unesco PROAP/ACEID)
27. Ms. Charatsri Vajrabhaya (Unesco PROAP/ACEID)

ANNEX V

LIST OF DOCUMENTS

I. Information documents

PROAP-90/APEID-RCM/INF.1	- General Information Paper
PROAP-90/APEID-RCM/INF.2	- List of Documents
PROAP-90/APEID-RCM/INF.3	- Provisional List of Participants

II. Working documents

PROAP-90/APEID-RCM/WD.1	- Agenda
PROAP-90/APEID-RCM/WD.2	- Annotated Agenda
PROAP-90/APEID-RCM/WD.2 (a)	- Elaboration of Annotated Agenda 3.1
PROAP-90/APEID-RCM/WD.3	- Provisional Schedule of Work
PROAP-90/APEID-RCM/WD.4 (a)	- APEID Action Programme Review, 1987-1990
(b)	- Country papers
PROAP-90/APEID-RCM/WD.5	- Project Performance Evaluation Report (PPER) for RAS/86/170
PROAP-90/APEID-RCM/WD.6	- Project Performance Evaluation Report (PPER) for RAS/86/051
PROAP-90/APEID-RCM/WD.7	- Mid-term evaluation of two UNDP-assisted regional education projects RAS/86/170 and RAS/86/051
PROAP-90/APEID-RCM/WD.8	- Summaries of presentations and discussions at the APEID Regional Symposium on Qualities Required of Education Today to Meet Foreseeable Demands in the Twenty-first Century (Bangkok, Thailand, 16-18 August 1990)
PROAP-90/APEID-RCM/WD.9	- APEID's survey of educationally disadvantaged population groups in Asia and the Pacific region: an interim report

PROAP-90/APEID-RCM/WD.10	- Working paper: Possible ideas for programme areas and APEID mechanisms (prepared by a Technical Working Group)

III. Reference documents

PROAP-90/APEID-RCM/REF.1	- Final report of the Eleventh Regional Consultation Meeting on APEID, 1988
PROAP-90/APEID-RCM/REF.2	- UNDP Project Document RAS/86/170: Improvement of National Education Programmes through the Network of the Asia and Pacific Programme of Educational Innovation for Development (APEID)
PROAP-90/APEID-RCM/REF.3	- UNDP Project Document RAS/86/051: Improvement of Science and Technology Education

IV. Other documents

1. Mid-term Evaluation of RAS/86/170 and RAS/86/051: Provisional Agenda

The Asia and Pacific Programme of Educational Innovation for Development (APEID) has as its primary goal to contribute to the building of national capabilities for undertaking educational innovations linked to the problems of national development, thereby improving the quality of the people in the Member States.

All projects and activities within the framework of APEID are designed, developed and implemented co-operatively by the participating Member States through nearly 200 national centres which they have associated for this purpose with APEID.

The 29 Member States participating in APEID are Afghanistan, Australia, Bangladesh, Bhutan, China, Democratic People's Republic of Korea, Fiji, India, Indonesia Iran, Japan, Lao People's Democratic Republic, Malaysia, Maldives, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Samoa, Socialist Republic of Viet Nam, Sri Lanka, Thailand, Tonga, Turkey and Union of Soviet Socialist Republics.

Each country has set up a National Development Group (NDG) to identify and support educational innovations for development within the country and facilitate exchange between countries.

The Asian Centre of Educational Innovation for Development (ACEID), an integral part of the Unesco Principal Regional Office for Asia and the Pacific in Bangkok, co-ordinates the activities under APEID and assists the Associated Centres (AC) in carrying them out. In the fourth cycle of APEID (1987-1991), seven programme areas have been selected for the purpose of concentration. These are:

1. Universalization of primary education
2. Continuing education
3. Education and the world of work
4. Restructuring secondary education
5. Educational technology and information technology
6. Training of personnel including professional support services and distance education
7. Science and technology education including science for all.