ASIAN PROGRAMME OF EDUCATIONAL INNOVATION FOR DEVELOPMENT

Programme Development Meeting

Chiangmai, Thailand, 26 April–6 May 1977

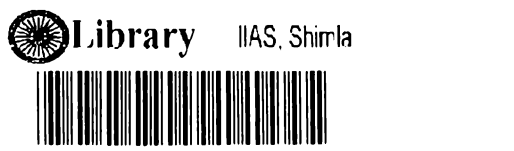
REPORT ON WORK PLANS OF APEID FOR THE SECOND PROGRAMMING CYCLE 1978–1981

Unesco Regional Office for Education in Asia
Bangkok
1977

Asian Programme of Educational Innovation for Development (APEID) Programme Development Meeting, Chiangmai, Thailand, 26 April-6 May 1977.
Report on work plans of APEID for the second programming cycle, 1978-1981. Bangkok, Unesco Regional Office for Education in Asia, 1977.
p.

1. EDUCATIONAL INNOVATIONS - ASIA.
I. Title.

371.39



ASIAN PROGRAMME OF EDUCATIONAL INNOVATION
FOR DEVELOPMENT

Programme Development Meeting

Chiangmai, Thailand, 26 April – 6 May 1977

REPORT ON
WORK PLANS OF APEID
FOR THE
SECOND PROGRAMMING CYCLE
1978–1981

Unesco Regional Office for Education in Asia
Bangkok
1977

Published by the Unesco Regional Office for Education in Asia
920 Sukhumvit Road
C.P.O. Box 1425
Bangkok, Thailand

OFFICERS OF THE MEETING

Chairman

Mr. Charoon Vongsayanha

Vice–Chairmen

Dr. A.T. Morales

Mr. Toru Sawada

Rapporteurs

Mr. T.M. Sakya

Mr. Abdul Aziz b. Ismail

Mrs. Srinoi Povatong

Secretary

Dr. M.C. Pant

y

CONTENTS

INTRODUCTION AND PROCEEDINGS

Background

The Asian Programme of Educational Innovation for Development (APEID) which became operational in 1975, will be completing its first cycle of activities in 1977 and entering the second cycle from 1978.

The Fourth Regional Consultation Meeting was held at the invitation of Unesco at Bangkok on 19–25 April 1977 to carry out the following two assignments:

i) To make an overall evaluation of APEID in the first cycle of operation; and

ii) To make recommendations for the future programme of APEID in the second programming cycle, 1978–1981.

The future programme of APEID in the second programming cycle was considered by the Consultation Meeting in the context of the emerging national needs and priorities, and bearing in mind the areas in which inter-country co-operation could be most effectively realized for common benefit. Taking account of the experiences in inter-country co-operative action generated in the first cycle of APEID, the Consultation Meeting formulated the broad strategies for APEID in the second cycle.

While APEID since its inception has been based on the concept of linking educational innovations to development, the Consultation Meeting re-emphasized this concept and identified five developmental themes to which APEID activities in the second programming cycle should be directed. Recommendations were also made by the Meeting in regard to the principles of action by which APEID activities may be planned and the modes of operation by which they may be carried out. The following are the themes and developmental goals identified by the Consultation Meeting for APEID programmes and activities in the second cycle.

Innovations in education designed to contribute to and promote:

i) Integrated rural development;

ii) Development of productive skills relevant to economic development;

iii) Universalization of education at the early school levels and functional education for out-of-school youth and adults;

iv) Better health and nutrition; and

v) National unity and international understanding and co-operation.

Programme Development Meeting

Participation

The Programme Development Meeting immediately followed the conclusion of the Fourth Regional Consultation Meeting. It was convened by Unesco with the Thailand National Commission for Unesco and the Ministry of Education of the Royal Government of Thailand as generous hosts. Most of the participants who attended the Regional Con-

---

* Fourth Regional Consultation Meeting on the Asian Programme of Educational Innovation for Development, Review and Recommendations for the Second Programming Cycle, *Final Report*, Bangkok, April 1977.

sultation Meeting also attended the Programme Development Meeting. Additional participants were designated by the Member States for the Programme Development Meeting, which made it possible for the Meeting to draw on a wide range of specialized knowledge and competencies relevant to its work. (List of Participants at Annex I).

Terms of reference

The following were the terms of reference of the Meeting:

i.) Elaboration of the developmental themes as identified by the Fourth Regional Consultation Meeting and specification of each theme's implications in terms of the expected outcomes in the several programme areas (areas of innovation) indicated by the Consultation Meeting; and

ii.) Formulation of Work Plans (detailed specifications of, and schedules for, APEID project activities) under each programme area (area of innovation) in the light of the guidelines given to it by the Fourth Regional Consultation Meeting.

While identifying the developmental themes, the Consultation Meeting also gave explanatory comments on these themes. In elaborating these developmental themes for the purpose of operationalizing them, the Programme Development Meeting was expected to exercise its own judgement in defining the scope of each theme, and formulating its objectives and programme activities.

Work of the Meeting

The Programme Development Meeting assembled at Chiangmai on 26 April 1977. It unanimously elected Mr. Charoon Vongsayanha (Thailand) as Chairman, Mr. Toru Sawada (Japan) and Dr. A.T. Morales (Philippines) as Vice Chairmen, and Mr. T.M. Sakya (Nepal), Mr. Abdul Aziz b. Ismail (Malaysia) and Mrs. Srinoi Povatong (Thailand) as Rapporteurs.

After the first plenary session, the Meeting divided itself into five groups for detailed consideration and elaboration of the themes identified for the second cycle of APEID:

Group 1 : Education for Integrated Rural Development

Group 2 : Education for Development of Productive Skills Relevant to Economic Development

Group 3 : Universalization of Education at the Early School Levels and Functional Education for Out-of-School Youth and Adults

Group 4 : Education for Better Health and Nutrition

Group 5 : Education for National Unity and International Understanding and Co-operation

(The composition of the five groups is at Annex II).

The first four days were devoted by the Groups to the elaboration of the themes including defining their objectives, and study of current efforts in the Member States with special reference to co-operative actions among the Member States. This was reviewed in a plenary session, after which the Meeting re-formed itself into four Area Committees composed of educationists and specialists in each of the seven areas of innovation identified by the Consultation Meeting.

Area Committees

Area Committee 1 : Management of Educational Innovation and Non-formal and Alternative Approaches to Education

Area Committee 2 : Curriculum Development and Educational Technology

Area Committee 3 : Education of Teachers, Teacher Educators and Other Educational Personnel

Area Committee 4 : Science (including Mathematics) and Technical Education and Vocational Education

The Area Committees examined the contribution that each area of innovation could make to the developmental themes and the linkages among the themes. The outcome of the work of the Area Committees was a set of Work Plans in which programme activities arising from the various fields of education, and the developmental themes are interrelated and interlinked.
(The composition of the Area Committees is at Annex III).

The last three plenary sessions were devoted to reviewing the reports of the Area Committees in order to ensure articulation among the various themes and the programme activities, and to the finalization of the draft report of the Meeting.

In the concluding session, the Meeting adopted its report subject to certain changes and modifications proposed by it, and set up a Review Committee to assist the Secretariat to incorporate these modifications and prepare the final version of the report.

The Meeting placed on record its deep gratitude to the Royal Government of Thailand, its Ministry of Education and the Thailand National Commission for Unesco, and to the education authorities of Chiangmai for their generous hospitality and the courtesies extended to the participants. It thanked Unesco for convening the meeting, and the Unesco Regional Office for Education in Asia and ACEID for their effective support.

The Report is presented in three parts. In Part I are reproduced those portions of the Final Report of the Fourth Regional Consultation Meeting in which the Consultation Meeting suggested guidelines to the Programme Development Meeting for the second programming cycle of APEID. Part II is the Programme Development Meeting's elaboration of the themes which are to be the focal points of APEID activities in the second cycle, including brief accounts of the national efforts under way in the countries of the region, and activities bearing on these themes which were carried out in APEID during the first cycle. Part III of the Report presents the Work Plans, including specification of the objectives, expected outcomes and the suggested programme activities.

PART I

GUIDELINES

for the

PROGRAMME DEVELOPMENT MEETING

The following pages (7–16) contain the recommendations of the Fourth Regional Consultation Meeting on the scope and design of the second programming cycle of APEID, which served as guidelines for the Programme Development Meeting reported in Parts II and III of this Report.

SCOPE AND DESIGN OF APEID IN THE SECOND PROGRAMMING CYCLE

Aims of APEID

Statement of APEID philosophy

Based on the participating Member States' national goals and their commitment to national development in the context of their political, social and economic systems, APEID is a co-operative endeavour of the Member States sharing a commonality of outlook towards progress and change. It seeks to give expression to "the idea of development as an overall, multi-dimensional and diversified process essentially endogenous in nature, linked with the values peculiar to each society and requiring the active participation of individuals and groups who are its agents and its beneficiaries."*

APEID is designed and developed jointly by the Member States, and its activities are implemented and supervised through institutions associated with it, with the support and participation of international bodies constituted by the Member States of the region pursuing similar objectives. The relationship between the participating Member States is based on reciprocity, mutual learning and self-reliance.

Aims of APEID

1. To stimulate efforts of the Member States to improve the quality of life of the people through creating and strengthening national capabilities for the development and implementation of innovations in education, both formal and non-formal.

This aim will be achieved through:

a) identifying and sharing innovative experiences among the Member States;

b) promoting understanding of the process of innovation and its management;

c) encouraging systematic experimentation and accelerating the implementation of educational innovations in response to problems of development; and

d) evaluating and redirecting innovative programmes.

2. To encourage the Member States to make all groups (students, teachers, parents, village and community leaders, administrative personnel and policy makers) aware of the need for relevant changes in education (both formal and non-formal) as an essential prerequisite for the improvement of the quality of life of the people.

This aim will be achieved through:

a) collecting and disseminating information on educational change within countries and the region as a whole;

b) promoting and supporting publications in the national languages of the Member States;

c) encouraging wider and more authentic participation in the national development process especially in the field of education.

3. To promote understanding and appreciation of the differences in educational practices and approaches of the Member States, and thereby contribute to international understanding and the creation of a new international economic order.

---

* Resolution 100 of the General Conference of Unesco (Nineteenth Session, Nairobi, 1976).

This aim will be achieved through:

a) encouraging and promoting opportunities for face-to-face exchange of ideas and experiences at national and regional levels;

b) developing co-operative activities in the search for solutions to common educational problems in the spirit of technical co-operation among developing countries in particular;

c) promoting studies of contemporary changes in educational systems of the Member States in the context of emerging development needs.

Principles of action and modes of operation

Principles of action

The following principles of action emerged as a result of the discussion at the Meeting:*

1. the sharing and exchange of experiences through co-operative endeavour among the Member States based on their respective expertise and resources available;
2. the planning and organization of activities and programmes co-operatively by the Member States, appreciating that they are in the best position to know about their needs and problems and to decide on the solution;
3. the planning and implementation of educational programmes in accordance with the areas of concern as reflected in the national development plans of the Member States, bearing in mind that the Member States are themselves at different stages of development;
4. the flexibility for the Member States to be selective in their participation in the APEID programme, bearing in mind the importance of:
   a. relevance to the Member States;
   b. follow-up action;
   c. multiplier effect;
5. the continuous evaluation of each activity/project through regular feedback from the participating Member States;
6. resource personnel needed for specific activities to be drawn as far as possible from the Member States;
7. the promotion of bilateral or sub-regional co-operation and collaboration among the Member States which have similar problems and needs.

Modes of operation

The meeting reviewed the three modes of operation currently in use in the first cycle, namely:

a. the exchange of experiences for personnel development;

b. development meetings for planning of activities, syntheses of experiences and co-operative action and training workshops for development of new instruments, methodologies and acquisition of knowledge, skills and attitudes;

---

* Refers to the Fourth Regional Consultation Meeting (Bangkok, 19–25 April 1977).

c. development and dissemination of materials and information.

It was agreed that:

a. these modes of operation have generally proved to be effective strategies towards achieving the objectives of APEID and are therefore recommended for retention in the second cycle;

b. a fourth mode, joint innovative projects, be added for the second cycle;

c. there is a need to delineate the categories of activities under these modes and, where appropriate, to draw up guidelines to ensure effective implementation

The following categories of activities are recommended for inclusion in the second cycle of APEID:

No.	Category	Remarks
1.	Inter-project/inter-country visits	(a) To maximize benefits, the following are to be borne in mind: i) objectives of visits; ii) homogeneity of interests of, and experiences sought by, participants; iii) timing of visits; iv) adequate advance information on participants (background, interests, etc.) for use of host countries to enable planning of suitable programmes. (b) To facilitate (a) above, Member States concerned are to be encouraged to consult on a bilateral level, keeping ACEID informed of the arrangements made, etc. (c) The principle of sharing of experience is to be stressed as a two-way interaction, and both visitors and hosts should derive benefits from this activity. (d) Evaluation of each visit is to be made by the parties concerned with a view to providing guidance for organizing similar activities in the future.
2.	Mobile training teams for in-country workshops (original title: mobile training teams and in-country workshops)	The title of this category has been amended to reflect more clearly the nature of the activity.
3.	Attachments	(a) The attachment may be for varying periods. (b) The attachment can be for the purpose of: i) serving as a resource person in the host country;

No.	Category	Remarks
		ii) gaining specific experiences relevant to the country of the visitor.
4.	High-level personnel project studies and seminars (original title: high-level personnel exchange workshops)	The title of this category has been amended to give greater clarity of purpose.
5.	Technical working groups and study groups	(a) Adequate background information on the objectives, approaches, targets and other relevant materials, etc. of the working/study group is to be given to participants well in advance to ensure meaningful participation. (b) Activities under this category lead to the development of instructional/resource materials.
6.	Training courses/workshops (original title: sub-regional training courses/workshops)	The title has been changed to broaden its scope to include regional, sub-regional and national levels.
7.	Field operational seminars	These are seminars which are held at the end of field visits in one or more countries.
8.	Joint innovative projects	(a) This is a new category of activity aimed at promoting bilateral or even sub-regional co-operative effort. This is not only a new category but also involves a new mode of operation. (b) An activity in this category may be initiated as a follow-up to a seminar/workshop/study group/etc. or be initiated by APEID considering a common problem/interest of two or more Member States. (c) An example of an activity under this category is the evaluation of a functional literacy programme undertaken jointly by the participating Member States, culminating, where possible, in a seminar among the participants. (d) Funding may be a major constraint, but joint sponsorships with other funding agencies/regional co-operative agencies may be explored.
9.	Exchange and dissemination of information and materials	(Refer to pages 15–16)

Themes and areas of innovation

The Meeting reviewed the developmental themes of special concern to the participating Member States as identified by the Evaluation Teams and selected the five which appear to be of common and greatest concern to the countries.

A further consideration before the Meeting was the innovative thrusts already made in the countries, as extensively reported by the Evaluation Teams, to gear their educational systems to make education more relevant and responsive to the achievement of the countries' macro-level development goals.

Themes

The following are themes* and development goals for APEID's programmes and activities for the second cycle (1978–1981).

Innovations in education for contributing to and promoting:

1. Integrated rural development;
2. Development of productive skills relevant to economic development;
3. Universalization of education at the early school levels and functional education for out-of-school youth and adults;
4. Better health and nutrition;
5. National unity and international understanding and co-operation.

There are several development priorities which are not covered in the list of themes. The Meeting considered two of these for their possible incorporation in the second cycle programme of APEID. These are population planning, and environmental management, the educational aspects of which are population education and environmental education.

Population education was regarded as an area of great concern in most of the Asian countries. It was noted that one of the countries had proposed its inclusion in the second cycle during the APEID Evaluation Team's visit. It was pointed out at the Meeting that this particular theme was regarded as important enough to be the concern of a whole unit at the Unesco Regional Office for Education in Asia (ROEA).

The Regional Population Education Programme in Asia is handled by the Mobile Team in Population Education which is located at ROEA, Bangkok. The Mobile Team assists the Member States in the formulation, implementation and evaluation of population education projects at the national level. Although population education programmes at the national and regional levels use their own modalities of programme development and implementation, the modalities used by APEID have been helpful in designing some activities in population education at the regional level.

The Meeting recommended that in the organization of its future activities, the unit may consider the increased use of some of the modes of operation developed by the participating Member States for APEID.

As for environmental education, the Evaluation Reports show that there is considerable emphasis in some countries on relating education to environment at the first level and on treating environment as an important resource for learning.

---

* (i) The themes represent the common priority concerns of the Member States, but the countries set their own priorities for these themes in their national development goals in accordance with their own conditions and capabilities.

(ii) The scope of the themes is not mutually exclusive; instead, they are mutually supportive and inter-penetrating to a large extent.

In the first cycle programme, environmental education was included in the science area. The Meeting desired therefore that the Programme Development Meeting (PDM) take relevant aspects of environmental education into account while developing work plans for the second cycle.

Areas of innovation

The Meeting considered the national plans of educational innovation developed by the participating Member States for the period corresponding to the second cycle. The Meeting also reviewed the areas of education in which innovative thrusts are being directed to solve common problems of development, particularly those relevant to the themes earlier described. Additionally, suggestions of the participating Member States and Associated Centres were examined with respect to additional areas of innovation to be included in the second cycle. Seven priority areas of innovations emerged from this analysis and are noted below:

1. Non-formal and alternative structures in education
2. Administration and management of educational innovations
3. Curriculum development
4. Educational technology
5. Education of teachers, teacher educators and other educational personnel
6. Science (including mathematics) and technology education
7. Vocational education

Institutional framework

The existing institutional framework has proved itself for starting and implementing the first-cycle activities under the Programme.

In view of the experience gained and programmes foreseen for the second cycle, the institutional framework, however, needs strengthening in the following manner:

a. *The Regional Consultation Meeting* should be seen as an integral part of the framework, as it is here that the objectives of the Programme are established, priorities set, progress reviewed, evaluation made and guidelines framed for future co-operative actions. These should remain the functions of this body, which as now, should meet annually, during the second cycle also, to ensure that the unique feature of the Programme in linking international action to the national initiative of the Member States continues to remain the main organizing principle of APEID.

b. (i) The Regional Consultation Meeting could invite each Member State to send two nominees so as to represent the policy-making and implementing personnel as well as the professionals from the Associated Centres, the nomination being left to the Member States.

(ii) Each Member State could be invited to send one or more observers, if it so desires, at its own cost. However, in case of the host Member State, if it so wishes, the number of observers may be increased, to help better organize and conduct the Regional Consultation Meeting.

c. To reflect the basic philosophy of APEID in its actual operation, each Member State may be invited, if convenient, to host the Regional Consultation Meeting in turn. A beginning could be made by addressing the Member States in alphabetical order. However, if any Member State wishes to take its turn earlier or later, this could be announced by the concerned Member State during a Regional Consultation Meeting.

d. The Regional Consultation Meeting may normally be held in January-March each year. This will permit the review of the previous year's activities, and will still give time to make changes, if necessary, in the programme of the coming year.

e. (i) In order to bring about exchange of experience at the highest level, the Regional Consultation Meeting may discuss the implementation of a specific theme of common concern to Member States. Appropriate time should be provided for the discussion, the theme of which could be identified by the Regional Consultation Meeting of the previous year.

(ii) For the purpose of enhancing mutual understanding of national initiatives, visits to some selected innovative projects in the host country may be arranged for the participants of a Regional Consultation Meeting.

National Development Groups (NDGs)

1. The NDGs should continue to be seen as key institutions in policy formulation and the formulation of strategies for the Asian Programme.

2. The NDGs are not to be looked upon as the educational policy-making bodies for the the Member States, but essentially as identifiers and stimulators of educational innovation for *development* within the Member States, studying their processes and practices, and coordinating such activities for the purpose of channelling and sharing the experiences at the regional/international levels. For purposes of such channelling, the NDGs will have to necessarily evaluate the effectiveness of the innovation and decide which experiences can be offered for sharing and where they would like to receive additional experiences relevant to their own development needs.

3. The Meeting noted that in different countries the NDGs vary in forms and in functions. Recognizing that different Member States have different organizational patterns and structures, the Meeting is of the opinion that no single model can be prescribed for developing the NDGs. This will have to be left to the decision of the individual Member States. What is important is that it should be able to play its role and discharge its functions as envisaged above.

4. In some countries, Development Groups at provincial level have been established. The Meeting recommended that in order to achieve the objectives of the Programme, such arrangements should be promoted within a country down to institutional level. This would help in identifying innovative practices at the grass-roots level and in disseminating relevant information and experiences.

5. (i) While the composition of the NDGs is naturally the responsibility of the Member States, it is suggested that Heads of the Associated Centres, some professionals and Chairmen of sub-Development Groups, if any, may be members of the NDGs.

(ii) As educational innovations for *development* is the main concern of the Programme, and approach to development has to be multidisciplinary, the NDGs should also have as members persons from outside the educational fields, who are involved in the developmental activities.

6. In the past, it appears that some NDGs have not been able to meet frequently. The Meeting felt that regular meetings (at least two to three times a year) are necessary to ensure effective implementation of the Programme.

7. The identification, collection, translation and dissemination of information, should be a major function of the NDGs.

8. Secretarial assistance should be ensured for the NDGs by the Member States. If NDGs function within National Commissions for Unesco or the Ministries, a desk officer could be designated to deal with matters relating to APEID.

9. APEID should provide seeding funds by contract to NDGs to undertake translation and dissemination activities, or taking up pilot studies through the Associated Centres or other institutions involved in educational innovations. The Meeting recognized that larger dissemination within the Member States will have to be done by the Member States themselves, either through their on-going channels or through establishing new networks.

10. ACEID should regularly supply to the NDGs the summary of major recommendations of regional seminars held within Asia on all educational matters, to help them promote action at the national level.

11. To have effective participation from the Member States, NDGs should have suitable arrangements to brief the participants for APEID activities. After participating in the activities, the participants should be required to submit to their respective NDGs and Governments, reports containing their opinion about the activities attended by them. The Member States may, from time to time, keep ACEID informed of such aspects of these reports that they consider would be useful in making APEID more effective. Furthermore, NDGs should keep all their members informed about APEID activities.

Associated Centres (ACs)

1. The Associated Centres have played an important role during the first cycle by acting as a major operational arm of the Programme, by undertaking inventory work, writing case studies, hosting inter-country/inter-project visits, sub-regional and regional activities, organizing follow-up national activities and participating in co-operative development of guidelines, methodologies, approaches, instructional materials, etc.

2. The Meeting recommended that the following be the main functions of the Associated Centres during the second cycle:

a) Carrying out innovative educational projects and activities in the field of education for development;

b) organizing regional or sub-regional training courses and seminars to prepare key personnel in the Member States in the development, adaptation and use of innovative approaches and products;

c) co-operating in the design, implementation or evaluation of innovative schemes and projects, with ACEID and institutions in other Member States;

d) facilitating dissemination and exchange of experience and information on new developments in their areas of innovation.

3. The Meeting noted that in the past the Associated Centres have been identified by a joint team of national experts and Unesco staff. The main criterion used has been to determine whether a centre has generated certain experiences in educational innovation for development which it can share to mutual advantage. This could continue to be the criteria, but such institutions which have potential for development and/or for promoting dissemination of materials and information should also be taken into account. The functions mentioned in 2 above can be used as the basis for developing a definite criterion for association.

4. During the second cycle, each Member State may be encouraged to offer at least one Associated Centre in each area of innovation. This centre can then be made responsible to disseminate widely within the country, specially to institutions engaged in the same area of innovation, the national/regional/international experiences. For this purpose the Centre may create a special APEID 'cell' or 'desk' in the Centre.

This can also, later on, provide a forum for exchange of experiences and a nucleus for networking of institutions engaged in a particular area of innovation within the country (for example, Japan's Council of Educational Technology Centres).

5. As the Programme's main concern is educational innovation for *development,* the

network should encourage the inclusion of institutions outside the educational system, specially those involved in educational aspects of development (agricultural education and extension institutions, health education bureaux, management institutes, etc.)

6. Associated Centres should be encouraged to develop more and more bilateral links with similar centres in other Member States.

Asian Centre of Educational Innovation for Development (ACEID)

1. During the first cycle, ACEID has acted as the resource base for, and facilitator, co-ordinator and the secretariat of the Programme. It has assembled and diffused documentation and information on educational innovations, arranged exchange of persons and experiences among the Member States and provided technical support to participating Associated Centres in organizing activities under the Programme. The Meeting was of the opinion that these should continue to be the functions of ACEID.

2. As the Meeting has identified some focal points (themes) for the second cycle of the Programme, ACEID should undertake and initiate some in-depth studies to develop independent literature on these themes which will have relevance to the Asian scene.

3. ACEID should co-ordinate activities in respect of the evaluation and planning for follow-up phase of inter-country activities.

4. APEID schedule of activities developed in ACEID for a year should be supplied to Member States well in advance.

5. ACEID should be strengthened in terms of staff and financial support.

Information exchange

APEID has, in the view of the Meeting, played a significant role in stimulating innovations for development in the Member States during the first cycle, and a stage has now come when exchange of information is going to play a more crucial role in the development of innovative activities. It is necessary to take definite steps to create an infrastructure and a system for providing the information base necessary for these activities to develop. A few important steps in this direction are recommended below:

1. The run-offs fo ACEID publications should become much larger than they are at present. The mailing lists should be extended in order that a larger number of publications are mailed out from ACEID to individual addresses in Member States. Alternatively if a country so agrees, it may designate one central agency in the country (e.g. National Commission for Unesco or National Development Group) to which all publications of APEID may be sent.

2. National Development Groups may take urgent steps to provide translations of some selected ACEID materials for wider dissemination in their own countries and for publication of suitable summaries and articles based on ACEID materials, in the various educational journals in their countries. It is also important to arrange translation into English of selected materials originating in the various languages of the Member States for distribution to other Member States.

3. In this connection, it is imperative that Member States may plan to have one of their major libraries, perhaps in one of the Associated Centres, selected to work as an information and documentation centre for the whole country. This centre would receive material from various agencies of the United Nations and other educational agencies. This material could then be abstracted and widely circulated in the country concerned and made available to information and documentation centres in other Member States. A network of information will thus develop which will make the experiences and the fruits of intellectual labour of one country and group of educationists available to all others.

4. ACEID Newsletter should also contain information on the latest position in respect

of developments of various innovative projects in the Member States and if possible in other countries. The frequency of the Newsletter should be increased to at least four times a year.

5. The reports of the seminars and workshops should be written in a simple style and a summary of the specific contribution made by the seminar/workshop should be clearly provided to facilitate the rapid assimilation of such literature.

6 It is extremely important that knowledge about innovative programmes and their impact on educational processes should be widely publicized through publications prepared for the general public. The resistance to educational innovations can be minimized if such material in the form of books, films, tapes and recordings is widely publicized through the mass media. ACEID should take steps to prepare material of this kind at least on one or two important projects as soon as possible.

7. Monographs on member countries' educational policies, thrusts and major innovations, including their results, should be brought out under APEID by commissioning authors in the Member States.

8. There has been a very considerable reliance in the educational field on British, European and American literature where the conditions of application have been very different from those prevailing in the Asian countries. Now that the main themes and the major concerns of the Member States are identified, APEID may take steps to publish books on the main themes listed by this Conference. This work might conveniently start in the coming year by selecting two or three important themes.

9. ACEID might take steps to publish bibliographies of publications of direct interest in the field of educational innovations, for circulation to Member States. The publication based on the contents of selected Asian journals in the field of education should be strengthened and should become a regular feature of the service provided by ACEID.

Resource for the Programme

While discussing the institutional framework, the Meeting considered the question of financial resources available for APEID, which are the key factor in determining its size and magnitude. The institutional framework and the financial resources have to match and support the extent and dimensions of APEID to enable to fulfil its potential of service.

The Meeting found that a number of activities earmarked for the Asian region, which has half the world population within it, are being financed from the resources provided in the Regular Unesco budget, and these activities do not at present form a part of APEID. In order to derive maximum benefit out of these activities and funds by building these projects and activities more firmly on the co-operative grass-roots experiences and national initiatives which form the basis of APEID, the Meeting felt very strongly that more and more of these Regular Unesco activities and funds be identified with APEID which could lead to a more comprehensive, and at the same time decentralized educational programmes in the Asian region.

The Meeting appreciated the support provided by UNDP in the initial phase of APEID. It was noted that UNDP recognized that APEID exemplified the new approaches to technical cooperation referred to in the UNDP Governing Council resolution on "New Dimensions", especially the operative paragraphs on technical co-operation among developing countries. The Meeting recommended that UNDP continue to strongly support APEID as it expands its activities and redirects them to focus on themes critical to the emerging developmental needs of Member States in Asia.

The Meeting also noted with satisfaction the support received from other sources, particularly from the Governments of Japan and Thailand, and recommended increasing support from the participating Member States.

PART II

DEVELOPMENT THEMES

and

EDUCATIONAL INNOVATIONS

In this part are presented five themes of development goals which were identified by the Fourth Regional Consultation Meeting as the focal points for APEID activities during the second programming cycle. The elaboration of these themes includes a brief statement of the problems with reference to the Asian region including the implications for education. Current efforts under way in the Member States are described in an illustrative way, together with APEID activities undertaken in the first cycle relative to the theme. This is followed by a statement of the objectives to which APEID activities may be directed, and the expected outcomes.

The elaboration of the themes presented in Part II served as the basis for the Work Plans contained in Part III.

DEVELOPMENT THEMES AND AREAS OF INNOVATION, OBJECTIVES AND OUTCOMES

The main thrust of APEID is the promotion of education innovation for development. This implies that educational innovations *per se* are not the primary preoccupation of APEID; rather those educational innovations which directly contribute to and promote development goals which, for the second programming cycle of APEID, have been defined in the five development themes. It is recognized that there is an inter-active relationship between educational innovation and development. Educational innovation will contribute directly to development, and equally important, the development process will impel changes and innovations in education.

Education itself is a multi-dimensional process; and it is therefore necessary to identify, for operational purposes, those aspects of education in which innovations are essential for contributing to development. The aspects of education have been termed "areas of innovation" and have been selected so as to define the priorities for APEID in the second programming cycle.

The inter-relation of areas of innovation and development themes is operationlized in terms of objectives and expected outcomes. Both in defining these objectives and the sets of related activities and projects, an important consideration of selection is that they should meet the criteria of effective inter-country and regional co-operation such as the felt needs of the Member States, cost-effectiveness, potential for encouraging or releasing further co-operative efforts and contribution to self-reliant growth.

1. EDUCATION FOR INTEGRATED RURAL DEVELOPMENT

A. Statement of the theme

The vast majority of the people in most of the developing countries of Asia live in the rural areas, and the rural population will continue to be a predominant sector for a long time to come. Rural areas suffer from deprivation of various kinds, and the Governments are showing deepening concern fro the development of the rural population. Such development is necessarily multi-dimensional and cannot be brought about by piecemeal efforts. There is an imperative need for an integrated approach. This is getting increasing recognition in national policies, along with the realization that rural development must necessarily arise from the initiative and active participation of the rural people themselves.

Integrated rural development means

i) integration of policies and programmes to provide to the rural people better production and marketing facilities to generate higher income, which should be equitably distributed among them in order to enhance their quality of life environment;

ii) integration of the various segments of the rural society around new social institutions so that all rural people, especially the disadvantaged, can actively participate and develop their leadership potential in the production and development processes;

iii) integration between economic development policies and policies for the promotion of culture in the rural context so that economic development becomes socially and culturally meaningful and relevant; and

iv) integration of the work of all the agencies involved in rural development through better co-ordination and co-operation, especially at the grass-roots level.

The problem of integrated rural development has far-reaching educational implications such as the following:

a) development of school programmes relevant to the rural environment and responsive to the needs and aspirations of the rural community;

b) development of co-ordinated programmes of non-formal education, linking formal and non-formal education, and re-orienting the total educational effort, with a view to the development of productive skills related to developmental activities;

c) involvement of rural communities in the planning, management and supervision of the educational programmes;

d) mobilization of local resources, both physical and human;

e) preparation and promotion of continuing professional growth of teachers and other educational personnel in their special roles to work in rural areas; and

f) allocation of resources for education in rural areas on an equitable basis.

B. Current efforts within the countries

(*In this section, efforts currently being made within the Member States in the field of education for integrated rural development have been sampled as illustrative of the variety of strategies being attempted*)

In almost all the Member States, planning efforts have been initiated or are going on to bring about integrated rural development. There is a growing realization, amongst the Member States, of the importance of integrated and well-coordinated efforts in this direction. This is clearly evident from a study of programmes and projects undertaken by them. Integrated rural development is being attempted by using education as an instrument within both the formal and non-formal education systems.

Curriculum development is one area in which efforts to integrate education with the programme of rural development are clearly seen.

In Afghanistan, rural transformation is sought to be brought about through the acquisition of permanent literacy during the period of primary education and the inclusion in the curriculum of subjects like industrial arts and agriculture, which deals with crops, livestock raising, poultry farming, farm management and other farm topics.

In Bangladesh, the study of crops, reforestation, conservation of land and water resources, irrigation, control of insects, pests and co-operative work have been included in the school curriculum aimed at rural transformation. Population education has also been included in the curriculum as one of the subjects to achieve rural transformation.

In India, the programme of work experience and the subject of social reconstruction aim at developing an understanding of the need and the skills for bringing about rural transformation.

In Indonesia, rural transformation is sought to be achieved through the development of applied skills. Subjects like fisheries, farming and livestock-raising aim at motivating people to undertake agricultural projects in school or in the community, and assisting the community in agricultural methods. The Study Services Project (KKN) aims at providing the students with practical experiences in rural development.

In the Republic of Korea and India, a multi-media approach is being developed for selected curriculum units related to national development. In order that the school curriculum can become more relevant to social and developmental needs, flexibility in curriculum development is being introduced. In the Republic of Korea, a modular approach has been suggested; and in India curriculum cells are being set up both at the Centre and in the various States of the country so as to allow for continuous renovation.

In Malaysia, programmes of skill development and health and nutritional education aim at accelerating the process of rural transformation.

In the Philippines, the present elementary and secondary programmes are multidisciplinary in approach. Practically all subjects have concepts in health, nutrition and employable skills meant for rural and urban development.

In Sri Lanka, a foreward thrust in agriculture is considered basic to a successful programme of rural transformation. This is reflected in the curriculum of social studies which has been designed to emphasize national and rural development.

In Pakistan, agro-technical and vocational studies consisting of agriculture and other subjects have been introduced as an integral part of the general education system to make curriculum responsive to social and development needs.

Teacher education has been rightly seen to occupy a key position in the educational system to bring about major educational and social changes. In a large number of Member States attempts have been initiated to link teacher education and training of other educational personnel with problems of rural development.

In Bangladesh, curricula for teachers are the outcome of action research in the villages and are based on the felt needs of the people. The farmer-members' involvement and participation, accentuated through local rural leadership, gives it the potential for acceptance, service and survival.

In Iran, the University of Revolutionary Corps is engaged in providing training to teachers in distant areas. In Pakistan the People's Open University focuses its attention on teachers of rural schools. In India the new approach to teacher training gives adequate weightage to the involvement and participation of the community in community development programmes in the teacher education curriculum. A few teacher education institutions have linked the pre-service with in-service education programmes to solve the problem of rural development.

In Malaysia, community development classes are conducted in the rural areas to bring about a more development-oriented rural community. Pilot programmes aimed at involving the rural people in village development through their own efforts have also been launched. The training of community development workers and workers of pre-school children centres, the setting up of Women Training Centres, a Rural Improvement Training Centre and rural libraries and the expansion of health and nutrition programmes are some of the other current measures aimed at accelerating the process of rural development and transformation.

In Nepal, a number of programmes like "Remote-Area Primary Teacher Training Programme", "On-the-Spot Primary Teacher Training", "Development of Field-oriented Sequence in the Primary Teacher Training Programme", and special programmes for training of village girls and women to become teachers in remote areas are in operation.

In Sri Lanka, involvement in community development is being made a part of teacher education. Amongst other objectives this innovation is directed towards making the teachers realize their new role as teachers.

In the Philippines, the teacher education curriculum has been revised to make it more community and rural development-oriented. A number of innovative projects in teacher education aim at linking teacher education with rural development, such as the following:

a) graduate programme leading to the degree of Master of Arts in teaching elementary agriculture;

b) teacher education programme for rural development initiated by the Cagayan Valley Institute of Technology;

c) UNC Community Service Programme; and

d) F. Y. D. P. programmes for out-of-school youth.

In Morong, a lakeside town in the Philippines, development activities such as small-scale industries profitably engaged in by the people and the school children, and the operation of a summer folk school to train out-of-school youth and adults in various useful trades, demonstrate the dynamic and mutually beneficial relationship between the school and the community.

In Thailand, student teachers are trained to assist in development projects in rural communities in addition to developing competence for their teaching duties. In another project in Thailand students of home economics are provided practical training and experiences in the rural areas.

In Pakistan, the establishment of agro-technical teacher training academies and introducation of methods and techniques of teaching agriculture as a subject in training institutions have led to the preparation of teachers with an understanding and skills in the rural context.

Educational technology is being increasingly used for educational programmes directed to rural development in almost all the participating countries.

Non-formal education programmes have been found to be the major instrument for integrated rural development.

In Afghanistan, non-formal education is linked to the educational programmes of other agencies working for rural development.

In India, non-formal education programmes are to serve the weaker sections of the community with emphasis on community development and rural transformation. Also, educational television programmes cover rural development.

In Iran, non-formal education programmes of the National Committee for World Literacy Campaign are increasingly directed to rural development co-operatively wtith other agencies. A university in Iran has developed a new programme at the first degree level focusing on education for rural development.

The self-reliance movement in Bangladesh, coupled with the emphasis on the education components of all rural development programmes, and the research studies carried out by the universities as well as the special training programmes for educators, make an understanding of participation in integrated rural development programmes an integral part of the education system.

In Indonesia, a scheme called Indonesian Board for Volunteer Service (BUTSI) has been launched with the objective to preserve and strengthen "Gotong Royong" (mutual help) through the young people by directly involving them in village development activities, also to stimulate and help the development activities originating from and carried out in the rural areas. Through Project PAMONG, emphasis is put on utilizing community resources such as parents, craftsmen and others of supporting education, and thereby a linkage is established between the school and the community.

In Nepal, the compulsoty introduction of one year of National Development Service for all graduate students of Tribhuvan University and all Nepalese who earn a Master's degree from any foreign university, is intended to give impetus to rural development as well as make the graduate students reality-oriented. There are also adult education and functional literacy programmes for raising the literacy level and developing relevant vocational skills for community development.

Also, formal school programmes have been made flexible to suit the requirements of the rural population, with the school providing service to the community in its development programmes. The Non-Formal Education Project (India), School Improvement Programmes through Community Support (India), Economic and Educational Rural Development through Voluntary Efforts (India), linking of some of the programmes of the People's Open University with integrated rural development projects in Pakistan, Saemaul Leaders Training Institute in Korea, development of applied skills, fisheries, farming, livestock raising in Indonesia and Malaysia, the Agricultural Skills Training Project, Bario Development School Pilot Project, Community Development through Non-Formal Education, Cotabato Rural Uplift Movement, Non-Formal Agricultural Education, and YCAP Project of the Philippines, and the nationwide adult education programme in Thailand are some of the examples of current efforts in the Member States at linking non-formal education with rural development.

C. Co-operation among countries within the APEID framework

Following the recommendation of the Second Regional Consultation Meeting (Tokyo, May 1975), education for rural development was treated as one of the principal focal points of inter-country co-operation within the framework of APEID. These co-operative activities were related to all programme areas of APEID. In Curriculum Development and Teacher Education the conceptual framework, strategies and modes of

operation were developed through regional workshops, followed by sub-regional training workshops on curriculum development. In Science Education and Educational Technology areas, two regional workshops developed guidelines for relating science to rural environment and needs, followed by the first of a series of sub-regional workshops for developing modular instructional materials. Supporting these development activities, training workshops in educational technology were held at the national level for training of personnel in preparation of instructional materials.

The problems involved in the management of integrated rural development programmes in which education is a component were approached through the first series of national workshops culminating in a sub-regional workshop in which the experiences gained in the countries in relation to these problems were studied.

These operational activities in inter-country co-operation were backed up by two studies and the collection and dissemination of information and materials relating to integrated rural development programmes in the countries of the region. Of the two studies, one related to the identification of unused and under-utilized resources, has been done in parallel form in three countries. The second study was done by a study group and related to the preparation of teachers for education in rural areas.

D. Objectives and expected outcomes

The objectives and expected outcomes are defined below for inter-country co-operative activities in each of the seven Areas of Innovation identified by the Fourth Regional Consultation Meeting, which will have a direct contribution to make to Integrated Rural Development. Some of the objectives in this Area of Innovation are common and this is taken into account in the specification of project activities. (refer to Part III of the report).

Development theme: Integrated rural development

1. Area of innovation: Non-formal and alternative structures in education

Obejctives

1. To facilitate innovations in educational structures, strategies and programmes for extending relevant education to rural people who have had little or no education and, at the same time, ensuring their effective participation in the educational processes; and
2. To promote innovations for developing appropriate knowledge and skills among rural people.

Expected outcomes

A. Greater appreciation of the problems of integrated rural development and the role of education in contributing to the success of integrated rural development programmes including environmental resources.

B. Increased collaboration in sharing experiences of innovative approaches, programmes and new structures in education for relating education to rural development.

2. Area of innovation: Administration and management of educational innovations

Objectives

1. To facilitate development of structures, processes and techniques in the admini-

stration and management of innovative educational programmes and educational components of other development programmes with close inter-agency co-operation and community involvement to ensure the optimum use of unused and under-utilized resources; and

2. To facilitate the development of personnel for effective planning and implementation of education for integrated rural development.

Expected outcomes

A. More effective inter-departmental and school-community co-operation.

B. Increased collaboration in designing programmes and sharing experiences, materials and techniques found useful in the integration of education with rural development.

3. Area of innovation: Curriculum development

Objectives

1. To facilitate the development of techniques and methodologies for developing relevant and environment-based curricula and instructional materials with the participation of people concerned; and
2. To promote the development of flexible institutional structures and procedures suited to the rural conditions.

Expected outcomes

A. Orientation and training of cadres concerned with planning, designing and developing needs-based curricula and instructional materials.

B. Exemplars of alternative models in curriculum planning and development; and self-learning materials including audio-visual materials for rural development and enhancing the quality of the environment.

4. Area of innovation: Educational technology

Objectives

1. To contribute to national efforts in developing curriculum and low-cost teaching aids with indigenous materials, and innovative instructional techniques including self-instruction relevant to rural development; and
2. To promote fuller use of available mass media, including radio and TV and assist in developing educational programmes and materials suitable for rural areas.

Expected outcomes

A. Better use of available community resources and wider participation of the local people in educational efforts for rural development.

B. Cost-saving devices and equipment both by using low-cost materials and by economies of scale.

5. Area of innovation: Education of teachers, teacher educators and other educational personnel

Objectives

1. To strengthen national capacities for developing innovative pre-service and in-service education programmes for preparing teachers, teacher educators and other personnel in education for integrated rural development; and

2. To promote the development of self-instructional modules and learning packages for the use of educational personnel in implementing the programme of education for integrated rural development.

Expected outcomes

A. A better understanding and appreciation of alternative innovative programmes and training methodologies, to prepare teachers, teacher educators and others for education in integrated rural development.

B. A better programme of education in integrated rural development through the use of self-instructional modules and learning packages.

6. Area of innovation: Science (including mathematics) and technology education

Objectives

Through sharing of experiences and co-operative development of guidelines and exemplars, enhance the national capabilities:

1. To design integrated science, mathematics and technology curricula and related learning-teaching materials for use, both in formal and non-formal education, which would, interalia, respond to the demands of integrated rural development including conservation and development of rural environmental resources; and

2. To design and develop alternative schemes and instructional materials, using a variety of media, for training of teachers to implement effectively the integrated science, mathematics and technology curriculum.

Expected outcomes

A. Awareness and better understanding of the problem of integrated rural development and environment and the role of science, mathematics and technology education, in contributing towards the success of development efforts, especially in rural areas.

B. A group of skilled curriculum developers for continuous adjustment of curricula to meet the changing needs, and develop relevant instructional materials.

C. Better preparation of teachers for their new roles and to equip them with new competencies.

7. Area of innovation: Vocational education

Objectives

Enhancing national capabilities:

1. To design and develop methodologies, curricula and related teaching-learning materials suited to the development of skills relevant to the needs of a rural society.

Expected outcomes

A. Data and information on alternative models in curriculum, methodologies, teaching and learning materials.

B. Identification of common problems and issues, and awareness of emerging trends in the role of vocational education contributive to integrated rural development.

2. EDUCATION FOR DEVELOPMENT OF PRODUCTIVE SKILLS RELEVANT TO ECONOMIC DEVELOPMENT

A. Statement of the theme

The development of productive skills relevant to economic development has been of major concern to all countries participating in APEID. In developing countries, the aspirations of the people for a new economic order have highlighted the need

a) to integrate learning with productive work in order to develop practical problem-solving abilities of the learners;

b) to build productive work into the educational process as a source of learning and insights;

c) to develop skilled manpower required for socio-economic development;

d) to increase economic productivity of the work force; and

e) to minimize the problem of unemployment through the development of productive skills.

This concern has led the educational authorities in the Member States to review their educational programmes with a view to meeting the challenges posed by the new demands. It has involved integration of technical and vocational studies in the general system of education, skill development for in-school and out-of-school children, work experiences in school education, emphasis on vocationalization of secondary education and such programmes as "earning while learning". Underlying this programme is the emphasis on the affective and manipulative skills which so far have not received sufficient attention. Agencies other than education had not been recognized as having a major role to play in the educational process. These new roles and linkages have called for new methods and practices in both the content and structure of education as is borne out by the educational activities in the Asian countries. These include the use of local and indigenous materials, community involvement in education and the development of low-cost and cost-effective techniques, the promotion of non-formal education for out-of-school children and youth and for illiterate adults, and the establishment of linkages between the school and industry or farms.

The theme has a direct bearing on the following target groups:

1. pupils in schools;
2. early school leavers (drop-outs);
3. school leavers (terminal);
4. out-of-school population.

The needs of the target groups relevant to the theme may be identified as follows in terms of their educational implications:

1 Pupils in schools

1.1 inculcation of attitudes and values;

1.2 work experience;

1.3 pre-vocational as an integral part of general education;

1.4 technical and vocational education; and

1.5 vocational guidance and counselling.

2. Early school leavers (drop-outs)

2.1 inculcation of attitudes and values;

2.2 basic skills in functional literacy and numeracy (where they are found inadequate);

2.3 knowledge of economic aspects of production and marketing; and

2.4 development of marketable vocational skills.

3. School leavers (terminal)

3.1 inculcation of attitudes and values;

3.2 entrepreneurship including employment opportunities in the country;

3.3 knowledge of economics of self-employment and marketing feasibility studies; and

3.4 technical and vocational skills development.

4. Out-of-school population

4.1 inculcation of attitudes and values;

4.2 basic skills in functional literacy and numeracy; and

4.3 development of vocational skills required for self-employment or for finding employment.

The demands on education organized under the various Areas of Innovation in respect of the theme are listed below:

1. Pupils in schools

1.1 Inculcation of attitudes and values

1.1.1 Curriculum development for horizontal integration to reinforce, through every programme area in the school curriculum at both levels, healthy attitudes towards work and to respect those who contribute to the nation's well-being through work. This should develop awareness and appreciation of inter-dependence among the workers in the community, no matter what kind of work they may be engaged in;

1.1.2 Evaluation of affective domain objectives;

1.1.3 Reorientation of teacher education for the above.

1.2 Work experience

1.2.1 Sharing of experiences among

i) Curriculum developers in the area of work experience;

ii) Teacher education for work experience;

iii) Educational technology (production of materials).

1.3 Pre-vocational education

1.3.1 The contribution of science and technology education to pre-vocational education and the reinforcement of pre-vocational education through science and technology;

1.3.2 Alternative structures in education – the use of community resources in pre-vocational education (work places and skilled workers) and management aspects.

1.4 Technical and vocational education

1.4.1 The use of educational technology in vocational education;

1.4.2 Curriculum development for adoption of appropriate technology depending on the stage of development of the country;

1.4.3 Linkage between vocational education in schools and industry and employment agencies;

1.4.4 Vocational education in science and technology.

1.5 Vocational guidance and counselling

1.5.1 Teacher education.

2. Early school leavers (drop-outs)

2.1 Inculcation of attitudes and values

2.2 Basic educational skills, etc.

2.2.1 Curriculum development for intensive integrated courses in the development of basic skills in functional literacy and numeracy;

2.2.2 Teacher education for the above;

2.2.3 Educational technology for supporting the above.

2.3 Knowledge of economic aspects of production and marketing

2.3.1 Reorientation of teachers through teacher education for this new subject area;

2.3.2 Curriculum development for this new area.

2.4 Development of marketable and vocational skills

2.4.1 Use of community resources in non-formal educational setting;

2.4.2 Use of educational technology for reinforcement.

3. School leavers

3.1 Inculcation of attitudes and values

3.2 & 3.3 Entrepreneurship

3.2.1 & 3.3.1 Linkage between formal and non-formal education for development of curriculum materials.

3.4 Technical and vocational skills development

3.4.1 Use of community resources – resource personnel and work places for for imparting of skills;

3.4.2 Use of educational technology;

3.4.3 Vocational education.

4. Out-of-school population

4.1 Inculcation of attitudes and values

4.2 Basic skills in functional literacy and numeracy

4.2.1 Development of integrated curriculum materials;

4.2.2 Educational technology for reinforcement.

4.3 Development of vocational skills required for self-employment or for finding employment

4.3.1 As for 2.4 spelt out for early school leavers.

B. Current efforts within the countries

(*In this section, efforts currently being made within Member States in the field of education for development of productive skills relevant to economic development have been sampled as illustrative of the variety of strategies being attempted.*)

The Member States are increasingly planning and implementing educational programmes that are geared to the development of productive skills, work-oriented and

responsive to their manpower needs. Innovative approaches and strategies in this direction are reflected in the educational systems, both formal and non-formal, of Asian countries. Subjects of studies which had hitherto not formed as a part of the formal school are finding their way into the school programmes. Linkages between the education systems and other agencies in the provision of education for the development of productive skills have emerged and are emerging.

Most Asian countries have attempted the development of productive skills through curriculum reforms. In India, work experience forms part of the general education programme of the first ten years of school. This is strengthened by the other subject areas in the curriculum, especially science and mathematics. In addition, India is launching on a massive scale vocationalization of education at the higher secondary stage from the academic session 1977-1978.

In the second five-year development plan in education, Indonesia has targeted for (a) the provision of facilities for skills development in the Junior High School; (b) improving the skills of technical manpower in line with developmental needs and the needs of youngsters for job opportunities; and (c) development of vocational schools.

The Industrial Arts Education Project of the Republic of Korea is intended to enhance the efficiency and effectiveness of general technical education at the middle school level. It covers the development of an individually assessed skill-learning model and related instructional materials for the improvement of the industrial arts programme in the middle schools.

In Malaysia, technical and vocational education is designed to develop expertise in the fields of engineering, agriculture and commerce both at technician and craftsmen levels. In the lower secondary schools, industrial arts, home science, agricultural science and commercial studies are made available as elective subjects in the school curriculum.

In the Philippines, the development of the nation's manpower in the middle-level skills necessary in the socio-economic development of the country is an objective of education as decreed by the President. The ten-year national education development programme provides for expanding existing programmes and establishing new ones to train middle-level technical and agricultural manpower. A work-oriented curriculum project to develop work concepts and provide work experience has been in operation.

In Sri Lanka, the development of productive skills is carried out at all stages. In the school system, the innovation introduced under the new reforms is the introduction of pre-vocational studies through which a linkage has been established between the school and the occupations practised in the community. Technical sciences too have been introduced into the curriculum at the higher secondary level. Sri Lanka is also providing vocational training for school leavers and has introduced Project Work for senior secondary students.

In Thailand, the educational system lays particular emphasis on relating formal with non-formal education and on providing appropriate vocational training for each level of school organization and for each kind of education, and on harmonizing, in the learning process, career development with moral and intellectual growth. Considering the national priorities as reflected in the National Development Plan, the educational system has provided short-course vocational training for out-of-school population in addition to courses given in schools and technical colleges.

In Bangladesh, new curricula and syllabuses for the primary and secondary stages prepared recently by a National Curriculum Committee set up by the Government, lay great stress on work orientation in environmental studies (grades 1-5) and science (grade 6-10). In addition, a new subject called "Work Experience" is proposed to be introduced as a compulsory subject in all classes of the primary and secondary stages.

The educational system in Singapore is geared towards reducing educational wastage

and producing useful citizens who are skilled and adaptable to change. In general education at the second level, workshop practice/home economics forms an integral part of the curriculum, to develop meaningful manipulative skills and an appreciation of working with one's hands. At the primary level, a new basic course programme has been introduced to cater for the academically weak pupils not benefiting from the normal school programme. These pupils are given nine years of primary schooling as compared to the normal span of six years. Also, the existing vocational courses at secondary level are being strengthened to raise the standards of vocational/technical education.

In Pakistan, educational reform as a part of major reform includes integration of agro-technical and vocational studies in the general education system, introduction of trades as a parallel stream after eight years of schooling, diversification of secondary and higher secondary school curricula, and reorganization of teacher education programmes to meet the needs of new work-oriented school curricula.

In Japan, work-oriented programmes are included in the school curriculum not so much for the development of any specific employable skill but for making a provision of a balanced general education. Recently, a new type of school called "special training school" has been established which aims to offer to the school leavers the courses to develop the individual ability required for his or her daily life.

Efforts through non-formal education are also being made in some Member States. Afghanistan has a programme of lifelong education for workers and government officials to improve their skills. In Bangladesh, at the non-formal level, school students have been taking part in large numbers in community development projects under the national self-reliance movement.

In Malaysia, in addition to the school system, other agencies like the Ministry of Youth, Sports and Culture and the Ministry of Labour and Manpower provide short-term vocational training for out-of-school youth and school leavers who need employable and productive skills. There are specific programmes on non-formal education to provide adults and out-of-school youth training for a change in vocation.

In Nepal, there is provision for skill training in the school system under the National Education System Plan. The Institute of Engineering offers training programmes for various trades. The Women's Organization also runs training programmes for women. Practical knowledge and skills are also imparted under projects like the one on "Earning while Learning".

C. Co-operation among countries within the APEID framework

Along with integrated rural development, "employable skills" was one of the focal points identified by the Second Regional Consultation Meeting (Tokyo, May 1975) for APEID activities.

Many of the activities described in the earlier section on the theme of integrated rural development were concerned also with the development of productive skills particularly for the out-of-school youth. In addition, a Regional Field Operational Seminar was organized in collaboration with NIER (Japan), on curriculum development for work-oriented education. This provided an opportunity to all the participating countries to study some of the on-going work-oriented education projects in the countries and to synthesize their experiences. This was followed by another Field Operational Seminar on Work-Oriented Education with special reference to Handicraft Education. At the national level, three mobile teams in educational technology concentrated on the training of personnel in the preparation of modular instructional materials related specifically to pre-vocational subjects and skills development. In the area of science education a Technical Working Group developed methodologies for linking the teaching of science with real-life problems and work experiences. Currently in progress is an inter-country study of on-going pilot projects which seek to integrate work with learning.

D. Objectives and expected outcomes

The objectives and expected outcomes are defined below for inter-country co-operative activities in each of the seven Areas of Innovation identified by the Fourth Regional Consultation Meeting, which will have a direct contribution to make to development of productive skills relevant to economic development. Some of the objectives in this Area of Innovation are common and this is taken into account in the specification of project activities (refer to Part III of the report).

Development theme: Development of productive skills relevant to economic development

1. Area of innovation: Non-formal and alternative structures in education

Objectives

1. To facilitate innovations in structures, strategies and programmes of non-formal education and in the preparation of expertise available in the community to participate in designing and implementing projects for the training of school leavers and out-of-school youth in productive skills; and
2. To promote innovations in linking formal and non-formal systems of education with emphasis on the utilization of community resources to provide learning experiences through productive work at all school levels.

Expected outcomes

A. Increased collaboration in sharing experiences relating to the development of productive skills through non-formal education, and structures linking formal and non-formal education.

B. Better appreciation and knowledge of alternative approaches in the preparation and use of available community expertise to impart productive skills.

2. Area of innovation: Administration and management of educational innovations

Objectives

1. To co-operate in the development of national organizational structures and innovative management techniques to design work-oriented/pre-vocational/technical and vocational programmes to be integrated into the general education curriculum; and
2. To facilitate inter-agency and community involvement in the planning and implementation of innovative educational programmes for the development of productive skills.

Expected outcomes

A. Production of handbooks and manuals on innovative management processed, techniques and systems.

B. More thorough and systematic training of personnel for the effective management of work-oriented programmes.

3. Area of innovation: Curriculum development

Objectives

1. To enhance the development of work-oriented curricula (including agro-techincal, pre-vocational, vocational and technical studies) as integral part of general

education leading to the inculcation of positive attitudes and values towards productive work and of appropriate evaluation procedures; and

2. To strengthen the potential for designing, particularly for out-of-school population, intensive integrated programmes in literacy and numeracy; knowledge of economic production and marketing and entrepreneurship.

Expected outcomes

A. Reorientation of educational personnel in the development of new strategies, methodologies and devices for evaluation.

B. Exemplar instructional materials, approaches, strategies and methodologies for relevant target groups.

4. Area of innovation: Educational technology

Objectives

1. To develop low-cost educational materials from indigenous resources and appropriate techniques for imparting productive skills.

Expected outcomes

A. Sharing of information, materials and experiences on appropriate educational technology in the development of productive skills.

B. Reorientation of educational personnel in the production and use of innovative materials.

5. Area of innovation: Education of teachers, teacher educators and other educational Personnel

Objectives

1. To strengthen national capacities for developing innovative programmes for preparing teachers, teacher educators and other personnel in the field of education in the development of productive skills; and

2. To promote orientation of teaching towards technical developments and work-oriented activities in education.

Expected outcomes

A. Better understanding of innovative programmes for preparing educational personnel in the development of productive skills.

B. Development of alternative methodologies for linking teaching in schools to the world of work.

6. Area of innovation: Science (including mathematics) and technology education

Objectives

Through exchange of experiences and co-operative endeavours, supporting national initiatives and enhancing capabilities:

1. To design and develop integrated curricula and related instructional materials in science, mathematics and technology, using a variety of media which, inter alia, are work-oriented to support the development of productive and functional skills to meet the real-life needs of the learners, both in the formal and non-formal education.

2. To design alternative structures and approaches for the preparation of specialist teachers involved in science, mathematics and technology education effectively to play, among others, their supportive role in the development of productive skills.

Expected outcomes

A. Enhancement of knowledge and techniques of science and mathematics curriculum design and construction, to meet the changing needs for development of productive skills, both within and outside the formal school system.

B. Better preparation of science, mathematics and technology teachers, for acquisition of needed competencies to fit them for their new role.

7. Area of innovation: Vocational education

Objectives

Through exchange of experiences and support to national efforts, strengthen national capabilities:

1. To design alternative vocational education approaches for creating positive attitudes and values towards productive work and development of specific skills relevant to the changing needs of a society, either for employment or self-employment; and

2. To design and implement pre-service and in-service education programmes to improve professional competencies of vocational education persoonel, both through formal and non-formal education.

Expected outcomes

A. Cardres of trained curriculum developers experienced in the preparation of effective vocational education programmes.

B. More appropriate learning/teaching materials for meeting specific needs of different target groups and training of skilled manpower.

C. Improved teaching personnel for vocational subjects.

3. UNIVERSALIZATION OF EDUCATION AT THE EARLY SCHOOL LEVELS AND FUNCTIONAL EDUCATION FOR OUT-OF-SCHOOL YOUTH AND ADULTS

A. Statement of the theme

"Universalization" refers to the provision of basic educational opportunities for the mass of people, both children and adults, who have had little or no access to such opportunities. It is seen as a prerequisite to realizing the goal of democratization of education and equality of educational opportunities.

The goal of mass education is a development goal in its own right and is to be found in the policy pronouncements and national development plans of all the developing countries in the Asian region. It is conceived as an essential part of any development strategy which aims at fuller and more productive utilization of human resources, and the effective participation of the people in the social and political process. Experience has shown that deep social and economic disparities which characterize the socio-economic structures of many Asian countries are an impediment to the developmental process and to the consolidation and strengthening of national unity and social cohesion. Universalization of educational opportunities, in order to provide mass education, is an essential step towards narrowing these disparities by providing opportunities for social and economic advancement to the under-privileged groups.

In the last two or three decades educational expenditures in all Asian countries have increased to a level where the economics of the developing countries are finding it difficult to absorb the growing burden. Despite these enormous investments, more than half of the children and adults in the developing countries in Asia have no access to basic educational facilities. The number of those who are not attending school or those who have withdrawn from school prematurely and of adult illiterates has been growing and will continue to grow, unless deliberate and systematic measures are taken to counteract this trend. Clearly a linear expansion of the formal education system alone cannot offer viable solutions to this problem. Its strong urban bias and the "sieving" process of selection implicit in its working are ill-suited to provide educational opportunities for the under-privileged and the disadvantaged sections of the population. Consequently many countries in Asia have taken initiative in developing other ways to achieve mass education to complement the formal education system or to reorient it.

The implications of universalizing education are conceived within the following framework:

i) By level, universalization refers to the provision of basic education facilities as well as to the creation of conditions in which such facilities can be effectively utilized. It enables all learners to acquire the basic skills, competencies and attitudes on which they can build further to increase their productive capacities and quality of life.

ii) The "target groups" comprise children, youth and adults of all ages who have had insufficient or no opportunity to participate in the educational process. Particularly the target groups include the disadvantaged sections of the population such as women and girls, urban poor, tribal groups, etc.

iii) The objectives and content of basic education are functionally defined in terms of the needs of the learner groups and characteristics of the environment in which they live.

iv) The modes of basic functional education are different in different environments and socio-political contexts. They inculude the use of resources in the community which are unused or under-utilized; the reorientation of formal educational institutions; utilization of mass media and other forms of mass

communication; and a redefinition of the role of teachers and of students as well.

An important element of the strategy of mass education as a developmental goal is the participation of the community in the education process. It has implications not only for the content and methods of education but also for the administrative and management procedures.

B. Current efforts within the countries

(*In this section, efforts currently being made within the Member States in the field of universalization of education at the early school levels and functional education for out-of-school youth and adults have been sampled as illustrative of the variety of strategies being attempted.*)

In only a few countries in Asia, the first cycle of primary education has universal enrolment and efforts are being made now to extend the duration to 8 or 9 years. In most countries in Asia, however, the groups which have little or no access to educational opportunity comprise more than half of the total population. This includes children who are unable to attend schools, children who prematurely leave school and young people and adults who have had insufficient or no educational opportunities.

A common characteristic in all countries is scarcity of resources. The available resources are heavily strained with the increasingly more complex tasks which the growing societies call for, and the high rates of population growth.

In this connection, Asian countries are attempting innovative programmes through non-formal education, linkages of non-formal with formal education, restructuring curricula, using educational technology, improved teacher education and vocational education.

In Indonesia and the Philippines the Project for Instructional Management by Community, Parents and Teachers was started in 1974. The objectives of the project are to find an alternative system for effective delivery of primary education in accordance with the situation common in Indonesian and Philippine districts, and also to test how effective and economical the system is. In this project children work on the different modules on their own, make their own evaluation based on special guidelines and arrange remedial work themselves.

Also in Indonesia, the Learning Centre Pilot Project was started in mid-1973. The techniques used are classroom instruction using AVA, lectures, group work, guidance and counselling, and instructions through local radio stations. The learning centres are part of out-of-school activities. They have been established to serve the learning needs of local communities in their environment, as extensions of the Centre of Family Welfare Communication Service. Schools are also being developed for the disadvantaged children. Alternative solutions to the problem of universalization of education are based, inter alia, on the exploration of low-cost media systems, and the use of unused and underutilized potentialities including those of the indigenous culture and tradition.

In Pakistan, a pilot project on "Integration of Education in Rural Development" has been launched in the villages of the Federal Area. In this project, out-of-school children and some adults will be given basic education. The existing physical facilities in the villages will be fully utilized. The school teachers and other available educated persons in the area are being trained to work in the project. The curriculum based on the needs of the community is being developed. School Councils consisting of teachers and other relevant persons from the community have been constituted for each village. School timings will be arranged in order to get the maximum number of pupils in the school.

In Iran the National Committee for World Literacy Campaign, as a non-governmental organization, has been established for the purposes of eliminating illiteracy among adults, out-of-school youth and children and giving them an opportunity to continue their studies up to the primary school level. Suitable books for adults are prepared by the Committee. The "National Centre for Adult Education and Training" affiliated to the Committee has been established for training teachers and conduct research and evaluation of adult education programmes in Iran.

In 1974, the National Council of Educational Research and Training in India started a project for the provision of part-time non-formal instructional programme to children in the age-group 6-14 years who have either not gone to school or dropped out at one stage or another before completing class VIII to enable them to join a regular stream in class VI or IX in a formal school. This programme is oriented also to community development. Alternative systems of education in rural areas are being developed using flexible timing, low-cost materials and community resources. Education for the disadvantaged and backward classes is being promoted under the project "Voluntary Rural Development through Education".

In Malaysia, compensatory education is provided for the socially and culturally disadvantaged children.

In the Philippines, the In-School Off-School Approach to Education Project is now being implemented. Its major aim is to maximize the utilization of the resources found in the school and in the community, and at the same time to increase educational efficiency by linking formal instruction and non-formal study. The community has emerged as the most promising medium for spanning the gap between what the learner knows and what he does. This involves a reorientation of the curriculum by making it community-based and finally developing a climate of acceptance of the innovation among teachers, school officials, parents and the community as a whole. Other developments in the Philippines include: the production of non-formal education self-learning kits; establishment of non-formal education courses with equivalency certificates and conducting experiments on multi-grade classes in remote areas to admit all out-of-school children and youth.

In Iran, the Army of Knowledge, or Education Corps, was established in 1962 for the purpose of utilizing the young high school graduates to teach rural children, youth and adults during the period when they would normally be doing their compulsory military service. These young men and women are given a four-month intensive training. They are essentially multi-function village-level workers who act as agents for an integrated approach to rural development, including literacy campaigns. Tribal education, in Iran, has been introduced for educating nomadic tribes. Teachers for this programme are selected from among the tribe's men and women who undergo a two-year training at normal schools.

In India, in accordance with their national policy for education, a new pattern of education, 10-2-2, is being introduced. The NCERT policy document on "Curriculum for Ten-Year School: A Framework", was adopted by the whole country, with provision for changes according to the felt needs and aspirations of the people.

In Afghanistan, the Republic has realized that education, especially in its conventional form, does not meet the needs of the Afghan society. Therefore, as a first step towards the development and universalization of education, a reform in education in general and in curriculum area in particular was launched in January 1974. This reform not only has brought about changes in the school structure, but at the same time has provided more opportunities to the children in the primary school level.

In Thailand, Educational Region 7 launched an educational radio programme in 1972 with a view to improving the quality of learning and teaching. The programme covers all schools in the province having radio receivers. The broadcast is done two hours

every weekday and one half-hour during school holidays. The Centre for Educational Technology in Bangkok assists in preparing radio scripts and other support materials.

In India mass media is used to educate the deprived and under-privileged sections of the community.

In Indonesia, an educational broadcasting experiment project has been started. The objective of the project is to find ways to use radio effectively to support education. The use of radio broadcasting for education is in itself an innovation in Indonesia, because it is efficient in improving the teaching ability of professional teachers. For the broadcasting programmes materials are sent to schools together with teachers' guides. Teachers are asked to give suggestions for implementation in terms of preparation, exhibition materials, follow-up, etc. Thus, broadcasting is integrated with lessons in the classroom.

In Iran, the Educational Radio and Television Organization plays a very active role in improving education. The Organization conducts a vast programme concerning formal and non-formal education of farmers, workers, women, youth, school teachers and students of primary and secondary schools.

In Malaysia, the programmes of the Educational Media Service (ESM) are aimed at improving the quality of education, especially in the rural areas. They provide opportunities to more pupils especially in the disadvantaged regions to get better education by watching or listening to well-presented TV or radio lessons; inform teachers and parents about educational innovations; assist teachers in the implementation of curricular changes and in improving their techniques of teaching speciific subject areas, particularly in science, mathematics, civics and languages. The ESM also provides a cheap and effective way to train teachers through in-service courses.

In Pakistan, the Television Corporation has launched the Adult Functional Literacy Project as a pilot project. Community centres have been established in some selected villages. Trained instructors have been appointed to help the villagers in their classes. The lessons are given through television, six days every week.

In Sinahn County of Korea, the radio broadcasting programme was implemented to promote educational development by improving the curricula and administrative support. The main objectives of this project are: (1) to improve the outcomes of instruction/learning activities through the use of technology; (2) to prepare teachers and upgrade their professional competence by providing up-to-date information on educational innovations; and (3) to help administrators and supervisors to establish relevant policies and guidelines to support the school. Korea has also started an air and correspondence education project to provide high school education for workers, school dropouts and out-of-school youth and adults.

Singapore is using television and other media to improve classroom learning.

In Singapore, mass media, modular approaches and micro-teaching are used in teacher education. In the last three years of its establishment, the Institute of Education has introduced a number of innovative concepts and approaches in teacher education. The new curriculum has been formulated with two objectives in view: (1) to enable student teachers to acquire necessary skills and teaching competence; and (2) to provide facilities for student teachers to upgrade their own academic attainments in order to be better informed and also better able to respond to an ever-present intellectual challenge. An important aim is also to train teachers to accept and participate in changes.

Nepal has plans of the extensive use of radio broadcasting programmes for both formal and non-formal education.

In Pakistan, the People's Open University has been established, which has launched primary teacher orientation course through radio and correspondence courses. All the primary school teachers will be trained in the teaching of the new curriculum developed

by the National Bureau of Curriculum, through this course in a phased manner. The teachers will be evaluated at the centres established by the University, after the completion of the course. The University is also undertaking an integrated functional education project.

In India, the Report of the Education Commission (1964-66) describes the real merit of work-oriented education as a source of learning. It points out that work experience should be a central feature of school education at all levels. Work experience should provide an opportunity to learn from the use of hands, give insight into the material phenomena and human relationships involved in any organized productive work and create the attitudes necessary for co-operative accomplishment.

Nepal is promoting the expansion of educational opportunities through free primary education, scholarships and non-formal education schemes.

In Sri Lanka, based on a pilot project of in-plant education in factories and work places conducted at the Veyangoda spinning and weaving mills, a country-wide programme of in-plant education for the junior secondary pupils has been launched. This movement has become very popular with pupils and parents.

C. Co-operation among countries within the APEID framework

The Second Regional Consultation Meeting (Tokyo, May 1975) identified "basic functional education" as one of the priority concerns of the participating member countries and therefore of APEID. Basic functional education was seen as relating to children as well as to out-of-school population who have had little or no opportunities to acquire appropriate learning experiences suitable to their needs and functional in terms of their use in the home and in the community.

In the first cycle, inter-country co-operative activities relating to basic functional education covered all programme areas of APEID. In curriculum development the conceptual framework was explored in two regional meetings on alternative approaches to school education and curriculum development at the early school level. The specific problems of large/multi-group/multi-grade classes were studied in a regional meeting on the basis of the actual experiences in a number of countries. Another technical working group examined the alternative structures and methods in teacher education which the countries have been experimenting within the context of universalization of basic educational opportunities.

In the area of science education the focal point of inter-country co-operation has been to relate the teaching of science to rural environment.

Recognizing the crucial role of media and other mass forms of communication in the universalization of education, a Regional Promotional Seminar on Educational Technology with particular reference to education and broadcasting was organized. This is to be followed in the current year by a regional workshop on the preparation of instructional aids using indigenous materials. A technical working group is also to consider the problems of designing and developing packaged multi-media teaching and learning materials for use of disadvantaged groups of learners.

In the area of adult literacy, a Regional Mobile Field Operational Seminar carried out studies in-depth of adult literacy programmes in certain countries of the region and developed a synthesis of their experiences on the designing, development and implementation of functional literacy programmes.

The inter-country programmes which are currently under way and which have a direct bearing on the theme include a Regional Mobile Field Operational Seminar on Non-formal Education with Reference to Universalization of Education; High-level Personnel Seminar on Policies, Problems and Practices in Universalization of Basic Education and a series of National Advanced Level Workshops for Teacher Educators which would be concerned with the development of teacher education programmes with reference to the curriculum needs of early school levels.

D. Objectives and expected outcomes

The objectives and expected outcomes are defined below for inter-country co-operative activities in each of the seven Areas of Innovation identified by the Fourth Regional Consultation Meeting, which will have a direct contribution to make to Universalization of Education at the Early School levels and Functional Education for Out-of-School Youth and Adults. Some of the objectives in this Area of Innovation are common and this is taken into account in the specification of project activities (refer to Part III of the report).

Development theme: Universalization of education at the early school levels and functional education for out-of-school youth and adults

1. Area of innovation: Non-formal and alternative structures in education

Objectives

1. To contribute to national efforts and capacities to design and develop non-formal education programmes for extending basic education opportunities and for the reorientation of the formal structures of the education system for making them more responsive to community needs;
2. To promote the mobilization of community resources and participation, with special attention to providing educational opportunities to disadvantaged groups; and
3. To promote inter-country exchange of experiences and expertise as a mode of mutual learning about strategies, planning techniques and new structures in education for linking formal and non-formal education.

Expected outcomes

A. Increased exchanges of experiences of innovative programmes and strategies in basic and continuing education and new structures linking formal and non-formal education.

B. Enhancement of knowledge and techniques to mobilize and manage community resources.

2. Area of innovation: Administration and management of educational innovations

Objectives

1. To facilitate innovations in decentralized planning and managements, inter-agency co-operation, and mobilization of community participation; and
2. To facilitate innovations in effective planning and management of community-based institutions.

Expected outcomes

A. Exchange of experiences in mobilizing and directing community participation and the management of community institutions.

B. Exchange of training materials for the above.

3. Area of innovation: Curriculum development

Objectives

1. To strengthen the capacities for developing techniques and methodologies of

curriculum construction based on environment and integrating work and learning with emphasis on individual differences in learning and of inexpensive instructional materials; and

2. To promote the designing of flexible institutional structures and procedures.

Expected outcomes

A. Orientation of cadres concerned with the planning, designing and developing need-based and environment-based curricula and instructional materials.

B. Information (exchange) on alternative models in curriculum development at the early school levels/stages.

4. Area of innovation: Educational technology

Objectives

1. To strengthen national capabilities for designing low-cost educational materials, including self-instructional packages, and using mass media for the universalization of education and functional education; and

2. To promote teacher education in the use of new teaching aids including audio-visual devices.

Expected outcomes

A Formation of cadres at national and local levels responsible and capable of developing educational technology.

B. Development of institutional infrastructure for the promotion of educational technology.

C. Orientation of teacher education inculcating developments in educational technology.

5. Area of innovation: Education of teachers, teacher educators and other educational personnel

Objectives

1. Through inter-country exchange of experiences, to strengthen the national capacities for developing new programmes for the education of teachers, teacher educators and other educational personnel with special reference to the disadvantaged groups and teaching in multi-group and multi-grade classes; and

2. To strengthen national capacities for developing continuous teacher education programmes for renewal of science and technology education suited to the needs and conditions of local communities.

Expected outcomes

A. A better understanding and appreciation of problems of the education of the children of disadvantaged groups.

B. Development of insight into the complex nature of the methodology of teaching in multi-group, multi-grade classes.

6. Area of innovation: Science (including mathematics) and technology education

Objectives

Through co-operative efforts, enhancing national capabilities:

1. To design and develop innovative curricula and train personnel for designing cost-effective equipment, using locally available materials, which would im-

prove the conceptual and contributory roles of science, mathematics and technology education to develop problem solving abilities and foster productive capacity;

2. To provide training to educational personnel for using the environment as an important learning resource for science, mathematics and technology education; and
3. To develop non-formal education, making effective use of mass media for literacy in science, mathematics and technology and their popularization among out-of-school children, youth and adults.

Expected outcomes

A. Enhancement of knowledge and techniques for designing and developing science, mathematics and technology curricula and supportive cost-effective equipment.

B. Better trained teachers for using the environment for designing science learning-teaching activities.

C. Use of non-formal systems through mass media for developing scientific literacy and popularizing science.

7. Area of innovation: Vocational education

Objectives

Through exchange of experiences, enhancing national capabilities:

1. To develop integrated basic level curricula and related instructional materials directed towards skill development relevant to local needs and occupations; and
2. To prepare educational personnel and resource persons available in the community for effective work-oriented education programmes.

Expected outcomes

A. Greater awareness of the problems of skill development at the basic level and potential solutions.

B. Training methodologies for preparing educational personnel and resource persons from the community.

C. More effective learning-teaching experiences for skill development.

4. EDUCATION FOR BETTER HEALTH AND NUTRITION

A. Statement of the theme

Health with which nutrition is causally related in the developing countries of Asia, is of particular significance in development because it is not only essential for improving the quality of life but also directly affects human productivity, the capacity to respond to problems and challenges, and the motivation towards achievement and learning. There is a link between poverty, whether relative or absolute, and food intake. Nutritional deficiencies affect all age-groups but are to be found in their severest form in children of low-income population groups. In the developing countries of Asia, more than fifty per cent of all deaths occur in the early age-group populations, and malnutrition is the largest single contributor to such mortality.

The problems of health and nutrition are made more difficult by the fact that facilities for medical or health care are not accessible to those who need them most. Furthermore, a major share of such facilities as exist are concentrated on curative services rather than preventive services.

While the problems of health and nutrition arise primarily from a lack of adequate food, malnutrition, and paucity of health amenities, they are also closely related to lack of awareness and understanding of the elementary skills pertaining to health, hygiene, nutrition and physical education; lack of positive attitudes towards health care and food habits; and lack of understanding of the value of indigenous helath practices. These problems are all inter-related, and recognition of this fact is gaining ground in national development policies.

Education is to be viewed as an essential element in any integrated effort to solve the problems of better health and nutrition. For this purpose, education, both formal and non-formal, has to be consciously directed to:

i) inculcation of positive attitudes and values towards health, nutrition and physical education;

ii) creating necessary awareness of the problems of healthy living and of the available resources including indigenous medical services and local foods; and

iii) developing appropriate knowledge of the causes and consequences of poor health and malnutrition, and inculcating the necessary skills and habits for putting this knowledge into use in everyday living in the home and in the community.

Clearly, any educational programme for better health and nutrition at the grass-roots level must involve the educational personnel working in close co-operation with other concerned agencies and the community.

B. Current efforts within the countries

(In this section, efforts currently being made within the Member States in the field of education for better health and nutrition have been sampled as illustrative of the variety of strategies being attempted.)

There is an increasing awareness of the need to raise the standards of health and nutrition in all the countries of the region. This is reflected in the integration of this awareness in the curricula of science, social studies and home science. Physical education programmes including games and sports, also cater to these growing needs. Periodic medical check-up of pupils, and attention to school hygiene, are being taken up more seriously.

Indoesia has a special programme called school hygiene effort. The Fourth National Development Plan of Thailand includes a major nation-wide Primary Health Care Project under which every village will select 10 to 15 health communicators who will be given training in health and nutrition. A special division in the Department of Education and Culture of the Philippines has been established which co-operates with the National Foundation for Applied Nutrition, to provide school health and nutrition services and facilities side by side with a more intensified health and nutrition programme.

In Sri Lanka, the school health and nutrition programme is geared to the goals set up in the National Plan, which aims at raising the nutritional level of people in the low-income groups. Special effort is made through surveys to find out the requirements of various communities and their problems of health and to revise the health curricula through community participation.

In Afghanistan, in primary schools, health is to be taught and learnt so that emphasis is placed on good nutrition and healthful practices in the schools and in the homes.

In Indonesia, both subjects (health/nutrition) are integrated and combined. Nutrition education deals with kinds of food and balanced diet. Health education is correlated with physical education.

In Pakistan as well as in Bangladesh, the school curricula have been reorganized with a view to introducing the concepts of health, nutrition and physical education at the primary and middle school levels. At the secondary level, elective subjects of health and physical education have been included in the curriculum. This is done to promote health, cleanliness and sanitation habits among learners. There are other programmes of health agencies which are run in co-operation with the education system.

Iran has a strong programme for health and nutrition education in rural and urban areas. In all non-formal education programmes, there is a strong component of health and nutrition.

Teacher training curricula also reflect this growing awareness. In India, the Central Bureau of Education has developed special syllabuses for elementary and secondary school teachers. A project has been started in Bangladesh for health and nutrition improvement and education of the people through the teachers of the rural schools who, having very high multiplier effects, can act as effective change agents.

Education and training in the field of health and nutrition is getting increasing attention. General agencies like the departments of health and medicine, education, planning and development, social welfare, secular voluntary organizations, and religious organizations are undertaking singly or jointly the training of health workers, paramedical professionals, and health educators for better implementation of programmes of health and nutrition, and for more effective community education in these areas. In Malaysia, mobile teams are doing health education and care programmes.

Well-organized action-cum-research projects, reflecting joint efforts in this regard, are being carried out. The University of the Philippines is engaged in a community-based health teaching and health care delivery programme. Child welfare has a distinct emphasis on health and nutrition. Applied nutrition programmes for children are being worked out and implemented.

In India, a child welfare project provides an integrated programme of health, nutrition and agricultural education.

In Nepal, the Children's Organization is setting up Children's Homes in which attention is paid to better hygiene and higher standards of health and nutrition. A national body has been formed to co-ordinate the activities in the field of nutrition being carried out by governmental and non-governmental bodies. Also, health education in Nepal has been made compulsory at all levels of education. The Government has a comprehensive programme for providing integrated health services to all the villages in Nepal.

Thailand is planning a nation-wide project of Child Nutrition Centres, to be staffed by Child Nutrition Attendants.

In Bangladesh, an experimental health centre is catering to the health needs of the poor, with community involvement and participation, and the people are being motivated to organize their own health services on the basis of active participation, and utilization of unused and under-utilized indigenous resources.

In the Philippines, an integrated programme stressing functional literacy, health, livelihood, self-government and culture is being carried out by co-operative action by the college, the church, and the community.

Special programmes to provide better nutrition to school pupils are being implemented. In the Philippines, the Department of Education and Culture, assisted by civic organizations, is providing supplementary nutrition to pre-school children and meals to other school children in their formal school system. Additionally, the non-formal education programmes for adults, youth and early school leavers have a strong component of health and nutrition. A special programme for training of teachers-cum-development workers provides training in health and nutrition in addition to horticulture, civil works and pedagogy.

Malaysia has a similar programme. In India, in one State, a number of experiments were done to provide free mid-day meal to all school children with the help of, and contribution from, the local community.

Experiments in distance teaching in health and nutrition are being carried out in several countries. In the Philippines, correspondence courses, combined with TV and radio programmes, have upgraded the knowledge of rural school teachers of health and nutrition. Malaysia and India are also experimenting with TV programmes in health and nutrition.

Special attention is being paid to the nutritional needs of the under-privileged. Pre-school education and child health care are being provided in the newly opened rural areas in Malaysia. In India, an experiment in establishing a network of creches for children for blue-collar working mothers has been tried out in New Delhi, with the help of several agencies. Programmes to educate the workers to make use of the facilities, and training programmes for higher secondary school girls to run the creches have been found to be effective. In Bangladesh, a programme of education and nutrition for the under-privileged children has been launched.

Increasing attention is being paid to population education, and its integration with the programmes of health and nutrition. In Bangladesh, population education has been introduced in the formal school system. The Population Education Unit of the NCERT in India has developed a syllabus in population education for all classes and is helping in incorporating population education in the textbooks. Source books for teacher educators have also been prepared.

C. Co-operation among countries within the APEID framework

APEID activities have emphasized three national developmental goals of common concern to the participating countries. Health and nutrition is one of these.

All the activities reported under the theme "Integrated Rural Development", with the exception of those under the management area, were explicitly directed to promote and contribute towards health and nutrition. Of particular significance in these inter-country activities, mention may be made of the following:

At the Sub-regional Curriculum Development Workshop, the review of national curricula covered the content and design of health and nutrition curricula. The seven countries represented at the Workshop offered their experiences and participated in the synthesis of such experiences.

At the Regional Planning Workshop (Manila, May 1975), modules were developed on the theme of health and nutrition. Exemplar modules have been prepared at the national and regional activities, both for use by pupils and in teacher education, primarily as a training modality.

During 1977, six countries are holding workshops at which curriculum planning and review exercises will be undertaken, which will include health, hygiene and nutrition.

D. Objectives and expected outcomes

The objectives and expected outcomes are defined below for inter-country co-operative activities in each of the seven Areas of Innovation identified by the Fourth Regional Consultation Meeting, which will have a direct contribution to make to Better Health and Nutrition. Some of the objectives in this Area of Innovation are common and this is taken into account in the specification of project activities (refer to Part III of the report).

Development theme: Better health and nutrition

1. Area of innovation: Non-formal and alternative structures in education

Objectives

1. To facilitate innovations in education focusing on local initiative, participation, full use of local resources and development of the community in raising health and nutrition standards; and
2. To facilitate inter-agency co-operation in identifying educational needs and programmes for better health and nutrition.

Expected outcomes

A. Increased co-operation amongst the existing agencies concerned with health and nutrition in order to promote, through education, changes in attitudes, values and habits; and

B. Increased sharing of experiences and collaboration amongst the Member States in the use of non-formal and new structures in education to raise levels of health and nutrition.

2. Area of innovation: Administration and management of educational innovations

Objectives

1. To facilitate development of information exchange on health and nutrition to develop more effective supervisory systems and practices for raising the standard of health and nutrition of pupils and community awareness of such problems; and
2. To promote co-ordination of inter-departmental efforts in the field of health and nutrition, so that the reorganized systems and knowledge gained can be used for education.

Expected outcomes

A. Increased collaboration in sharing experiences and basic data on health and nutrition in the community; and

B. Greater involvement of the community in relating education to better health and nutrition.

3. Area of innovation: Curriculum development

Objectives

1. To strengthen the capacities for developing relevant approaches and methodologies of curriculum preparation and relevant instructional materials, utilizing local resources with emphasis on promoting awareness and basic understanding of principles underlying the theme and integration of the basic concepts relevant to the theme in different disciplines; and
2. To facilitate the development of flexible institutional structures and procedures.

Expected outcomes

A. Data on alternative structures in curriculum development (including radio/TV programmes) for better health, hygiene, nutrition and balanced diet; and

B. Training of concerned personnel and other voluntary organizations for designing and developing curricula and teaching material, in relation to the community's needs for health, hygiene and nutrition.

4. Area of innovation: Educational technology

Objectives

1. To use indigenous games, dance, music, drama and other modes, as well as available mass media for promoting proper health and nutrition concepts and habits; and
2. To develop teaching aids and self-instructional packages relevant to health, hygiene and nutrition.

Expected outcomes

A. Fuller participation of the people in developing awareness for the improvement of health, hygiene and nutrition habits.

5. Area of innovation: Education of teachers, teacher educators and other educational personnel

Objectives

1. To enhance national capacities for developing relevant approaches and methodologies for teacher education and training programmes for education in better health, nutrition and family welfare in the community; and
2. To promote development of teaching materials involving interdisciplinary and multi-media approaches and the use of community resources for education in better health, nutrition and family welfare in the community.

Expected outcomes

A. Development of better understanding and insight into the interdisciplinary nature of training educational personnel for health and nutrition education.

B. Relevant data and information obtained from analysing innovative experiences in preparing teachers and other educational personnel for health and nutrition education.

6. Area of innovation: Science (including mathematics) and technology education

Objectives

Through support of national initiative and regional exchange of experiences and their synthesis, develop national capabilities:

1. to identify key concepts and processes of science and to develop practical activities leading to the provision of more effective learning experiences in order to develop positive attitudes toward health, nutrition, hygiene, sanitation and environmental awareness; and
2. to survey existing practices and innovative measures in the Member States leading to a more relevant and improved formal and non-formal education in these fields.

Expected outcomes

A. Improved community practices in health, nutrition, sanitation and hygiene;

B. Greater sensitivity to environmental problems; and

C. Data on community practices on production, preservation and preparation of foods.

7. Area of innovation: Vocational education

Objectives

Through exchange of experiences and co-operative efforts, enhance national capabilities:

1. to develop appropriate vocation education courses and instructional materials to provide a sound base for training of technicians in the fields of health, sanitation, nutrition and family welfare, both in formal and non-formal education; and
2. to develop effective learning-teching experiences related to health, nutrition, diet management, food preservation and preparation, animal husbandry and fishery.

Expected outcomes

A. Enhancement of knowledge and techniques of vocational education curriculum design and construction, to meet the needs of programmes for better health and nutrition; and

B. Better community awareness, understanding and habits with respect to health and nutrition.

5. EDUCATION FOR NATIONAL UNITY AND INTERNATIONAL UNDERSTANDING AND CO-OPERATION

A. Statement of the theme

The consolidation of national unity is the object of national endeavours in all countries of the region. It is both a goal of national development and its energizing principle.

Recognizing that education is a powerful influence in the formation of attitudes and the sense of identification, educational programmes are explictly inspired and guided by considerations of national untity and social cohesion.

In terms of regional and inter-country co-operation in the framework of APEID, the theme of national unity is interwoven in the other major themes, namely:

i) Universalization of basic education in order that disparities of educational opportunities are removed and social cohesion is strengthened;

ii) Education for rural development so that all sectors of national economies are able to contribute to total national development and each sector has its equitable share of developmental benefits; and

iii) Education for productive work, health and nutrition to the end that the productive potential of all sections of the population is realized for national development.

In view of the above, the theme of national unity does not need to be considered in any separate set of project activities; rather, it underlies and supports all developmental efforts and goals.

There are however two areas in which sharing of experiences among the countries is recommended through specific activities. These areas are: (i) teaching of languages in the national context, including the development of national/official languages for educational purposes; and (ii) the full expression of national culture(s) in education, including moral and civic education.

These activities can appropriately take the form of in-depth comparative studies by ACEID carried out in co-operation with national scholars during the second cycle.

Similar considerations are applicable, *mutatis mutandis,* to the important theme of international understanding and co-operation. Valuable work in this area is being done by Unesco globally. APEID itself is an example par excellence of international co-operation. The objective of promoting international understanding should be kept constantly in view in all activities of APEID. In addition, it is recommended that non-governmental organizations which are actively working for international understanding in Asia should be associated with APEID's work (e. g. Asian Federation of Unesco Clubs), and at the national level, the schools in the Associated Schools Project can provide valuable help to APEID's activities. Publications and materials issuing from Unesco's programme for international understanding should be made available regularly to APEID's Associated Centres.

PART III

WORK PLANS FOR THE SECOND PROGRAMMING CYCLE (1978–1981)

Area of innovation:

1. Non-formal and alternative structures in education

A considerable variety and range of experiences have developed in the last few years as the Member States in the region, becoming increasingly aware of the limitations of the formal school systems, have sought new ways to provide educational opportunities to the mass of the people (refer to Part II ante 'Current Efforts within the Countries').

Non-formal education is linked to all the four development themes, namely: universalization of education, integrated rural development, education for productive skills relevant to economic development, and education for better health and nutrition.

Non-formal education is also now increasingly linked to formal education in a variety of ways, leading to the development of alternative structures in education. This linkage is to be found in programmes designed to prepare early school leavers to re-enter the formal stream of education; in programmes such as open education systems and learning centres; and in the participation of students in work-experience programmes.

A common feature of all these programmes is the effort to involve local communities in the creation and management of educational activities and to mobilize local resources for this purpose.

The main thrust of this Area of Innovation in APEID will be centred on the following four aspects, which will serve as the basis for inter-country exchange of experiences and mutual learning:

i) Designing and development of non-formal education programmes ralated to the development goals of the countries;

ii) Community participation and mobilization of local resources and expertise to support the planning, organization and implementation of non-formal education programmes;

iii) Linking of non-formal and formal education programmes and development of alternative structures; and

iv) Inter-sectoral and inter-ministerial/departmental approach and co-ordination in the development and implementation of non-formal educational programmes.

Activities in this area of innovation will be linked closely with other areas of innovation, notably Administration and Management of Educational Innovation, and Educational Technology.

The following are the immediate objectives in this area of innovation:

Through inter-country exchange of experiences, information, materials and training of personnel:

1. To promote awareness, understanding and insights into the designing and development of non-formal education programmes relevant to developmental goals of the countries, with particular reference to: (a) universalization of education for meeting the needs of rural and other disadvantaged sections of the population; and (b) utilization of local resources and sound indigenous practices;

2. To contribute to enhancing national capacities to design and develop non-formal education programmes for productive skills and better health and nutrition suited to their needs and resources, with reference to: (a) content, (b) methodologies, (c) structures, (d) utilizing the local expertise available in the community, and (e) linking formal and non-formal education programmes;

3. To promote the development of new strategies and alternative approaches for mobilizing active participation of the community in the planning and organiza-

tion of their own non-formal education programmes and in co-ordinating and inter-relating such programmes with other development programmes;

4. To provide opportunities to the Member States to study the designing and development of alternative structures in education which link formal and non-formal education programmes, and to facilitate the efforts of the Member States in establishing new structures; and
5. To enhance awareness of the need for innovative non-formal educational programmes related to the development themes through case studies and collection and dissemination of information and materials.

Work plans

1. Designing and development of non-formal education programmes

Scope:

i) Development of productive skills;
ii) Universalization of education; and
iii) Better health and nutrition.

Emphases:

i) Innovative non-formal education programmes; and
ii) Use of local resources and sound indigenous practices.

Participation:

i) Personnel from Member States who have operational responsibility for designing non-formal education programmes related to: (a) development of productive skills, and (b) better health and nutrition; and
ii) Resource persons from the host countries.

Activity	Commencement	Duration
1.1 Inter-country, inter-project study visits – Preparation of background materials and case studies by participants.	Mid-1978/ mid-1979	
– Study visits to on-going programmes in three countries.	Mid-1978 mid-1979	Four weeks each
– Meeting of participants in a study group to analyse and synthesize their study experiences and prepare plans for further work in their home countries.	Mid-1978/ mid-1979 Late 1978	One week each
– Follow-up. (The inter-country, inter-project study visits will be organized in two series, one for development of productive skills and the other for better health and	Late 1979	Continuing

Activity	Commencement	Duration
nutrition).		
1.2 Sub-regional training courses/workshops		
Scope:		
i) Development of productive skills;		
ii) Integrated rural development.		
Note: The countries in the region will be covered in two series of operation.		
A. First series:		
i) Preparatory group meeting to prepare guidelines for conducting national seminars/workshops and sub-regional training course.	Mid-1978	One week
ii) National seminars/workshops to analyse and explore crucial problems and issues, and synthesize national experiences.	Late 1978	One week
iii) Sub-regional training course workshop. (The content will be based on the syntheses of national experiences developed in the national workshops and in-depth study of projects in the host country).	Mid-1979	Four weeks
iv) Monitoring and follow-up.	Late 1979	Continuing
B. Second series:		
Note: The same phases as in the First series.		
1.3 Study group to evaluate and synthesize experiences in the first and second series.	Early 1981	One week
1.4 Mobile training team for in-country assistance in organizing training of personnel for institutions concerned with non-formal education, which are being newly established or need strengthening. (Three mobile team operations will be organized).		
Scope:		
i) Integrated rural development;		
ii) Development of productive skills; and		
iii) Universalization of education.		
– Constitution of national faculty by Member States and their study visits	One in 1979 One in 1980	Four weeks Four weeks

Activity	Commencement	Duration
to corresponding institutions in other countries.	One in 1981	Four weeks
– In-country training course/workshop by the national faculty assisted by resource persons.	One in 1979 One in 1980 One in 1981	Four weeks Four weeks Four weeks
– Follow-up.		Continuing

Outcomes:

i) A corps of persons in each participating Member State trained in the designing and development of non-formal education programmes;

ii) A series of comparative studies on alternative approaches and methods for designing and developing non-formal education programmes;

iii) A series of case studies on country experiences and plans;

iv) Persons trained for establishing or strengthening institutions for non-formal education; and

v) Exemplar materials for inter-country as well as intra-country exchange and use.

2. Promoting community participation and leadership

Scope:

i) Universalization of education; and

ii) Development of productive skills.

Emphases:

i) New strategies for mobilizing active community participation in planning non-formal education programmes; and

ii) Effective co-ordination of their own programmes and interrelating them with those of other development agencies' programmes.

Participation:

Teams, inter-departmental in composition, of persons operationally responsible for non-formal education programmes.

Activity	Commencement	Duration
2.1 Case studies of community participation and leadership and mobilization of community resources. (Ten case studies)	1978	Continuing
2.2 Inter-country, inter-project study visits – Constitution of country teams and their preparatory work.	Late 1979	
– Study visits of country teams to on-going projects in other countries.	Mid-1980	Four weeks
– Study seminar of country teams to synthesize their experiences and	Mid-1980	One week

Activity	Commencement	Duration
prepare plans for follow-up activities.		
– Follow-up activities.	Late 1980	Continuing

Outcomes:

i) A series of case studies;

ii) Teams of persons with experiences and insights in the dynamics of community participation and leadership roles in non-formal education; and

iii) Contribution to national efforts to stimulate community action for developing their own educational programmes and co-ordinating them with other development programmes.

3. Alternative structures in education

Scope:

All four development themes

Emphasis:

Designing, developing and operating alternative structures in education linking formal and non-formal education.

Participation:

i) Directors of relevant innovative projects in the countries;

ii) Persons responsible for specific forms of alternative structures (e. g. learning centres, open universities, etc.); and

iii) Policy makers.

	Activity	Commencement	Duration
3.1	Technical working group meeting: To develop symposium of experiences in the Asian countries in developing alternative structures and linking formal and non-formal education, and to evolve guidelines for designing suitable experimental projects.	Late 1978	Ten days
	– Follow-up support for experimental projects in the countries.	1979	Continuing
	– Regional study group to review and synthesize the experiences of experimental projects.	Late 1981	Ten days
3.2	High-level personnel project study and seminar on specific alternative structures (two such seminars)	One in early 1980	Ten days
		One in 1981	Ten days
3.3	Inter-country, inter-project visits for policy makers (linked with Administration and Management of Innovation Activity 2.2)		

Outcomes:

i) A portfolio of case studies;

ii) Development of experimental projects in the countries and their networking for exchange of information and experiences; and

iii) Comparative experiences of key-level personnel in designing and managing programmes of alternative structures.

4. Special technical co-operation programmes

Scope:

All four development themes.

Emphasis:

Designing and development of innovative non-formal and alternative structures in education.

Participation:

Middle-level personnel in projects and institutions requiring training in specialized skills and techniques.

Activity	Commencement	Duration
Attachments/internships The attachments will be made on institutions and projects which provide opportunities for the required on-the-job training. The normal duration will be from eight to ten weeks (10 man-months per year)	Mid-1978	Continuing

5. Enhancement of awareness of the need for innovative non-formal education programes and new structures

Scope:

All four development themes.

Activity	Commencement	Duration
– Preparation of inventories of innovative projects	1978	Continuing
– Preparation of studies and literature on different aspects of non-formal education and alternative structures.	1978	Continuing
– Case studies and comparative studies.	1978	Continuing
– Information materials		
– Dissemination of information to Member States.	1978	Continuing

2. Administration and management of educational innovations

The main thrust of this area is on creating new organizational processes, techniques and structures, as well as to redesign existing ones and increase their effectiveness in relation to such national development themes as integrated rural development, development of productive skills relevant to economic development, universalization of education at the early school levels and functional education for out-of-school youth and adults, and better health and nutrition.

Country experiences as well as concerns expressed by the Member States indicate the need for new management structures and approaches and co-ordinated systems of management which stimulate and channel broad-based community participation.

Immediate objectives

The immediate objectives of this area based on the objectives identified under the aforesaid themes are as follows:

1. to facilitate, through mutual learning and sharing of experiences, the development of personnel to improve administration and management of educational innovations;
2. to promote co-operative efforts in the preparation of exemplar management designs and resource materials;
3. to promote co-operative efforts to develop alternative, supportive and collaborative procedures and systems of supervision at the field level, ensuring inter alia involvement of the community and greater responsibility and autonomy for field workers; and
4. to collect and disseminate experiences and literature on administration and management of educational innovations in the Member States.

Work plans

1. Promoting intra- and inter-governmental co-operation

Scope:

Integrated Rural Development

Emphasis:

i) Education for rural development; and

ii) Management practices and systems of community development projects including those outside the field of education but which have educational components.

Participation:

Key personnel representing different ministries/organizations engaged in education for integrated rural development.

	Activity	Commencement	Duration
1.1	First cycle activities in integrated rural development carried over	1977	Continuing

	Activity	Commencement	Duration
1.2	Second Advanced-Level Workshop on Education for Rural Development	1978	One-two weeks
1.3	Study Group	1978	One week
1.4	Inter-country/inter-project study visits (eight)	Two in 1978 Two in 1979 Two in 1980 Two in 1981	One week each One week each One week each One week each

Outcomes:

i) Explorations of crucial problems and issues and synthesis of national experiences;

ii) Enhanced skills and competencies to design, develop and implement educational innovations;

iii) A short practical handbook on the design, implementation and management of education for rural development projects; and

iv) Expanded co-operation and some innovations in the educational management systems and procedures in the home countries.

2. Promoting alternative administration and management structures and procedures for supportive and collaborative supervision

Scope:

All four development themes

Emphasis:

Innovative systems and procedures to involve the community, teachers and others in the administration, management and supervision of educational innovation and in using supervision to support innovation and initiative on the part of such personnel.

Participation:

Key administrators in education and other agencies engaged in innovative programmes in supervision and evaluation.

	Activity	Commencement	Duration
2.1	Sub-regional and National Workshops		
	– Preparatory meeting	One each in 1978 and 1979	One week
	– National Workshops	One series each year, 1978 & 1979	Two weeks
	Sub-regional training workshops	One each 1978 and 1979	Three weeks
	– National follow-up activities	One each 1978 and 1979	
2.2	Inter-country/inter-project visits for policy makers		

Activity	Commencement	Duration
– Visits	1979	Three weeks
– Synthesis of studies	1979	One week
(covers also Curriculum Development Activity 3.1, Teacher Education Activity 1.3, Non-formal and Alternative Structures Activity 3.3, and Science Education Activity 4.1 as far as policy makers are concerned).		
2.3 Study Groups	1980	Two weeks

Outcomes:

i) Explorations of crucial problems and issues and synthesis of national experiences;

ii) Enhanced skills and competencies for the management and evaluation of innovative programmes of supervision involving broad-based community participation; and

iii) A short practical handbook for supervisors.

3. Special technical co-operation programmes

Scope:

All four development themes

Emphasis:

Participants to be attached to host institutions as full-time professionals.

Participation:

Middle-level personnel in projects and institutions involved.

Activity	Commencement	Duration
Attachments/internships Attachments will be made with institutions and projects. The normal duration will be four to six weeks. (Nine man-months per year).	1978	Continuing

4. Exchange and dissemination of information and materials in the administration and management of educational innovations

Scope:

All four development themes

Emphases:

i) Conceptualizations on management processes and social, political and cultural factors;

ii) Indigenous management practices and operations; and

iii) Forces/factors influencing innovative educational efforts.

Participation:

Inter-disciplinary specialists concerned with the management of innovation.

Activity	Commencement	Duration
4.1 Development of reading and reference materials	1979	Three weeks
4.2 Promoting analysis and recording of experiences	1978	Continuing

Outcomes:

i) Book of readings on Asian experiences in the administration and management of educational innovation; and

ii) A portfolio of case studies.

5. Co-operative efforts in evaluation of the administration and management of educational programmes

Scope:

All four development themes

Emphasis:

Promoting and enhancing co-operative efforts in the evaluation of on-going, innovative educational projects of the countries involved.

Participation:

Personnel responsible for evaluating on-going, innovative educational programmes.

Activity	Commencement	Duration
5.1 Joint innovative projects		
– Identification of projects	Linked with 1.3 and 2.2	
– Preparatory Meeting	early 1979	Ten days
– Field work	1979	Continuing
– Study Group	1980	Two weeks

Outcomes:

i) Better understanding and insight into the problems and progress of the educational projects under review; and

ii) A handbook of guidelines and critical issues for the joint evaluation of projects.

Area of innovation:

3. Curriculum development

The main thrust of this area is on innovations in curriculum development which are related to national development goals, focused on integrated rural development including environment, development of productive skills relevant to economic development, universalization of education at the early school levels and functional education for out-of-school youth and adults, education for better health and nutrition, and national unity and international understanding and co-operation.

Institutions dealing with curriculum development, their organization, practices and norms, form a crucial sub-system of the educational system as a whole. Their work and functions are linked with other related agencies and institutions. Organizational flexibility which will allow for major and continuing institutional adjustments is essential to maximize the benefits from linkages which exist or can be established and to facilitate the design, development and implementation of curriculum innovations in general.

New patterns of innovations in curriculum development are emerging. An increasing number of curricular centres are attempting to involve the community and identify and use indigenous resources. There are many variations of work-oriented curricula in both formal and non-formal education including pre-vocational studies to inculcate positive attitudes and vocational skills and to combine work and learning. Curricula have been developed based upon the problems and realities of the environment, and there is continuing work to refine environment-based curriculum materials.

In the proposed Work Plans in this area of innovation which follow, due consideration has been given to follow-up and feedback activities at the national level. The activities in the work plans are planned and organized sequentially and are to be viewed as a coherent whole.

Immediate objectives

The immediate objectives identified under the aforesaid development themes leading to the enhancement of professional growth of personnel in curriculum design, development and evaluation are as follows:

1. To enhance present capabilities for the development of methodologies and techniques in curriculum design and evaluation in relation to the demands identified under the five development themes;
2. To facilitate the development of exemplar curriculum materials in relation to the new techniques and methodologies referred to in (1) above;
3. To strengthen capacities for the development of alternative institutional structures and procedures in curriculum development;
4. To foster an awareness and an understanding of the need for the participation of various individuals and agencies concerned with education in the planning, preparation and implementation of curricula, and the development of potentials for their effective involvement; and
5. To promote increased flow of information and exchange of experiences in regard to methodologies, techniques and materials in the area of curriculum development relevant to the development themes.

Work plans

1. Development of techniques and methodologies in curriculum design

Scope:

Universalization of education

Emphases:

i) Environment based;
ii) Community support;
iii) Indigenous teaching devices; and
iv) Alternative structures.

Participation:

Personnel responsible for developing, managing and evaluating curricula.

Activity	Commencement	Duration
1.1 Development of techniques and methodologies for designing need-based curricula for universal basic education		
– High-level personnel project studies and seminar	1978	Ten days
– Case studies	1979	
– Inter-country/inter-project study visits	1979	Three weeks
– Regional Study Groups	1980	Three weeks
– Support to national institutions for further development of capacities of personnel	1979	Continuing
1.2 Developing curricula for languages in the national context, and civics and moral education incorporating national culture(s)		
– Inter-country/inter-project visits	1979	Three weeks
– Regional study groups (2)	1980-81	Three weeks
– Support to follow-up activities at national level	1981	

Outcomes:

i) Synthesis of experiences and methodologies and techniques in design, development, implementation and evaluation of curricula;
ii) Symposia of country experiences on development of curricula; and
iii) Skills in design and evaluation of curricula and better understanding of the process of curriculum development.

2. Development of curriculum materials, including modules

Scope:

i) Integrated rural development; and
ii) Development of productive skills.

Emphasis:

Co-operative development of exemplar indigenous and low-cost modular instructional materials relating to the core curriculum.

Participation:

Personnel engaged in the development and production of curriculum materials.

Activity	Commencement	Duration
2.1 Materials on curriculum for integrated rural development		
– Development of techniques and methodologies in curriculum design and guidelines for preparing curriculum materials (carry-over of activity in the first cycle)	1977	Completed
– Study group meeting for identification of core curriculum and preparation of detailed guidelines for development of materials	1978	Two weeks
– Case studies	1978	Continuing
– Development of exemplar materials by national centres/institutes	1978	
– Support to national institutions for further development of materials	1979	Continuing
2.2 Materials on core curriculum for the development of productive skills		
– Development of techniques and methodologies in curriculum design and guidelines for preparing curriculum materials (carry-over of activity in the first cycle)	1977	Completed
– Case studies on pre-vocational, work experiences and similar projects(5)	1978	Continuing
– Study group meeting on identification of curriculum at basic education level and preparation of guidelines for materials development	1979	Two weeks
– Development of exemplar materials by national centres/institutes	1979	
– Technical working group for finalizing materials (linked with 2.1)	1980	Ten days
– Support to national institutions for further development of materials – In-service National Workshops	1980	Three weeks
– High-level personnel exchange project studies and seminar (linked with 2.1) two series	Mid 1981	Ten days

Outcomes:

i) Exemplar materials;

ii) Sample core curriculum relevant to integrated rural development and productive skills; and

iii) Corps of personnel trained in design and development of instructional materials.

3. Development of alternative structures and procedures for curriculum designing, development, implementation and evaluation

Scope:

All four development themes

Emphases:

Community involvement: broad-based participation; and use of local resources.

Participation:

i) Policy makers;

ii) Curriculum development centres' staff

iii) Other curriculum development personnel; and

iv) Personnel from other development agencies concerned.

Activity	Commencement	Duration
3.1 Developing alternative structures		
— Case studies	1978	Continuing
— Mobile Training Team Workshops (2)	1978	Four weeks
— Inter-country/Inter-project study visits (personnel dealing with curricula development, implementation and development)	1980 1979	Four weeks Four weeks
— Support to follow-up activities at national level (curriculum developers and resource persons) — In-service/ In-country Training Workshops	1979	Three weeks Continuing
— High-level personnel exchange project studies and seminar for personnel operationally responsible for new structures	Late 1980	Ten days

Outcomes:

i) Exchange of experiences at policy-making level on planning and design of institutional structures;

ii) Corps of people knowledgeable about design, development and operation of alternative institutional structures for curriculum development; and

iii) Trained personnel in mobilization of local resources and expertise.

4. Developing innovative techniques and devices for i) pupil evaluation and ii) public examination

Scope:

All development themes.

Emphasis:

Identification and development of a variety of procedures and guidelines for tools to evaluate specific aspects of pupil performance in relation to the curriculum.

Participation:

Curriculum personnel concerned with pupil evaluation and public examination.

Activity	Commencement	Duration
– Synthesis of experiences and preparation of guidelines (carry over from the first cycle; organized jointly with NIER: NIER funding)	1977	Completed
– Technical support for follow-up activities at national level	1979	Continuing
– Case studies and study group meeting to synthesize experiences (carry over from the first cycle)	1977	Completed
– High level personnel project studies/ seminar	1978	Ten days
– Regional Seminar	1979	

Outcomes:

i) Innovative evaluation and examination procedures; and

ii) Guidelines for developing innovative evaluation and examination tools, methodologies and procedures.

5. Special technical co-operation programmes

Scope:

All development themes.

Emphasis:

Development of innovative techniques and methodologies for designing need-based curricula.

Participation:

Curriculum personnel and staff of Associated Centres.

Activity	Commencement	Duration
– Attachments/internships Normal duration will be 12-15 days (10 man-months per year)	1978	Continuing

Outcomes:

i) Exchange of experiences; and

ii) Corps of personnel knowledgeable about innovative techniques and methodologies in curriculum design.

6. Enhancement of exchange and dissemination of information and materials relating to curriculum development

Scope:

All development themes

	Activity	Commencement	Duration
6.1	Inventories of innovative projects	1978	Continuing
6.2	Case studies and comparative studies	1978	Continuing
	i) Work-oriented education		
	ii) Pre-vocational and vocational studies as part of general education		
	iii) Language curriculum		
	iv) Environment education		
	v) Pupil evaluation and public examination		
	vi) Curriculum evaluation		

7. Joint innovative projects/studies

Scope:

All development themes

Emphases:

Child development with emphasis on:

i) The developmental tasks of learners;

ii) Conceptual development among children; and

iii) Motivation aspects in the learning process.

Participation:

Associated Centres with capability for inter-disciplinary research.

Activity	Commencement	Duration
– Identification of projects	Early 1978	
– Study Group Meeting	Late 1978	10 days
– Planning and execution of projects	1979	Continuing
– Dissemination of research findings	1980	Continuing

Outcomes:

i) Collaborative studies among Member States; and

ii) Creation of knowledge base for innovative actions relevant to the themes.

Area of innovation:

4. Educational technology

For purposes of the Work Plan, educational technology refers to the use of specific techniques and the systematic application of organized knowledge to the practical problems of education. Innovations in educational technology in the context of Asian countries are related to all the development themes notably universalization of education, integrated rural development, development of productive skills, and better health and nutrition. Furthermore it has a supportive role in other areas of innovation, particularly non-formal education, curriculum development, teacher training, science education and vocational education.

The main thrust in this area of innovation centres on the use of mass media for the expansion of educational opportunities and the development of training techniques and of low-cost instructional materials using indigenous resources.

Immediate objectives

1. To promote the application of educational technology and facilitate the introduction of innovative methods and materials for the development of:
   i) low-cost teaching aids using locally available materials;
   ii) indigenous teaching/learning devices including traditional arts (folk drama, puppetry, etc.);
   iii) mass media; and
   iv) instructional aids including self-instructional materials;
2. To contribute to the national efforts in preparing educational personnel to develop and use relevant educational technologies, with special reference to universalization of education, education for rural development, and development of productive skills; and
3. To promote the flow and exchange of information and materials on educational technology.

Work plans

1. Designing and management of educational technology programmes

Scope:

i) Universalization of education; and
ii) Integrated rural development.

Emphases:

i) Development of low-cost materials and indigenous teaching devices; and
ii) Development of educational broadcasting (TV/radio).

Participation:

Directors and equivalent personnel responsible for the planning and organizztion of education technology programmes in the country.

	Activity	Commencent	Duration
1.1	Inter-country/inter-project study visits (carry over from first cycle)	1977	Completed
1.2	Advanced-Level Workshop (carry over from first cycle)	1977	Completed
1.3	Follow-up in the participating countries	1978	Continuing
1.4	High-Level Personnel Project Study and Seminar: (to synthesize experiences of 1.1-1.3, evaluate and prepare plans for second series)	early 1979	Ten days
1.5	Inter-country/inter-project study visits (second series)	late 1979	Four weeks
1.6	Advanced-Level Workshop (second series)	1980	One week

Outcomes:

i) Strengthening of institutional capacities through mutual learning; and

ii) Increasing inter-project/inter-centre flow of information and materials.

2. Collaboration with countries in personnel training and institutional building in educational technology

Scope:

All development themes

Emphases:

i) Development of low-cost materials and indigenous teaching devices;

ii) Development of software for educational broadcasting (radio/TV); and

iii) Development of instructional materials using specific techniques (programmed instruction, modular materials, etc.)

Participation:

National personnel responsible for programmes referred to above.

	Activity	Commencement	Duration
2.1	Mobile training team for in-country training	One in 1978 One in 1979	Four weeks Four weeks
	– Constitution of national faculties by Member States and their study visits to corresponding institutions in other countries.	One in 1980 One in 1981	Four weeks Four weeks
	– In-country training course/ workshop by the national faculty assisted by resource persons.	One in 1978 One in 1979 One in 1980 One in 1981	Four weeks Four weeks Four weeks Four weeks
	– Follow-up activities.	1978	Continuing

Outcomes:

i) A corps of persons in participating Member States trained in developing instructional materials and software.

ii) Persons trained for establishing or strengthening institutions for educational technology programmes.

3. Development of low-cost and indigenous teaching devices and materials based on cost-effective techniques

Scope:

i) Universalization of education; and

ii) Development of productive skills.

Participation:

Personnel in the Member States operationally responsible for development of materials.

	Activity	Commencement	Duration
3.1	Regional workshop for exchange of experiences and identification of problems.	Late 1977	Completed
3.2	Case studies of on-going programmes in Asian Member States (five case studies).	Late 1977	Two years
3.3	Sub-regional training course/ workshop (first series).	Late 1978	Four weeks
3.4	Follow-up national workshops	1979	Four weeks each
3.5	Sub-regional training course/ workshop (second series)	Early 1980	Four weeks
3.6	Follow-up national workshop	1980	Four weeks each
3.7	Study group to synthesize and evaluate and to prepare plans for future action	1981	Ten days

Outcomes:

i) Groups of trained persons in the Member States;

ii) Development of exemplar materials and techniques in the countries;

iii) Plans for future activities;

iv) A series of case studies and comparative studies; and

v) Inter-country flow of information and materials.

4. Training of personnel for development of educational radio/TV programmes

Scope:

i) Universalization of education; and

ii) Integrated rural development.

Emphasis:

Preparation of programmes and their use and evaluation.

Participation:

i) Key-level personnel from Member States as resource persons; and

ii) Personnel responsible for programme production and evaluation in the countries.

Activity	Commencement	Duration
4.1 To prepare guidelines for production, use and evaluation of educational radio/TV programmes:		
— Inter-country visits to study the on-going programmes	1978	Four weeks
— Meeting of a technical working group to prepare the guidelines	1979	Ten days
4.2 Sub-regional training course/ workshops (two series)		
— First training course/workshop	1980	Four weeks
— Second training course/workshop	1981	Four weeks
4.3 National training workshops	1981	Continuing

Outcomes:

i) Groups of trained persons in the Member States;

ii) Development of training programmes; and

iii) Comparative studies synthesizing and evaluating experiences.

5. Special technical co-operation programmes

Scope:

All development themes

Emphasis:

Mutual help to meet specific needs in educational technology, using available facilities in the participating Member States.

Participation:

Associated Centres

Activity	Commencement	Duration
Attachments/internships:	1978	Continuing
Attachments will be made with institutions and projects. The normal duration of an attachment will be four to six weeks. (Nine man-months per year)		

6. Enhancement of awareness of the need and potential of educational technology

Scope:

All four development themes

	Activity	Commencement	Duration
6.1	— Collection and dissemination of information	1977	Continuing
	— Inventories of innovative projects	1977	Continuing
	— Case studies of low-cost and indigenous materials development	1977	Continuing
	— Case studies of distance learning projects	1977	Continuing
6.2	— Collection and exchange of programme materials, software, low-cost aids and indigenous learning devices	1978	Continuing
	— Support to national centres for developing their holdings and to networking national resource centres for inter-country exchange	1978	Continuing
	— Strengthening Regional Educational Media Resource Exchange Service (REMRES) and its clearing house services	1978	Continuing

7. Joint innovative projects/studies

Co-operative study in the application of systems approach in education at institutional and project level.

Area of innovation:

5. Education of teachers, teacher educators and other educational personnel

Teachers and other educational personnel are by far the most important agents for making educational innovations possible and effective. Their preparation and training have therefore a direct bearing on educational innovations contributing to the development themes, namely, integrated rural development, development of productive skills, universalization of basic educational opportunities and better health and nutrition.

Furthermore, innovations in teacher education and innovations in other areas are closely interlinked, notably non-formal education, curriculum, science education and educational technology.

In recent years many Asian countries have taken significant initiatives to develop alternative approaches to teacher education in terms of structure, content and outreach.

APEID activities in the second programming cycle are designed to build on and strengthen these national initiatives and to this end centre on six critically important aspects:

i) Alternative structures in teacher education to strengthen institutional capabilities for meeting the demands for teachers and educational personnel created by national development goals;

ii) Alternative methods and techniques for strengthening innovative initiatives in preparing teachers and other educational personnel for curriculum content relevant to the development themes and their new roles as development agents;

iii) Development of materials to support the new structures, methods and contents;

iv) Continuing professional growth of teacher educators in order to create innovating cadres;

v) Networking of innovating teacher training institutions, institutions for non-formal education, etc., and increasing the inter-country flow of information, experiences and materials; and

vi) Co-operative studies on problems which arise with reference to the contribution of education to the development themes.

Immediate objectives

In order to make effective the contribution of educational innovations to development themes, the *immediate objectives* of APEID's activities in this area of innovation are as follows:

1. To contribute to co-operative efforts in developing alternative structures, methods, and techniques in the preparation of teachers, teacher educators, and other educational personnel with reference to the development goals;
2. To contribute to the promotion of continuing professional development of teachers, teacher educators, and other educational personnel with special reference to their roles as development agents;
3. To facilitate the development and application of new training techniques and the production of instructional and other teaching/learning materials using locally available resources;
4. To promote increased flow of information, materials and experiences in regard to methods, materials, and techniques in the preparation and training of teachers; and

5. To promote co-operative studies and research in teacher education with a view to enhancing national capabilities to plan and undertake educational innovations linked to national development goals.

Work plans

1. Designing alternative structures in teacher education

Scope:

Universalization of education.

Emphases:

i) Innovative structures to meet the demands for teachers for mass education with special reference to disadvantaged groups;

ii) Mobilization of local and community resources and expertise;

iii) Inter-linking of formal and non-formal methods and of pre-service and in-service teacher education; and

iv) Use and preparation of other developmental personnel in teaching roles.

Participation:

i) Teacher educators;

ii) Staff of non-formal education programmes; and

iii) Resource persons in community development.

	Activity	Commencement	Duration
1.1	Development of prototypes of alternative structures based on on-going programmes in the countries (carry-over of activity in the first cycle).	1977	Completed
1.2	Case studies of alternative structures (continuing activity from the first cycle).		
1.3	Mobile field operational seminar		
	– Selection of training programmes exemplifying alternative structures and developing background materials.	Mid-1978	
	– Teams of participants for on-the-spot study of the above.	Early 1979	Four weeks
	– Meeting to synthesize experiences and develop guidelines for future action.	Early 1979	One week
	– Inter-country, inter-project visits for policy-makers (linked-with Administration and Management of Educational Innovation Activity 2.2)	1979	
	– Follow-up activities at the national level.	1979-1980	Continuing

Outcomes:

i) A series of case studies and comparative studies; and

ii) Reorientation of groups of teacher educators and other educational personnel.

2. Development of alternative methods and techniques for training of teachers and educational personnel

Scope:

i) Integrated rural development;
ii) Health and nutrition;
iii) Development of productive skills; and
iv) Universalization of education.

Emphases:

i) Training methodologies for community-based teaching and learning, including use of locally available learning resources;
ii) Use of new educational technologies and mass media;
iii) The changing role of teachers in the context of the development themes; and
iv) Training in teaching methodologies with reference to special problems such as multiple class and disadvantaged groups (e. g. tribal people).

Participation:

i) Teacher educators concerned with such programmes; and
ii) Trainers of non-formal education staff;
iii) Supervisors.

	Activity	Commencement	Duration
2.1	Case studies and prototype projects relating to the above (continuing activity from the first cycle).		
2.2	High-level teacher educators, project study and seminar.	1979	Two weeks
2.3	Study groups and training workshops on specific problems, e. g. use of new educational techniques; training methodolgies based on locally available learning resources; writing workshops for distance teaching techniques.	One in 1978 One in 1979 One in 1980 One in 1981	Four weeks Four weeks Four weeks Four weeks

Outcomes:

i) Comparative studies in training methodologies;
ii) Training of groups of persons in the Member States; and
iii) Increase of inter-country flow of experiences and information.

3. Continuing professional growth of teacher educators

Scope:

All four development themes.

Emphases:

i) Renovation of teacher training institutions with reference to the development

themes;

ii) Co-operative effort for reorienting teacher education curriculum to the development themes; and

iii) Networking of innovative teacher training institutions for mutual help and with institutions concerned with non-formal education.

Participation:

Teacher educators

	Activity	Commencement	Duration
3.1	National advanced-level workshops for teacher educators (on-going activity from the first cycle).	1977	
3.2	Preparatory group meeting for preparing the second series of national advanced-level workshops (five countries).	1978	One week
3.3	National level workshops.	1978	Two weeks each
3.4	Regional workshop to review, evaluate and synthesize the experiences of national workshops.	Mid-1979	Ten days
3.5	Follow-up at the national level.	1978-1981	

Outcomes:

i) Reorientation of teacher educators/teacher training institutions;

ii) Inter-country experiences serving as basis for further action; and

iii) A series of case studies and comparative studies for teacher educators.

4. Development of exemplar materials

Scope:

i) Integrated rural development (with special reference to environment); and

ii) Better health and nutrition.

Emphases:

i) Co-operative development of exemplar materials relating to the core curriculum of teacher education; and

ii) Co-operative development of exemplar materials relating to in-service training of teachers.

Note: The above cover the preparation of teachers for both formal and non-formal education.

Participation:

Teacher training institutions/curriculum development centres/non-formal education centres which are associated with ACEID.

Activity	Commencement	Duration
4.1 Exemplar materials for core curriculum of teacher education.		
— Identification of core curriculum and guidelines have been completed in the first cycle.		
— Development of exemplar materials by national centres/institutes.	1978	
— Technical working group for finalizing the materials and exchange of experiences.	Late 1978	Two weeks
— Support to national institutions for further development of materials for use.	1979-1981	
4.2 Exemplar materials for in-service training of teachers.		
— Study group (interdisciplinary) to develop guidelines for preparation of materials.	1979	Ten days
— Development of exemplar materials by national centres/institutions	1979-1980	
— Technical working group for finalization of materials and exchange of experiences.	Early 1981	Two weeks
— Support to national institutions for further development of materials for use.	1981	

Outcomes:

i) Sets of exemplar materials based on experiences in the countries;

ii) Trained personnel in Member States in the development and evaluation of materials in teacher education suited to national needs; and

iii) Networking for mutual help of teacher training and other educational development institutions.

5. Special technical co-operation programmes

Scope:

All four development themes.

Emphasis:

Development of new training methodologies.

Participation:

Staff of Associated Centres.

Activity	Commencement	Duration
Attachments/internships. Attachments will be made in institutions and projects; normal duration will be 8-10 weeks (9 man-months per year).		

6. Enhancement of awareness of the need for innovative training programmes for other education personnel

Scope:

All four development themes.

	Activity	Commencement	Duration
6.1	Collection, development and dissemination of information and materials. – Inventory of innovative projects. – Case studies and comparative studies. – In-depth studies and development of literature of significant problems in teacher education. – Exchange of instructional materials.	1978	Continuing

7. Joint innovative projects/studies

Scope:

All four development themes.

Participation:

Associated Centres with research capabilities.

	Activity	Commencement	Duration
7.1	Comparative studies of researches in teacher education relevant to development themes.		
	– Review of research by participating countries.	1978	
	– Interdisciplinary study group to analyse findings, identify the gaps and prepare guidelines for joint research studies.	Early 1979	Two weeks
	– Research studies in the participating Member States.	1979-1980	
	– Meeting of the study group to review the results and disseminate the studies.	1981	Two weeks

Outcomes:

i) Networking of institutions engaged in research in teacher education; and

ii) A series of studies on problems directly related to development themes.

Area of innovation:

6. Science (including mathematics) and technology education*

The main thrust of this area is on innovations in science (including mathematics) and technology education related to national development goals with reference to integrated rural development; development of productive skills relevant to economic development; universalization of education at the early school level and functional education for out-of-school youth and adults, and better health and nutrition.

Attempts at improving ways of living and environment, health habits, agricultural practices and production methods are indicators of the acceptance of change. The speed and facility with which changes occur depends of the creation of a climate of opinion favourable to scientific ideas, and on the achievement of some basic degree of 'scientific literacy', whereby a majority of people have some understanding at least of the simpler scientific principles, and their applications which contribute to development efforts.

This has considerable implications for all types and levels of education, both within and outside the formal system, as well as for the strategies, resources and methods used in teaching science.

In a society where the scientific enterprise has begun to influence daily lives, science teaching should prepare the people gradually in the fundamental principles governing scientific and technological processes, leading to development of scientific attitudes, understandings and the necessary productive skills.

Immediate objectives

The immediate objectives identified under the five development themes are:

1. To enhance national capabilities for designing and developing innovative curriculum based on real life experiences in science and technology for basic education and for non-formal systems of education;
2. To promote the development and use of cost-effective, indigenous learning devices and other instructional materials in science and technology education for both formal and non-formal education;
3. To strengthen national initiatives and efforts in the use of the local environment and other available resources as an alternative to and as a complement of laboratories in implementing science and technology education programmes;
4. To strengthen the national capacity for developing alternative structures and methods in pre-service and in-service education of science and technology teachers to develop competencies required by their new roles; and
5. To promote innovative approaches for developing integrated science and technology courses relevant to the needs of various areas of vocational education, both for the formal and non-formal systems of education.

Work plans

1. Designing and developing innovative science curriculum

Scope:

All development themes

Emphases:

i) Based on real life experiences and the environments;

ii) Work-oriented curriculum; and

iii) Both formal and non-formal.

---

* All references to science in this section includes mathematics.

Participation:

i) Specialists engaged in science curriculum development; and

ii) Specialists from other areas of concern.

Activity	Commencement	Duration
1.1 Strategies, methodologies and techniques for the development of programmes in science and technology education linked with real life experiences and environment:		
– Development of guidelines and preparation of exemplar materials (continuing from first cycle)	1977	Completed
– Compilation of available information	1978	Continuing
– Case studies of selected projects (10)	1978	Continuing
– Preparatory workshop	Early 1979	Ten days
National workshops	1979	Three weeks each
Sub-regional workshop (first series)	Late 1979	Three weeks
Support follow-up national activities	Late 1979	Continuing
– Preparatory workshop	Early 1980	Ten days
National workshops	1980	Three weeks each
Support follow up national activities	1980	Continuing
– Study group to synthesize experiences and develop guidelines for future action	Late 1981	Two weeks
1.2 Developing alternative approaches to integrate science, mathematics and technology education elements within the curriculum.		
i) Mobile field operation seminar		
– Selection of curriculum centres	1978	
– Teams of participants for on-the-spot study	1979	Four weeks
– Meeting to synthesize experiences and development of guidelines for future action	1979	Two weeks
– Follow-up activities at national level	1979	Continuing

Outcomes:

i) A series of case studies and comparative studies;

ii) Inventories;

iii) A set of guidelines for developing science and technology curriculum;

iv) Synthesis of experiences; and

v) A corps of persons trained in developing alternative approaches.

2. Promoting the development of instructional materials

Scope:

All development themes

Emphasis:

Cost-effective and indigenous materials.

Participation:

Specialists and science personnel in charge of designing and producing teaching materials.

Activity	Commencement	Duration
2.1 Development of modules and self-instructional materials		
— Module writing workshop on science in the rural environment (Continuing from the first cycle)	1976	Completed
— Development of exemplar modules	1977	Continuing
— Compilation of information on existing materials		
— Technical working group for reviewing existing materials and planning future action	1978	Two weeks
— Sub-regional workshop (two)	1979	Three weeks each
— National workshops for module writing	1980	Two weeks each
2.2 Selection and development of cost-effective indigenous instructional materials and equipments		
i) Inter-country, inter-project study visits		
— Preparation of background materials and case studies by participants	Early 1978	
— Study visits to projects in four countries	Late 1978	Four weeks
— Meeting of the participants in a study group	Late 1978	One week
— Follow-up (linked with activity 3)		

Outcomes:

i) Exemplar modules;

ii) Collection of different materials necessary for development of modules; and

iii) Case studies.

3. Utilizing community resources and local environment for strengthening programmes of science and technology education

Scope and **Participation:**

Same as under Activity 2.

Emphases:

Community experiences; toys and games; indigenous teaching devices; and other resources.

Activity	Commencement	Duration
3.1 Inter-country, inter-project study visits (linked with activity 2.2)		
— Preparations of background materials and case studies by participants		
— Study visits to projects in four countries	Mid-1979	Four weeks
— Meeting of the participants in a study group	Mid-1979	One week
— Follow up	Mid-1979	Continuing

4. Development of alternative structures and methods for preparing science and technology teachers at pre-service and in-service levels

Scope:

All development themes.

Emphases:

i) Alternative structures inter-linking formal and non-formal education;
ii) Mobilization of community resources and local expertise;
iii) Use of mass media and other modern techniques;
iv) Training methodologies for curriculum relevant to the development themes and for the changing roles of teachers; and
v) Use and preparation of other development personnel in teaching roles.

Participation:

i) Teacher educators in science and technology;
ii) Staff of centres of innovation responsible for pre-service and in-service education of science teachers (for example: curriculum centres/training institutions/ mass media non-formal education programmes);
iii) Personnel from other developmental agencies concerned; and
iv) Policy-makers.

Activity	Commencement	Duration
4.1 Developing alternative structures for the education of science and technology teachers		
a) Inter-country/inter-project visit for policy makers (to be linked with AMEI 2.2)		
b) Case studies of alternative structures	1978	Continuing
c) Mobile Field Operational Seminar		
— Selection of traning programmes exemplifying alternative structures and developing background materials		

	Activity	Commencement	Duration
	– Teams of participants for on-the-spot study of the above	Early 1979	Four weeks
	– Meeting to synthesize experiences and develop guidelines for future action	Early 1979	One week
	– Follow-up activities at the national level	1979	Continuing
4.2	Developing alternative methods of teaching for education of science teachers (to be linked to 4.1)		
	a) Case studies of innovative methods and techniques of science education prepared by persons involved in designing and developing those methods and techniques	1978	Continuing
	b) High-level teacher educators project studies and seminars	1979	Two weeks
	c) Study groups and training workshop on specific problems e. g. use of new educational techniques; training methodologies based on locally available learning resources; writing workshops for distance teaching techniques	One in 1978 One in 1979 One in 1980 One in 1981	Four weeks Four weeks Four weeks Four weeks
	d) Support follow-up national activities	1981	Continuing

Outcomes:

i) Compilation of background materials;

ii) Case studies and comparative studies;

iii) Synthesis of experiences;

iv) Guidelines for future action; and

v) Corps of persons trained in innovative methods and techniques in designing and developing new methods and techniques.

5. Development of integrated science and technology courses relevant to vocational courses

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphases:

i) Deriving contents of science, mathematics and technology from demands of vocational education in both formal and non-formal setting; and

ii) Inter-relating science, mathematics and technology education with vocational education.

Participation:

Specialists in vocational, technical and agricultural education and mathematics and science educators.

Activity	Commencement	Duration
i) Technical Working Groups (to be linked to the Technical Working Group in the area of Vocational Education No. 3.2)	1980	15 days each
ii) National workshops	1980	Three weeks
iii) Follow-up meeting of directors of national workshops.	1981	Two weeks

Outcomes:

i) Guidelines for inter-relating science and technology education with vocational education programmes;

ii) Guidelines for national follow-up activities;

iii) Alternative methods/techniques; and

iv) Corps of persons prepared in designing and development of alternative methods and techniques for relating science education with vocational education.

6. Special technical co-operation programes

Attachments/internships

The attachments will be made on institutions and projects which provide opportunities for the required on-the-job training. The normal duration will be from eight to ten weeks. (10 man-months per year).

Area of innovation:

7. Vocational and technical education

This is a new area in APEID proposed by the Fourth Regional Consultation Meeting on the basis of suggestions received from the Member States. Innovations in vocational and technical education are critical to two development themes, namely, development of productive skills relevant to economic development, and integrated rural development. In this context vocational and technical education refers to those aspects of the educational process involving, in addition to general education, an appreciation and practice of work requiring practical skills, and the development of productive skills preparing for an occupational field, including productive self-employment.

Vocational and technical education is related closely to other areas of innovation in APEID, notably curriculum development, science education and non-formal education. Therefore vocational and technical education as an integral part of general education is covered in the appropriate Work Plans in these related Areas of Innovation (work experience, pre-vocational education, technological element in science education, etc.). APEID's activities in this particular Area of Innovation are envisaged mainly for vocational and technical education as preparation for an occupational field and as continuing education, providing for the foundation of basic skills required for initial employment, including self-employment.

Considering that vocational and technical education is being proposed for the first time in APEID, the main thrusts at this stage will be towards collection and regular exchange of innovative experiences; collaborative designing of strategies, methodologies, and instructional materials in the various fields of vocational and technical education including training of teachers; and co-operative research and development on problems of common concern to the Member States. These thrusts will be linked to two development themes; namely, development of productive skills and integrated rural development.

Immediate objectives

1. To create the necessary information base by collecting and disseminating information, documentation and materials relating to innovative vocational and technical education, including teaching materials and mass media programmes relevant to integrated rural development and development of productive skills;
2. To contribute to national efforts in developing strategies and programmes for innovative vocational and technical education through inter-country exchange of experiences and co-operative activities;
3. To strengthen national efforts in the training and preparation of educational personnel for vocational and technical education related to the development themes;
4. To promote collaboration among the Member States for the development of physical facilities, low-cost prototype materials and equipment, and stimulating joint research and development effort in this regard; and
5. To promote awareness of the need for, and potential of, vocational and technical education as an integral part of general education.

Work plans

1. Developing information base and promoting flow of information and materials

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphases:

i) Productive skills programmes for out-of-school youth;

ii) Involvement of institutions of vocational and technical education and other educational institutions in programmes for upgrading of skills;

iii) Integration of general education and vocational and technical education; and

iv) Innovative approaches and programmes in curriculum planning, materials and facilities development, training methodologies, and evaluation procedures in vocational and technical education including the training of teachers in the context of resource constraints.

Participation:

Institutions and agencies in the Member States operationally responsible for the planning and development of vocational and technical education programmes.

Activity	Commencement	Duration
1.1 Preparation of national inventories.	Mid-1978	One year
1.2 Case studies of selected programmes.	1979	Continuing

Outcomes:

i) Compilation of innovative programmes in the Member States; and

ii) A series of comparative studies.

2. Enhancing awareness of the need and potential of innovative approaches and programmes

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphases:

i) Comparative study of innovative programmes relating to vocational and technical education as preparation for occupation; and

ii) Identification of problems, issues and trends.
(Note: The above covers agriculture education also.)

Participation:

i) Staff of innovative centres and institutions (including agriculture); and

ii) Supervisory staff.

Activity	Commencement	Duration
2.1 Constitution of country teams and their in-country preparation and briefing.	Early 1979	
2.2 Inter-country and inter-project study visits by country teams (four host countries)	Mid-1979	Four weeks

	Activity	Commencement	Duration
2.3	Meeting of country teams in a review and synthesizing seminar on the conclusion of their study visits.	Mid-1979	Ten days

Outcomes:

i) Country teams with comparative experiences of innovative programmes; and

ii) A series of studies of innovative programmes (it will serve as input to Activity 3).

3. Collaborative designing of strategies, programmes and methodologies for vocational and technical education

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphasis:

Innovative curriculum planning and instructional materials design.

Participation:

i) Specialists from the Member States in different areas of vocational and technical education;

ii) Specialists in designing physical facilities and equipment;

iii) Specialists in curriculum, teacher education and non-formal education; and

iv) Specialists engaged in development of appropriate and indigenous technologies.

	Activity	Commencement	Duration
3.1	Preparatory group meeting.	Late 1979	Ten days
3.2	Technical working group (four) for different areas and aspects of vocational and technical education.	1980	Fifteen days each
3.3	Follow-up national seminars/workshops on the guidelines developed by the technical working groups.	1980	Continuing
3.4	Mobile training teams to be made available on request for in-country training.	1980 and 1981	Ten weeks each

Outcomes:

i) A set of guidelines, based on synthesis of experiences of on-going innovative programmes in the countries on the organization, programme content, instructional materials, physical facilities and teaching staff; and

ii) Training of cadres in the countries.

4. Special technical co-operation programmes

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphasis:

Development of new training methodologies and materials.

Participation:

Staff of Associated Centres.

Activity	Commencement	Duration
Attachments/internships Attachments will be made in host country institutions and projects relating to vocational and technical education. Normal duration will be from 10 to 12 weeks. (Nine man-months per year)	1979	Continuing

5. Collaborative development of pre-service and in-service training of teachers and other educational personnel in various fields of vocational and technical education

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphases:

i) Innovative training programmes; and

ii) Development of training materials.

Participation:

Directors and staff of teacher training institutions in vocational and technical education.

	Activity	Commencement	Duration
5.1	High-level personnel project studies and seminar: To exchange experiences and make comparative study of innovative programmes in vocational and technical education and related teacher education.	Mid-1980	Four weeks
5.2	Attachments/internships (Nine man-months per year)	Mid-1980	Continuing

Outcomes:

i) Reorientation of training programmes; and

ii) Training of personnel.

6. Joint innovative projects/studies

Scope:

i) Development of productive skills; and

ii) Integrated rural development.

Emphasis:

Designing of inexpensive and functional physical facilities and equipment.

Participation:

Specialists from research and development centres concerned.

	Activity	Commencement	Duration
6.1	Study group meeting.	Early 1979	Ten days
6.2	Research and development work in the participating centres.	1979	Two years
6.3	Study group meeting to review and appraise.	Late 1980	Ten days
6.4	Follow-up work.	1980	Continuing

Outcome:

Design guides.

WORK PLANS
(Summary)
of
Asian Centre of Educational Innovation for Development (ACEID)

Activity ACEID/1	–	Providing technical supporting services in the planning and organization of regional and national level activities, identified under various Areas of Innovation.
Activity ACEID/2	–	Co-ordinating and supporting activities in respect of the evaluation and planning for follow-up phase of inter-country activities.
Activity ACEID/3	–	Co-operating with the participating countries in the development and operation of joint innovative projects.
Activity ACEID/4	–	Undertaking and initiating in-depth studies to develop literature on the identified themes relevant to the Asian scene.
Activity ACEID/5	–	Collecting, developing and disseminating information on innovative programmes, APEID activities and the activities of National Development Groups (NDGs) and Associated Centres, and providing a network of information and material exchange service through the Regional Educational Media Resource Exchange Service and concerned Associated Centres; and promoting appreciation of the governing principles of APEID and its approach to inter-country co-operation.
Activity ACEID/6	–	Facilitating and promoting exchange of persons among the Member States and in the APEID network.
Activity ACEID/7	–	Organizing periodic review of and consultation on APEID in general and of the work plans in particular.
Activity ACEID/8	–	Collaborating with the National Development Groups in identifying centres of innovation and developing their areas of co-operation with other centres in the network.
Activity ACEID/9	–	Providing technical support to NDGs and national centres of innovation in participating countries in organization of activities, including training activities, within the framework of the APEID network.
Activity ACEID/10	–	Collaborating with other international as well as regional organizations which have similar aims in the promotion of educational innovation for development.

ANNEXES

ANNEX I

LIST OF PARTICIPANTS

Afghanistan

Dr. Abdul Aziz Hamid
Vice-President
Department of Teacher Education
Ministry of Education
Kabul

Bangladesh

Mr. Quazi Md. Munzur-i-Mowla
Joint Secretary
Education Division
Ministry of Education
Bangladesh Secretariat
Dacca

Dr. A. M. Sharafuddin
Joint Secretary-in-Charge
Science and Technology Division
Ministry of Education
Bangladesh Secretariat
Dacca

India

Dr. M. B. Buch
Professor and Head
Centre of Advanced Study in Education
M. S. University of Baroda
Baroda

Dr. Udai Pareek
L. and T. Professor of Organizational Behaviour
and Area Chairman
Indian Institute of Management
Vastrapur, Ahmedabad-380015

Indonesia

Dr. Setijadi
Chairman, Office of Education and Cultural Research and Development (BP3K)
Chairman of the National Development Group
Ministry of Education and Culture
Jakarta

Indonesia (Cont'd)

Mr. Rachmat Wiradinata
Director, Centre for Educational and Cultural Research
Jakarta

Mr. Siswoyo
Director, Educational Research and Development Centre
Professor, IKIP (Teachers College)
Jakarta

Iran

Dr. J. Golestaneh
Chief of Education
Iranian National Commission for Unesco
Teheran

Japan

Mr. Toru Sawada
Deputy Director General of Science and International Affairs Bureau
Ministry of Education, Science and Culture
Tokyo

Mr. M. Watanabe
Deputy Director
Educational and Cultural Exchange Division
Unesco and International Affairs Department
Science and International Affairs Bureau
Ministry of Education
Tokyo

Prof. M. Naruse
Chairman, Japan Council of Educational Technology Centres
Professor, Curriculum Research and Development Centre
Faculty of Education
Gifu University
Gifu

Japan (Cont'd)

Dr. K. Koizumi
Chief, Section for Educational
Research Workshops in Asia
National Institute for
Educational Research
5-22 Shimomeguro, 6-chome
Meguro-ku
Tokyo

Malaysia

Mr. Abdul Aziz b. Ismail
Deputy Director-General of
Education
Ministry of Education
Kuala Lumpur

Mr. Mohd. Ali Ithnin
Senior Examination Specialist
Examinations Syndicate
Ministry of Education
Kuala Lumpur

Nepal

Mr. T. M. Sakya
Member Secretary
National Education Committee
Chairman of National Development
Group
Ministry of Education
Kathmandu

Mr. J. M. Adhikari
Rector, Tribhuvan University
Kathmandu

Pakistan

Dr. Tahir Husain
Joint Secretary/Joint Education
Adviser
Deputy Chairman, National
Development Group
Ministry of Education
Islamabad

Dr. R. A. Shah
Joint Secretary/Joint Educational
Adviser
National Bureau of Curriculum
and Textbooks
Ministry of Education
Islamabad

Philippines

Dr. A. T. Morales
Director
National Research and Development
Centre for Teacher Education
Chairman of the National
Development Group
Department of Education and Culture
Manila

Mr. V. G. Suarez
Assistant Secretary
Department of Education and Culture
Manila

Singapore

Mr. John Yip
Assistant Director of Education
Ministry of Education
Singapore

Mr. Woon Ho Thye
Senior Media Adviser
Singapore Educational Media Service
Institute of Education Campus
Paterson Road
Singapore 9

Sri Lanka

Mr. K. D. Ariyadasa
Deputy Director General of Education
Curriculum Development Centre
Ministry of Education
Colombo

Thailand

Mr. Charoon Vongsayanha
Under-Secretary of State for
Education
Chairman of the National Development
Group
Ministry of Education
Bangkok

Mr. Prapat Saengwanit
Secretary-General
Thailand National Commission
for Unesco
Ministry of Education
Bangkok

Thailand (Cont'd)

Mr. Sunthorn Sunanchai
Director
Adult Education Division
Department of General Education
Ministry of Education
Bangkok

Dr. Panom Pongpaibool
Acting Director
Educational Research Division
Office of the National
Education Commission
Sukhothai Road
Bangkok

Miss Napa Bhongbhibhat
Acting Director
Centre for Educational Technology
Department of Educational
Techniques
Ministry of Education
Bangkok

Mrs. Srinoi Povatong
External Relations Officer
External Relations Division
Office of the Under-Secretary
of State for Education
Ministry of Education
Bangkok

REPRESENTATIVES/OBSERVERS

SEAMEO

Mr. Khoo Eng Choon
SEAMES Assistant Director for
Programme
920 Sukhumvit Road
Bangkok

Mr. Chin Pin Seng
Centre Director
SEAMEO Regional Centre for
Education in Science and
Mathematics (RECSAM)
Glugor, Penang, Malaysia

WHO

Miss I. Bjorkroth
Nurse Educator, representing
WHO Regional Office for South
East Asia at New Delhi

THAI ORGANIZING COMMITTEE, MINISTRY OF EDUCATION, BANGKOK
For Programme Development Meeting on APEID

Mr. Prapat Saengwanit, Chairman
Mr. Pradol Tantiwongse, Adviser
8th Regional Education Officer
Chiangmai Education Officer

Mrs. Choob Buspavanich
Mrs. Songsri Sivakua
Mrs. Srinoi Povatong

UNESCO SECRETARIAT

Unesco Regional Office for Education in Asia/Asian Centre of Educational Innovation for Development (ACEID), Bangkok

Mr. Raja Roy Singh
Director

Dr. A. Latif
Chief of ACEID

Dr. Thamrong Buasri
Curriculum Specialist,
ACEID

Mr. A. Dyankov
Instructional Materials Specialist
ACEID

Mr. R. L. Hurley
Specialist in Design and Management
of Educational Innovations
ACEID

Dr. H. K. Paik
Specialist in Training Methodology
ACEID

Dr. M. C. Pant
Specialist in Science Education
ACEID

Mr. M. S. Ramos
Specialist in Adult Education
ACEID

Miss Charatsri Vajrabhaya
Assistant Programme Specialist
ACEID

Mr. R. Watanabe
Associate Expert in Educational
Technology
ACEID

Mr. N. Sagara
Administrative Office

Mr. W. A. Simpson
Publications Officer

Mr. C. T. Crellin
Educational Adviser

Unesco Headquarters, Paris

Mr. E. Prabhakar
Chief, Asia Section
Operational Programmes Division
Education Sector
Unesco, Paris

Dr. F. Vohra
Division of Science, Technical and
Vocational Education
Education Sector
Unesco, Paris

ANNEX II

COMPOSITION OF THE THEME GROUPS

Group on Education for Integrated Rural Development

Dr. M. B. Buch (Chairman)

and

Group on Education for Better Health and Nutrition

Mr. J. M. Adhikari (Chairman)

Miss Napa Bhongbhibhat
Miss I. Bjorkroth
Dr. A. T. Morales
Mr. Quazi Md. Munzur-i-Mowla
Dr. U. Pareek
Mr. T. M. Sakya
Mr. Rachmat Wiradinata
Dr. F. Vohra

ACEID staff: Dr. A. Latif

Group on Universalization of Education at the Early School Levels and Functional Education for Out-of-School Youth and Adults

Dr. Setijadi (Chairman)

and

Group on Education for National Unity and International Understanding and Co-operation

Dr. K. Koizumi (Chairman)

Dr. J. Golestaneh
Dr. Abdul Aziz Hamid
Dr. Tahir Husain
Mr. Abdul Aziz b. Ismail
Prof. M. Naruse
Dr. Panom Pongpaibool
Mrs. Srinoi Povatong
Mr. Prapat Saengwanit
Mr. V. G. Suarez
Mr. Woon Ho Thye
Mr. E. Prabhakar

ACEID staff: Dr. H. K. Paik

Group on Education for Development of Productive Skills Relevant to Economic Development

Mr. K. D. Ariyadasa (Chairman)
Mr. Chin Pin Seng
Mr. Md. Ali Ithnin
Dr. R. A. Shah
Dr. A. M. Sharafuddin
Mr. Siswoyo
Mr. Sunthorn Sunanchai
Mr. M. Watanabe
Mr. John Yip
Mr. A. Dyankov
ACEID staff: Mr. R. Watanabe

ANNEX III

COMPOSITION OF THE AREA COMMITTEES

I. Management and Non-formal Education

Dr. J. M. Adhikari
Miss I. Bjorkroth
Mr. Khoo Eng Choon
Mr. Quazi Md. Munzur-i-Mowla
Mrs. Srinoi Povatong
Mr. Prapat Saengwanit
Mr. Sunthorn Sunanchai
Mr. M. Watanabe
Dr. U. Pareek (Convenor)

ACEID staff: Dr. A. Latif
Mr. R. L. Hurley
Mr. M. S. Ramos

II. Curriculum and Educational Technology

Mr. Aziz b. Ismail
Dr. K. Koizumi
Prof. M. Naruse
Dr. R. A. Shah
Mr. E. Prabhakar
Mr. K. D. Ariyadasa
(Convenor for Curriculum)
Mr. John Yip (co-convenor)
for Curriculum)
Mr. Woon Ho Thye (Convenor
for Education Technology)

ACEID staff: Dr. T. Buasri
Mr. R. Watanabe

III. Teacher Education

Dr. M. B. Buch
Dr. J. Golestaneh
Dr. A. T. Morales
Dr. Panom Pongpaibool
Mr. Siswoyo
Dr. A. Aziz Hamid (Convenor)

ACEID staff: Dr. H. K. Paik

IV. Science and Vocation Education

Mr. Chin Pin Seng
Mr. Md. Ali Ithnin
Dr. A. M. Sharafuddin
Mr. Rachmat Wiradinata
Mr. C. T. Crellin
Mr. A. Dyankov
Dr. F. C. Vohra
Dr. Tahir Husain (Convenor)

ACEID staff: Dr. M. C. Pant

EDITORIAL BOARD

Dr. M. B. Buch (Chairman)
Mr. Chin Pin Seng
Mr. Quazi Md. Munzur-i-Mowla
Dr. R. A. Shah
Mr. M. Watanabe

Thailand National Commission for Unesco

Mrs. Srinoi Povatong

Unesco Secretariat

Mr. Raja Roy Singh
Mr. E. Prabhakar
Dr. A. Latif
Dr. M. C. Pant

REVIEW COMMITTEE

(This Committee was set up by the Programme Development Meeting to incorporate the modifications of the Work Plans of APEID as indicated by the last plenary session of the Programme Development Meeting.)

Dr. M. B. Buch	Chairman of the Editorial Board and Chairman of the Theme Group on Education for Integrated Rural Development
Dr. R. A. Shah	Member of the Editorial Board
Dr. A. Aziz Hamid	Convenor of the Committee on Area of Teacher Education
Dr. K. Koizumi	Chairman of the Theme Group on Education for National Unity and International Understanding and Co-operation
Mrs. Srinoi Povatong	Rapporteur of the Programme Development Meeting

Secretariat

Mr. Raja Roy Singh	Director of the Unesco Regional Office for Education in Asia
ACEID staff	