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ABSTRACT

The last two decades have witnessed a sudden upsurge of new institutions of higher learning in countries of Southeast Asia, and most of these institutions are located in nonmetropolitan areas. What is the nature and function of these metropolitan or regional universities? How do they relate to the metropolitan universities? What role can they play in promoting the regional or subnational development process? How should they interact with the provincial government and the local community in playing this role? How do they relate to their immediate environment? Each of these questions is answered in the various papers presented at the workshop sponsored by the Regional Institute of Higher Education and Development. (MJM)

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ROLES OF UNIVERSITIES IN LOCAL AND REGIONAL DEVELOPMENT IN SOUTHEAST ASIA

Proceedings of the Workshop
Held in Penang
4 - 7 December 1972

Edited
by
Yip Yat Hoong

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PREFACE

The last two decades has witnessed a sudden upsurge of new institutions of higher learning in countries of Southeast Asia, and most of these institutions are located in non-metropolitan areas. What is the nature and functions of these non-metropolitan or regional universities? How do they relate to the metropolitan universities? What role can they play in promoting the regional or sub-national development process? How should they interact with the provincial government and the local community in playing this role? How do they relate to their immediate environment? To answer these and other questions relating to the roles of these new institutions in local and regional development of countries in Southeast Asia, the Regional Institute of Higher Education and Development brought together about thirty participants at a Workshop in Penang in December 1972. The participants at this Workshop were senior members of the academic community, and senior officials of development agencies and ministries of education in the countries of Southeast Asia.

In this report of the proceedings of the Workshop, the Editor has included the discussion which followed the presentation of the papers at each session. The editing of these discussions from tape has been a laborious task, but it is hoped that this will present to the reader a fuller picture of the ground covered at the Workshop.

February 1973

Yip Yat Hoong

WELCOME ADDRESS BY DR. YIP YAT HOONG, DIRECTOR, RIHED

Many of the new universities in Southeast Asia have been located and developed with the implicit purpose of providing sources of stimulation for regional or sub-national development processes. Others have begun to define their roles in terms of regional issues and interdisciplinary approaches to them. Mindanao State, Xavier and Notre Dame Universities in Mindanao in the Philippines, the provincial universities of Indonesia, Chiangmai, Khon Kaen and Songkhla Universities in Thailand, and the Science University of Malaysia are examples of institutions which, whether by programme, concept, intent or circumstance, display dominant interests in regional problems.

Two trends seem to underlie the progress of a regional orientation in Southeast Asian universities. One is the growing academic attraction to interdisciplinary 'environmental' perspectives of education, research and development, and the relevance of regional emphasis for implementation of such perspectives. Another is the growing governmental belief that national social and economic development, if it is to occur beyond major urban centres, requires the decentralized growth of skills, organizational capacities and development programmes. It is believed that the merger of academic and governmental interests in regional institutions can create viable contexts for coordination between government development agencies, universities and local communities. As such, regional universities can provide the arenas for such coordination.

Certain common characteristics of regional situations may be observed in Southeast Asia.

First, regions are unique. Each possesses its own natural conditions, economic prospects, and institutional possibilities. Each is likely to require approaches to development that differ from those applying elsewhere.

Second, regional universities are generally young, weak, and relatively flexible. Their capacities are limited, but they are responsive to promising innovations. Typically, they are searching for an identity, for the nature of their regional roles and for the programme possibilities in research and education that these roles would suggest.

Third, they are isolated. As organizations, they lack opportunities to share ideas and experiences with others like themselves or to draw upon the resources of established national institutions. Staff members have little access to the stimulation of their professional peers.

Fourth, government development agencies generally lack regional approaches

to their missions. If they are regionally oriented, they are weak; if they are nationally oriented, they are relatively insensitive to specific regional needs.

Fifth, effective modes of interaction between regional universities and government development agencies and between regional universities and the more established national universities have yet to materialize. In part, this is because the parties perceive little benefit arising from interaction. The perception is itself a symptom of undefined regional concepts and roles.

The main purpose of this Workshop is to provide an opportunity for the sharing of experiences among regional or non-metropolitan universities and government development agencies facing somewhat similar problems relating to an interdisciplinary 'environmental' approach to social and economic development.

It is believed that:

- (i) Regional programmes will be strengthened as universities and government development agencies develop mutually beneficial exchanges of information, skills and support appropriate within their regional contexts.
- (ii) Such exchanges will enhance, on the one hand, the development of capacities in regional or non-metropolitan universities to provide useful regional services and, on the other hand, the responsiveness of national or metropolitan universities to regional needs.
- (iii) As the rationales for regional programmes evolve, they will suggest appropriate roles and activities for universities and government development agencies, as well as modes of coordination among them.
- (iv) As these exchanges display their possibilities, the content of university curricula and research programmes, and the mechanisms by which government development agencies elicit, utilize and sponsor research and training, programmes can begin to complement one another.
- (v) Interdependence can then begin to emerge in congruence with patterns required for integrative regional activities.

During this and the following three days, the Workshop will be exploring five areas of concern within the theme of the roles of universities in local and regional development in Southeast Asia. The Workshop will start off this afternoon by examining the nature and functions of the regional or non-metropolitan university. Of interest to participants and observers will be the distinctive roles and purposes of the regional or non-metropolitan university in overall national and regional development; relationships of the university to its socio-natural environment and to the problems of development it contains; and the possible innovative programmes and approaches to training and research, particularly of a multi-disciplinary nature. Of interest to participants and observers too, will be the characteristics of the regional or non-metropolitan university and the problems it faces in institution building.

In its second session, the Workshop will be examining the relations between the regional and the national or metropolitan university. This session will discuss

the cooperation between regional and national or metropolitan universities and among regional universities in terms of teaching and research; consultation in preparation of teaching programmes, sharing of facilities and interchange of teaching and research staff; and the potential benefits arising from such cooperation. The Workshop will be paying special attention to the mechanisms for this cooperation, the problems involved and the means of overcoming them.

The third session of the Workshop will discuss the relations between the universities and the government. It will look into potential areas of cooperation between the university and the government development agencies attempting to implement development programmes at regional and local levels; problems of such cooperation and means of overcoming them; role of the national government in planning and coordinating inter-university development; and role of the national government in encouraging coordination of development agency and university activities at regional levels.

The fourth session, as an extension of the third, will look into the relations between the regional university and the provincial government. Of special interest will be cooperation between the regional university and the provincial government in regional development planning through teaching, research and consultation; and coordination between regional and national or metropolitan universities' developmental efforts and between regional and national development plans. Also to be looked into will be the mechanisms of cooperation and coordination, the problems involved and the means of overcoming them.

The fifth session will be confined to the regional university and its environment. Topics to be discussed during this session include the roles and purposes of the regional university in the development of local communities and human and natural resources; the university as a source of techniques for and ideas about the productive and wise development of regional resources and as a source of innovations that will improve the management of land, water and forest resources; the university as a forum and catalyst for regional integration of dispersed development programmes and disciplined research activities; and the university as a source of information and skills relevant to local conditions and needs.

The sixth and final session will be devoted to preparing recommendations that might be useful to universities and governments of countries in Southeast Asia.

RIHED is grateful to the Science University of Malaysia for hosting this Workshop in Penang. As the host, the University has been extremely generous in making available to RIHED its physical facilities as well as the services of its Registrar and staff. RIHED wishes to thank the Vice-Chancellor of the Science University of Malaysia, Tan Sri Professor Hamzah Sendut, for this generous gesture. The success of this arrangement with the Science University of Malaysia has convinced RIHED that it should have similar collaboration with other universities in this region for holding its future Workshops.

RIHED, the Science University of Malaysia and the participants and observers of this Workshop are honoured by the presence of His Excellency the Governor of Penang, Tun Syed Sheh Alhaj bin Syed Hassan Barakbah, at this official opening of the Workshop today. It gives me great pleasure to call upon His Excellency the Governor of Penang now to deliver his opening address for this Workshop.

**OPENING ADDRESS BY HIS EXCELLENCY,
TUN DATUK SYED SHEH ALHAJ BIN
SYED HASSAN BARAKBAH, THE GOVERNOR OF PENANG**

It is, indeed, a pleasure and a privilege to be asked to say a few words to such a distinguished gathering of scholars from various universities in Southeast Asia and to declare open the Regional Institute of Higher Education and Development Workshop. Your choice of the Science University of Malaysia as the venue for this Workshop brings honour not only to the university but to the State of Penang as well, for it reflects your confidence in the potentialities of this state as a centre of learning.

The coming together of the cream of intellectuals from seven countries in Southeast Asia to discuss the role of universities in local and regional development will provide an excellent opportunity for you to address yourselves to the increasingly complex problems that beset higher education in this region. I am sure you will in a concerted and corporate effort, identify and analyze these problems, and suggest appropriate solutions, so that we may evolve a more dynamic and realistic programme in keeping with the needs of our societies. RIHED provides a medium for the constant pooling and interchange of ideas of research and experience for the common, cumulative benefits of all member countries. All of us shall eagerly await the results of your deliberations.

We are living in a very exciting era full of challenges. We are rapidly moving towards the year 2000. It is closer to us in time than the outbreak of the Second World War. While I am not asking you to delve into the world of the futurist who plans beyond the year 2000, I would ask you to be one step ahead of the technocrat whose planning spans five, ten or fifteen years.

As educational planners you obviously have to plant your feet firmly on the ground, but you must also at the same time undoubtedly provide that extra imagination which may be utopian to most, but which your special knowledge and experience can best translate into reality. While at the moment there may appear no relevance or necessity to go along with Cedric Price and his 'thinkbelt' of a mobile university to cater for 20,000 students, and while at the moment we may not yet be thinking of the super industrialism of the post-industrial age, there is no reason why we should not extend the horizons of our planning a little further, for by the year 2000, ideas and innovations which may seem to be revolutionary today will have become commonplace. We must be careful that in formulating our present short-term plans we do not clog up and suffocate the long-term needs of human society.

Your theme: The role of universities in local and regional development in Southeast Asia, is both a timely and appropriate one and I hope you will accord to the concept of development a broader range of meaning, and view it in a wider perspective. Man's mastery of science and technology has brought about accelerated development in affluent societies and in developing nations, resulting in unprecedented levels of wealth. Efforts are now being made to effect a more equitable sharing of this wealth, of the resources and opportunities inherent in a country, so as to further improve the standard of living of our peoples. We must rethink and reappraise the goals which economic progress is supposed to serve. In order that this reconciliation between material progress and our social objectives be achieved, we should get our priorities correct, and be selective about the type of industries we need in our development programme. We should bypass the mistakes learnt by other countries in their progress towards the industrial and post-industrial society. Their pattern of permitting industries to spring up haphazardly so long as these industries promised capital inflow and employment potentialities, may no longer be adequate or even good for us. We should be more discriminating in our choice and aim at a form of industrialization based on the recycling of resources and on technologies of improved conservation to avoid the problems of pollution.

Through the ages the major threat to man's existence has come from nature. Today the position is more complicated, and the principal threats to nature and to mankind come from man himself. Walt Whitman's lyrical appreciation of the cheerful sight of smoke pouring from industrial chimneys in the early days of the USA is now very far removed from history and reality. At present the 'never-ending line' of acrid smoke belched out by industrial plants, the noxious fumes emitted by automobiles in cities and the indiscriminate burning of agricultural wastes in the countryside, incessantly pollute our atmosphere. Chemical residue emptied into our rivers, aggravated further by insecticides and pesticides that flow freely in our paddy-fields and streams, pose a real danger to fresh water life that forms a substantial part of the diet of our population. Sewage, industrial effluence and toxic wastes flowing into the sea, and oily discharges from ships and tankers, all threaten marine life. Therefore, something must be done, and done quickly, to arrest the building up of this atmospheric and oceanic pollution. This then is one of the major areas in which universities have a vital and positive role to play. Your strategy of action, and the results of your studies and researches, should be placed at the disposal of governments and other allied agencies in our region.

In the setting up of industries in the context of national development, universities can also play an important role in seeing that apart from the consideration of economic and financial factors, feasibility studies also incorporate environmental analyses. In doing so, universities will to a great extent augment government's effort at determining a more happily-balanced industrial growth.

Values change from time to time and perspectives alter over the years. The early concept of the pursuit of knowledge for its academic satisfaction now belongs to the realms of history. As they become more and more involved in problems faced by the nation, universities become part and parcel of the daily existence of our people. The resources of universities and their reservoir of expertise should be tapped to the advantage of government and the private sector. It is time now that there exists a triangular interaction of ideas and experience between government and universities, between government and the private sector, and between universities and the private sector. The possibility of periodic rotation of personnel among these three sectors should be seriously looked into. In this way we shall be able to ensure the total involvement and optimum use of the best brains available in the country; in this way we shall be able to ensure the updating of our knowledge and practical experience; and in this way we shall be able to ensure that the maximum benefits arising from our development projects will be channelled to our peoples so as to provide them with a richer, happier and more meaningful life. I wish this Workshop every success.

On a less serious note - but an equally important one - I hope delegates will take time off to enjoy the wide and varied form of natural beauty that our island provides, and thus return to your countries refreshed for the rigours of university life that lie ahead of you.

Ladies and gentlemen, I now have great pleasure in declaring this Workshop open.

PART I

NATURE AND FUNCTIONS OF THE REGIONAL UNIVERSITY

NATURE AND FUNCTIONS OF THE REGIONAL UNIVERSITY

Arwari Dilmy

HISTORICAL BACKGROUND

Most of the universities in provincial capitals of Indonesia, apart from the University of Indonesia in Jakarta, Gajah Mada University in Jogjakarta and Airlangga University in Surabaya, were established around 1957 by private foundations and adopted by the Central Government in subsequent years.

The new universities, however, mostly owed their establishment to local politicians and administrators, who thought more of the prestige that the presence of a university would supposedly bring than of the needs of the surrounding region and the practical problems of the future growth of the university.

It is obviously essential, for the sake of a region, that the oldest section of the community be given the opportunity of an education beyond senior high school level. Before the 1950's, however, only students with substantial private backing could take their education beyond the high school level because they were required to enroll in the universities and colleges of Java, such as the University of Indonesia in Jakarta, IPB in Bogor, Bandung Institute Technology in Bandung, Gajah Mada University in Jogjakarta, Diponegoro University in Semarang, Airlangga University in Surabaya, and so on.

If an expansion of higher education on any meaningful scale was to be possible and the growth of regional and social imbalance reduced, then the establishment of universities in the major provincial capitals was an absolute necessity.

It is important at this stage to point out the attitude to higher education of the 'ruling class' during this period. They saw in the university simply an extension of the high school with the same organization and the same traditional teaching methods. They were certainly unaware of the university's potentials in broader terms as a centre for regional culture or as an agent of modernization. In addition, the 'ruling class' had worked themselves into a dilemma, for on the one hand, they welcomed the university for the prestige it seemed to bring, but on the other hand they were apprehensive of the graduates and university staff who would compete with them for government jobs and the more lucrative openings in the city in general.

This gives an indication of the sort of problems the new provincial universities were up against. The University of Lambung Mangkurat was no exception. It thus serves as a useful example of the pattern of development of provincial or regional universities in the years since their foundation.

THE GROWTH OF THE REGIONAL UNIVERSITY

The University of Lambung Mangkurat (Unlam) was founded as a centre for higher education in 1951. The impetus came from ex-leaders of the 4th Division of the Indonesian Navy together with officers of the Kodam X. Lambung Mangkurat and prominent civilians in Banjarmasin, Jakarta and Bogor. Though Unlam was founded on a private basis, the Central Government assumed overall responsibility for it in 1960. Four faculties were in existence at that time: Economics, Law, Social Politics and Islam. Subsequent years saw the opening of the Agriculture Faculty, the BI course, i.e. junior high school teacher training.

In 1963 the newly-formed Teacher Training Faculty and the College of Education became a branch of IKIP in Bandung. Other later additions to the University were the faculties of Fisheries, Forestry and Technology.

In 1962 the Islamic Faculty broke away to become the State Institute of Islam under the Department of Religion. In 1969 the Education Faculty was reunited with Unlam to become the twin faculties of Teaching and Education. At the present time then Unlam has nine faculties. The faculties of Economics, Law, Social Politics, Education and Teaching are in Banjarmasin itself and the faculties of Agriculture, Fisheries, Forestry and Technology are in Banjar Baru, a new administrative settlement some 35 kms. from Banjarmasin.

It is obvious that in absolute terms the growth of Unlam over the last fourteen years has been very slow, although it was moderately faster than other universities in Kalimantan.

One of the principal reasons for this slow rate of growth is that funds allocated by the private foundation for the five-year period 1957-62 came only in irregular, unpredictable and hard fought-for instalments. This unreliable source of funds was halted altogether when the foundation itself was wound up in 1965.

This left the University virtually without funds apart from the 15 per cent. of its annual requirements contributed by the Central Government. This amount was sufficient to maintain the University administration and a limited amount of teaching in operation but was not enough to support a larger, expanding educational programme.

Academic and administrative staff members could see no way of attracting additional funds to the University and the situation was further aggravated by competition amongst faculty and departmental heads for what little funds remained.

No channels of communication between the University and the provincial administration could be opened whilst university staff members were wholly pre-occupied with internal affairs.

Thus in the first ten years of its existence Unlam could neither establish an identity nor hope to become aware of its wider responsibilities whilst such a confused and parochial view of its functions was predominant.

It can be seen then that during this longer period Unlam advanced only a

little way beyond being an extension of high school and was certainly not a university in the sense that it imaginatively sought to become an agent of development and a centre for culture within the region as a whole.

The late 1960's and early 1970's have seen Unlam waking up to its broader responsibilities in the developing provinces of Kalimantan. The needs for external cooperation and the functions of education, research and public service took on a new significance.

It is important to realize that the initial impetus for this reorientation came from within the University itself and was not imposed from above. The post of Rector had been vacant from 1966 to 1971, his duties being performed by a board which met infrequently. In 1970 a group of academic staff, gathered in the so-called 'senate', concerned at the University's lack of purpose and direction, came together to ask the President *via* the Minister of Education and Culture to appoint a new Rector.

Their efforts were rewarded by the appointment of a prominent research scientist as Rector; the setting up of regional research projects in all the nine faculties; and more generally, a quickening of interest in Unlam and its potential by the Department of Education.

In this way, Unlam has set itself the task of accumulating and processing information about the human and natural resources of South Kalimantan and will become a central information bank for any future developments in the province and Kalimantan as a whole.

As has already been stated, the rate of growth of Unlam up to this time was slow. For the period 1961-70 the annual growth for certain representative sections of the University is as follows:

Textbooks, reference books and magazines	2 %
Accommodation for academic and administrative staff	2½%
Classrooms and classroom equipment	1 %
General equipment facilities	1 %
Teaching staff and laboratory technician appointments	5 %

The 1973 budget however sees an increase of 25 per cent. on the 1972 contribution from the Ministry of Education. This and the allocation of a further 120 million rupiahs by the Central Government for the student centre and other buildings in 1977-8 means that in the coming years all the basic functions will be in operation again and Unlam will be ready to embark on a comprehensive educational and research programme within the region.

The change of fortune that Unlam has experienced recently has not necessarily been shared by all other universities outside Java. Several barely seem to justify their existence.

President Sukarno had encouraged provinces to open a university in their respective provincial capitals; but in practical terms many of these capitals lacked the size and regional significance to support a fully established university.

Many of these universities still struggle on but the present Central Government is allocating sufficient funds for a single integrated faculty only in the less important provincial capitals. This kind of rationalization is happening in Java too. The Rector of Airlangga University in Surabaya, Dr. Erie Sudewo, is trying to incorporate the various universities and colleges and institutes of East Java into one East-Java University, with principal faculties in Surabaya and branches in Malang, Pasuruan and so on.

In the first half of 1972 the President of the Republic of Indonesia instructed that all centres of higher education, apart from those involved in industrial training, should come under the Ministry of Education. In addition he instructed that all centres of higher education including IKIP and various academies within any city should amalgamate with the principal university there.

It has been recognized then, by those responsible for long-term educational planning, that civic pride is not a sufficient reason for the existence of a university. It must justify itself in terms of the efficiency of its own internal organization and the contribution it makes to the region as a whole.

ROLE OF THE REGIONAL UNIVERSITY IN LOCAL AND REGIONAL DEVELOPMENT

Both university planners and academic staff are firm in the belief that an efficient university in a provincial or regional capital must become the centre for cultural activity and an agent for resource development within that province.

The adoption of the term 'regional' for the university also gives it a greater national significance in terms of achieving the overall educational goals of the nation and in this way it can be said that the regional university stands on a par with the 'Five Centres of Excellence' in Indonesia, although in practical terms it may have some distance to cover. The term 'regional' then, brings with it greater genuine prestige and implies a sense of national purpose, but it also involves a much greater practical duty to become a centre for research and innovation within the region as a whole. Unlam, as an example, is already taking this responsibility seriously.

The natural environment of Banjarmasin, where the Lambung Mangkurat University is situated, is low-lying tidal swamp and forest. For centuries the population of South Kalimantan has supported itself with a combination of fishing, animal husbandry and the growing of swamp padi and other basic food crops. Reflecting this, the long-term planning of the University seeks to concentrate on the agricultural technology of the tidal regions, including animal husbandry and fishing and the reforestation of the *lullang* fields with useful tree species and other export products.

In other regions also the regional universities are already playing their part in the development of their respective regions. The University of Syiah Kuala in Banda Atjeh, Kutaraja, Northern Sumatra, is now the focus of the Atjeh Develop-

ment Board; and the Hasanudin University in Ujung Pandang, Makassar, South Sulawesi, has prepared the first five-Year Regional Development Plan for Eastern Indonesia. During the period April to September 1972, several regional universities were instructed by the National Planning Bureau and the Ministry of Education and Culture to coordinate the collection of data for the second national five-year plan. Unlam was given the job of coordinating this collection of data from all four provinces of Kalimantan. This task will help to lighten the load of the Central Government.

Acting on this public function, the relationship between the regional university and the regional planning agencies are more direct than relation with the national planning agencies. In regions where planning agencies are not fully established the regional university has come to be regarded as the principal institution for regional planning, in view of the existence of qualified personnel and suitable research facilities there. This was the case with the University of Syiah Kuala and is now so with Unlam.

Since October 1972, 60 per cent. of the planning work in South Kalimantan is being done by Unlam. Of the thirteen members of the Provincial Planning Bureau, nine are staff members of Unlam and the Rector and Dean of the Economics Faculty are Chairman and Vice-Chairman of the Bureau, respectively.

In the city of Banjarmasin we see the same trend. The Lambung Mangkurat University staff members are taking an active part as advisers and committee members in a variety of the city's administrative, financial and cultural activities.

Right at the other end of the scale, at the level of basic production, agricultural students from Unlam, in cooperation with the Provincial Agricultural Service, are working in the fields with the farmers to demonstrate improved methods of planting, use of fertilizers and the combating of crop diseases. More generally, they are helping to implement a planned shift from monoculture to multiculture and a reduction in rubber planting; balanced by an increase in the production of coconuts, cloves, tangerines, nutmegs and pineapples.

Thus, although the University itself is situated in the regional capital it is developing strong links with the surrounding countryside. By recruiting many of its students from the villages, the University further strengthens these links. This sense of responsibility to the surrounding rural areas of the region fulfilling its public service role will be further demonstrated in practical terms in 1973, when students will have to work and study in the villages as part of the new doctoral programme. This programme is being carried out in cooperation with the Labour Department and the *surjana butsi* volunteers, who are university graduates who undertake to work as volunteers in the villages for periods of up to two years.

CHARACTERISTICS OF THE REGIONAL UNIVERSITY:

PROBLEMS OF STRUCTURE

Having talked generally about the various functions of the regional university

within the region, we arrive at the problem of the more practical distribution of time and resources between the education function to produce qualified graduates and the development of the public service function.

Most of the regional universities simply do not have enough qualified research workers, planners or community workers to fully implement the public service function.

During the period April - September 1972 when the University was collecting and processing data for the second five-year plan, the university staff members at Unlam had to act as planners and social-research workers. This exerted a strain on members individually and produced dislocations in the teaching programmes. As well as having to deal with this kind of periodic demand on their time, teaching staff have become too heavily involved in the day-to-day administration of the University and faculties, cutting down the time available for more basic functions such as research and teaching.

A solution to this and other difficulties in the social service side of Unlam's role as a regional university will hopefully be found in the imaginative use of a Ford Foundation grant made to Unlam for a two-year period starting in August 1972. The grant provides for assistance to the University's faculties of Agriculture, Economics, Forestry and Fisheries, and to certain supporting university-wide programmes, with the intent to strengthen the University's capacity to contribute to provincial development efforts. Staff development in the above faculties and the University administration will be supported by foreign training at Asian and Australian institutions, and by domestic training at leading Indonesian institutions. The grant further provides for equipment, books, publications and supplies, for consultants in the areas for which training, equipment, and other material assistance is being provided, and for regional development research and seminars.

The Central Government has given Kalimantan an important place in the development of Indonesia over the next few years. By working to fulfill its function as a regional university, Unlam is actively seeking a leading role in that development and by so doing has ensured that the future of Unlam and the future of Kalimantan as a whole are now inseparably linked.

NATURE AND FUNCTIONS OF THE REGIONAL UNIVERSITY

Bimala Kalakichu

BACKGROUND

Universities in Thailand were traditionally confined to being located in Bangkok, the capital city. The idea of establishing regional universities was initiated in 1931 with the provision of land in three main provinces in different regions, but the plan was set aside during World War II. It was not until the early 1960's that the government revised the original plan in accordance with its Regional Development Plan and preliminary preparations were undertaken for the establishment of three regional universities. This plan was part of the National Development Plan for Economic and Social Development for the whole country. The establishment of these new universities reflected the philosophy of education of the Thai government whose aim is to provide opportunities for higher education for all communities.

ROLES AND PURPOSES OF THE REGIONAL UNIVERSITY

In broad terms, the functions of the universities in the modern world is administered to seek and cultivate new knowledge; to provide the right kind of leadership in all walks of life; to provide society with competent men and women trained in various professions; to strive to promote equality and social justice; and to foster through its members the attitudes and values needed for developing the appreciation for the traditional, cultured life in individuals and society. Regional universities are established for the development of education but they must also provide economic and industrial opportunities for the local communities in accordance with the needs of the region. Thus a regional university has to be related to the resources and endowments of that region; and the devising of techniques in various fields, appropriate to the pattern of regional resources, is one of its primary functions.

To determine whether a new university should be a full university or not and what trend it should take depends upon the needs of the region. Administrators should first consider what type of personnel or manpower a specific region needs and this must be kept in mind while consulting with the people living in the region or their representatives.

The Thai government established the first two regional universities in Chiang-mai and Khon Kaen provinces with emphasis on the urgent needs of the regions. The first university was founded with three faculties initially i.e. Humanities,

Science and Social Sciences; while the second started with the faculties of Agriculture, Engineering, and Science-Arts (which was a service centre for courses in basic sciences and language and was envisaged to later develop into two individual faculties as demand increases). Khon Kaen University will expand in the future with the addition of a Health Science Centre which will comprise various faculties in medical sciences.

The possibilities of development of Khon Kaen University come from the co-operation of the Committee for Promotion of University Activities appointed after the establishment of the University. Representatives for the committee were selected from active leaders of the sixteen provinces of the Northeast region. From this Committee the University is able to probe the demands and needs of the region and also gain support and cooperation for its long-term development programme.

The following points must be borne in mind when considering the development of Khon Kaen as a university for the Northeast region.

- (i) A regional university is established to decentralize higher education in order to prevent migration of the younger generation from the provincial regions into the urban centres which are already overcrowded. At the same time development should be attempted for education at the lower levels. Failure to promote education at lower levels will create unsatisfactory results in the education of people at the higher institutions of learning, and will bring many problems which are difficult to solve. If we promote higher education *alone* it will be difficult, eventually, to find really good students for the regional university, for most of the students who enroll will be those who failed to enter the established national universities in the central region. This is the problem which Khon Kaen University and other regional universities has been facing since the time of their establishment, and we do not know how long this will continue. Because of this, the standard of academic training in regional universities may be lower than that of the more established universities and it will be difficult to persuade senior and experienced personnel from the central region to work in the local communities, although there are proper incentives offered to the recruits. Most people would prefer to work in the central region rather than in a region where there is no guarantee for the welfare of a family with growing children.
- (ii) A regional university should be the centre of higher learning for the region. Once established it should try to maintain high standards of academic training and be able to assist the existing institutions to promote their academic status by means of cooperation and technical assistance. Long-term planning should be devised for the extension of the university into other populated provinces which will eventually develop into individual universities to meet the increasing demand of the region. In the initial

stage the regional university will act as a supporting institution and assist any new institution by providing and sharing well qualified and experienced staff members as well as technical knowhow.

- (iii) ~~A regional university should be the centre for the preservation and promotion of the cultural heritage and traditions of the region, each having its own natural resources, socio-natural environment and problems of development which differs from the others. The university would be the best place as a centre of research to preserve the cultural assets as well as attempting to develop the local communities and human resources to make the best use of its natural resources.~~

PROMOTION OF ACADEMIC STANDARDS AT KHON KAEN UNIVERSITY

In order to increase the standards of academic training at the University and support students of the Northeast region, Khon Kaen University has adopted various methods as follows:

(i) *Enrolment*

To enable students of the Northeast region to enter a university, Khon Kaen University offers places in any faculty to students who are in the top 10 per cent. in each province, as judged by the previous matriculation results. These students then enter without having to sit for the highly competitive entrance examination for placement in all universities in the country. Those eligible need only apply to the University during the time of the examination.

(ii) *Scholarships*

Scholarships to local school students. The University grants a number of scholarships to students who are in the last two years of high school in the sixteen provinces, with the only condition that they must make Khon Kaen University their first choice. This is to enable the poor but good students to continue studying at a higher level and at the same time to encourage the students to continue their education in the region instead of migrating to the crowded urban universities.

Scholarships at the University. A good number of scholarships are granted to first-year students whose permanent residence is in the Northeast region, without any conditions being imposed. They will hold the scholarships through the four academic years provided they maintain good grades.

(iii) *Aptitude Test*

Khon Kaen University administers an aptitude test to first-year students during the oral interview which forms part of the entrance examinations. It is our belief that individual students should have a field of study suited to their personalities, and that they should be concerned with the development and progress of the region. With regard to this future profession, the student should plan to work in the region after the completion of his

studies, so that the original purpose of establishing the university will be achieved.

SOME SUGGESTIONS FOR PROMOTION OF REGIONAL UNIVERSITIES

- (i) *Support from Well-established Universities*
- In the initial stage of development a regional university should be established as a university supported by major campuses in the urban communities. This will help a young university to develop and become mature within a short period. It will enable the new university to share experiences and technical knowledge as well as staff members with those established universities. At the same time, it will attempt to improve the academic standards and recruitment, which normally take a lot of time and financial support.
- (ii) *Incentives to Faculty Staff*
- There should be sufficient incentives to encourage experienced and well-qualified personnel from well-established institutions in the urban communities to work in the regions. Special allowances or non-practising allowances should be provided in sufficient quantity for the teaching staff members, especially those of higher-trained professions which the regional university badly needs. There should be also enough funds for interested staff members to pursue research work in various fields of study.
- (iii) *Improvement of Lower-Level Education and Encouragement for Local Students*
- Being the only institution of higher learning, or one among the few in the region, the regional university should help support and promote the education of the region from the lower levels up to the pre-University level. This could be done by offering refresher or intensive courses in related fields to teachers of the local schools from time to time and, sharing technical knowledge with higher institutions above the secondary level. Encouragement should be given to local school students who are competent but needy and who wish to further their education as far as possible.
- (iv) *Diffusion of Regional Universities*
- Once the university becomes mature and is well-established, it should plan for extension into other developing communities in order to ensure that higher education is accessible to anyone in the region. This could be done by supporting a new institution or organizing summer courses, or offering short courses which are greatly needed in the region, such as agricultural or nursing education in off-campus mobile unit services.

DISCUSSION

Chuan Han

Yip

In discussing the nature and functions of the regional university I wish, at the outset, to explain the term 'regional university' in the context of this Workshop. This is to avoid any confusion over the term which could very well bog down the subsequent discussion. Here I am reminded of a statement in Dr. Ton-That-Thien's paper for a later session that a national university is not necessarily metropolitan and a metropolitan university is not necessarily national.

I must confess that the term 'regional' is not an adequate description of those universities under discussion at this Workshop. The term means *sub*-national rather than *inter*-national, and it may also be called provincial or non-metropolitan. A university may be regional, provincial or non-metropolitan either in its orientation of teaching or research, in its location or in its contribution to its immediate environment. In Indonesia, on the one hand, the term 'provincial' is readily accepted in describing those universities outside the metropolitan areas. In Malaysia, on the other hand, the regional definition is less acceptable. For instance, the Science University of Malaysia is also national in purpose although, because of its location, it also has an important regional role. For convenience rather than for exactness, therefore, let us agree to accept the term 'regional' or 'non-metropolitan' in describing the universities under discussion.

The last two decades have witnessed a sudden upsurge of new institutions of higher learning in Southeast Asia and most of these institutions are located in the non-metropolitan areas. In this session, we are going to examine the nature and functions of these universities *vis-a-vis* their immediate environment. In doing this, we will be examining the roles and purposes of these universities, their programmes of teaching and research and also some of the problems that they face in trying to fulfill these functions. The two papers for this session are written by people who have been involved in the development of regional universities: Dr. Anwari Dilmy, Rector of Lambung Mangkurat University in Banjarmasin in South Kalimantan and Dr. Bimala Kalakicha, Rector of Khon Kaen University in Thailand. Let us now discuss these papers.

Saisuree

Dr. Bimala Kalakicha, whose paper I shall attempt to summarize, has asked me to convey his regrets for his inability to be present at this Workshop.

A summary is somehow a kind of interpretation and to interpret is often to add one's biases to the original thoughts of the writer. In trying to be faithful to the paper of Dr. Bimala, I may at the same time go beyond his premises and conclusions or may omit important points.

Until ten years ago, Thailand had five universities which were all located in the city of Bangkok. A project for the establishment of regional universities was conceived some thirty years ago but did not become a reality until it became a part of the national plan for social and economic development at the beginning of the last decade. The rationale behind this move was based on the well-recognized relationships between development and education. If the social and economic standards of those people who live far away from the cities are to be improved, development in education becomes imperative and this means education up to the university level. Within this context a regional university has to be a focal point of economic, social and intellectual activities in order to constitute a major and significant stimulus in the development process. Thus a university can no longer look at itself as a kind of exclusive club for the benefit of a privileged elite. It has to become more open, accessible and deeply concerned and involved with problems in its environment. The method used has to be in the application of scientific knowledge to the practical problems of life, for example, agriculture, education, engineering and health. It must also become an instrument of understanding and enhancing the traditions and cultural heritage of its environment. This is one aspect of development which is often overlooked.

In every possible way, a regional university must feel, think and act as part of the community where it stands. On the other hand, the community must identify itself with this institution of higher learning and recognize its potential as a resource centre for its development. This two-way process implies that the university must involve local leaders in its development. Staff members and students must make a real effort to go out to the people and show a genuine concern for their welfare and be involved in their social projects. As an example of cooperation between the university and the community, let me cite the establishment of a Committee for the Promotion of University Activities in north-

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east Thailand. This is a body consisting of prominent citizens from each of the sixteen provinces in northeast Thailand. This Committee meets annually to review the activities of the Khon Kaen University and make suggestions for its improvement. This Committee has succeeded in creating a foundation to provide financial help to the University as part of a long-range programme of assistance. On the part of the Khon Kaen University, there are agricultural extension programmes to help the villagers. The University has also become involved with local schools. Work camps have been set up by students in the villages. Other endeavours include the development of curricula and educational materials relevant to the needs of the rural schools. Also established is a regional cultural centre to restore and promote cultural heritage, the wealth of which we have only just begun to realize. Health standards are also upgraded through the establishment of a health centre by the University. These developmental activities promoted by the University, it is hoped, would lessen the need for youths to emigrate to the capital city of Bangkok which is already highly congested.

Another possible contribution of a regional university is in its role as a catalyst to promote cooperation between the various government agencies and private organizations. Often the government and the private sectors have difficulty in working together. The University, because of its neutral position, has access to both the private and public sectors and is often in a position to bring about cooperation between the two sectors in development projects beneficial to the community.

Establishing an institution of higher education in a rural setting does not go without some difficulties. The first problem is recruitment of qualified staff. To attract qualified and experienced staff to a regional university is not easy. Most academic and professional staff prefer the amenities of a large city like Bangkok although it often wonder if air pollution, traffic jams and higher cost of living can be considered as amenities. A regional university must find ways to interest able people to take up its teaching and research appointment. Monetary inducements may be one way but equally important is the challenge it provides, especially to young academics. Young academics are more attracted to such a challenge, especially if there is dynamic leadership to bring out the best in them. This may be the reason why a new regional university often presents the image of being dominated by young academics who are imaginative and creative

but at the same time somewhat chaotic. The lack of experience of many staff members requires that the university administration provides in-service training which has much value in terms of institution-building.

The second difficulty of the regional university concerns the student body. Thai students attach great importance to the name of an institution and it would take some time before a regional university could build up a reputation to match that of the more established universities. In an effort to encourage better students to enter the Khon Kaen University, the university administration accepts automatically those students who are within the top 10 per cent. of their class in the sixteen provinces of the region. In addition, a number of scholarships are offered to students whose homes are in northeast Thailand. In any case it would take some years before Khon Kaen University could build up its reputation high enough to compete with the more established universities in Bangkok for better students. Among the many possible ways of ensuring academic excellence one could consider the establishment of a system of cooperation between the competent and experienced professors of universities in Bangkok and the young instructors of the regional universities. The availability of awards for the training of academic staff overseas is also an important factor for the development of regional universities.

The third difficulty of regional universities in Thailand is in the area of finance. In Thailand all universities are state universities. Rules and regulations concerning budgetary allocations and university management are applicable to all universities, both old and new, in spite of the fact that the needs of individual universities are quite different. These rules and regulations are very rigidly observed and consequently they tend to slow down the rate of growth of some of the new universities; and if one accepts the premise that education is one of the main factors that lead to social and economic development of a region, then the whole process of accelerated development of the region is hindered.

These are some of the points I feel that Dr. Bimala would have liked to emphasize were he here today and I hope they do justice to his thoughts. Personally, I shall be happy if these experiences of Khon Kaen University as a regional institution prove useful to those who are involved in similar ventures. I look forward to your reactions and suggestions.

Abdul Manap It has been highlighted in both the papers of Dr. Bimala and Dr. Dilmy that the regional university should be oriented towards the requirements of the society, especially through interaction with the government and industry, that it should become the 'intellectual centre' for the community and provide consultants to various industries, and that it should have a strong centre to develop research and innovations within the region.

Of all the various roles and purposes of the regional university listed in Dr. Bimala's paper, I would like to spend a few minutes to expand on his statement that the regional university should provide the right kind of leadership in all walks of life. I feel that the regional university has a unique opportunity to do this.

There are two kinds of 'leaders'. One is that who uses authority to compel obedience from his subordinates. The other inspires, persuades and leads by setting the right examples. It is the second type of leaders that the regional university should aspire to produce. A true leader is one who possesses imagination and vision. He thinks ahead and plans beyond the immediate present. He has a goal in mind but he has at the same time a clear conception of what is possible to achieve and what is not. A certain amount of speed and decisiveness is usually found in the make-up of a leader. He is able to decide quickly on a course of action when confronted with a problem. This requires a degree of mental toughness and courage. Even though his course of action may sometimes be unpopular, a true leader will have the mental resources and perseverance to see it through and not be deterred by criticism or adversity. A leader knows how to work with people and is able to bring out the latent potentials in his subordinates. Genuine friendliness and concern for his subordinates are two hallmarks of a leader. He has time for a smile and a friendly chat and he shows sincere interest in the lives, hopes, and dreams of those under his charge. He builds a sense of comradeship with those under him so that they feel free to share their ideas and suggestions with him. A leader does not live in a remote ivory tower. He does not hesitate to call conferences and meetings on which his assistants and subordinates can have an opportunity to share their views with him regarding problems that face their organization. The leader is always able to communicate. He has trained himself to think clearly and, therefore, he is able to express himself with clarity and persuasiveness. In this way, his subordinates can quickly and accurately grasp his ideas. Because of his ability and willingness to communicate, he

is able to create a unity of purpose among his subordinates. A leader is also one who accepts the responsibility for the mistakes of his organization. He consistently sets an example of fairness, integrity and a strong moral character. He is also a self-disciplined man.

Dr. Dilmy said in his paper that both university planners and academic staff are firm in the belief that a provincial university in a provincial or regional capital must become the centre for cultural activity and an agent for resource development within that province. Indeed, the major research efforts of the university should be oriented towards the achievement of the 'well-being' and 'happiness' of the people, instead of just towards the pursuit of the greatest economic gains. I am especially pleased to learn from Dr. Dilmy that the staff of his university are helping to implement in his province the shift from monoculture to multi-culture, and the reduction in rubber planting, balanced by an increase in the production of coconuts, cloves, tangerines, nutmegs and pineapples.

Dr. Dilmy has also mentioned that one of the principal reasons for the slow growth of a provincial university is the lack of funds. I subscribe to the view that financial difficulties are one of the stumbling blocks to the development of regional universities. To run a university is a costly affair and since most of these universities derive their sources of funds from their governments, the rate of development of these universities is influenced by the prosperity of the countries. The funds available to a university is further affected by the relative priority of higher education to the overall education in the country. If the stage of national development dictates that primary and secondary education should have a higher priority, then higher education will have to be sacrificed for the lack of funds. It is also possible that policy-makers are sometimes insensitive to the needs for the development of higher education in the country and hence funds become less readily available for the universities.

Amnuay

In responding to the papers presented by Dr. Bimala and Dr. Dilmy, let me make the following comments:

(i) It would have been more helpful to us had the papers dealt in some detail with the 'developmental problems' faced by the regional universities in Thailand and Indonesia. Why were these universities founded in the first place? What were the 'motivating factors'? Analyses of social, economic, and political

aspects of the development of these universities might also render a better picture and understanding of the regional universities.

(ii) In his treatment of the roles and purposes of the regional university, Dr. Bimala seems to set very high ideals and objectives. I believe that a university must possess a sound philosophy of education and a set of specific objectives. However, a serious question must be raised here: do we always consciously attempt to achieve those objectives? In other words, are these objectives reflected in 'university behaviour' such as in curriculum development, staff development, planning, and administrative organization? To illustrate my point I would like to refer to Dr. Manap's comment on Dr. Bimala's statement '[the regional university] to provide the right kind of leadership in all walks of life'. Dr. Manap is in agreement with Dr. Bimala. I do not disagree with them. But my concern with this problem is, 'how'? How is this specific objective (to train the right kind of leadership in all walks of life) to be achieved? Specific objectives must be translated into behaviour and practical programmes. Lacking this consciousness and 'behavioural manifestations' we might be accused of 'looking at the stars'. We set high expectations for the regional university but we lack the 'how' to reach them.

(iii) Both Dr. Bimala and Dr. Dilmy contend that the regional university must take into consideration the needs of the environment or region in which it is located. While no one could disagree with this view, I would like to give a word of caution that there must be a realistic means in determining what these needs might be and how should these needs be met, and in what priority. In many instances, local participation seems to be nothing than a fund-raising channel, rather than a real and responsible participation in all facets of development and planning.

(iv) In talking about the regional university, what 'criteria' do we use or have in mind? Do we use the same criteria as we use to measure the metropolitan university? If this is true the regional university loses its uniqueness. It is nothing more than a metropolitan university which happens to be located in a regional setting. Dr. Dilmy mentioned in his paper that the regional university, in this case in Indonesia, might be so developed that it 'stands on a par' with the 'Five Centres of Excellence'. What criteria of excellence does Dr. Dilmy use for this assessment? Can there be a concept of 'regional excellence'?

(v) Lastly, many of us often state that the regional university should be an agent for change or a modernizing agent. This is a

comfortable statement to make, but it is uncomfortable from the behavioural point of view. Again, let us remind ourselves that the regional university, by virtue of it being situated in the regional setting or environment, does not automatically become an agent for regional development or modernization. Planning and conscious behavioural efforts are required to achieve such a worthwhile goal.

Thuy

For years in Southeast Asia, access to higher education has been the privilege of the well-to-do in society. This is because colleges and universities have been established in the urban areas rather than in the rural areas. Consequently, the colleges and universities in these countries have so far not made any significant contributions towards the development of regions away from the urban centres. I agree with Dr. Bimala that regional universities ought to be set up and that such universities should be centres of higher education for the various non-metropolitan regions as well as urban centres for the preservation and promotion of national cultures and traditions.

Chairman
Yip

Dr. Amnuay has raised a number of pertinent questions which I hope the paper writers and others could respond to in the course of this discussion. He has reminded us that in thinking of the regional university as an agent of change, we have also to consider the extent of this role that the regional university could play and, more important, we have to consider how the regional university is going to play this role. This is basically what Dr. Amnuay was pointing out because he was referring to the question of curriculum development, staff development and institution building that a regional university has to undergo in order to make itself viable before it could make significant contributions to the development of its environment.

Another point which I feel important is the question of academic excellence *versus* relevance. Should we try to bring the regional universities up on par with the national or metropolitan universities in terms of academic excellence or should the regional universities concentrate on meeting regional needs rather than trying to ape the national or metropolitan universities in their teaching and research activities?

In his paper, Dr. Bimala mentioned the fact that the idea for establishing regional universities in Thailand was formulated in the 1930's although it was implemented only quite recently.

What we would like to know are the reasons that led to the establishment of these universities away from the metropolitan areas and to what extent their roles and purposes coincide with or differ from those of the established universities in Bangkok.

Madjid Ibrahim I feel that the establishment of universities in the provinces will bring about very profound changes in the social, economic and political structure of the society in the future. This is because provincial or regional universities make it possible for more people of different social and economic strata to be educated while previously this privilege has been confined to the children of well-to-do people in the metropolitan areas. Of course, regional universities, because of financial and staffing problems, cannot achieve as high an academic standing as those national or metropolitan universities. However, they have other compensations, such as being more relevant to their environmental conditions. It is true that in terms of academic qualifications and experience, the staff of provincial universities may not come up to those in metropolitan universities. On the other hand, if we compare the quality of the academic staff of provincial universities with the administrative staff of the provinces, then, they are much better-qualified individuals. This is an important fact because it means that the regional university could serve as a useful source of planning expertise for the province.

Hafid In my opinion, national development means, in fact, regional development. In order to achieve national development all the regions within Indonesia have to be developed. In Indonesia, there is horizontal immobility of labour, particularly high-level manpower, from one region to another. Thus it is necessary to establish centres of high-level manpower training outside the metropolitan areas. As a result, there are now many universities in Indonesia which are located outside Jakarta. This does not imply that all the non-metropolitan or provincial universities in Indonesia have as high an academic standing as those in Jakarta. However, as pointed out by Dr. Madjid Ibrahim, the provincial universities have the advantage of being closer to the problems of the regions than the metropolitan universities. The lack of horizontal immobility of graduates from the metropolitan to the non-metropolitan areas is one of the strongest reasons for the establishment of provincial universities in Indonesia. Another point is that the provincial universities need not compete with

the metropolitan universities but rather are complimentary to them. What I mean is that each provincial university can specialize in a particular area of teaching and research which it finds most suitable in terms of its location, physical environment and human resources.

Thien

The last few years have seen a very rapid development of regional universities in countries of Southeast Asia. We might look at this development from three angles. The first is motivation. It has been pointed out in the papers that the prestige of a province or region is one motivation for the establishment of a provincial or regional university. Another motivation is the need to relate teaching and research to the needs of the region.

Another way of looking at the development of regional universities is in terms of their relevance to the provinces or nation. Dr. Hafid has just mentioned that regional universities should specialize in particular areas in their teaching and research activities. This is very important. A university situated close to the sea should perhaps specialize in marine biology rather than in arts or social sciences.

A third way of looking at this development is in terms of the contributions of the regional universities to the regional and national development processes. I am glad that Dr. Hafid pointed out that national development means, in fact, regional development. I think this is a delayed awakening in countries of Southeast Asia. National development should be overall development of the country which includes development of those regions lying outside the main metropolitan areas. People who have visited Thailand would have noticed the tremendous growth of Bangkok in recent years relative to the rest of Thailand.

It seems to me that during the last few years we have two movements in the development of higher education in Southeast Asia. One is the democratization of higher education in that the governments are establishing more universities in order to provide greater access to higher education. The other movement is decentralization of universities which we are dealing with here now. I also wonder how much influence politics has in the establishment of regional universities. I do not know about other countries in this region but in South Vietnam politics seems to play a very important role in the establishment of regional universities. This has arisen out of the need to catch votes in the non-metropolitan areas. The trouble with this is that these new

universities are often started very hastily with neither buildings nor staff. I think it is good to establish regional universities to further regional development but at the same time I wish to express caution in the establishment of these universities. If they are too rapidly and too carelessly established, they could create more problems than solutions for the regions, especially when the graduates are under-qualified and unable to get jobs. For this reason the governments of the countries in this region should plan the regional universities very carefully if they are to make significant contributions to regional development.

Steinberg

I'd like to follow up on the remarks of several of the speakers. Apart from the motivations for the establishment of regional universities which I agree are often complex and involved both politically and idealistically, I would like to concentrate on the question of service or relevance of the university to the region. In the case where a university is a national university in a regional setting and has a national function, such as a national agricultural college in the training of extension workers and so on, the service of the university is quite clear. Theoretically, the government could absorb most of the graduates of the university into its various departments. However, when a university is regional, then we get into a more complex situation and this relates to the sort of training the university provides to its students. Do we know in the countries of Southeast Asia whether the graduates of regional universities have all got jobs commensurate with their training? Even if there is no graduate unemployment or underemployment at the moment, then what about the future? Would the regions be able to absorb all the graduates from the regional universities? These are the questions that regional universities should try and find answers to through research.

Koesnadi

I would like to add a word of caution regarding the expansion of regional universities. I speak from the experiences of Indonesia where regional universities have been very hastily established in recent years. There are forty state universities in Indonesia, most of which were established in the years 1962-5. The establishment of these universities had been motivated by the fact that each province wanted a university of its own. The feeling then was that one of the attributes of a province was a university and the province which did not have a university of its own was felt to be incomplete. Even in the People's Consultative Assembly it was

stated that it was desirable to have a state university in each province. This statement was interpreted by the people in the provinces to mean that a state university *had* to be established in a province. This decision had the support of President Soekarno at the time and this together with the pressures from the provinces were too strong for any Minister of Education to resist. Therefore, we are now landed with a large number of these universities whose establishment was based on a provincial pride or prestige without due consideration for the basic requirements that must exist before a university could be established. Now we have inherited forty state universities, some of which are not qualified to be regarded as universities.

Now, as a matter of policy, Indonesia is going to reduce the number of provincial universities. In doing so, we try to match the aspirations of the people in the provinces with the qualitative aspects of the universities. As an example, let me take the province of Kalimantan. We have at the moment four state universities in the whole of Kalimantan because we have four provinces there. We are trying now to merge the four universities into one university for the whole of Kalimantan but allow each section to have a special area of specialization; for instance, the university in the eastern part of Kalimantan has very strong environmental conditions for teaching and research in forestry. We are going to have the faculty of forestry there and remove other existing faculties such as law and technology because the environmental conditions are not suitable for these other faculties. By this method, we will be reducing the number of universities over the years. The phasing out of existing universities in Indonesia requires a very careful plan of action and a lot of persuasion. For one thing, the students presently in these universities should not be affected by the change. The phasing out of faculties or universities would only affect new students.

I am quoting this experience of Indonesia because it is important to consider not only the aspirations of the people in the establishment of regional universities but also the quality of teaching and research in these universities. This is because unless we do this, many of the regional universities will not be in a position to really serve their regions effectively. In the coming years in Indonesia, the number of state universities in the provinces is likely to be reduced from forty to about twenty. This policy decision of phasing out provincial universities in Indonesia has been decided not only by officials in the Ministry of Education and

Culture but also by the people in the universities. I feel that in discussing regional universities, we ought to consider the qualitative aspects of these universities which will determine whether or not the graduates they produce are going to be change-agents of society.

Chairman
Yip

Mr. Koesnadi has introduced a new element into our discussion and has set us thinking over the question of expansion *versus* consolidation in the development of regional universities. We will all be watching with great interest how Indonesia could cut down the number of universities since most countries in this region have the problem of just maintaining the number of existing universities, leave alone the creation of more universities, due to the growing social demand for higher education. Malaysia has had to create several new universities in very recent years just to cope with this increasing demand. So has Thailand which appears to be solving it with the establishment of Ramkhamhaeng University which is an open university. The feeling that national and regional needs could be better solved by consolidating the existing regional universities provides an interesting point for discussion.

Suffian

Malaysia, as a federation, has thirteen states but four of the five universities are situated in one state, Selangor, where the federal capital is. The odd one out is situated in Penang. When the first university was established, it was natural that it should be established in the federal capital. The second university was established in Penang just before the last general election. Just as in the case of South Vietnam, mentioned by Dr. Thien, politics came into the picture in the establishment of the university in Penang. There was tremendous agitation by the people of Penang for a university and there was a fear on the part of the State Government of Penang that unless they yielded to the demand of the people of Penang they might lose the general election. So the State Government yielded and established the university in Penang but still they lost the state election! During the same election there was another pressure group in Kuala Lumpur agitating for the establishment of another university. Hence a third university, the National University, was established in Kuala Lumpur. The fourth and fifth universities which are also located in Kuala Lumpur were in fact colleges which have been

upgraded to university status. There is now a feeling in government circles that universities in Malaysia should be evenly distributed in different parts of the country. However, there is tremendous opposition from students and staff to any suggestion that any of the four existing universities in Selangor should move out of the state.

I should mention that the policy of the Government of Malaysia is to treat all universities equally and to insist that the same level of academic standard be maintained in all the universities. In Malaysia we are confronted with difficulties caused by the multi-racial composition of our society and we are also troubled by the separatist tendencies of some states. In our attempt to weld the various states and the various races into a united nation and achieve national unity, we cannot afford to have any university, like the one in Penang, serve only a particular state. Thus the university in Penang takes students not only from Penang but also from all over the country. This is why the University of Penang was renamed a year ago to become Science University of Malaysia so as to remove the regional connotation. For this reason, all universities in Malaysia are national universities having a national role and purpose.

You

I have nothing to contribute from experience as there are no regional universities as such in Singapore. However, as I listened to the discussion, I am struck by the contributions from the Indonesian participants. On the one hand, we have the view expressed that national development is regional development which I subscribe to; but does that mean that we should develop regional universities in order to achieve regional development? Mr. Koesnadi in fact shattered that assumption by stating that Indonesia now is attempting to amalgamate and reduce the number of regional universities. The conclusion I draw from this is that although national development means regional development, it does not mean that we must proliferate regional universities. I think this is an important point for us to take note of. Politics apart, regional universities are not set up merely to promote regional development. Let me elaborate on this point. I think that to set up as many universities as there are regions is an awful waste of resources. Obsession over horizontal immobility of high-level manpower can be exaggerated. If we train our graduates in the regional universities, it does not mean that the graduates would not move to the metropolitan areas. They would move

all the same so long as the draw is there through better employment opportunities and so on. Facts being what they are, the metropolitan areas will always draw the people from the regions, both before they are trained and after they are trained. For this reason, I do not think that horizontal immobility of high-level manpower ought to be a good reason for the establishment of regional universities.

In the developed countries there are universities outside the metropolitan areas. These are not regional universities in our sense of the term but are merely 'centres of excellence'. Mr. Koesnadi has stressed on the importance of the qualitative aspect of the regional universities. These qualities are unlikely to be achieved if there is proliferation of these universities leading to a thinning-out of resources through duplication of faculties. Instead, can we not think of establishing a few centres of excellence, each specializing in a particular field such as law, social sciences, science and technology, medicine and so on? In each case the centre takes into consideration the advantages which the environment offers. For instance, we do not set up a centre for marine biology in an inland area as earlier pointed out by Dr. Thien. In the case of Indonesia, as mentioned by Mr. Koesnadi where the number of provincial universities is going to be reduced from forty to twenty, can we not think of this idea of a few centres of excellence and specialization? In this respect we may be able to learn from the experiences of the developed countries where a number of colleges may be attached to a university.

Koesnadi

I would like to comment on Professor You's remarks and say that this is exactly what we are trying to do in Indonesia. Let me take the example of Kalimantan where the Lambung Mangkurat University is the strongest of four universities in the region. This university is going to be the 'centre of excellence' for the region. At the same time, we are going to scrutinize the other three universities and see which area of specialization each university is best suited for. These three other universities will be maintained as faculties rather than as colleges since we do not have a system of colleges. This would mean that there will be only one university for the whole of Kalimantan with different campuses, each with a different specialization. This will avoid any unnecessary duplication of fields of study. To bring about this change in the regional universities requires very careful planning on our

part but this policy decision that has already been taken and the process of change is under way.

Abdul Manap There are *pros* and *cons* in the establishment of universities in the provinces or non-metropolitan areas. One advantage of establishing a regional university is that it will create a 'spin-off' in the region by creating employment for people in the area and in this way contribute towards development and perhaps urbanization. On the other hand, one disadvantage is the difficulty of maintaining academic excellence. Also regional universities tend to be isolated and lack communications with other similar institutions, a disadvantage which universities in the metropolitan areas do not have to put up with. The decision for us then is to weigh the beneficial results of the 'spin-off' to the region against the disadvantages such as lower academic standards and isolation.

You I do not know what Dr. Manap means by 'spin-off'. But if by 'spin-off' he means the multiplier effect of employment creation, then I think this is a very expensive way of creating employment in the provinces.

Thien I think the problem facing us today is not whether or not we should have more regional universities. I think there is a strong case for more of such universities to be established in the countries of this region. The real problem is one of planning. If we want to establish a provincial or regional university, we have to plan ahead - have the staff ready, have the buildings ready and have the curriculum ready long before we admit the first students. We should not improvise and have what some people call 'instant universities'.

Ich I would like to add some comments to the question of expansion *versus* consolidation of regional universities. It has been pointed out that the rapid expansion of regional universities tends to lower the quality of higher education. It is also true that these regional universities are sometimes set up for political reasons. The point I wish to stress is that the expansion of these universities is unavoidable because of the rapid expansion in the demand for places in institutions of higher learning. If we are going to consolidate and reduce the number of universities, as in the case of Indonesia, how are we going to meet this huge demand for places? It could only mean that our existing universities

would be overcrowded. One solution is to limit the number of students being admitted to the universities. But if this is done, I would like to know what happens to those high-school graduates who do not gain admission to the universities.

Koesnadi

In Indonesia we are preparing our Second Five-Year Plan for 1974-9 and in this Plan we have decided that there would be no increase in the number of students entering the universities during the period of the Plan. I wish to point out that there is a false notion in society at large that every student who has completed his high school must go on to the university to further his education. We are trying to convince people that this is not so and only those with adequate academic preparedness should be admitted to the universities. Of course, the consequence of this is that a large number of high-school graduates would not be admitted into the universities. What are we going to do with these people? The answer lies in providing technical courses for these students which would enable them to acquire certain skills. We are trying to introduce an 'open-door' policy for universities to admit students not only for degree studies but also for non-degree studies. In other words, these universities will provide two types of courses - one leading to a degree and the other not leading to a degree.

You

I subscribe to the first part of Mr. Koesnadi's comments, namely, that not every high-school graduate should go on to a university. It is dangerous to have a university explosion. The expectations of graduates are very high and if, after graduation, they could not find jobs commensurate with their training then there could be very serious social problems. It would be a mistake for us to think that just because the population has increased and the number of high-school graduates has increased, the number of universities must automatically increase to create more places for the high-school graduates.

I am also at the same time disturbed by Mr. Koesnadi's remark that the universities should also provide non-degree courses to high-school graduates. Is it not rather wasteful to make use of university resources to teach those people who do not qualify for admission? Is it not possible to provide this sort of training at the level of the high school rather than wait for these students to complete their high school and then have these courses provided by the universities? This will create two parallel channels

of education provided by the universities, one to cater for degree students and the other to cater for non-degree students. By doing this, we would still have a university explosion, just that it is now of a different kind. Where previously the explosion was of people who were all aiming for a degree, now it is a dual explosion of people who are aiming for a degree as well as those who are not aiming for a degree.

Koesnadi

I would like to answer Professor You. The 'open-door' policy which I described earlier is not going to be implemented in all the universities but only in those universities which have resources to execute this programme. As an example, let me cite Bandung Institute of Technology. ITB is now preparing a two-year non-degree programme for technicians while the degree programme goes on to train engineers. This programme is going to provide the technicians which the country needs. ITB is able to implement this 'open-door' policy because it has the resources to do so.

Lee

It is often taken for granted that post-secondary education is necessarily university education. Consequently, in a country like Malaysia, there is a shortage of people trained at the technician's level. I agree with the view expressed by some of the speakers that countries in this region should think in terms of providing sub-tertiary education which would relieve the pressure on the universities and also at the same time increase the supply of middle-level technicians and managers.

Steinberg

I would like, if I may, to go back to a point raised earlier concerning national unity. This is important because there seems to exist a certain amount of tension between the concept of regional university and that of national university, especially in countries that have heterogeneous populations as those in South-east Asia. This heterogeneity of the population is not only in terms of ethnic diversity but also in terms of religious and language diversity. For instance, we have a tension existing in Mindanao between the Muslims and the Christians. This sort of problems are found also in Malaysia, Thailand and elsewhere. What then is the role of the regional university in promoting national unity? I raise this issue because, while it is delicate, it is also an issue which cannot be avoided in discussing the complex role of the regional university.

Romm Since coffee-break we have had a very interesting transition in terms of our discussion. We started looking again at political motivations for the creation of regional universities, then moved on to the question of expansion *versus* consolidation, and from there we moved into the area of efficiency in higher education, efficiency defined very much in terms of metropolitan universities which we are here trying to create an opposite to. We seem to have gotten away from the role of the regional university which we started to discuss at the opening of the session this afternoon. Does this now mean, in fact, that there is no role for the kind of regional university we have been talking about or does this mean that somehow we now admit that there are certain motivations by faculties, students and others who create definite problems within the context of the regional university which we have to confront with if we are to make the regional university work?

Koesnadi I would like to avoid any misunderstanding. Let me explain with the example of the Lambung Mangkurat University in which Dr. Dilmy is Rector. As I explained earlier, this University is going to be the only one for Kalimantan. But this does not mean that this University will serve only the province in which it is situated. It is supposed to serve the other three provinces in Kalimantan as well. In this sense the Lambung Mangkurat University is still regional because it serves the region comprising the four provinces of Kalimantan. For this reason, I do not think we have digressed from discussing the role of the regional university.

Romm I was not speaking specifically of Indonesia. I think we have taken the Indonesian situation and generalized from it. One thing we have missed in the discussion is the crucial stage in the Indonesian experience between the creation of the regional universities and the amalgamation of these universities. The establishment of regional universities itself would seem to have very marked effects on the provinces in terms of creating new aspirations for higher education among the people who never had such aspirations before. This is something that Indonesia has gone through but perhaps we should not generalize from this and think that it would be automatic for regional universities in other countries to move from dispersion to amalgamation.

Chairman

Yip

We have raised a number of very interesting issues in the course of our discussion this afternoon. We talked about the motivations behind the establishment of regional universities, including political motivations; we talked about the relevance of these universities to the needs of the regions they serve; and we also talked about the possible contributions of these universities to the regions and the nation. We have not examined too closely, however, the mechanism by which these universities could make their contributions most effectively.

From the discussion, we now realize that the term 'regional university' has different meanings in different countries. All universities in Malaysia, for instance, are national universities having a national role and purpose. The concept of the regional university seems to fit most appropriately into the Indonesian situation. However, Indonesia is at the moment going through a very important and significant change in the development of regional universities. Regional universities in Indonesia are now moving from expansion to consolidation, from dispersion to amalgamation and from increase to reduction in the number of university places. This is an interesting experiment which all of us will be watching with great interest in the coming years.

I feel that there are several issues concerning the role and purpose of the regional universities which we have not had time to explore in detail and I hope that we could come back to these in the later sessions of this Workshop.

PART II

**RELATIONS BETWEEN THE REGIONAL AND
THE NATIONAL/METROPOLITAN UNIVERSITY**

RELATIONSHIP BETWEEN *PEMBINA* AND NON-*PEMBINA* INSTITUTIONS

Koesnudi Hurdjasoemantri

THE *PEMBINA*¹ SYSTEM

In my paper at the RIHED Workshop held in Singapore on 26-29 July 1971, on the 'Existing Relationship Between the State Universities and Government Planning Agencies in Indonesia', I elaborated on the policy of the development of higher education in Indonesia, as stated in the Basic Memorandum of the Director-General of Higher Education in 1967.

For a clear understanding of the relationship between *pembina* and non-*pembina* institutions, some highlights of the policy have to be repeated here.

The Basic Memorandum has pointed out that the task of institutions of higher learning had to be one of 'agents of modernization and development', a role which is of vital importance and relevance, especially to developing nations. To reach this objective, more attention had to be paid to the qualitative aspects of higher education. Four fields have to develop, that is, reorganization of its structure and management, curriculum, personnel and material development.

Several change-agents have been established. First among them were the *pembina* faculties, faculties which in view of their academic standing, have been assigned the leadership role of upgrading other faculties in the same discipline. To ensure a nationwide coordination, a grouping of these *pembina* faculties has been set up, called the 'consortium'. There are five consortia, *viz.* the consortia for

- (i) agricultural sciences,
- (ii) science and technology,
- (iii) medical sciences,
- (iv) social sciences and humanities, and
- (v) education and teacher training.

The consortium of social sciences and humanities has been sub-divided into five sub-consortia, *viz.* for law, economics, social sciences, arts and philosophy, and psychology.

The primary function of these consortia is to advise the Minister of Education and Culture in designing nationwide development programmes in their respective disciplines, covering the fields of structural, curriculum, personnel, material, research and public service development. As such, the consortia act as vehicles in the overall effort to develop higher education as envisaged in the Basic Memorandum.

¹ *Pembina* means, literally, 'developer'.

Understanding fully the limited availability of human and material resources, a selective approach has been adopted in strengthening a few institutions to be developed into 'Centres of Excellence'. The selection was based on the following criteria: (i) academic standing; (ii) possibility of interdisciplinary studies and research; (iii) potentiality for innovation and experimentation; (iv) capacity to extend their excellence to other universities; (v) prospects of better and quicker returns from investment of limited resources; and (vi) spheres of influence in terms of students, teachers and academic disciplines. Based on these criteria, the following universities/institutes have been selected to be developed into 'Centres of Excellence': Universitas Indonesia (UI, i.e. University of Indonesia in Jakarta); Universitas Gajah Mada (UGM, i.e. Gajah Mada University in Jogjakarta); Universitas Airlangga (UNAIR, i.e. Airlangga University in Surabaya); Institut Teknologi Bandung (ITB, i.e. Bandung Institute of Technology in Bandung); and Institut Pertanian Bogor (IPB, i.e. Bogor Institute of Agricultural Sciences in Bogor).

The *pembina* faculties in the five 'Centres of Excellence', which count for 80 per cent. of the total *pembina* faculties, have better staff, students, equipment and facilities and have therefore better programmes of teaching, research and public services. Hence the time and resources required to bring these centres up to the highest standards will be much less than those required to build up entirely new or less developed centres.

Strengthening the five centres not only benefits the centres concerned, but also has a multiplying effect on the development of the other institutions as well, and as such possesses a nationwide scope and character.

The *pembina*-system (with the *pembina* faculties, the consortia and the centres of excellence as change-agents and change-pushers) provides inter-institutional assistance and cooperation, enabling the regional universities to increase their role in the local and regional development through a gradual qualitative build-up of their strength.

BENEFITS DERIVED

Two major fields of development, i.e. the staff development and the research workers development, are strategic factors in the qualitative build-up. The First Five-Year Plan (1969-74) provides annual budgets for programmes in these fields. These programmes are executed by the *pembina* faculties under the coordination of the respective consortia.

Staff Development

There are three systems in staff development:

- (i) *the seeding-system*, preparing selected senior students in *pembina* faculties (as students are still being regarded as 'seeds') to become future faculty members in the *pembina* as well as, and especially so, in the non-*pembina* faculties;

- (ii) *the grafting-system*, which 'grafts' young graduates to *pembina* faculties to gain more knowledge, skill and experience in teaching and research, before starting to teach;
- (iii) *the upgrading-system*, providing special courses in *pembina* faculties for the purpose of upgrading the ability of existing faculty members at the non-*pembina* faculties in their own specialization as well as in new methods of presentation. A few hundred students are now studying in various *pembina* faculties under the seeding-system, while other young graduates are 'grafted' to *pembina* faculties in various disciplines.

An illustration of the upgrading system may show the importance of the *pembina*-system for the improvement of teaching in non-*pembina* faculties, as indicated in Table I.

TABLE I
DOMESTIC IMPROVEMENT COURSES, 1970-2

<u>Coordinating Consortia</u>	<u>Number of Courses</u>	<u>Number of Participants</u>
Agricultural sciences	8	185
Science and Technology	6	148
Medical sciences	4	14
Social sciences and Humanities		
Law	8	93
Economics	10	100
Social sciences	2	44
Arts and Philosophy	7	160
Psychology	3	45
Education and Teacher training	13	257
<i>Total</i>	<u>61</u>	<u>1,046</u>

While these upgrading courses are implemented as domestic programmes, faculty members both from *pembina* and non-*pembina* faculties have also been sent to various institutions in other countries for bettering themselves educationally through degree and non-degree programmes. Table II shows the number of faculty-members who have been sent in 1970-2.

TABLE II
STAFF SENT ABROAD, 1970-2

<u>Coordinating Consortia</u>	<u>Number of Participants</u>
Agricultural sciences	136
Science and Technology	145
Medical sciences	259
Social sciences and Humanities	
Law	19
Economics	71
Social sciences	77
Arts and Philosophy	82
Psychology	17
Education and Teacher training	157
<i>Total</i>	<u>963</u>

Research-worker Development

As has already been pointed out at the 1971 Workshop, Indonesian universities/institutes are heavily involved in national, regional and local development through research activities as well as direct participation in developmental projects.

A very recent accomplishment is the participation of universities/institutes in the design of the Second Five-Year Plan (1974-9). The National Development Planning Body (Bappenas) has invited the state universities/institutes to participate in the design of the Second Five-Year Plan, covering both the regional (provincial) planning and the national (sectoral) planning. A special budget of Rp. 250 million has been allocated for this purpose.

The regional universities, under the coordination of ten designated universities, have been engaged in research activities during several months and have submitted on 2 October 1972 the regional planning of the twenty-six provinces of Indonesia. These regional plans could act as alternative plans for Bappenas, which would also be able to use regional plans from the governors concerned.

Sectoral planning is executed by the five centres of excellence, and covers a wide field: such as agriculture, industry, transportation, education, health, and so on. Even in the field of civil service, administration organization, and the review of the whole salary system, universities/institutes are invited to do research on, and submit recommendations for, the improvement of the system, which is indeed a unique example of the heavy involvement in the total national development.

These responsibilities in the field of research call for specially-designed programmes in the development of research workers. It cannot be assumed that a faculty-member is automatically at the same time also a research worker.

One of the special programmes which is now being implemented by the IPB is a sandwich-type programme of developing research workers in the fields of rural social sciences. It is attended by various interdisciplinary teams of non-*pembina* faculty-members, and starts with a three-month course/workshop in Bogor for the theoretical foundation; followed by four months of actual field research in the respective provinces funded by the governors of the region; and is wound up with an evaluation workshop in one of the non-*pembina* institutions (Lambung Mangkurat University in Banjarmasin).

The improvement courses for staff development as described earlier also provide research assignments to be carried out by the participants.

PROBLEMS FACED

One of the major problems in staff development is the heterogeneity of quality of faculty-members, which makes it very difficult to design suitable improvement courses. The different educational background with subsequent different levels of ability demands a separate programme for the 'beginners' and 'advanced group', thus creating an additional academic burden for the *pembina* institutions, apart from finance. Since the main purpose is to gradually increase the ability of the faculty-members of the non-*pembina* institutions, these difficulties have to be surmounted.

A major problem in the field of research worker development is the time element, since developing research workers requires a considerable length of time and preparation, while the research workers in the *pembina* faculties are themselves heavily involved in their own research. A solution is sought in recruiting foreign experts to develop research workers through their assignment of one or two years to a non-*pembina* institution.

An exchange of views and experience between RIHED members in the field of staff and research worker development, subsequently leading towards joint projects, will be most valuable.

RELATIONS BETWEEN THE REGIONAL AND THE NATIONAL/METROPOLITAN UNIVERSITY

Mohamed Suffian bin Hashim

At present there are five universities in Malaysia. These are:

- (i) University of Malaya, sited in Kuala Lumpur;
- (ii) University of Science, Malaysia, sited in Penang;
- (iii) National University, sited in Kuala Lumpur;
- (iv) National Institute of Technology, sited in Kuala Lumpur; and
- (v) University of Agriculture, sited in Serdang, some 20 miles south of Kuala Lumpur.

Thus it will be seen that of the five universities, four are crowded in or near the federal capital, and there is only one outside.

The University of Malaya was the first to be opened in Malaysia (in 1957), and in those days the capital was the natural site for it. The second university to be founded (in 1969) was the University of Science, Malaysia (originally called the University of Penang). Penang was the agreed site for it, because the agitation for its establishment was led by the inhabitants of that island. In addition, there was general agreement that it should be in Penang, as with the erosion of Penang's free-port status and the decline of its trade it was thought that Penang, already the site of the oldest school and of many other excellent schools in the country, should be developed as a centre for education (as well as for tourism, in view of its beautiful beaches and hills). The National Institute of Technology found its natural base in Kuala Lumpur because it had originally been there since 1906 as a technical school, and after the second world war as the Technical College, before it was upgraded to university status in 1972. The College of Agriculture also found its natural base in Serdang where it had existed (first as an agricultural school and later as the diploma-awarding College of Agriculture) since 1931. The National University was opened in a hurry (in 1970) and there was no time to provide specially constructed buildings for it. A Teachers' Training College, the buildings of which were conveniently available in the capital, was made available for it.

However, latterly, there has been a growing awareness on the part of the Government that the Malaysian capital, at present a wooded and attractive city because it is the smallest capital in Asia, should not have a monopoly of universities in Malaysia; that when the capital has grown (as is inevitable) its overcrowding and congestion will not be conducive to research and study which require peace and quiet and a serene atmosphere; and that universities, which are important growth points for economic prosperity, should be fairly distributed all over the country. This awareness is shown by the decision to move the National

University away from the capital to Bangi, a sleepy rural town some twenty miles from the capital. There are some, however, who feel that the move will not be far enough: I am one of them.

So the first point I wish to make is that in Malaysia there is a need for regional universities, meaning that in Malaysia, universities should not all crowd into the federal capital, that on the contrary only one or two at the most may be in the capital, and that the rest should be elsewhere, so that university education may (as it were) be brought to the people. This point is worth stating in the Malaysian context, because in the minds of many Malaysians a university education is associated with cities and a city life-style. Malaysians do not realize that a university sited in a rural area will attract scholars and students from all over the country and indeed from all over the world, and has a charm all its own, once it has an established reputation. Examples are Oxford and Cambridge.

I have mentioned universities as important growth points for economic prosperity. Participants are aware of the impact on the local economy of a military base: the money spent by soldiers and their families makes for a boom in the locality, and the removal elsewhere of the base spells ruin to many small businesses. The existence of a university in the locality has the same effect; it provides employment for a large number of people and generates income. Take for instance the University of Malaya. This year (1972) it will pay its staff, and for buildings, etc., \$34.5 million. The recipients of this money will spend most of it in or near Kuala Lumpur. Add to this the money disbursed by the city government (\$60 million for 1973 as reported in the *Straits Times* of 11 November 1972) and the money spent by the Selangor State Government and by the Federal Government, and the effect on the local economy may well be imagined.

The dramatic effect on regional economies of having a university of the size of the University of Malaya may be gathered from the information that its 1972 budget is more than the 1972 budget of at least six states, namely:

<u>State</u>	<u>\$ Million</u>
Perlis	4
Trengganu	12
Malacca	13
Kelantan	19
Penang	27
Negri Sembilan	29

The State of Selangor where the federal capital is, is the richest state in West Malaysia, and it is clearly unfair to other states that most universities should be sited in the national capital.

The second point I wish to make is that, when Malaysia has more regional universities, it is most important that none of them should be allowed to develop into parochial universities taking students only from its vicinity, and that on the

contrary, each of them should take in students from all over the country and its staff should be convinced that their mission is to instill in the minds of their students a sense of oneness, of belonging to the Malaysian nation, and not to just one component part of it, though of course, faculty and students should be proud of their own university as against other universities.

As regards cooperation among regional universities and between regional universities and universities in the capital, two things that have happened and are happening which give hope for the future. When the University of Science was first opened (in 1969) there was close cooperation between it and the University of Malaya, as there had been between the University of Singapore and the then newly-founded University of Malaya. Teaching staff in Kuala Lumpur gave courses in Penang. There was cooperation because the University of Malaya felt like a brother to the University of Science and some faculty members transferred from Kuala Lumpur to Penang. A spirit of cooperation still animates the two Universities, though the need for help from Kuala Lumpur has diminished as the University of Science has grown. A certain amount of coordination is effected through formal and informal contacts with the Ministry of Education. Also a few persons are members of the governing body of both universities, especially government nominees. I am hopeful that these amorphous arrangements will continue and will be beneficial to all universities.

But in course of time the number of universities and their students will increase as can be seen from the Australian experience. Australia with a population of twelve million has twenty-one universities and a student population of 92,000, whereas Malaysia with a population of ten million has only five universities with a student population of 11,159. When Malaysia has more universities, more undergraduates and more research students, some formal machinery for securing cooperation between all universities will have to be created to exist, not as the sole coordinating body, but to exist side by side with the informal arrangements that are bound to continue to exist at all levels from the vice-chancellor down to assistant lecturers.

At present the recently-established Higher Education Advisory Council maintains contact with all universities in the country, with the Ministry of Education and other government agencies, and will in due course, build up and maintain contact with the professions and with other bodies outside Government. The Council will hopefully develop into a body for creating and maintaining contact with all universities in the country so as to ensure that there is no duplication except planned duplication; to ensure that there is no wasted effort and resources; and to ensure that the country obtains maximum value for the vast amount of money spent on universities in and outside the capital. But at the same time it cannot be too strongly emphasized that members of faculty should themselves maintain good relations with members of faculty in other universities, because the best form of cooperation is secured by informal and friendly arrange-

ments with one's opposite number on a person-to-person basis. This already exists between academicians in this country and academicians in foreign countries, and there is little reason why it should not exist between academicians in Malaysia itself.

I mentioned above that duplication as such is not necessarily undesirable: it is only unplanned duplication that is undesirable. Take for instance the field of medicine. The country needs more doctors than the number at present produced by the University of Malaya (about a hundred a year). Government has therefore decided to make money available to establish a second medical faculty at the National University. Clearly there should be cooperation between the two faculties. Some measure of cooperation will probably be achieved through the Higher Education Advisory Council, and also through the Ministry of Education. In due course perhaps a special body may have to be established to coordinate the work of the two faculties, such a body may have to be established to coordinate the work of the two faculties, such a body to consist of representatives from the two universities, from the Ministries of Education and of Health, from the medical profession, and from the Higher Education Advisory Council. But in the long run, it is up to members of the two faculties themselves to maintain friendly person-to-person relationships if there is to be effective coordination and cooperation between the two, and an outside body should come in as consultants only to resolve matters that cannot be resolved otherwise.

I would be unrealistic not to admit that there are built-in factors that militate against university cooperation. First, there is university autonomy. It is right that each university should be self-governing, but I submit that it is not right that every university should be permitted to go its own way without regard to national needs and interests. Universities depend on Government for some 90 per cent. of their budgets, and ministers are accountable to the people's representatives in Parliament for this money; but government nominees on governing bodies of universities are however there to see that money given to universities is well spent, but spent to produce not only high-calibre manpower but in the right number and with skills that are required by Malaysia. To produce graduates whom the country does not need and not to produce the type of graduates that is required, is simply being silly.

A second built-in factor that militates against university cooperation is, of course, personality differences. It is right that members of faculty should take great pride in the performance of their own university, but this should not be at the expense of university cooperation. Malaysia is a rich country by Asian standards, but she is not all that rich as to be able to afford unnecessary duplication and to waste resources, particularly human resources. If faculty can be persuaded that the national interest should prevail over personality difference, there will be hope.

I would like to conclude by repeating what I said above, namely, that under

Malaysia's special conditions where the central mountain range effectively divides the peninsula into two distinct parts, and a thousand mile wide sea effectively divides West Malaysia from East Malaysia, so that the pace of educational, and therefore social and economic development has been uneven and there are many pockets of underdevelopment giving rise to dissatisfaction and even resentment it is most important that each regional university in the country should not be allowed to develop into parochial universities training its graduates not to look beyond the state border; and that every university in this country, whether regional or metropolitan, should be nurseries for producing Malaysians with a Malaysian outlook; nurseries for fostering the growth of national unity and a Malaysian nation. Inter-university cooperation within the country is, for this reason alone, vital.

RELATIONS BETWEEN THE REGIONAL AND THE METROPOLITAN UNIVERSITY

Okas Balankura

The relationship between the regional and metropolitan universities in Thailand is one of Big Brother to Little Brother, which is to be expected, since the first regional university was begun long after the several universities in Bangkok had become established institutions. These regional universities were originated with a definite philosophy and commitment in mind. They were set up not only to relieve the metropolitan universities of enrolment burdens, but also to provide leadership in the development of the region in which each institution was located. However, since most of the early planning and leadership came from the Bangkok institutions, the metropolitan universities have maintained a paternal attitude towards the regional universities. This is not to say that there has been no co-operation in this relationship. Individual faculty members from metropolitan institutions have generally been available to the outlying schools, either on a one-way or reciprocal basis, usually for short periods of time. They have gone primarily as consultants or speakers on programmes, although some faculty transfers to regional institutions have occurred.

As regional universities have expanded, their staff members have received the cooperation of Bangkok officials in planning, and have gone to observe operations in Bangkok universities. Cooperative planning in curriculum development, the institution of new programmes, research proposal development, and administrative processes have occurred to the benefit of the regional institution as well as to the staff members involved. The regional staff gain new insights from the dialogue, while educators in Bangkok gain in understanding the conditions and problems at regional universities, understanding that better prepares them to work with students, many of whom will return to up-country locations.

Another aspect of this relationship that has been by necessity one-directional, concerns the advancement of the educational level of regional university faculty at metropolitan universities, where they get preferential treatment when undertaking graduate programmes. However, this facet of the relationship is like most of the others in that it has been available, but not utilized very much. This seems to be due to lack of formal machinery set up to facilitate arrangements between institutions. Any arrangements under the existing informal relationship necessitates much red tape cutting and a lot of initiative on the part of individuals. This takes time which hard-working people who are interested often do not have. Also, in the past, the 'relationship' has been rather one-sided, which is never a healthy situation.

If machinery could be set up to effect long-term, mutually beneficial exchanges

or cooperative ventures, there would no doubt be many interested parties and the initiation of many types of programmes. The machinery should be general enough to encompass a wide range of possible programmes. It should encourage both long- and short-term exchanges that are attractive enough to guarantee participation. Budgets should be set aside to provide for travel and housing for staff engaged in really meaningful projects. Teaching chairs might be established at both regional and Bangkok universities. Facilities should be readily open to use by visiting personnel. Sabbatical-type release time might be periodically provided to staff and encouragement given to worthy projects.

Material support should be given to research proposals, with priority given to cooperating teams from regional and metropolitan universities. It might even be helpful to set up committees of faculty members from two institutions to investigate research needs and possibilities.

Encouragement should be given to joint research projects. One way would be to give credit for various kinds of publication and to aid in publishing, possibly in the form of a jointly-published annual periodical.

There should be a set allotment for scholarships for regional university staff for both short-term and degree study at metropolitan universities. It might even be worthwhile to consider a work/study programme, with the regional university providing job training and experience in the form of an assistantship for a year, to be followed by a year of study at a metropolitan school as the scholarship phase of the programme.

One problem in the relationship between regional and metropolitan universities lies in the access on the part of personnel to scholarships and grants. An effort should be made to guarantee more equal opportunities by making sure that the machinery for publicizing such opportunities is more prompt and responsive towards the regional university.

Cost factors in the development of a more mutually beneficial relationship between institutions should not be an obstacle. By sharing the costs as well as making a concerted effort to secure funds from foundations, which favour a greater role for regional universities, costs should be manageable.

If the biggest obstacle to more cooperation between regional and Bangkok-located universities -- lack of formal machinery supportive of cooperating programmes -- can be overcome, both sides in the arrangement will have something to offer and something to gain. Better understanding of the problems and more expertise in finding solutions to them will result. But, more than that, a mutual respect will develop, which will contribute much to a lasting cooperative relationship between regional and metropolitan universities in Thailand.

RELATIONS BETWEEN THE REGIONAL AND THE NATIONAL/METROPOLITAN UNIVERSITY

Ton-That-Thien

I should begin with three preliminary observations.

First, a national university is not necessarily metropolitan, and a metropolitan university is not necessarily national in character.

Second, I am not familiar with the university systems of the countries of Southeast Asia, and I shall speak essentially about Vietnam; but, considering the ex-colonial background common to all the countries of this area, I assume that we face similar problems or situations, and what is true of Vietnam is more or less true of other countries. But I may be dead wrong, and shall welcome corrections.

Third, I shall be speaking only about South Vietnam, as we have practically no access to information on what has been going on in the North, a most unfortunate state of affairs resulting from partition, the war, censorship and all the rest.

In South Vietnam we have at present nine universities – four state, five private founded at various times between 1917 and September 1972.¹ They are, in chronological order of their establishment:

(i) *Saigon University*

It was formerly the National University of Vietnam. It was founded as the University of Indochina in 1917. It became the University of Hanoi in 1949, with a branch in Saigon. It became University of Saigon in 1957, when a second university was founded that year in Hué, the former imperial capital.

(ii) *Hué University (Hué)*

This was founded in 1957, after the Geneva peace settlement, and naturally by order of the late President Ngo Dinh Diem, who was then head of South Vietnam. But President Diem was also from Hué, and from a family of high mandarins trained in Confucian ways and steeped in traditional culture and nationalism. It was also a time when Saigon had officially replaced Hué as the capital of the country. Moreover, Hué was close to the seventeenth parallel, and President Diem wanted to make clear that: (a) South

¹ See also my article, 'Higher Education in a Transitional Country Plagued by Colonialism and War: The Case of South Vietnam', in *Development of Higher Education in Southeast Asia: Problems and Issues*, Singapore. RIHED, 1973.

of the seventeenth parallel a non-communist, national, and traditional culture still prevailed, i.e. Vietnam still remained Vietnam; (b) the government was determined to hold Hue and was confident enough about the future to establish a university just south of the demarcation line. Organization-wise there were many problems, which will be discussed later on. The first rector of that university was a Catholic priest, Father Cao van Luan.

(iii) *Dalat University (Dalat)*

Again, President Diem was personally involved in the foundation of this university, which came into existence in 1958. Its founder was Monsignor Ngo Dinh Thuc, President Diem's elder brother. It was officially a Catholic university, placed under the official jurisdiction of the Council of Vietnamese Bishops, although in actual fact, it was under the control of Monsignor Ngo Dinh Thuc, who, through his family connections secured for it many privileges and firm support from President Diem and his government. The university was built in the hill station of Dalat, and had the most beautiful campus in the whole country. It had ample financial resources, generated initially by a government land grant. But it faces many problems, as will be discussed below.

(iv) *Van Hanh University (Saigon)*

This is a Buddhist university, founded in 1964 by the Buddhist United Church, soon after the Buddhists re-emerged on the national scene following the fall of the Diem regime. The Buddhists then had a share of political power; in addition, a Buddhist militant was Minister of Education, and another the Minister of Public Works. The first gave the University its charter and the second a building, both by cutting liberally through red tape. As will be seen later, Van Hanh did not become a real university until 1967, and many of its problems were similar to those of Dalat University.

(v) *Can Tho University (Can Tho)*

Planned under the Diem government but established only in 1965 at Can Tho, capital of the Mekong delta, south of Saigon, the most populous area of the country, this university, like Hué University, is a regional one. Its founding reflected the government's desire to give formal recognition to the importance of the area and to erase the local people's feeling of neglect by the central government in the past.

(vi) *Minh Duc University (Saigon)*

This university was established hastily in 1970, in spite of the great reluctance of the Ministry of Education, by a group of Catholics headed by the Reverend Buu Duong who and this is no insignificant coincidence

happened to be father confessor to President Nguyen van Thieu. Its status is still ambiguous, as the Ministry has so far refused to grant it an official charter, because of a number of unfulfilled requirements (in particular, it still has no fixed home of its own).

(vii) *Hoa Hao University* (Long Xuyen)

This University was also founded in 1970 in the Mekong delta, at Long Xuyen, capital of the Hoa Hao area.² One of those who took an active part in its founding was Le Phuoc Sang, a senator well known for his support of President Thieu's government. Like Minh Duc, it was established hastily and had some difficulty in securing its charter from the Ministry of Education. It too, still has no building of its own.

(viii) *Cao Dai University* (Tay Ninh)

Like Van Hanh and the Hoa Hao universities, this is an official establishment under the jurisdiction of a religious body, the Cao Dai Church. It was founded in 1971 at Tay Ninh, seat of the Cao Dai religion,³ to assert equality both for the Cao Dai religion and for the 'western region' of the Mekong delta as against the other religions and regions.

(ix) *My Tho University* (My Tho)

This is the newest university, founded in September 1972 at My Tho, just south of Saigon, in the delta. This is the first concretization of an idea — the junior college — pushed very hard by the American advisers. But, so far, only the foundation stone has been laid, and it will be some years before it can start functioning.

Two more universities have been much talked of in the past two years; one at Danang and one at Nha Trang, in Central Vietnam. The government has been petitioned by the local people, but so far the projects could not be implemented for reasons of finance and other resources. It is also likely that more private universities will make their appearance in the coming years, as there is now a growing number of young men and women graduating from their *tu tai* (baccalaureat) each year, and there is not enough room for them in the existing universities which are already overcrowded with some 60,000 students.

I should lastly add that I have left out the so-called Technical Schools (agriculture, engineering, public works, and so on) which do not yet have university status.

² The Hoa Hao is a Buddhist sect, but as an organization, it has mixed political and religious aims. It claims to have three million members, a claim considered to be much inflated.

³ The Cao Dai is also a religion with a strong predominance of Buddhism, but admits into its pantheon many other gods and great men (Jesus, Victor Hugo, etc.).

II

The previous section merely describes the universities of South Vietnam without stating much about their problems, or the problems for the country resulting from their existence, nature, and mutual relationships, which is the purpose of this paper. I now take up these problems.

As mentioned above, Saigon is the oldest and eldest university of Vietnam. Originally the country's national university, it has lost that position since 1957. Since 1964 it has even ceased to be the country's primary metropolitan university, and has become only one among others. However, it is still *primus inter pares*, by virtue of its seniority, and the material and especially human resources at its disposal. In these respects Saigon University is the best endowed of all Vietnamese universities.

Staffwise, it has the largest number and the best qualified teachers of the country. There is a special reason for this. Saigon was an offshoot of the University of Hanoi, and after the partition of the country in 1954, practically all the Vietnamese staff of the University of Hanoi moved to Saigon. Until 1955, the University was under French control. In fact, it was under the jurisdiction of the Academy of Paris. Considering that (i) the French imposed very stringent requirements in their recruitment of university teaching staff to ensure high quality, and (ii) they imposed still more stringent conditions on the Vietnamese to restrict their entry into the professional corps,⁴ the Vietnamese teaching staff of Saigon University was of high quality, equalling their French metropolitan colleagues. They were solidly trained and had a high sense of their profession. But at the same time, they had also the same defects: a tendency to seek erudition for its own sake, a narrow *esprit de corps* and exclusiveness, and a greater proficiency in French than in Vietnamese. These qualities and defects moved with them out of the Academy of Paris, the University of Indochina, and Hanoi University into the National University of Vietnam which President Diem decided to establish in 1955 to assert his country's cultural independence from France.

All through the years of French control, the two strongest fields of the University of Indochina had been Law (and Administration) and Medicine. This was to be the basic features of the National University of Vietnam which became the University of Saigon from 1957 onwards. The first Vietnamese securing the very difficult title of *agrégé* were in Medicine. Next came Law. There were only a handful of them, and thus Vietnam had very few full professors, the *agrégation* being an indispensable condition for qualifying for the title. This is another way

⁴ To obtain a full professorship at the Saigon University (which remained under French control until 1955), a Vietnamese must pass the very difficult French *agrégation* in Paris.

of saying that (i) Saigon University had an entrenched monopoly in Law and Medicine (and related fields like Pharmacy, Dentistry, etc.); (ii) all the other fields, in particular in the Natural Sciences, Social Sciences, and Humanities, were wide open.

Until today, Saigon University has retained unchallenged superiority in Law and Medicine which, it should be noted, were practically a monopoly of the French trained professors, for the historical reasons given above. In Science, it has an important edge, as its faculty had an early start, and also because for many years it had the field all to itself, as well as all the equipment provided by the state.

Many important consequences follow from the above situation in regard to the relations between the regional (or private) universities and Saigon University.

(i) The new universities are much less well equipped in staff and equipment than Saigon University.

The best qualified graduates possessed a strong urge to become professors at Saigon University because of prestige, and more particularly, because of security both materially and status-wise as manifested by appointment by ministerial decree, security of tenure, political and administrative protection — a very important consideration in an unstable country — pensions and other privileges, particularly housing. In addition, Saigon University did not have to worry about having sufficient buildings, and was spared at least an initial expensive programme of building which would have devoured most of its financial resources.

(ii) Saigon, by virtue of its seniority and, again, because of its virtual monopoly of teaching staff before 1957, became the mother of the regional state universities and elder sister of the private universities: it provided the initial staff, or a large percentage of them for the launching of the new universities. Thus, Hué University was practically an extension of Saigon University at its start, and for several years, it could not have functioned if the professors from Saigon did not commute some 400 miles by air between Saigon and Hué each week to keep it going. Its dependence on Saigon has been highlighted by the new war conditions: since 1965 many Saigon teachers have been forced to interrupt their commuter programme and Hué University has been on a limb. The 1968 Tet offensive by the Vietcong almost led to the collapse of the university, and the new Vietcong spring offensive this year (1972) has seriously jolted it again. In 1968, Hue university, became a refugee university in Saigon, and this year, it has sought temporary refuge in Danang, 80 miles south of Hué.

What is true of Hué University is true of Dalat University, with the difference that Dalat University is a private one. Again, it is the professors from Saigon commuting by air between the two cities which had made it possible to get Dalat started in 1958, and to keep it going since then. Like Hué, Dalat has just skirted collapse, as a result of the new war and political situation has prevented many professors from Saigon from continuing with their itinerant teach-

ing'. In fact, some of its courses, in particular its graduate section, had to be moved to Saigon because the teachers were reluctant or unable to continue commuting between the two cities.

What is true of Hué and Dalat is true of Van Hanh, Can Tho, Hoa Hao, Minh Duc, and Cao Dai Universities. Only each time, the strains on Saigon have become worse as the Saigon teaching corps had to spread thinner and thinner. Some professors teach in three or even five universities at the same time. Also, many had to cram a whole year's course into a few weeks, teaching the same subject six or eight hours a day! This is a completely preposterous situation and a negation of the terms 'university' and 'teaching'.

(iii) Since Saigon University had a virtual monopoly of teaching Law and Medicine, and almost a total neglect of the Natural and Social Sciences and Humanities, it was into these fields that the new universities found it logical and easier to move. Thus, although Hué had a faculty of Law and a faculty of Medicine, it was in the field of National Culture and History that it tried to concentrate its attention. Can Tho also had a faculty of Law and Social Sciences, and in addition, was expected to have a strong School of Agriculture. Dalat was the first to have a School of Business Administration and Politics and the first to offer a degree course in Journalism. Van Hanh had a Faculty of Buddhist Studies, a Faculty of Social Sciences (conferring degrees of Sociology, Political Science, Economics and Commerce), a Faculty of Arts which confers the degree of Bachelor of Journalism, as well as a respectable library on Eastern Philosophies. Minh Duc has a Faculty of Sciences and especially a Faculty of Medicine which will confer a degree on Eastern Medicine — a novelty which has set it at loggerheads with the Vietnamese Medical Association and the Ministry of Education. The Hoa Hao University has a degree course in International Relations and is expected to be strong in Agriculture eventually, as it is in the midst of the richest farm lands of Vietnam. The Cao Dai University, set in the midst of one of the country's woodland areas, is expected to be strong also in agriculture. My Tho, as stated, will be the first Junior College, American fashion. Danang, a populous and expanding harbour, is expected to have a strong school of Business and one of Medicine, when it comes into existence. Nha Trang, on the fishing sea-board, is expected to concentrate on marine biology and fishery.

In all the above new fields, Saigon offered help, but this help was limited, being mostly in the fields of Law and Economics. Most of the teaching staff of the new schools come from outside Saigon and outside France. They came from many countries — the United States, Canada, Great Britain, Australia, New Zealand, Germany, Switzerland, Belgium, Japan — where they had gone in search of something more than the concept of 'University education means education in Administration, of Law or Medicine.' The exploitation of the living or of the dead' (as this author's philosophy professor in high school used to say), a concept going back to the old French colonial days.

In sum, Saigon, the metropolitan and once national university,⁵ retains its old colonial features (like old colonial hotels — the Majestic in Saigon, the E and O in Penang) and strong (almost unejectable) French influence in Law and Medicine, and the predominance of the old French-trained *agrégés*, while the new generation trained in new ways and new countries. These new universities will give South Vietnam a modern face, although the new men are not all as solidly trained as their elders from Saigon University. In fact, this is what differentiates these new universities from Saigon.

In this connection, it should be pointed out that unlike former British or American colonies, the switch to the national language has contributed to the prolonged dependency of the Vietnamese regional and private universities on the metropolitan university. In Malaysia and Singapore, for example, continued use of English makes it possible to recruit outside or foreign professors, and this has helped the regional or private universities to grow faster and independently. In Vietnam, because of the use of Vietnamese as the medium of teaching in Saigon University (the earliest, only and national university) it had an early start, and therefore occupied a commanding position. Moreover, the use of Vietnamese precluded the employment of foreign professors by the regional or private universities which, anyway, could not afford to hire them (and not only to pay them higher salaries but also to transport them to Vietnam and back together with their families and house them while they were in Vietnam). Only Saigon, a state university could afford this.

Recently, the regional and private universities were adversely affected by a new government decision. On 9 September 1972 the Prime Minister issued a decree raising the incomes of government professors considerably — from 20,000 to 32,000 or 30,000 to 60,000 piastres (50 to 84, and 75 to 150 American dollars) per month, depending on the grades, — but at the same time enjoining them to devote their full time to teaching and research at their own universities. The decree will cause the regional and private universities to lose most of their teaching staff, and if applied to the letter, would make it impossible for those universities to function, as a very large number of their teachers at present come from Saigon or from the state universities.

Yet another factor affecting the growth of the regional, and especially private universities, is the traditional preference of the Vietnamese for state diplomas. One of the reasons for this is the dominance of Vietnamese society by the government. Another is the attitude of the government agencies themselves in the recruitment of personnel: candidates with diplomas delivered by state universities were given preference to those graduated from the private universities, even when the latter were clearly more competent. Some cases have come to light where graduates from private universities were not even admitted to take

⁵ This is true also, although to a lesser extent, of the other regional state universities.

the selective examination, or were admitted only after fights about the legality of the decisions of the agencies concerned. Sometimes the senior government officials in charge would be so outmoded in their thinking as to refuse to admit graduates from a faculty of which they had personally not heard. For example, graduates in Economics or Commerce from the Faculty of Social Sciences of Van Hanh University were refused when applying for a selective examination of the National Bank because (a) Social Sciences were thought to have nothing to do with Banking or Business Administration; and (b) diplomas delivered by Van Hanh University were not state diplomas.

But Saigon's superiority cannot last for ever because of growing pressures of the rapidly swelling student population⁶ and of the necessity to meet new needs of the country. It has been compelled to take in new young professors -- many of them the products of Saigon itself or French-returned graduates with a doctorate but not an *agregation*, while graduates from non-French countries have been trying hard to force the gates of the French fortress, particularly in Medicine, Science, Economics. On the other hand, the new universities have been trying hard to improve their standards, and once the war is over, one should expect their ranks to be swelled by a growing number of more qualified graduates from abroad.

(iv) The regional, and especially the private universities had one big factor working in their favour: their newness. They could open new fields of studies as has been mentioned. They could also innovate in relation to curricula, teaching methods, and structures, and introduce changes easily and rapidly. Saigon, on the other hand, is practically frozen, as it is rigidly dependent on the Ministry of Education administratively, and, being an old establishment, attempts at innovation are blocked by vested interests, or inertia; in addition, as in many ex-colonial administrations, personal intrigues have plagued its life. Lastly, being a state financed university, it charged practically no fee and the ever larger number of students registering there each year made it impossible for its professors to give adequate attention, or any attention at all, to their students. In 1968/69 its Faculty of Law had 11,509 students, and its Faculty of Arts 11,911, compared to 1,010 and 839 respectively in 1956/67, while the total number of professors in *all* Vietnam were 394 in 1959/60 and 925 in 1968/69, not excluding double, triple, or quadruple counting.⁷ Many students, especially in the first and second

⁶In 1972, some 28,000 passed their baccalaureate (equivalent of matriculation or GCE). In 1974/75, this figure is expected to reach 40,000; while even now (September 1972) with a total student body of 60,000, all the existing universities are overcrowded and understaffed.

⁷Estimates for 1972: Law: 17,000; Arts: 15,000; figures concerning the total professional corps are not available, but cannot be more than 30 per cent. above those of 1968/69, or about 1,200.

years, hardly know their professors, and the postgraduate students would be very lucky if they could discuss their work with their supervisors once every three months. Seminars are out of the question, there being not enough teachers, and especially there being not enough classrooms.

Administratively and financially, the private universities can enjoy a freedom and flexibility which are unknown to the state universities, regional or metropolitan. They can introduce new methods of management, especially where they have a modern-minded and forward-looking leadership. They can make the changes required without having to go through several layers of bureaucrats or ministries (usually Education, Finance, Office of the Prime Minister, Office of the President of the Republic). They can have the scales of salaries and fees they wish. They can charge the fees they want. And they can receive and spend donations without much fuss. They can pick and send students abroad for further training on scholarships given by Vietnamese or foreign donors without delay (the only delay being those imposed by the general legislation on the draft). They can build if they have the money. Generally speaking, any change may be introduced whenever the university leadership deems it necessary. This is the opposite of what happens in the state regional and metropolitan universities.

(v) There is however a number of things which are common to all Vietnamese universities, metropolitan or regional, state or private; they have all suffered from the same ills resulting from long years of pre-colonial imbalance and stagnation, colonial distortion and delay, war dislocation and impoverishment and foreign interference. The overall effects of those ills are a congested, poor, dispirited and declining system of higher education. This aspect of the problem has been dealt with by the author elsewhere and the reader is referred to it.⁸

III

We should now attempt to draw some conclusions and lessons from what has been said above. They are (with special reference to South Vietnam):

- (i) In ex-colonial countries, the national/metropolitan university enjoys a number of material and moral advantages due to its seniority, firmer foundations, and strong support by the state.
- (ii) The national/metropolitan university plays a vital role in the launching of new universities, either regional or private. But this help is limited and is practically confined to a number of specific fields.
- (iii) The national/metropolitan university is more handicapped than the regional or private universities in opening up new fields of studies and re-

⁸See the author's article in RIHED, *op. cit.*

- searches to meet the new needs of the country.
- (iv) The national/metropolitan university is more handicapped than the regional or private universities in regard to innovation, restructuring and quick change.
 - (v) The superiority of the national/metropolitan university will diminish as the new regional or private universities grow and improve their standards, especially where the country's administrative structure is anachronistic and rigid.
 - (vi) As a very tentative general conclusion: unless the national/metropolitan university is willing and able to make drastic changes to maintain its lead, the hope for the country's future lies with the regional or private universities because the latter are more open, more forward-looking, more dynamic and more flexible.

DISCUSSION

Chairman
Hamzah

In yesterday's afternoon session, we had a very stimulating discussion on the nature and functions of the regional university. Our topic for this morning's session is on the relations between the regional and the national university. Of particular concern for us in this topic is the possible cooperation between the regional and the national university in teaching and research, the mechanism for this cooperation and the problems involved.

There are four papers for this session and they are from Mr. Koesnadi Hardjosoemantri of Indonesia, Tan Sri Mohamed Suffian bin Hashim of Malaysia, Dr. Okas Balankura of Thailand and Dr. Ton-That-Thien of Vietnam. The three discussants are Dr. Madjid Ibrahim of Indonesia, Dr. Ariffin bin Ngah Marzuki of Malaysia and Dr. Sanga Sabhasri of Thailand. Let me now invite Dr. Madjid Ibrahim to start the discussion.

Madjid Ibrahim There are indeed some *environmental* differences between regional and metropolitan/national universities. But from a purely disciplinary point of view, there should not be any differences at all because the sciences that are taught and developed within the universities should not be dependent upon a university's locality. The differences lie only in the emphasis in the interdisciplinary combination and approach required for its environmental relevancy. These environmental differences could result in different rates of progress among universities.

The metropolitan/national universities enjoy many advantages, among these are:

- (i) Proximity to the top decision-makers both in the government and in the private sector.
- (ii) Better alternatives for staff selection.
- (iii) Better accessibility for international aid and cooperation.
- (iv) Since the demand for entrance is usually great, the standard for admission could be kept high.

Because of these favourable factors, the metropolitan university can produce better graduates, and have better research, publications and other facilities. Most of the provincial or regional universities are less fortunate in these respects, and this is reflected

in their slow progress and in the low quality of their graduates. The metropolitan university can stretch out a helping hand to overcome these shortcomings of the regional university through staff development in the form of a staff upgrading programme, curriculum improvement, joint research projects, channelling foreign assistance, and by persuading some of its staff to move to the regional university.

In Indonesia, through the establishment of the 'Five Centres of Excellence', and the financial support of the Ministry of Education and Culture, most of these programmes have been implemented quite successfully.

The differences in emphasis for the sake of environmental relevancy could lead to regional specialization and regional complementarity. This could take two forms:

- (i) Establishing one or two faculties at a certain locality of a region whose disciplines are in conformity with the environmental factors of the region as a branch of a university in another region or in a metropolitan area. The relationship between these two institutions of higher education will be complementary to one another.
- (ii) Acknowledging the fact that, given reasonable financial resources and close cooperation with established universities, the existing regional university could let some of its faculties develop faster than others in response to its environmental factors. The requirements of both regional specialization and regional complementarity could still be met. But it must be recognized that the various faculties will not have the same rate of progress.

It has been mentioned by several speakers that the dispersion of universities throughout the regions will bring the facilities of higher education to a greater number of people in the population from various cultural and social strata. In this way, as I have mentioned in my paper to be presented in Session IV, it is hoped that the future leadership elite would be more democratic in characteristic and would be more motivated towards change, modernization and development. But this dispersion should not lead to over-expansion, as is in the case in Indonesia at the present, so that the wastes of duplication could be avoided. Indonesian universities are at present over-expanded, especially in terms of the local capacity to provide staff and financial resources to these universities. But it is also difficult to say what is the optimum number of universities and the extent of dispersion.

However, this may be considered in relation to the following factors:

- (i) The communication and transportation network between regions.
- (ii) The changing capacity of the central and provincial governments to acquire financial resources through the process of development.
- (iii) The improvement in the living conditions that could be brought to regional cities through the process of development.

Finally I would like to say that the provincial universities are only 'provincial' or 'regional' because of their location. There is no tendency towards parochialism. They have the same educational objectives and the same national goal in their mission.

Ariffin

In his paper, Tan Sri Suffian has explained the establishment of universities in Malaysia and the relationship of one university to another. I would like to emphasize that in the case of Malaysia, unlike in Indonesia or South Vietnam, a university can only be created by an Act of Parliament. Tan Sri Suffian has mentioned that universities could serve as 'growth points' for the stimulation of employment and economic prosperity for the region. Although this is an important by-product of the establishment of a university, this should not be the main consideration in deciding the siting of a university. If we wish to generate employment, we could do so more successfully with the money spent by other means than by setting up a university. Personally, I would like to see more universities in Malaysia established in the East Coast or in East Malaysia. However, we should be cautious in creating new universities and take heed of the experience of Indonesia where the number of universities has grown so large that the quality of teaching and research in these universities leaves much to be desired. I am glad that the Indonesian Government is taking steps to consolidate and strengthen these universities.

The siting of a new university in the national capital has been mentioned. Sometimes this cannot be avoided. Let me illustrate with the case of the National University of Malaysia or Universiti Kebangsaan where the medium of instruction is Bahasa Malaysia. One of the main problems in this university is to recruit staff who could teach in Bahasa Malaysia. There is a scarcity of such staff and at this early stage of the university's development, it has

to rely on part-time staff from the University of Malaya, the National Institute of Technology and the University of Agriculture. These institutions are all located in Kuala Lumpur and hence, the advantage of locating the National University in Kuala Lumpur as well. If the medium of instruction in the National University had been English instead, then locating it outside Kuala Lumpur would create less difficulties.

Sanga

The papers this morning have presented us with a number of experiences of countries in Southeast Asia in an effort to provide university education to the people. It seems that the first university in a country is usually established in the national capital, unlike those in developed countries where the first universities were sited in the rural areas, for instance, Oxford and Cambridge. Having established the first university in the national capital, other universities have been sited right there. As has been pointed out, seven out of ten state universities in Thailand are located in Bangkok while four out of five national universities in Malaysia are located in Kuala Lumpur. This is also true in South Vietnam although the University of Saigon remains today the biggest university in the country.

The papers have also referred to a type of paternal relationship between the regional and the national/metropolitan universities. Dr. Thien chose to call the University of Saigon the mother or elder sister while Tan Sri Suffian and Dr. Okas referred to the national/metropolitan university as the big brother, giving it a different sex! The question here is whether the national/metropolitan university is strong enough to become either the mother or big brother or whatever we may call it. There are certain disciplines in which the national/metropolitan university could assist the regional university. Such disciplines, for instance, are medicine, agriculture and education. However, there is a limit to this, especially when the regional university is expanding faster than the national/metropolitan university. During the early stages of development of the new universities in Malaysia, Vietnam and Thailand, we have seen professors of the metropolitan universities commuting several hundred miles by air to teach at the regional universities. Sometimes I wonder whether the universities should not have aeroplanes of their own. Another point I would like to raise here is whether research work at the metropolitan universities is strong enough, and if not, how can they assist the regional universities in research? It would sound like an old Thai

saying that a mother crab trains her baby to walk straight while she never does so herself.

It occurs to me that the most effective means of strengthening the staff of regional universities is to provide the opportunity for them to have advanced training at the metropolitan universities. The programme of study could be arranged in such a manner that the staff of regional universities could take courses at the metropolitan universities and do their field work in the regions.

I should like to agree with Dr. Thien that the establishment of regional universities should not be done in a hurry. The rapid expansion in the number of students or universities would defeat the purpose of achieving academic excellence. It would not only deprive the regional universities of academic excellence but it will also weaken the academic programmes at the metropolitan universities. It would drain the latter's competent staff to fill the new academic and administrative posts created at the regional universities.

Finally, I am of the opinion that for the sake of mutual respect and better relations between the regional and the national/metropolitan universities, the regional universities should be developed, with regards to teaching, research and service, to be just as good as the metropolitan universities.

Yip

I would like to comment on a number of points arising from the papers presented this morning.

I would like to start off with Koesnadi who has given us a very interesting paper showing the relationships between the *pembina* and the non-*pembina* universities. In his paper, Mr. Koesnadi has described the characteristics of the *pembina* universities, the *madya* universities and the new universities and their contributions towards the national and regional development process. Mr. Koesnadi has said that in the formulation of the new Five-Year Development Plan of Indonesia, from 1974 to 1979, the development agencies will be preparing one plan and the universities will be preparing another, each group working separately. It seems that the idea of having two plans is to provide comparison on two alternative approaches to development planning. My question is this: why do we need two separate development plans for one country? Would it not be more economical in terms of time and energy to group together development planning offices and university personnel to produce one plan? I believe that Hasa-

with the planning agency of the province. Why is there a need now to depart from this mode of cooperation and coordination between the universities and the development agencies?

I would like also to refer to the paper presented by Tan Sri Suffian. We understand from his paper that the concept of regional and national universities is less clearly defined in the case of Malaysia. Tan Sri Suffian has pointed out that in the case of Malaysia all universities are national universities and all universities are supposed to achieve the same level of academic excellence. However, when we talk about the relationships between national and regional universities I think that this is relevant for Malaysia as well. For instance, we can examine inter-university cooperation and coordination in the area of staff training and development. Here we may take the example of Indonesia where we have the 'seeding system', the 'grafting system' and the 'upgrading system'. I think the Indonesian case is something which Malaysia can learn from. In Malaysia, there is now a mechanism of promoting inter-university cooperation and coordination because of the recent establishment of the Higher Education Advisory Council under the chairmanship of Tan Sri Suffian. It is one thing to talk about inter-university cooperation and coordination; it is another to find out how one could go about it. I think this is a good occasion for us to hear from Tan Sri Suffian what are some of the ideas he has regarding the promotion of inter-university cooperation and coordination in Malaysia.

My last comment is on Dr. Okas' paper. In his paper, Dr. Okas mentioned that the rationale behind the establishment of regional universities in Thailand is to provide leadership in the development of the regions outside Bangkok. My question is this: are the regional universities in Thailand, namely Khon Kaen, Chiangmai and Songkhla, really achieving this purpose? Here I am reminded of the fact that about 75 per cent. of the students in the regional universities in Thailand have in fact come from the Bangkok area and are likely to go back there after graduation. I think this will seriously reduce the effectiveness of the regional universities in training leaders for the non-metropolitan areas.

Chairman
Hamzah

May I request the paper writers to hold back their answers for the moment and reply at the end of the session. In the meantime we can have more comments, observations and questions.

Thien

I would like to take up two points in the discussion. It was mentioned earlier that the national universities could help the regional universities in their development but I wonder if this is true in an absolute sense. For example, the University of Saigon, as a national or metropolitan university, has been providing its teachers on a part-time basis to the regional and new universities but at the same time it is also spreading all its defects and bad habits to these universities. The Faculty of Arts in Van Hanh University, for example, has suffered from this because it is a duplication of the Faculty of Arts of the University of Saigon and has inherited more of its bad than its good characteristics.

The other point concerns academic excellence. This is not something that is easy to achieve in the regional or new universities which have been set up for political reasons. Politicians have a great influence on the orientation and academic affairs of these universities and more often than not the Rectors and Deans of these universities are political figures. There was a case in South Vietnam where the final examinations of a university had to be postponed simply because the Dean of the Faculty was too busy with his electoral campaign.

Thuy

I would like to follow up on Dr. Thien's comment of the relationship between the University of Saigon and other universities in South Vietnam. The University of Saigon is regarded as the grandfather of universities in South Vietnam and as we all know in Southeast Asia, the grandfather receives greater respect and has greater authority in the household. The regional universities like the University of Hué and the University of Dalat were established as an extension of the University of Saigon in order to spread higher education from Saigon to the other regions. As Dr. Thien had mentioned, these universities were established mainly for political reasons. However, not having enough academic staff of their own, they have been relying too much on the University of Saigon to provide them with part-time staff and, as a result, they are unable to achieve a high level of academic excellence. As a result of this, the University of Saigon does not accept the graduates from these universities for post-graduate work. In other words, although the teachers in the University of Saigon teach part-time in these regional universities, they nevertheless do not recognize the degrees from these universities. There is as yet no agreement whereby degrees from other universities in South Vietnam could be recognized by the

University of Saigon. This is one of the difficulties in the co-operation of higher education in South Vietnam.

Manap

I would like to react to Mr. Koesnadi's statement that there are two 'upgrading programmes' for university staff in Indonesia, one at a lower and the other at an advanced level. Why is it necessary to have these double standards? Mr. Koesnadi also said that research workers in the universities should be full-time research workers and should not be assigned to do teaching. To my mind, the quality of research is also dependent on the quality of teaching. Excellence in research and excellence in teaching are closely related and often the professor who is a good researcher is also the most able teacher.

Ich

My comment is confined to Dr. Thien's paper. According to Dr. Thien, the university of Saigon is the last stronghold of French influence in South Vietnam. This might not be all together true because in the Faculty of Science at least more than 50 per cent. of the academic staff have been trained, not in France, but in the United Kingdom and the United States. Therefore, French domination, even if it does exist, is rapidly crumbling down. In the conclusion of his paper, Dr. Thien mentioned that unless the University of Saigon is willing to make drastic changes to its structure and orientation, then it is likely to be phased out of the higher education system in South Vietnam. I am less pessimistic about this and I am of the opinion that the University of Saigon would be able to introduce innovations that would solve its problems. What we need is strong support from the Government to bring about the needed changes and I think the Indonesian system of *pembina* and non-*pembir* universities would be quite enlightening for us in South Vietnam.

Chairman

Hamzah

I wonder if we might move out of South Vietnam and talk about the experiences of other countries in the region.

Bogaars

The question before us at this session is how the national universities, through proper relationships with the regional universities, could contribute towards national development of countries in Southeast Asia. From the discussion so far, I gather that there are so many different problems afflicting the universities in this region, many of which are legacies of the colonial past, that it is

impossible to draw up a set of problems common to the universities in the region. There seems to be no common denominators in the problems facing the universities so that it is not possible for one country to learn from the experiences of another. For instance, the Indonesian experience, as described by Mr. Koesnadi, is so specific that it is applicable only to Indonesia. I doubt if their system of higher education could be implemented elsewhere in the region.

Hahn

The Indonesian model of *pembina* and non-*pembina* universities suggests that here is a feasible way in which universities could involve in the social and economic development of the society. In this connection, I would suggest that the *pembina* universities would be more suitable for national development planning and the non-*pembina* universities for regional development planning. I would like to emphasize at the same time that the universities' involvement in the development process should be a continuous one from the stage of formulation of the plan to the implementation of the plan. I think that the Indonesian case could be applicable to some countries in this region and, in this respect, I disagree with the view expressed that the countries in this region cannot learn from each other's experiences.

Lee

I would like to confine my comments to just the Malaysian situation. I agree broadly with the sentiments expressed by Tan Sri Suffian with regard to the siting of two universities in Malaysia but at the same time I wish to react quite strongly to the sentiments expressed by Dr. Ariffin. Dr. Ariffin has argued for the establishment of the National University in the Kuala Lumpur area. Implicit in his argument are the facilities available to such an institution in a metropolitan area. I think it is important for us to consider many other factors in the siting of a new university. I am not suggesting that every state in Malaysia ought to have a university but I do feel that some of the older states like Malacca and also the states in East Malaysia ought to be seriously considered as the sites for new universities. I know that the National University which Dr. Ariffin is Vice-Chancellor, has rejected the Terendak Camp in Malacca as the site for the University. The Terendak Camp is an excellent site for a new university. It is about five thousand acres in size, it has two or three swimming pools, several buildings and excellent roads. It has also a hospital which could become the nucleus of the medical

school. All in all, it has about 80 per cent. of all the facilities needed for a university. I cannot help but feel that Dr. Ariffin has not given sufficient thought to Terendak Camp before rejecting it as site for the National University. About 80 per cent. of the total budget on higher education in Malaysia is spent in the Kuala Lumpur area and I think that this is highly immoral. I feel we have the responsibility to spread development to the other regions of Malaysia as well.

Ungku Aziz

I have two comments to make on this issue of university development in Malaysia and this concerns the students' involvement in it. One is that the students themselves have made the Government and the public aware of the dangers of having too many universities in the metropolitan areas. I think that this fact will influence considerably the future siting of new universities in Malaysia. The Government at the same time realizes that it is unhealthy to have too many universities close to one another, especially when students can organize themselves in the thousands for a demonstration in just a matter of a few hours! Kuala Lumpur has seen many examples of this during the last few years.

The other point regarding students' involvement is that in recent years the students have become more and more interested in providing service to the community, either in the rural areas or in the more depressed parts of the urban areas. They do this through workcamps whereby they go into the rural areas and build a road or a playing field for the kampong people. This direct involvement in production work is becoming an increasing aspect of students' activities in Malaysia. This, of course, is being done on a big scale in the Peoples' Republic of China. Perhaps this aspect of students' activities can be incorporated into the curriculum of the universities in this region.

Goodman

I would like to raise a concern on the comment made by Dr. Manap earlier on that the man who has a research background is necessarily the most able instructor. I have studied this question in many countries in Latin America, the Middle East and Asia, and come to a conclusion that it would be a mistake to think that an able teacher should also be a good researcher. I have come across many good teachers who are not research-oriented, while at the same time I have seen many good researchers who are bad in the classroom. I am raising this simply as a caution.

Also, we should not try to do what is being done in the United States where so much emphasis is given to basic and theoretical research in determining a man's promotion in the university that we have forgotten what applied research is. Let us not fall into this trap.

Chairman
Hamzah

We have been straying a bit from the subject of the relations between the national and regional universities. Let us try and come back to the topic of discussion.

Romm

This morning we have talked about the relationships between the national and the regional universities in filial terms. We have seen that the flow of resources is very much in one direction, that is, from the national to the regional universities. At the same time, we have seen other tendencies, one of which is the difficulty of regional universities in establishing their own identity and independence, and the other is that the national universities are themselves under severe resource pressures and therefore cannot really afford to service the regional universities as much as we have tended to think here. What this suggests is that there is a need for a relationship arrangement which is mutually beneficial to both the national and the regional universities. Perhaps there should be less of a parent-child relationship and more of activities mutually beneficial to both the national and the regional universities. I would like to pose this as a question. I think that we have not really dealt with the mutuality of the relationships between the national and the regional universities and the kind of arrangements whereby the regional universities could also serve the national universities.

Chairman
Hamzah

Time is marching on. I would like to leave the last few minutes to the paper-writers to respond to the various comments and questions raised. Let me give the floor first to Mr. Koesnadi.

Koesnadi

In answer to Dr. Yip's question, let me explain in terms of regional planning in Indonesia. Bappenas, the national planning body in Indonesia, feels that in addition to the regional development plans prepared by the various provincial Governors, there should also be regional development plans prepared by the provincial universities. These latter plans are supposed to give an

objective and unbiased assessment of the planning objectives and targets for the provinces. The feeling in Bappenas is that this approach would produce sounder regional development plans for the provinces in the end.

Let me next refer to the query from Dr. Manap as to why we need to have two upgrading courses for the training of university staff. From our experience at the Bandung Institute of Technology which provided this sort of training for the staff of other universities, we have come to realize that there is a vast heterogeneity in the quality of academic staff so that it is necessary to provide courses relevant to the type of staff being trained. If we have just one upgrading course, then the advanced academic staff would be bored with it while the less-qualified staff would be frustrated by it.

On the question of teaching and research mentioned by Dr. Manap and Dr. Goodman, we would like to believe that a good teacher is also a good researcher. But this assumption has proved to be false. The result of this is that academic staff who are involved in teaching usually could not produce good research and for this reason we have found it necessary to design special research programmes to enable academic staff to gain more experience in research so that they could become better researchers. This emphasis on research is given because of the importance of research for regional development planning in Indonesia.

I would like to refer briefly to what Professor Ungku Aziz has said about the involvement of university students in community development. We have had three pilot projects on community development this year, one of which is at the Hasanuddin University. Next year we are going to have thirteen pilot projects of this nature and on the basis of these projects, we will decide whether or not to include community development into the curriculum of universities in Indonesia.

My last comment is on Dr. Romm's query as to whether the relations between national and regional universities has become a one-way traffic. In the case of Indonesia, this flow is two-way. For instance, in sectoral planning the *pembina* universities need to have assistance of the non-*pembina* universities in providing the relevant data on the regions in order to formulate the sectoral plans. The *pembina* universities on the whole would not be able to provide such data. Here, we can see a flow of resources from the regional to the national universities.

Suffian

I have a very brief comment to add to the discussion concerning the siting of universities. The best universities in Europe are the old ones and they are sited in small town because they were founded by monks who wanted peace and quiet to reflect and to study. The universities in Southeast Asia are founded by governments, meaning politicians, and politicians like visibility; they like their efforts to be visible from the top of a bus on the way to the airport. That is why in the countries represented here, the best universities are found in the capital cities. However, there seems to be general agreement at this workshop that governments in future should exercise more care in the siting of new universities and that they should avoid the concentration of universities in the metropolitan areas.

Okas

I would like to react to Dr. Yip's question as to whether regional universities in Thailand have achieved their role in providing leadership for the regions. The answer is positive. It has been said that Bangkok is Thailand and Thailand is Bangkok. The establishment of regional universities is therefore necessary if we are to develop the regions outside Bangkok. Having a university in each of the regions in Thailand has been one of the chief means of achieving such regional development. I can assure you all that with the establishment of regional universities in Thailand, regional development has been progressing much faster. One of the significant results of the establishment of regional universities has been a migration of academic staff and students from the Bangkok area to the outlying regions. In recent years, more and more of the students from the Bangkok area have chosen to remain in the regions after they have completed their studies in the regional universities. For instance, 38 per cent. of the agriculture graduates at the Khon Kaen University last year stayed back in the northeastern region. It may appear to be a very expensive way to develop a region by starting a university there but a university serves as a catalyst for the development of the region and this would be a very significant factor in regional development in the long run. Of course, there are other reasons for establishing a regional university and these are quite similar to those for establishing a national university, namely, to provide higher education opportunities for the young people in the country.

Thien

As I listened to the discussion, I have come to realize that different countries have different problems with regards to the relations between the national and the regional universities, and many of these problems are related to these countries' colonial past. At the same time, I feel that they can learn a lot from the experiences of other countries that will help us plan our universities more effectively in the future and I, for one, have learned a lot from this discussion and I will be taking back to South Vietnam with me many useful ideas.

PART III
THE UNIVERSITIES AND THE GOVERNMENT

THE UNIVERSITIES AND THE GOVERNMENT

George E. Boguars

To my mind, it is immaterial whether a university in Southeast Asia is a full-blown government department or a semi- or fully-autonomous body with its own separate corporate existence. This is because to talk of university autonomy and independence today is to talk of a theoretical possibility but a practical impossibility. University expenditures (and I refer only to the university which provides more or less the full gamut of academic teaching in the modern sense of a university) have become so large that they can no longer be sustained by the individual efforts of private persons who pledge the larger part of their own fortunes to its upkeep and maintenance. In practically all instances the budgets of the better universities in Southeast Asia have to be underwritten to some degree or other by the governments of the countries concerned. I have qualified my remarks sufficiently, I hope, to avoid a long and tedious discussion on what constitutes a 'better' class university in Southeast Asia and the degree of dependence universities suffer to get their financial requirements met.

In a discussion on the role the university could play in national development I think we have first to agree as to what is the range of resources a university possesses which is likely to make a positive contribution to national development. These resources arise out of the functions the university has to perform; and here I am assuming an established university system which provides three major services to the community. The university imparts knowledge by programmes of study and courses of instruction over a wide field of disciplines, the choice of which has been either decreed by government in the past, or worked out jointly between government, the university, and interested sections of the community. Rarely does the university organize teaching which is unrelated to the needs of the community, be it for the private or public sector. Were it to do this continuously, it would very quickly be out of business because its graduates would soon find themselves unemployable, and whosoever is providing the finances of the university would soon put a stop to the matter.

The second function a university should fulfil is to provide a well-directed programme of research which, whilst it has not to be entirely orientated to the specific needs of the community, is of such quality that its implementation does produce the best type of brain power for the community. The academic motivation and initiative which are the consequences and indeed, the prerequisites of high-calibre academic research create for the community a large corps of disciplined and skilled thinkers who will form the nucleus for the growth of the community.

Finally, the university has the function of being a repository of knowledge because it is likely to be one of a few centres for the systematic collection of knowledge in the community. It is a specialist in the proper collection of knowledge relevant to its teaching and research programmes and the storage, tabulation and making available of such knowledge. Rarely does a community reduplicate these library services that exist in its universities because of the large expenditures involved in providing such facilities in the first instance. The other facilities that the university possess are specialized buildings and aids to teaching and research and while these may be available elsewhere in the community, they exist in the largest number in the university itself.

These then, in summary, are the major tasks a university performs and it organizes its resources to provide these functions to the community. The resources are its manpower and its teaching and research facilities including its library, halls and lecture rooms. It is these resources that could be used towards furthering the economic development of the community. I have omitted mention of other institutions of higher learning because these are fewer in number and where they exist, the resources they have are roughly similar to those of universities, though they may be more specialist by nature.

This now brings me to the question of how and with whom the university should cooperate in order to assist in the process of national development. That is, there must exist in the community an organization, or organizations, capable of employing these resources of the university in the process of national development. In other words, there must exist a demand for the qualified manpower that the university both possesses and produces and a need for its specialist facilities. In this context, I would prefer to use a broader definition for the process of national development than has been used in discussions on the relationship between government and university in the furtherance of national development.

Hitherto, the main emphasis has been to concentrate on those agencies of development which relate specifically to the production of material goods and services which in turn provide substantially improved living conditions for the community. I submit, however, that quite apart from the direct need to aid the technological progress of the community and coordinate the whole range of complex functions that are required to operate a modern developing country, there is as great a need to aid national development by indirect contribution, through strengthening of the general administrative structure and organization of the country and so provide that proper environment in which rapid and sustained economic and social development can take place. In other words, I would, while not lessening the need for economic planners, scientists and technocrats to man the various sectors of the economy, stress that there is as great need for highly trained overall supervisors and managers, who, for a better definition, we could describe as 'administrators'. I believe then that the role the university could

play is not a limited one of contributing to the organizing and implementation of economic planning for the production of economic goods and services, but rather being responsible for the *total effort* which consists of both the direct contribution to production and the indirect one of providing the administrative and organizational *milieu* in which national development can take place and flourish.

My proposition then, is this. There is an extremely wide range of governmental activity in which the resources of the university could be deployed to play a meaningful role in national development. I therefore do not hold that there must exist specific economic and financial agencies and organizations which are only or mainly concerned with economic development in a country before a demand can be generated for university staff to be drawn into the process of national development. It is sufficient for an overall administration (call it what you will), to exist, dedicated to the advancement of the material well-being of the community. This could very well constitute a single entity in the form of the entire government machine, or just a single unit of that machine, like a department or ministry such as that for economic development. All that is needed is a conscious attitude towards organizing the total national effort towards the creation of a better quality of life for all concerned. In fact, I feel that even in those countries where there are already well-defined agencies charged with the responsibility of economic development, the need exists (sometimes in greater degree than in those where no such organizations exist), for strong support from the university to those organs of government not directly involved in the process of economic development, that is, the administrative structure of government. By this I mean that there are countries which possess all the outward trappings of a society geared for economic development, yet lack the inherent administrative sinews and strength to sustain the prolonged effort required for such national development.

How then can a university help? First, I would like to consider the most obvious way a university assists in economic development: that is, by its undergraduate teaching programme. I believe that the university should produce in quantity, the type of graduates that are required by the community. If the main political objective of the country is economic development, then the training programme should largely be orientated towards providing a supply of engineers and scientists, economists, technocrats, etc., to man the various positions in agencies that are engaged in development. It would be a university greatly lacking in political or business acumen that produced graduates who could not fulfil these needs, or the graduates of which had no prospects of satisfactory employment but must needs accept employment that could be performed by persons who were less expensively qualified and trained. Therefore, insofar as a university satisfies the demand for graduates qualified in those areas of activity which the community is vitally interested, it fulfills its first and primary obligation to the community.

I now come to the question of the use of the university's manpower resources, in the form of the services of its dons and scholars, by the community, to undertake specific tasks in areas where the university possess specialized knowledge and expertise. In most instances this will take the form of consultant or advisory services to government and its agencies in the fields of labour, finance, economics, industry, trade, commerce, and so on. Such assistance could be on an *ad hoc* basis (as in the case of appointment of university staff to the chairmanship or membership of commissions of inquiry, arbitration tribunals, special committee, etc.), or as members of delegations to overseas conferences, seminars, etc. Such assistance however, could be on a more continuous basis as when university staff become advisers or consultants employed by government and its agencies on broader terms of reference, for example, economic or as labour advisers, and so on.

However, it is my view that the largest contribution the university teacher can make to the task of national development is by directly participating in the process of development or in the general administration itself. I believe that attempts to utilize the services of university dons and scholars in this manner has not succeeded because of

- (i) the difficulty of formulating procedures whereby such staff could be integrated (albeit temporarily) into the actual machinery of decision-making and implementation; and
- (ii) the lack of trust that exists between the professional administrator who considers the university teacher at best as an intruder, and a theoretician seeking opportunities to advance his own academic career, and at worst, as a danger to national security and a hindrance to national development.

On the other hand, the university teacher regards the civil servant as an uninformed and regulation-bound bureaucrat who cannot, or will not act, unless supported by precedent and official confirmation.

I believe that it is possible to resolve both these obstacles to university teachers being employed directly in the government machine. First, it has to be realized what are the qualities that the university teacher brings to the government which are required to assist in national development. I think that the most important of these is that quality of mind which is developed and sustained by long-term research, initiated and motivated by high academic standards and ideals, and the acquisition of knowledge and judgment gained through the pursuit of scholarly activities. Because of the nature of government business and more especially, because in most developing countries the need for economic growth and social change are urgent and pressing, there is a tendency for civil servants to develop 'action-oriented' attitudes towards the decision-making process. Government planners in general are less concerned with amassing data (sometimes for the reason that it is not there) or on the various aspects of planning (such as feasibility studies) because they are constrained by policy, time and bud-

getary factors. They are more concerned with finding out day-to-day solutions, and to adjust and adapt policies in the light of their impact on the community. They become impatient with the more measured tread, the critical and sometimes carping approach and the objective if somewhat clinical attitude of the academician. They want quick solutions to urgent problems and not the weighing and balancing of the efficacy or otherwise of a policy, or evaluation as to whether it is, in fact, optimal. Hence, if it is accepted that the university teacher does have a part to play in introducing into the development process, and even the administrative organization, a more thorough and national approach to decision-making and implementation, then it is important that he must hold a recognized position in the civil service hierarchy, and carry thereby the associated authority and responsibility involved. This, I believe, is crucial to the success of the proposal and can only be achieved by a proper system of secondments whereby suitably-qualified and experienced university scholars can be posted to specific duty posts or appointments in the public service and receive all the authority and responsibility-associated with such appointments. Generally, I would think, fairly senior teachers who have been taken on to the permanent establishment of the university and who have acquired a reputation for sound and scholarly research would benefit the civil service and general administration quite considerably. They should be remunerated according to the terms and conditions of the appointments they are to hold in the civil service, and generally these should be at fairly senior levels in the civil service hierarchy. Appointments should be for two or three years at the most.

As for the question of national security and access to official secrets, this could be met by excluding from the scheme all but nationals of the country and anyone whom the security authorities are unprepared to clear. By and large, therefore, it will be senior lecturers with about ten years' service who should be suitable for secondment and their appointment in the civil service would roughly equate to the grade of deputy-secretary in the UK civil service. By this means, the administration (and here again I stress that the secondments be not only confined to those posts where the task of function is directly related to economic planning and implementation but even to the general administrative machinery) will receive a continuous supply of senior faculty members who will bring to the government slightly different perspectives to national development and economic matters. Their more thorough and detailed approach to planning and evaluations will introduce into the administrative processes some measure of balance against the tendency to hasty administrative decision-making and even snap decision-making politically inspired. There will no doubt be some friction engendered but if the civil service is made to understand that these university secondments are for a short period of time and that these persons carry all the authority vested in the appointments, the system should work. Besides, the gains to the civil service by installing what would virtually be a testing board for the evaluation

of goals, priorities and methods set by government would be invaluable and the general tone and quality of the administration would be enhanced.

The other resources of the university (its specialized facilities for teaching and research) could be used for furthering national development by the establishment of programmes designed to provide middle management in the public service, who have been identified as having high potential for development. A small group of officers in middle career whose abilities, interests and long-range career objectives have been identified could be selected annually to attend special in-residence management courses organized and run by the university. The course would be designed to increase their knowledge and understanding of the domestic and international environment as well as develop their executive and professional skills. For the individual, the course would provide an insight into the latest developments in the management and behavioural sciences; and appreciation of the techniques and the process of analysis and decision-making in government; as well as being a medium for becoming knowledgeable about, and exchanging views on, the political, economic, social and cultural influences which affect policy-making.

The size of the groups could be regulated to the availability of facilities or of candidates. The principal guidelines in selecting participants would be a proven record of superior on-the-job performance and demonstration of above-average potential for advancement to senior management level in the public service. Of course, mere attendance and success at the course would not assure participants of promotion though their prospects would be enhanced accordingly. In addition, participants should be innovative and well motivated, possess good judgment, have a capacity for leadership and have the ability to plan, solve problems, make decisions and communicate effectively. They should also be flexible and innovative in relation to development opportunities.

The objectives of the in-residence management courses would be to increase officers' ability to analyze, think through and resolve management problems and to increase their knowledge and understanding of current methods of management theory and practice and their relevance to their particular community. They would also be instructed on leadership and personnel management practices and on understanding and developing the characteristics necessary to enable a senior civil servant to lead and motivate his subordinates effectively. The course would probably have to be between four and six months and conducted by university faculty members and specialist in education with varied academic backgrounds. They would be supplemented by experts from the private sector, universities and government. The curricula could include lectures, private reading, discussions and seminars and the presentation of an academic thesis on a problem of relevance to national development at the end of the course. There need be no formal assessment of work levels: merely reports on individual participant's performance.

The other use to which university facilities, especially research facilities, could be put, is to provide the government with a means of promoting and conducting research orientated towards development needs. The task could be undertaken by the university as part of its normal routine. Otherwise, a research centre or unit could be established together with the university to facilitate multi-disciplinary research, and also to operate as a channel for liaising with government and its agencies on research matters. The major effort of such centres or units should then be concentrated on research aimed at solving longer-term economic and social problems on an inter-disciplinary, project-orientated basis.

In this connection, because of the rapid developments in transportation and communications and the scale of modern industrial enterprise, even highly nationalistic countries have been forced into larger and larger groupings with their neighbours. This type of development is to be seen also in the growing organization of groups of university studies round similar regional centres. At times, national institutes are set up to assist universities to develop regional studies. The objective is to create a unified field of study in a particular discipline and the curriculum is adapted to the conditions of life and development in the region. With more long-run research, fruitful collaboration between governments and universities will be achieved within the region and those universities which have special facilities or departments of outstanding strength and promise should be encouraged to develop them as regional postgraduate centres of high international standing. This could be especially advantageous when the studies cover the modern behavioural sciences and economic planning and research. If developing countries do not move to mobilize and centralize resources for higher-level research and training by the development of such regional centres and institutes, they are bound to squander their limited resources of money and manpower.

Finally, I would like to say that the university has a responsibility to engage in extra-mural education of those who are ready to take advantage of it. This represents a responsibility of playing a specific role in the development of a system of education primarily aimed at enhancing intellectual and cultural qualities in the population, and thus indirectly assisting in the development process. In developing countries this need is even greater because of the lack of a highly-organized and pervasive system of television, broadcasting and other such agencies that exist in developed countries. To this end the university could organize planning and planning-orientated courses. These could cover, for example, urban planning, architecture, economics and various other development-type courses.

It will be seen therefore that the university and government have much to gain by the development of a proper national policy to help in implementing development programmes at regional and local levels. The growth of modern development planning has made it increasingly necessary to bend higher education to the

shape of the technical and administrative needs of a developing industrial community. If a country fails to develop its human reserves it fails to develop much else. This is especially so because progress is the result of human effort. It takes educated individuals to mobilize capital, exploit natural resources and create markets. Progress cannot be expected merely from the automatic action of economic forces: it is obtained by the conscious and sustained effort of every single individual and organization in the community, and in this respect the university has a vital part to play.

THE UNIVERSITIES AND THE GOVERNMENT: SOME COMMENTS ON THE EXPERIENCE OF THAILAND

Vinyu Vichit-Vadukan

INTRODUCTION

Thailand, a country of thirty-six million, has about a dozen government institutions of higher learning with a total enrolment of about 100,000. Apart from this, there are about half a dozen other private higher-learning, degree-granting institutions, with a total enrolment of less than 5,000.

Universities, being part of the government service, are still subject to very strict administrative control of the government. During the past decade, active discussions have taken place on the subject of autonomy in university administration, but not very much has been accomplished to date. The main stumbling block seems to be the inability of universities to be financially self-supporting.

This paper is presented as an attempt to describe and analyze the various problems of university administration in relationship to the roles of the government.

HISTORICAL BACKGROUND

Higher education in Thailand started at the end of the last century with an establishment of a university whose main objective was to produce qualified civil servants. This single objective has been maintained for a long period of time and universities which were created before World War II were all set up to produce government officials.

It was only after the war that recognition has been given to training, not only for the government, but for the whole economy, including the private sector.

In the late 1950's the need for national economic development has been strongly emphasized. Regional development to bridge regional disparities was also recognized. The Government has shifted its pattern of expenditures and has pumped in a substantial amount of its budget allocation to the development of the northern, southern, and particularly the northeastern, part of the country. Highways were built, irrigation systems were constructed and health facilities, including hospitals and health stations, were improved. Together with other economic and social development activities, the educational system was also subject to changes and improvements. Primary compulsory education has been increased from four to seven years in some selected regions. Vocational training institutions were developed both in quality and in number in various regions of the country. Emphasis has been given to the kind of vocational training that is needed for that particular region. Teacher-training colleges have also been esta-

lished in the provinces to alleviate the shortage of teachers in the rural and remote areas. The number of teachers produced annually has increased more than ten times during the decade of the 1960's.

Government expenditures for higher education have also increased at a higher rate than the average budget allocations.

Higher learning at university level has also been subject to changes and improvements. Before this period, university education in this country could only be found in Bangkok, the capital of the country. Chiangmai University was established in the north, Khon Kaen University in the northeast and Prince of Songkhla University in the south. The older universities were in Bangkok. Examples in this respect are Silpakorn University at Nakorn Patom, Kasetsart at Kampaensaen, and Mahidol at Salaya. Expansions to at least two campuses are being planned: i.e. for Chulalongkorn University at Cholburi; and Thammasat University at Patumtani.

Administratively, the organization of university administration within the government has also recently been changed. A Ministry of Government of Universities has been established to deal wholly with the affairs of the universities. The establishment of private colleges of higher learning was also encouraged and an office responsible for private universities was set up recently in the Ministry of Education. Attempts have also been made to gear the production of university graduates to the manpower requirements of the various regions of the country.

It can generally be said that developments which took place in the last fifteen years in Thailand seem to indicate that higher learning in this country has been moving at a sufficiently and satisfactorily rapid pace.

GOVERNMENT POLICIES ON HIGHER EDUCATION

Thailand started its first national development plan in 1961. The main emphasis on the First Plan period (1961-6) was on economic infrastructure. Many highways, irrigation facilities and electric power plants were built. It was during the period of the Second Plan (1967-71) that the manpower aspects of planning were emphasized. Manpower studies were conducted and education programmes at all levels were altered in an attempt to equate the demand for with the supply of manpower.

On higher education, it was stated in the second plan that emphasis would be given to the establishment and expansion of universities and campus outside of Bangkok, new faculties would be created, enrolments expanded, the number of faculty members increased, and overall academic standards improved. Assistance from abroad was also to be sought to upgrade higher education programmes. Enrolments at universities during this period was increased by over 30 per cent. from 33,500 to 45,100.

Priorities in the Third Plan period (1972-6) are set in such a way that among the various development sectors, agriculture and education will receive the

highest consideration. Policy statements during the Third Plan period include the reduction of wastages, continued shifts in emphasis on the various branches to conform with manpower requirements in the future, and activities on research and textbook production are to be promoted. Again, emphasis will be given to universities, campuses and education centres in the regions and provinces. It is expected that university enrolments will increase by 40 per cent. from 45,100 to about 64,000 in 1976. This does not include the enrolment in the open university (Ramkhamhaeng) which was opened in 1971 with a first-year enrolment of about 40,000 students. With all these expansion programmes which can be realized in a short period of time and considering the delay in the adaptation of universities to the manpower requirements of the future, concern was also expressed in the Third Plan about the problems of the educated unemployed. This problem seems to become more and more real and the government is making a serious attempt to alleviate it.

GOVERNMENT SUBSIDIES

The structure of the university administration in Thailand is such that all government universities have to rely very heavily on government subsidies. The only other main source of income is tuition fees, which constitutes less than one-fifth of the financial requirements. Other income is almost non-existent except for one university, Chulalongkorn, which has a large piece of property granted to it and income from this property helps with the administrative expenses.

The amount of subsidies received by each university depends on the project proposals that each individual university prepares. Except for items of current expenses, there have not been any definite criteria used to allocate subsidies to universities, such as accordance with their size, enrolment, expenditure, etc. Projects submitted for funding are normally screened by the National Education Council and the National Economic Development Board before going up to the Bureau of the Budget for actual allocation. All these three agencies use the Plan document as a guideline for their judgment on whether or not to support a particular programme. Government subsidies for the past five years are given in Table I.

GOVERNMENT CONTROL

Being part of the civil service machinery, universities are subject to the rules and regulations of the government, just like any other government agency. However, as the various universities were established somewhat independently by individual enactments and laws, the degree of control by the government varies from one university to another, except on financial matters, where all the universities are subject to a very uniform and standardized control.

Varying degrees of control exist in matters such as appointment of rectors and deans, approval of curricula and the general administration of the univer-

TABLE I
GOVERNMENT SUBSIDIES TO UNIVERSITIES
(*Million bah**)

<u>University</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Kasetsart	44.4	61.9	67.8	71.5	79.1
Chulalongkorn	67.8	65.7	88.3	120.6	138.7
Thammasat	23.3	29.5	29.2	29.3	38.9
Mahidol	134.6	197.8	138.4	213.4	220.4
Silpakorn	12.7	11.2	20.7	19.0	25.6
Chiangmai	85.2	90.8	77.2	86.3	102.4
Khon Kaen	34.0	38.6	31.8	32.2	62.2
Songkhla	23.7	24.5	51.3	55.1	60.7
NIDA	18.8	18.2	18.5	11.1	13.1
Total	444.5	538.2	523.2	638.5	741.1

Note: US\$1 = Bht. 20.80.

sities. A substantial amount of matters need to be approved by the highest authority in the government, i.e. the prime minister. Governing officers and staff of the universities are sometimes nominated by the government and also sometimes on political grounds. This has created dissatisfaction and resentment at the universities, and inefficiencies, delays in various undertakings and low academic and administrative standards are sometimes believed to be caused by such political involvements with the universities.

Numerous discussions and meetings have taken place among the universities and the usual conclusion is that universities must seek their own autonomy to strive to achieve their goals. It is often considered that a university is a place where political interferences are undesirable. Nevertheless, there has not been any satisfactory solution to such a problem.

There has been a number of suggestions made on the new university administrative system. These range from suggestions that universities be taken out of the government altogether to recommendations that the present set-up be retained, with changes to be made gradually and only in some areas (for example, in the promotion of more academic freedom and the setting-up of an academic community) which are considered to be important features of a university.

Before attempting to indicate the optimal alternative, it may be useful to learn what seems to be lacking in the present system.

First, government rules and regulations make it almost impossible for univer-

sities to act freely and flexibly so as to innovate and take chances in the pursuit of the best result. These rules and regulations may be suitable for the kind of agencies which require security and discipline but for others, particularly universities, where changes and challenge are regular features, strict rules and regulations are more often a hindrance to progress.

Second, the present system discourages the recruiting of the best-qualified teachers and professors since wages are low (an equivalent to one-third or one-fourth of those working on something similar in the private sector). Promotion is often based on rank classification rather than academic performance, hence qualified academicians are less motivated to join universities.

Frustrations also arise from delays in getting government approval on various matters. This sometimes makes plans and projects outdated and thereby not feasible.

Critics sound logical enough when complaining that the present system calls for changes. Nevertheless, it is unrealistic to jump to the conclusion that all problems will disappear once universities are out of the government system. At this stage, most universities are not in a position to act independently of the government, partly because of their heavy reliance upon government subsidies and partly, perhaps, because of their 'infant' structure which does not easily permit control and administration by themselves.

The government is well aware of this feeling of discontent among universities regarding government interference. Slowly, perhaps too slowly, the government is giving up its control of the universities. Programmes are being worked out by the government to subsidize universities without actually controlling them. In the event, universities might find themselves in difficulty in having to find, by themselves, able and reliable administrators who must be able to impose some much-needed controlling measures.

A number of the faculty members in the universities are not as yet unanimous in their feelings about whether or not universities should be in the civil service. Thai society still believes in the status of civil servants and there are still a number of advantages, both material and otherwise, attached to being a civil servant.

This question of government control and whether or not universities should remain in the government structure can be expected to be discussed in Thailand for some years to come. Solutions satisfactory to all concerned will be very difficult, if not impossible, to find.

GOVERNMENT USES OF THE UNIVERSITIES

Except in the fields of natural sciences such as medicine and agriculture, the government has not made very much use of the universities. It was only recently that universities were involved in the planning processes of the government.

During the preparation of the Third Plan, the National Economic Development Board, which was the agency responsible for the preparation of the Plan,

tried to use the talents at universities. The experience proved to be useful to both parties. The academic, systematic approach of the members of the universities has helped improve the quality of the plan and at the same time it was a chance for faculty members from various universities to expose themselves to the actual workings of the government agencies and those of the various development projects.

Research activities which are policy-oriented are being conducted more and more by the universities and there is an increasing trend for results to be used by the various government agencies.

It can be reasonably expected that the government will be making more uses of the universities in the years to come and that there will be closer relationship and understanding between the two parties.

GOVERNMENT AND PRIVATE UNIVERSITIES

It has only been a few years since the government has allowed the setting up of private degree-granting colleges and there are about six colleges in operation at present.

The government imposes very strict control on private universities which includes the size of their land and buildings; the volume of teaching materials and library facilities, their tuition fees; the quality of teaching, curricula, course description and the quality of teaching and examinations in general.

At present, due to their infancy and lack of sufficient capital, private colleges are still behind government universities in their standard of teaching and the general quality of their programmes. But the indications are that a very rapid improvement will take place in the near future.

SUMMARY AND CONCLUSIONS

In spite of the pessimistic views and conflicting opinions which exist at the moment on the relationship between universities and the government, there are a few potential areas for new development of a future system, based on the assumption that the government has a long-term plan to promote all universities and that universities will continue to be part of the government organization.

An area that should first be concentrated upon is regional universities. They are generally young, flexible and responsive to innovations. The government may help subsidize these universities in the form of land grants, the amount of which must be quite substantial to be able to yield the required returns. With this, the universities will be less dependent on the government's annual grants. Loans should be granted to universities at favourable terms, with no strings attached. Considerations should also be given to the sale of bonds to the public for educational purposes. But all this presupposes that the universities can be self-financed in the long run.

Physical facilities at regional universities should also be improved so that they

will be able to attract well-qualified faculty. Attempts should also be made to adjust pay scale to a level equal to the opportunity cost of such faculty members. Considerations should also be given to the Thai social values and way of life which are somewhat different from those of the West, such as the problems of the extended family, which may require larger housing facilities.

THE GOVERNMENT AND THE COLLEGE CURRICULUM IN THE YEARS AHEAD

Nguyen Van Thuy

Public higher educational institutions have had long involvement with the government. The relations between the universities and the government are complicated by the fact that control over the universities is exercised from various governmental agencies. The government completely dominates the universities financially; this financial control even extends in part to the private universities since they are sometimes subsidized in part by the government. The government exercises control over the university governance and administration and over the university staff and faculty-members and related problems concerning their recruitment, appointment, promotion, and training. However, the government has given very little consideration to the type of organization that might be necessary if it is to give proper service to the universities.

As a result of such highly centralized control, the universities are subject to peculiar administrative problems. They seek to be autonomous, but they are integrated into the national government system. Some of the problems they face are as follows:

- (i) The administrative organization of the university creates ambiguity in the four areas of college administration: academic affairs; student personnel services; business management; and institutional research and development. There is a lack of coordination and cooperation between the rector, deans, and department chairmen which results in confusion concerning recommendations for faculty appointments and promotions. Other areas of decision-making (such as the determination of departmental majors and minors, decisions as to new courses, textbook approval, approval of teachers' assignments and teaching loads, making schedules, determination of room space and space utilization, supervision and evaluation of instruction and curriculum) are new to many university administrators. Hence, the university fails to make appropriate plans for institutional extension and development.
- (ii) The university administrative processes are strongly influenced by features of the political system, such as: (a) invariably traditionalist academic norms, (b) inherent 'rightness' of the political elite, and (c) politicizing of both educational programmes and organization by the political regime.
- (iii) The administration of academic affairs is neither efficient nor effective and there is duplication of both programmes and physical facilities. This raises costs without raising the quality of education given.
- (iv) Although the national budget allocation for the university is far from

adequate to develop the facilities and to pay for instructional programmes, the management of the university often does not make the best use of the funds that are available. Some of the criticisms of university management that might be made are: (a) absence of proper budgeting policies; (b) failure to provide cost-benefit analyses when requesting funds; (c) application of rigorous budgetary procedures thus preventing the growth of longstanding traditions in academic life; (d) poor administration of the limited space available; and (e) lack of rational decisions on the use of university resources and the direction of university development.

(v) Poorly-trained and even more poorly-paid faculty-members confronting an excessive number of students who are ill-prepared for university study summarizes the main reason for the low quality of higher education. In addition, however, the libraries are inadequate and even so, unused; laboratories are overcrowded and under-equipped; classrooms often have standing room only; and neither space nor time is available for the professor to meet with his students outside of class. The programmes themselves often badly need improvement with out-of-date or poorly-organized syllabi, course outlines, and ineffective methods of instruction.

But the heavy hand of the government over the university does not help it to improve so that it can assume its role in meeting the urgent needs of national development. It has been recognized that

... the university cannot play its role in any contemporary society unless it succeeds in harmonizing its theoretical subordination to the needs of society expressed by the political authorities with effective autonomy; with a certain 'perspective', a certain 'withdrawal' from the power system, education becomes inevitably sterile.¹

As long as the university must subordinate its general policy to the paramount needs of society as defined by the governmental authorities, there will be a confrontation between the freedom to innovate and expand knowledge and the subordination to the power system. This certainly harms the traditional functions of the university, since the essential value of a university consists in its freedom to go its own way in teaching, research, and service to the community.

The focus of this paper is not on how to solve the above problems, however, but to examine how the college curriculum can be made responsive to national manpower needs *vis-a-vis* the above considerations. In this regard, undergraduate education in Vietnam has the following obligations.

(i) College education should provide the student with sufficient basic knowledge that makes him conscious of himself and the environment in which he lives. Thus college education should afford a setting in which each student can develop his talents, become more concerned about his obligations to his fellowmen, and

¹ Henri Janne, *The University and the Needs of Contemporary Society*, Papers of the International Association of Universities, No. 10, Paris, IAU, 1970, p. 46.

recognize that knowledge serves to identify man's past achievements but also provides the basis for further progress. It should help the student develop a respect and enthusiasm for learning, and appreciation for both continuity and change and the recognition that the result of thought is frequently action. Hence, it is anticipated that the acquisition of basic knowledge should culminate in the development of a concern suitable for living in an age of accelerating change and in a progressing society. This anticipation requires the student to:

- (a) have an accurate and strong attachment to the traditional heritage that made him able to appraise critically his own values and the values of society;
- (b) have a personal commitment to serve his community; and
- (c) be aware of the rapidly-changing nature of the world and the nation;

and hence be capable of adjusting to changing demands.

(ii) College undergraduate education should promote and develop the student's skills in communication, thus making human interactions and relationships almost limitless. In Vietnam, our college education does not serve this objective, and a degree conferred on the student often only offers him access to the 'ivory-tower', and separates him from the masses. A college education should provide the student with at least sufficient competency in oral and written expression for success in working with and influencing other people. The four facets of communication, reading, writing, speaking, and listening, should be included in required courses for the freshman year.

(iii) The college programme must provide the student an understanding of, and the ability to cope with, his environment. This includes such elements as (a) the development of man's knowledge about his environment; (b) the understanding of the physical and biological aspects, structure, changes, and relationships of matter and life; and (c) man's mastering of natural laws and factors that make him able to control his environment. This programme of study should consider the problem of individual and group living as a problem of utilization and distribution of manpower resources and their adjustment to environment. This curriculum would recognize the functions of the family in developing the individual's attitudes that lead him to effective living; it would recognize the interdependence between rural and urban societies; it finally would develop the student's aesthetic appreciation and thinking ability. Therefore the highly-educated and skilled undergraduate student of the future should be stimulated to think and to express himself rationally, imaginatively, and responsibly as he learns to apprehend civilizing values and to identify persistent human problems.

(iv) College undergraduate education should help the Vietnamese student to develop his broad competencies in, and readiness for, self-education and self-improvement. Obviously, the end product of such an education will not be the degree, but rather the student's achievement and change. In this context, the future graduates—whether they will be called bachelors or *licenciers*—should be

defined, as they were in the Vietnamese traditional education, in terms of the 'rising man' (*ca-nhan*). They will then be able to learn new kinds of things which are not taught in colleges and hence be able to adapt to the environment. They will be aware of the development and progress in human knowledge, in science and technology.

(v) Future undergraduate education in the Vietnamese universities must develop in the student strong concern for a well-rounded education. His education will have an impact on his attitudes, values, and judging ability. His learning will not be confined to the classroom or the laboratory.

(vi) College education in Vietnam should provide the student with complete professional preparation. His undergraduate programme will give him in addition the general attributes stated above; the basic fundamentals of the professional work that he completes in his graduate programme.

SUMMARY

Given the task of providing both for transmission of knowledge and for the production of new ideas for public use, the university curriculum must meet the challenge of the age, to prepare young men and women to expect and to welcome change and yet maintain the family and community ties upon which a strong society must rest. Moreover, the college curriculum must foresee further social changes (with its consequences) and national development as its outcome. If, on the contrary, the university curriculum merely follows the trends of the current society, it will only assist that society to stagnate, crystallizing its processes and attitudes. But the Vietnamese university should not stand alone in its responsibilities for both the citizen's material and moral welfare. It must, on the contrary, be a means by which all levels of manpower and resources in this country can appropriately cooperate and contribute to national advancement.

It must be pointed out that with the need to relate more to community needs, Vietnam has found it necessary to complement the university so as to bring higher education down to the community level. To do this the national system of junior colleges was established. The new institutions are to serve their communities by helping to tap the resources now made available through science and technology. They will train the technicians, the agriculturists, geneticists, soil technicians, junior business executives, junior accountants, etc. who can supplement the professionals in upgrading agriculture, commerce, health services, and so on. They will help retrain the returning veterans who will not wish to take the longer professional path in order to become contributing members of their communities.

DISCUSSION

Chairman:
You

The topic for discussion this afternoon addresses itself to the relations between the universities and the government, and in a sense it is relatively more straightforward and simpler compared with the one we had this morning. In this session, we would not be dealing with the problems of cooperation and coordination between the national and the regional universities. Here, we are dealing with the relations between the universities (both national and regional) on the one hand and the government on the other.

As far as the relations between the universities and the government are concerned, one has to look at this problem from the viewpoint of 'give and take'. In most of the countries of Southeast Asia, the government subsidizes the universities heavily. As such the government is concerned over the extent of control it could exercise over the universities, and the returns of its investments in the universities in terms of the output of trained manpower for national development purposes. The concerns to the universities, on the other hand, are in terms of how much financial support they could get from the government and how little control the government should exercise over them. At the same time, the universities are concerned over how they could live up to the expectations of the government and society and how they could contribute more towards the national development process by stepping out of the ivory tower and getting themselves involved with social and economic development of the country. If we could direct our discussion this afternoon to the question of 'give and take' between the universities and the government, then I think we can have a fruitful discussion.

Of the three papers presented for this afternoon's session, Mr. Bogaars' paper deals primarily with the question of how much the government expects from the universities by way of their contributions to society. Dr. Thuy's paper deals primarily with the question of government's control over the universities, while Dr. Vinyu's paper deals with both the aspects of government control over the universities and government's expectations of the benefits derived from the universities. The discussants for this session are Dr. Tisna Amidjaja, Professor Ungku Aziz and Dr. Nguyen-Tien-Ich.

Tisna Amidjaja In discussing the relations between the universities and the government, the Chairman has mentioned the important fact that the government expects the universities to contribute towards the national and regional development processes. My comment will be confined to these aspects of the relations between the universities and the government.

The question before us is this: What part should the universities play in the process of national, regional or local development? I believe that the answer to this question lies in the 'social consciousness' of the universities as well as of the public and the government. It is this consciousness which largely determines the role which universities could play towards the development process. In the case where the social consciousness of the universities is high and where the government and the public share this consciousness, then the universities' participation in the development of the society can be significant. On the other hand, in the case where the social consciousness of the universities is low or where it is not shared by the public and the government, then a different picture will emerge. The universities, for instance, might want to cling on to the traditional and outmoded concepts of a university's functions. In this case the universities' contribution to development becomes minimal. Once the universities, the general public, and the government share the same social consciousness then the universities' involvement in the development process becomes assured.

Let me illustrate this with the case of Indonesia. Since all universities in Indonesia were born with the Republic and evolved with it through history to their present form, the social consciousness in Indonesia is generally high, not only within the university community but also in the general public and the Government. There is a general consensus among the university community, the public, and the Government that universities in Indonesia have three fundamental functions:

- (i) Dissemination of knowledge and culture,
- (ii) Research in a broad field, and
- (iii) Service to the public.

The first two functions do not need further comments and it is the third which can become controversial. One should have a clear understanding of this, lest one should get the impression that the universities in Indonesia are being turned into public enterprises. This third function, defined as service to the public, has its roots in the social consciousness of the universities which

is that they should be concerned with and provide all necessary assistance to the pressing needs of society within their capabilities. This notion has two aspects:

- (i) Universities, both in its teaching and research, should be oriented towards the problems of the society and become the agents rather than agencies for change, and
- (ii) They should be ready to provide services requested by society however irrelevant this request might be in terms of scholarly pursuits.

Although the latter aspect does not exclude the possibilities of a university becoming some kind of a business enterprise, it should also be mentioned that this service of the university is sometimes provided without remuneration. It is this fact which sets the universities aside from business enterprises. In practice, however, it is very rare that no remuneration at all is paid for the services of the university staff although it often happens that the amount of remuneration given is more of a token of goodwill rather than for services rendered.

This social consciousness of universities in Indonesia and the willingness to step out of their academic walls has paved the way towards a large-scale participation of the universities in development programmes in Indonesia. Indeed, those in the universities feel honoured that they are participating in the development process. Universities in Indonesia are able to make significant contributions towards the development process because of the great concentration there of high-level manpower. Many of these qualified individuals get involved in the formulation and implementation of government development projects. These people are highly motivated by the social consciousness of servicing the society and this motivation is an important factor in view of many lucrative avenues of employment that are open to them in the private sector.

After these generalities, let me now focus on my own institution, the Bandung Institute of Technology, and use this as an example to illustrate a university's service function role to society in economic development. The Bandung Institute of Technology is an institution of higher learning, mainly in the fields of science and engineering. It is located in Bandung, about 100 miles from Jakarta and has a student enrolment of about 6,000. ITB is the oldest institution of this kind in Indonesia, having its roots way back in the colonial period. It used to be a part of the University of Indonesia and, because of its long history, it is the strongest institution of higher learning in the field of science and technology.

At ITB, we are conscious that we have the largest concentration of high-level manpower in the fields of science and engineering and we feel that this manpower should be properly utilized to support the economic development of Indonesia. Our involvement with the general public and the government during the past few years has been as follows:

- (i) Engineering services to various segments of business as well as the government.
- (ii) Feasibility studies for government development projects as well as private investors.
- (iii) Research and development in various industrial products and processes.
- (iv) Job-order manufacturing in various products.
- (v) Research and formulation of the regional development plan of West Java.
- (vi) Various sectoral policy research for the National Development Board.
- (vii) City planning for various municipalities.
- (viii) Numerous programmes in university development in cooperation with other national universities.
- (ix) Extension courses of different kinds and levels.
- (x) Cooperative programme with various ministries and the armed forces; and
- (xi) Special innovative projects in the field of transfer of technology in cooperation with domestic and foreign institutions.

The above list is not exhaustive but it serves to indicate the broad area of services requested from us. Furthermore, many of our teaching staff, particularly the senior staff, serve on various national and regional planning committees or are members of development boards or are associated with business enterprises as consultants. In addition we have, of course, our function as a teaching institution. Debates are going on at ITB at the moment as to whether the institution could survive as a teaching institution in view of all these burdens which it has to shoulder. This is a question that I, as Rector of ITB, have to weigh very carefully in my mind.

In concluding my remarks, let me make the following observations:

- (i) There is definitely a need and also a place for the universities in the developing countries to participate in development projects either on the national, regional or local levels. This

could be achieved only if the social consciousness of the universities is strong and this consciousness is shared by the general public and the government.

(ii) A university is both an agent and agency for change. As an agency for change it produces graduates with the right kind of spirit as well as the right kind of knowledge and skill needed for a country's development. As an agent of change it participates directly in the process of development by utilizing its resources, mainly, the staff available.

(iii) Once a university begins to act as an agent for change, there should also be institutional changes within the university, lest the old system inhibit the effectiveness of the university to act in this capacity.

Ungku Aziz

With this afternoon's topic of discussion on the relations between the universities and the government, we seem to have come to the heart of the theme of this Workshop. I would expect this discussion to lead us to a basis for regulating the relations between the universities and the government just as there are regulations governing the relations between workers and employers or between one government department and another. The absence of any acceptable basis for the relations between the universities and the government has led to a variety of ways of consultation between the universities and the government for the countries of this region. At one extreme we can have a situation of a Minister of Education calling up a Vice-Chancellor, Rector or President of a university and berating him, and at the other extreme, we can have a situation where consultation between a Minister of Education and a Vice-Chancellor, Rector or President of a university is carried out through a formal discussion involving also the staff of the university and the staff of the ministry. In-between these lies a very big range in the relations between the universities and the government, and some explorations of how these relations could be regulated seem desirable and could be an interesting project for RIHED to look at in the future.

Of the three papers presented, Mr. Bogaars' paper has come up with the clearest statement of what the government expects the universities to do. I agree with Mr. Bogaars that one of the main functions of the universities is to produce high-level manpower needed for the country. These are the people who would provide the future leadership for the countries in this part of the world. Providing the country with the right leaders who would

contribute towards the social and economic development process is certainly one of the main functions of the universities in this region. In discussing the training of future leaders, Mr. Bogaars has not mentioned cultural education as part of the training for such leaders. Culture may be a low-grade word in his country but I do feel that the universities have a role to play in cultural education. In Singapore cultural education is perhaps being carried out by other government-sponsored organizations but I do feel that the universities have an obligation to provide cultural education. If we do not thrust upon our students some awareness of our cultural heritage, then we are going to produce narrow-minded graduates who will in time become narrow-minded leaders. For this reason, I feel that the universities have an important cultural role to play.

I agree with the view expressed that the universities in Southeast Asia must be involved in the national development process. Indeed, they all do and the ivory-tower concept is obsolete in the context of Southeast Asia at present. By definition we cannot have ivory-tower universities in Thailand for instance. The universities there are all public universities and the universities' lecturers are civil servants. How can Thai universities be regarded as ivory towers? If they are ivory towers, then the government departments in Thailand must also be ivory towers. In fact the students will never permit the universities to be ivory towers. Therefore, we should not be worried too much about this ivory-tower concept in the context of Southeast Asian universities. At the same time, universities should not try to look for the mythical dragon that is called autonomy or academic freedom or else they will be in a perpetual state of confrontation with the government. The universities and the government should be seen as one system. What is needed is a clear idea of the role of the university in this system and the expectations of the government on this role of the university. The government cannot expect too much from the universities. If overloaded, a university, like a truck, will cease to function efficiently. For instance, if the government drains the university of its staff to development agencies for planning jobs, then after some time the university will cease to play its role as an educational institution. The Indonesian universities are going through this experiment of direct involvement with the development agencies but I feel that there is a limit to it and this question must be explored very carefully in order to maintain the primary function

of the universities which is that of an educational institution.

I am puzzled by a statement from Dr. Thuy's paper which says that a university student in South Vietnam often finds himself separated from the masses after he has received his degree. I find it difficult to understand this, especially in a country like South Vietnam which has been going through twenty continuous years of conflict. I would like to be enlightened as to how a university in South Vietnam can separate its graduates from the masses.

Let me now talk about university students in the relations between the universities and the government which somehow or rather seem to have been ignored by other speakers. I was in Japan at the time when the first demonstration by Thai university students against Japanese goods was held and I could see that they succeeded in worrying the Japanese more than any of the leaders in Southeast Asia could. No one or a group of people have done so much good than the Thai students in worrying the Japanese leaders about their exploitation of Southeast Asia by cutting down our jungles, polluting our air and sea and putting back very little in these countries. From this example, we can see that the university students have a big role in the relations between the universities and the government. The question before us is how such students' activities might be regulated in the relations between the universities and the government.

All these things need to be seen in the total context of the relations between the universities and the government and my role as a discussant is merely to stimulate people to think about these issues, and I hope I have done just that.

Ich

There are many problems facing the universities of Southeast Asia: relevancy *versus* stubborn conservatism, quality *versus* quantity, centralization *versus* decentralization, and so on. In countries where governments are able to provide strong leadership and adequate financial support, solutions to these problems can be found. On the other hand, where government leadership and financial support are lacking, where there is suspicion between the universities and the government, and where there is a lack of communication between the two, then the universities may run into the danger of failing to live up to the mission of training the future leaders of the country. It is important, therefore, to maintain a close working relationship between the universities and the government in the interest of all concerned.

Chairman
You

We could, perhaps, fruitfully address ourselves to a number of issues raised by the discussants. The first is the question of government control or influence and the desirable extent of it. As Professor Ungku Aziz has pointed out, the universities and the government should be considered as a system so that government control or influence cannot be avoided completely. Related to this is the question of university autonomy. The second issue is in terms of government's expectations of the universities. Within this, we may discuss the role of the universities' as an agent of change in terms of direct contributions towards the national and regional development processes, community service, training of high-level manpower and so on. The third issue is in terms of the universities' response to government's expectations. Within this, I can think of a number of sub-headings. One lies in the area of teaching. This includes curriculum development that would be most suited to training the future leaders of society. We may also add the question of cultural education mentioned by Professor Ungku Aziz. Let me take this opportunity to inform Professor Ungku Aziz that the University of Singapore has recently started a Department of Music which shows that we do give emphasis to cultural education. Another area will be university research and consultation in servicing government development agencies and private businesses. Finally, we may also include the students. What does the government expect of them? How do they respond to these expectations? These are also important questions for us to consider in discussing the relations between the universities and the government.

Yip

The Chairman has requested that we consider three main points in the discussion: namely, government control or influence; government's expectations; and universities' response. I will try to respond to the Chairman's request by confining my comments to the second of his points, namely, government's expectations of how the universities should perform. When we talk about government's expectations, I feel that the lead should properly come from those in the government rather than from those in the universities gathered at this Workshop. I dare venture to speak on this point only because I am now some sort of an international civil servant after having been an academic for more than ten years.

Mr. Bogaars, in his paper, has mentioned that national develop-

ment should be taken in a broader sense and should not be considered merely in terms of *economic* development. Speaking as a civil servant, he views the contributions of universities to national development in terms of indirect contributions rather than direct contributions. In Dr. Lisna Amidjaja's sense, it would mean that the universities should be considered more as agencies for change rather than as agents of change. I feel that if we accept Mr. Bogaars' definition of national development and the government's expectations of the universities in fulfilling their role towards national development, then the universities might be expected to take a passive role rather than an active role in the development process. I feel that the view expressed by Mr. Bogaars is a traditional view; it expresses the traditional role of the universities as institutions to produce graduates who will serve the government, the private sector and society. Universities all over the world have been playing this role for centuries and there is nothing new about it. This role puts the universities down as agencies for change. What is important in my own mind is a more active role, the role which puts universities into the position as agents of change. This role calls for the universities to come up with innovative approaches to development planning and this could be done only through research and direct involvement with government development agencies. When I say this, I am reminded by the very existence of RIHED. RIHED came into existence on the initiative of the governments of Southeast Asia, not of the universities in the region. ASAIHL, on the other hand, was founded on the initiative of the universities. RIHED was not. RIHED was initiated, formed, supported, and will continue to be supported by the governments of Southeast Asia, and the reason behind RIHED's existence is because the governments of Southeast Asia feel that the traditional concept of a university in terms of its contributions towards the development process is far too passive. RIHED's role is to look into more innovative approaches to development involving universities and government development agencies. In other words, it tries to bring about a more active role which universities could play in the national development process of countries in this region.

Vinyu

Professor Ungku Aziz has made a number of controversial statements. Although I can readily agree with him over a number of these statements, I must express my disagreement with him over his statement regarding ivory towers in my own country,

Thailand. I am quite convinced, contrary to Professor Ungku Aziz's belief, that universities exist as ivory towers in Thailand. This may be illustrated with examples. Since Professor Ungku Aziz and I are economists, I may illustrate by referring to the teaching of economics in Thailand. The university curricula in economics in Thailand are not geared towards the requirements of the Thai society. Very little attention is given to the kind of economists needed in the government and the private sector. We have been teaching development planning but this is usually done by people who have no knowledge at all of what is going on in the planning agencies in the country. I would consider this as an isolation from the realities of development in the country. Fortunately, this is being corrected, and we hope to introduce in our universities more relevant courses in economics in the near future.

Hafid

On the question of government control or influence, I would like to explain the situation in Indonesia. In a sense, universities in Indonesia are autonomous. They are free to determine the number of students to accept each year, the distribution of these students into various fields of study, and their curricula. They are also free to determine the type of research to be carried out and the sort of extension service to be provided to society.

However, the government can control or influence the universities in a number of ways. The most important of these is through finance. The universities in Indonesia depend on the Central Government for 90 per cent. of their total expenditure. The provincial governments contribute 5 per cent. and the students the remaining 5 per cent. of the total expenditure. Another control of the Central Government over the universities is in the hiring and firing of academic as well as the administrative staff. Also, no university or faculty can expand without the permission of the Central Government. Approval from the Central Government must also be obtained before a university could cooperate or collaborate with any foreign foundation, agency or university. In my opinion, the universities in Indonesia could develop at a more rapid rate if there could be more decentralization, for instance, in the hiring and firing of academic and administrative staff. On the question of response to the government, the Indonesian universities have done a lot in terms of direct contributions towards the development process. More could be done if the universities have greater autonomy in terms of finance, staff

recruitment and dismissal, cooperation or collaboration with foreign agencies, and so on.

Goodman

I would like to make a brief comment on the Chairman's request that we look at the three questions of government control or influence, government's expectations, and universities' response. I do not think that we could examine these questions in isolation. They ought to be discussed together because they are interrelated. I would like to suggest that we take a look at the whole concept of faculty development as related to curriculum development, keeping in mind the importance of relevancy to the needs of the community and the region, faculty development as related to research which is most important, and faculty development as related, in a larger context, to the university-community interaction. Within this question of faculty development, we have the problem of faculty retention. This problem is most crucial in any faculty development programme. We can have an excellent curriculum, interesting research projects, and exciting possibilities for university-community interaction, but if we do not have the staff to do these, then all our efforts would be in vain. Faculty retention has become a problem in most of the universities in this region because of the relatively higher salaries offered by industry. As a result, there is a drain of personnel from the universities to the private sector. One way to overcome this is to have a number of endowed Chairs. In the Asian Institute of Management in the Philippines, for instance, there are twenty-one endowed Chairs, each providing a salary that is 20 per cent. higher than the salary for similar positions in other universities. I am bringing out this question of faculty retention because I think this is an important issue for us to examine.

Thien

I would like to follow up on the point raised by Dr. Vinyu about the existence of ivory towers in our universities. Many of us might not be aware how much of the Western theories and concepts we have brought home with us from the Western universities where we have gone to study. I see nothing wrong with these theories and concepts as taught to the students in the West and when we studied in these universities, naturally we have to go through the same type of training. But the important thing for us to do is this: we need to revise these theories and concepts which we have learned from abroad and try to apply these to our

own environments. If we are unable to do this, then we will really be living in an ivory tower. I feel that there is a great need for our universities to revise the curricula to fit our own realities. Someone mentioned earlier that one of the functions of our universities is to provide knowledge. I would like to qualify this by saying that it should be *relevant* knowledge which we disseminate to our students.

Another point which I would like to make concerns government's expectations and what the universities can and should do. Naturally, the government would like the universities, because of the prestige, to agree with them on all matters of policy. However, most governments take a short-term view and expect people in the universities to be instruments of their short-term policies. I think that people in the universities should resist this. We should be concerned with the long-term interests of the country. We should view ourselves as the instruments of the community and the nation at large, and not just as the instruments of the government. This is often a difficult, if not a dangerous, thing to do. If we resist too hard, we might find ourselves in prison. But I think people in the universities should show some resistance all the same.

Romm

I hope I do not appear to be too irreverent by posing some opposition to the tenor of the discussion so far. To me, terms like government control, ivory tower, academic autonomy and academic freedom do not mean anything. I have a difficult time understanding what they mean in a particular cultural context leave alone in a multi-cultural one, such as we have in Southeast Asia. I doubt that we could examine the relations between the government and the universities in such vague concepts. What I would really like to see are specific situations as the ones described by Dr. Tisna Amidjaja. The power of Dr. Tisna Amidjaja's presentation about social consciousness in Indonesia is that he could take from a broad situation and work down to a specific one and show how this would mean to ITB in his relations with the government. I wonder if we might not try to do this in other areas since there are many people here who have worked on both sides of the fence, namely, government and universities. I am posing this as a suggestion.

Ungku Aziz

When I said earlier on that the ivory-tower university was an outmoded concept, I was referring to the university as a whole,

one that is isolated from society either economically, socially, culturally or politically. Dr. Vinyu was referring to part of the university as seen from his example of the teaching of economics in Thailand. There would certainly be some courses in a university which would be less relevant to the needs of the society and for these courses, the ivory-tower concept might apply.

The question of relevance was also raised by Dr. Thien. I agree it is important to make the courses of the universities relevant to the needs of the society. For instance, to teach the American accounting system in Malaysian universities when accountancy as practiced in the country is based on the British system would not be relevant. But just to be the devil's advocate, let me cite the case of the British colonial administrators who came out to Malaysia and Singapore. They studied classics like Greek and Latin rather than public administration or political theory but in spite of the lack of relevance of their training, they nevertheless made quite successful colonial administrators. But for the arrival of the Japanese, their system probably would have lasted another twenty years or more. This example seems to refute the argument that training must be relevant to the job. There is obviously some secret to this and I am putting up this example merely as the devil's advocate.

Koesnadi

Although I am now a government administrator, I have been a member of the staff of the Faculty of Law in the University of Indonesia, so I hope I am qualified to speak for both the government and the universities. Let me state, first of all, that in Indonesia the Government's influence lies in the overall policy of guidance in the development of higher education as an integral part of the national educational policy as a whole. This guidance is necessary in order to gear the development of higher education towards the national goal. Coming down to practical problems we have then the question of university autonomy. Universities in Indonesia are given complete autonomy in academic matters such as teaching and research. Even in the field of finance, the universities have some degree of autonomy. We have two kinds of budget, one is the routine budget, the other is the development budget. As far as routine budget is concerned, regulations regarding the use of funds have to be observed as in any government department. However, in the use of the development budget, the universities are free to use the funds according to the priorities decided by them. There is here complete autonomy

and such autonomy is also extended to the utilization of funds acquired by the universities from non-governmental sources.

Although the term 'university autonomy' means complete freedom of action on the part of the university, there are limitations to this freedom due to the fact that a university is a part of the community at large and for this reason it cannot withdraw itself into an air-tight capsule with no relationship with the world outside its campus. In other words, the very structure of the university itself inflicts limitations on the extent of its autonomy or freedom of action.

Another concern for us here is how to establish a close working relationship between the government and the universities. There should be a mechanism to bring about this relationship. In Indonesia, the Ministry of Education and Culture has recently established various mechanisms to ensure a continuous cooperation and consultation between the universities and the Government. These mechanisms are as follows:

- (i) The annual Conference of Rectors of state universities/institutes which provides a forum for communication among the rectors themselves and between the rectors and the officials of the Ministry of Education and Culture.
- (ii) The Dewan Pertimbangan Pendidikan Tinggi (Higher Education Advisory Council) which advises the Ministry of Education and Culture on general matters. This council is made up of rectors not only from the state universities but also from the private universities. This Council discusses general matters such as review of the Higher Education Act.
- (iii) The Lembaga Perguruan Tinggi Swasta (Advisory Council on Private Institutions of Higher Learning) which advises the Ministry of Education and Culture on matters relating to the development of private institutions of higher learning in Indonesia.
- (iv) The consortia which advise the Ministry of Education and Culture on academic matters in their respective disciplines.

Through these mechanisms, it is hoped to achieve maximum interaction between the government and the universities for the development of higher education in Indonesia.

My last comment will be on student participation in the relations between the government and the universities. We have been trying to set up a mechanism for consultation with students and we have discovered that we have first to strengthen the student body before we could start this consultation. This means that

the establishment of student councils must be guaranteed in the charters of universities with a clear description of their rights and responsibilities. Sometimes the students think only of their rights but not their responsibilities. Another way of establishing this mechanism for consultation with students is through the establishment of student organizations, such as the Medical Students Association, the Agricultural Students Association, the Law Students Association, and so on. Through these associations, the universities as well as the government can have consultation with students. The Indonesian Government supports the establishment of these student organizations. Periodic meetings between the Government, the universities and the students, represented by the student councils and the student organizations, have enhanced mutual understanding among the three bodies and this has led to a healthier atmosphere in the universities as well as in the country.

Shaharuddin

From the discussion around the table so far, I see that there is no disagreement over the fact that there is a need for the government and the universities to cooperate. What perturbs me is why this cooperation has not been very much achieved in most of the countries in this region. Perhaps this failure to achieve a satisfactory level of cooperation is due to the fact that the process of this relationship has not been clearly understood. Perhaps we need, first of all, to ask ourselves the question as to what is the basis for this cooperation before we start to talk about university autonomy and all that. This relationship between the government and the universities should be a natural, not an imposed, relationship. If universities first talk about their autonomy before establishing a basis for their relationship with the government, then they are actually imposing on the government. Perhaps each country in this region should review its existing basis of relationship between the government and the universities and from this review we may be able to see the problems and make the necessary corrections. In doing this, there should be a lot of 'give and take', as mentioned by the Chairman.

The discussion up to now has been mainly in terms of what the government expects of the universities, not what the universities could contribute towards national development. In this connection, what Dr. Yip mentioned earlier on becomes very relevant: which is, that universities should take an active role in the national development process. Universities have been made

to follow for far too long. It is about time that they take the lead.

My last point is about university autonomy. Here, we seemed to lack originality and tend to look to the West to define for us the concept of university autonomy. Consciously or unconsciously, we seem to use the criteria which Western universities use in defining university autonomy. It is about time that we try to be more inward-looking and view university autonomy in the context of our own economic, social, cultural and political environments.

Bogaars

I wonder if I could defend myself; and being in the fortunate position of being the last speaker, I hope that the two persons to whom I am going to reply would not be able to reply to me afterwards.

Dr. Yip took me to task for playing up the traditional role of the university. Either there are too many typographical errors in my paper or Dr. Yip has not read my paper because I have specifically excluded the traditional role of the university in my paper. I was, in fact, concerned with the direct involvement of the universities in national development and one of the suggestions I made was the secondment of university staff as civil servants for periods of two or three years. This is certainly a direct contribution of the universities if anything is.

On the question raised by Professor Ungku Aziz regarding the role of the universities in cultural education, I think that this is dangerous ground for the universities to tread on. Professor Ungku Aziz may have been more successful with this in Malaysia than his counterparts have been in Singapore. In fact, one person found himself out of Singapore for making improper remarks about *sarong* culture and things like that. Culture is very tied up with politics and one finds it difficult to separate one from the other. If one could talk about culture without involving politics then it is fine, but this is usually impossible to do.

Chairman
You

I think we have had an interesting discussion this afternoon in trying to examine some of the main issues concerning the relations between the government and the universities. The discussion has been fairly general and we might not have got down very much into specific issues. We could perhaps remedy this in later sessions.

PART IV
THE REGIONAL UNIVERSITY AND
THE PROVINCIAL GOVERNMENT

THE ROLE OF PROVINCIAL UNIVERSITIES IN REGIONAL DEVELOPMENT

A. Madjid Ibrahim

At present, there are forty state higher educational institutions in Indonesia. They consist of twenty-six universities, three institutes, and eleven *institut keguruan dan ilmu pendidikan* (IKIP, or teacher training and educational science institutes). These institutions are financed and supervised by the Department of Education and Culture, and are spread throughout all the provinces of the Republic.

Besides these institutions there are many other higher educational institutions run and founded by other ministries such as the Departments of Religious Affairs, Finance, Internal Affairs, and so on. Non-governmental (private) bodies have also taken part in developing and establishing universities and academies.

Several of these universities have flourished and have established themselves. Certain circumstances have made their growth possible

- (i) Physical facilities and teaching staff have been developed since before the Second World War.
- (ii) Generally the location of the universities are in the big towns which makes it easier to select new staff, to obtain foreign aid, and to develop physical facilities. Besides this, the rate of enrolment of new students on the one hand, and the demands from private enterprises and governmental bodies for university services on the other, have been very high.
- (iii) Selective and discriminate financial support which has been rendered to the universities is based on considerations of efficiency in budgetary allocation.
- (iv) Financial and other promoting facilities have been rendered by the regional government.

At present, however, among these universities which are scattered all over Indonesia, there are only a few that possess these promoting factors. The less fortunate ones have had to depend mainly on regional government support besides the dedication of their teaching staff and other personnel.

It is clear that such differences may well produce differing quality in their graduates and in the quality of the services they render to society. In spite of this, it should be realized that the present 'low' quality does not necessarily lessen the significance of the role played by them in developing education and services for the nation. These differences should not last very long in view of the present process of modernization and development.

The policy of founding universities in the provinces is of considerable significance, because of the following factors.

(i) Establishing educational facilities all over Indonesia will provide youth from every ethnic and social group and social stratum with better education so that the future leadership elites will probably have more democratic characteristics and will be more motivated towards change, modernization and development.

On the other hand if universities were located in only a few places this would lessen this broad participation of the population in the education process, and would mean that educational opportunities would be enjoyed mainly by those from the upper socio-political groups. This practice existed in the past, and should not be continued.¹

(ii) The universities in the respective provinces can be considered as a pooling together of people who could be considered as experts in their respective fields. Their skills can be used not only in the educational field but also in other activities in their community, and in the governmental or private sector. University teaching staff can, on the average, be assumed to be better equipped with tools derived from their mental discipline for analysis of problems than the average personnel in the government machinery.

(iii) In fact, they can be a part of the local social political elite; but this does not mean that they have to identify themselves with the formal political organization. They can introduce ideas on modernization and development which collectively can be translated into operational programmes, which in their turn can make the existing administration more efficient and effective.

(iv) Cooperation among the regional universities in research and data collection for analyzing local conditions (needed for a national policy) can result in a more scientific approach to problems, which would make it easier for the Central Government to arrive at an objective solution to the problem. It will also give the regional governments a better common understanding. This understanding is important for Indonesia since its vastness has resulted in its populations being separated, one from another, by space, and by differences in language and customs.

Some time ago the Central Government decided that each province should put away a small part of its revenue to finance the development of universities in its region. Included in this fund should be a separate fund for research and survey on development potentialities in the province. In addition to this is a fund provided by the Department of Education for the respective universities. At the beginning of 1972 Bappenas (the National Planning Board) asked all universities in Indonesia to collect data on the various development sectors to help formulate the basic planning policies of *Repelita II* and the final year of *Repelita I* (the Indonesian plans).

Both these decisions can help the universities a great deal in carrying out two of three main tasks: to carry out research and surveys and to provide public

¹ Arguments for limiting the number of universities to only a few places, however, have often emerged from consideration of quality.

services besides their teaching responsibility. The universities are now becoming involved in solving current development problems by providing up-to-date data and relevant analysis. For the Central Government, this could have a positive political effect since the government can listen to opinions on regional development, the more so if these universities cooperate closely with the provincial governments.

As was mentioned above, many of the regional governments had established regional universities which were later taken over by the Department of Education and Culture as state universities. More often than not, however, the Department of Education and Culture is unable to provide sufficient funds, so the regional government is often forced to continue its financial aid. Such aid may initially be found from incidental sources but soon becomes a permanent item in the regional government budget.

Because of this aid, the regional government often asks the help of the university, especially in carrying out research, and advise on various regional government activities, especially in development activities.

Long before Suharto's government, there was, in each province, the *Badan Koordinasi Pembangunan Daerah* (Bakopda = Coordinating Body for Regional Development). Many members of the university staff were involved in the Bakopda. These bodies also carried out planning tasks besides coordinating all development plans of the branches of various departments in the provinces. However, they could not become effective because of inflation, and often lacked budgetary discipline.

At present, the Central Government has encouraged close cooperation between the university and the provincial government. In fact provincial governments are in great need of such cooperation as often weaknesses in their personnel and staffing apparatus exist. In some provinces this cooperation is successful but in others it is less so.

Some of the reasons for the lack of success on attempts at cooperation between local universities and provincial governments could be stated as follows:

- (i) The belief, especially among the ranks of the older officials, that experience counts more than the intellectual capabilities of the young university graduates who make up the greater part of the staff of local universities. Because of this, they look down upon the academics.
- (ii) The belief among the senior university staff that they know better than public servants who have been caught up with routine, so that they, in their turn, look down upon the government officials of the provinces. Of course, neither of these two attitudes is conducive to fruitful cooperation.
- (iii) Political prejudices, particularly among politically-minded officials can make them become very sensitive and suspicious towards anyone from the universities who may dare to launch into open criticism of weaknesses within the administration.

These psychological and political hindrances to cooperation must be overcome by both parties who should look at the problem objectively if cooperation is to be established. It should be realized that this cooperation is very much needed by both sides, if the task of development and modernization is taken as mutual obligation. Although in the initial stages the government will have to do more by giving ample opportunities to younger staff to increase their capacities in approaching and solving development problems, in the long run both government and society as a whole will reap the benefits of this cooperation.

In addition to this, personal relationship between the university leadership and the government leadership (including the army, is also very important, especially in a small provincial capital where everybody knows everybody, and everybody knows everybody else's business.

Once this cooperative relationship has been established the role that can be played by the provincial universities in regional development is large and many-sided. The extent to which the university can realize its potential role depends very much on the size of the staff and their ability to apportion time between their main function of teaching and their participation in development.

However, it could be mentioned that one aspect of this participation which does not conflict with their main function is survey and research, which can be oriented towards immediate development problems. As a matter of fact many research and survey programmes have been carried out by the provincial universities either alone or in cooperation with other provincial universities or with central government agencies.

In some provinces, a provincial planning board has been effectively established. In this case the provincial universities can channel its participation through this board. The variety and extent of its participation depends upon the scope of the board's activities.

In Atjeh, for instance, about which I have some knowledge and personal experience, a provincial planning board which is called ADB (Atjeh Development Board) was established about four years ago. This board is the only planning unit within the province and is directly responsible to the Governor. It is entirely staffed by lecturers from Syiah Kuala University, apart from a small full-time secretariat.

The board's main functions are:

- (i) To formulate the basic principles of the provincial five-year development plan which is drawn up along a priority system.
- (ii) To formulate in detail the five-year development programme in consonance with the priority system.
- (iii) To formulate the annual development programme and its budgetary allocation.
- (iv) To evaluate the implementation of the development programme.
- (v) To carry out surveys and research to aid the implementation of the develop-

ment programmes.

- (vi) To carry out feasibility studies for the private sector of the economy.
- (vii) To advise the Governor on current economic and financial problems.

It is clear from the above that the board's main concern is the realization of the government effort, that is, setting of priorities and effecting efficient budgetary allocation.

It is realized, however, that the problem of development is not only confined to activities within the public sector, but also includes various intangible variables such as politics, religion, tradition and motivation.

However, even within the constraints with which we must work, the ADB, and through it, the universities, run the risk of being drawn into political involvement, because the problems of budgeting have very strong political overtones. What we must try to do then, is to insure socio-political stability through the establishment of an effective, development-oriented collective leadership through the alliance of the army, the provincial government and the university.

The formulation of the development programme, including survey and research, is carried out through the ADB by the university staff in consultation with the provincial government agencies and branches of the central government departments which insures contact between the faculties and the parallel government agencies. An example is the cooperation between the Faculty of Veterinary Science and Animal Husbandry and the provincial Agency for Animal Husbandry in promoting cattle production. The university staff are helping in training the agency personnel in pasture improvement programmes and in artificial insemination to improve local stock.

The university also tries to reach the people through seminars and extension services, as part of its public service function.

Seminars are held annually by various faculties, in line with the disciplines of each faculty, in which not only the university staff, but also people from the government and the general public participate. In this way we hope to introduce new ideas and new methods to the general public, as these seminars are always development-oriented.

Apart from working together with the government agencies the extension services of Syiah Kuala University also include the improving of educational achievements of high-school teachers, mass vaccination of poultry and cattle, and so on. A more intensive extension programme is being launched on a national level in which students are obliged to stay for six months in the villages as part of their studies.

THE REGIONAL UNIVERSITY AND THE PROVINCIAL GOVERNMENT IN VIETNAM

Nguyen-Tien-Ich

THE GENERAL SITUATION OF HIGHER EDUCATION IN VIETNAM

Vietnam has three public universities which are national universities and are named according to their locations: Saigon, Hué and Can Tho Universities.

Saigon University was created during the colonial period. Since then it has expanded and now consists of several schools spreading throughout the Saigon area. These are: the Pedagogy School to train high-school teachers; the Law School; the School of Letters; the School of Sciences; the Medical School, the Pharmacy School; the Dentistry School; and the Architecture School. During the school year 1971/72, there were 50,340 students registered with Saigon University.

Hué University, created around 1957, is located in the ancient imperial city of Hue, and consists of five schools, being: the School of Letters; the School of Sciences; the Law School; the Pedagogy School; and the Medical School. Its student body during the school year 1971/72 was 4,256.

Can Tho University was created in 1967 and is located in the city of Can Tho. It has five schools: Law; Letters; Sciences; Pedagogy; and Agriculture. Can Tho University reported a registration of 4,319 students during the school year 1971/72.

In addition to these universities, there are also the National Technical Center of Phu-Tho to train engineers in electrical, chemical, mechanical and civil engineering, and this school year, the centre will have a branch of electronic engineering; the National Center of Agriculture to train engineers in agriculture, forestry and animal husbandry. The National Institute of Administration provides civil servants for the country. All centres and institutes are located in Saigon.

Besides these public institutions, one can find several other private universities belonging to different religious sects in Vietnam; some more than ten years old, others of very recent origins. These are, in chronological order: the Dalat University located in Dalat, a resort city in the Highlands, and has, among other sections, a Business Management Section; the Van Hanh and Minh Duc Universities located in Saigon; the Hoa Hao University located in Long Xuyen; and Cao Dai University located in Tay Ninh, West of Saigon, near the Cambodian border.

Contacts between these institutions and the Government are mainly through the Higher Education Section of the Ministry of Education and are rather limited to administrative matters. In other matters, cooperation between government agencies and institutions on higher education is minimal. Thus, development

planning has been formulated without participation of the universities.¹ Students registering with various schools in different universities do so without any advice or information as to job prospects after their graduation. The result is a serious under-employment of graduate students.

THE PROVINCIAL GOVERNMENT AND THE REGIONAL UNIVERSITY

The highest administration unit after the central government in Vietnam is the province or city. There are fifty such units: the capital city of Saigon; five cities and forty-four provinces. Province chiefs and city mayors are appointed by the President of the Republic. Each provincial government provides more or fewer services, depending on its importance. The most common ones provided are: security, administration, finance, economic, and public health. Each province also has a council comprised of between six to thirty-six members, depending on its production, elected through popular vote for three years. Due to the war situation, provinces are grouped together into military regions placed under the overall charge of a military commander. There are four military regions in Vietnam.

With the exception of the Cao Dai and Hoa Hao Universities all the existing regional universities are located in the cities. The relations between provincial government and regional university, at the present time, are mainly of a public-relations type. Thus the region commander or the city mayor may be invited for an inaugural address, the university may also ask the regional authority for material or technical help and usually gets it, since higher education still enjoys some prestige in Vietnam. But active coordination between universities and government agencies for planning, research and consultation has not been developed yet at any level, national or regional. The reasons may be that: (i) the Confucian concept of higher education for an agricultural society still prevails nowadays; (ii) the level of industrialization of South Vietnam is not advanced enough to require consultation and research services from the universities; and (iii) the universities themselves are not well equipped enough to be able to solve technical problems that may arise.

However, most universities do make attempts to satisfy the needs of the country or region. The medical school of Saigon University will take more students this school year in order to turn out physicians at a faster rate. Hué University, being located in rugged region where flood control is most crucial, has a Civil Engineering and Hydrodynamics section. Similarly, foreseeing its future role in the development of the region, the Can Tho University has set up an agricultural school. Its first class has just been graduated last July with thirty-two agricultural engineers. Of these graduates, six will be employed by the University,

¹ During the drafting of the recent Four-Year Development Plan, there was participation from three or four university professors who served as members of the advisory committee. But this participation is rather on an individual basis.

ten by the Ministry of Agriculture, two by the Agriculture Research Institute, the remaining fourteen are applying for graduate studies abroad. The school is expanding so that it can accommodate 120 students from the school year 1973/74. This expansion is felt necessary to meet the increasing number of high-school graduates of the region and also the high-level labour demand from the five-year (1971-5) agricultural development programme, and from some prospective agriculture pilot projects from the Lower Mekong River Basin Development Committee.

One aspect that is worth noticing is that all these universities are independent of each other, although some professors may be teaching at several universities, and the Saigon University has established one liaison office for each of the Hué and Can Tho Universities.

In August 1971, the president of the Republic signed a decree establishing community colleges in Vietnam. The presidential decree state explicitly that the aims of community colleges are to develop:

- (i) Basic higher education with transitional specialization in undergraduate programmes;
- (ii) Technical higher education that truly answers the needs of the community that agrees to sponsor the college.

Each community college should endeavour to:

- (i) Train intermediate level technicians to support the economic development of the community;
- (ii) Prepare and guide students so that after two years of basic college education, they will be able to continue their undergraduate technical study in a national university;
- (iii) Help servicemen, civil servants and adults in the community to raise their education level;
- (iv) Test and guide students to select the appropriate field of study;
- (v) Develop cultural activities and social education in order to enrich the spiritual life of the people in the community; and
- (vi) Guide the mutual development of primary, secondary and college education in the province within the operating range of the corresponding community college.

Each community college is associated with, and, as far as academic affairs are concerned, dependent on, an existing national university. The board of trustees is chaired by the president of the associated national university, while the speaker of the board is the president of the community college. Other members of the board are the representatives of the people in the community, one for each province or city, and the city mayor(s) and the province chiefs.

Following this decree, two community colleges have been established in August 1971: the Tien Giang community college for the city of My Tho and six other provinces South of Saigon, located in My Tho; and the Coastal Community

College, located in the city of Nha Trang, for that city, the city of Cam Ranh and three other coastal provinces north of Saigon. Both are associated with the University of Saigon. The establishment of another community college for the city of Danang and two or three other provinces in the northern part of the country was underway when the sudden flare-up of the war last March disrupted its course and also prevented the materialization of the other two. Community colleges seems to be a good form of the higher educational system in which exists a formal coordination between the regional college and the national university on the one hand, and close cooperation between the provincial people and government and the college on the other hand. When they start functioning, they will, hopefully, in time create a habit for the academic media to get more involved with the economic and social development of the nation, and for government agencies to allow and encourage the participation of universities in the development planning process.

DISCUSSION

Chairman
Anwari Dilmy

While the topic of discussion yesterday afternoon was 'The Universities and the Government', our topic for discussion this morning is 'The Regional University and the Provincial Government'. The two papers presented this morning for this session are by Dr. A. Madjid Ibrahim of Indonesia and Dr. Nguyen-Tien-Ich of South Vietnam. These two papers present two extreme situations in the cooperation between the regional universities and the provincial governments. In South Vietnam, on the one hand, this cooperation has hardly begun, while in Indonesia, on the other hand, this cooperation has gone a long way and the regional universities have begun to play an important role in regional development. Most of the survey and research activities of regional universities in Indonesia are now geared towards solving development problems in the provinces. Dr. Madjid Ibrahim has explained the role which his university plays in regional development and this role is repeated in other regional universities in Indonesia. I hope that in the course of the discussion our Indonesian participants can explain the situation in Indonesia more fully so that participants from other countries could benefit from the Indonesian experience.

The three discussants for this session are Mr. Shaharuddin Haron of Malaysia, Dr. Saisuree Chutikul of Thailand and Dr. Louis J. Goodman of the East-West Center in Honolulu. Dr. Goodman replaced Dr. Mauyag M. Tamano of the Philippines who is unable to be present at this meeting because the present martial law in the Philippines has resulted in a government restrictive policy on travel abroad.

Shaharuddin

There is a golden opportunity for a regional university to take an active role in development work since government development agencies at the provincial or local level are often weak owing to poor staffing situations. The call to regional universities is not just to participate, but to take a more active role in development by virtue of the reservoir of talents available in the universities. Regional universities should therefore take advantage of this opportunity to establish a relationship for joint-undertaking of development work with the provincial govern-

ments or, if such a relationship already exists, to strengthen it all the more. This opportunity to cooperate with the provincial governments also includes the possibilities of conducting research into such matters as economic, social and cultural obstacles to development for regional development purposes.

If this opportunity is taken advantage of, the regional universities could play a major role in formulating and interpreting government policies with regard to national and regional development. In Malaysia, for instance, this would go a long way towards overcoming the problems of economic, regional and racial imbalance. Apart from interpreting government policies, the regional universities could get themselves involved directly in forging ways that would generate development in their local environments, thereby leading to the establishment of new growth centres. In Malaysia, the establishment of new growth is one of the means of fulfilling the objectives of the present development plan. In this regard, the location of a university in a particular region could well be intended to provide a firm basis in the creation of such a growth centre for the region. For instance, the National University of Malaysia can be regarded as a stimulant of change, and hence become the instrument to spearhead growth in the underdeveloped area of Bangi. In this context, the development of a university should transcend its traditional purpose of just churning out trained personnel and become really an agent of change for the region in which it is sited.

For a regional university to be able to contribute effectively to the development of its province, there must be a constant dialogue between the university and the provincial government. In this respect, I cannot help but stress the point I made yesterday that this relationship should be a natural relationship, not an imposed one. With the exception of Indonesia and, perhaps, Thailand, there is an absence of an institutional framework in most of the countries in this region whereby the regional universities and the provincial governments could engage in a constant dialogue. A gap seems to exist between the provincial governments and the regional universities, each remaining very much within its own world. Unless this gap is narrowed and unless the two parties begin to understand and appreciate each other's potential contributions towards regional development, there can be very little that the regional universities could contribute in the regional development process.

Saisitree

It seems to me that both Dr. Madjid Ibrahim's and Dr. Ich's papers have mentioned the two extreme forms of relationship between the regional university and the provincial government. I think that most of our situations fall somewhere between these two possibilities. I am afraid that I am not qualified to react to other countries' situations except to my own which is Thailand. As Mr. Bogaars mentioned yesterday, each country has its own system and problems; therefore a common solution to these diverse problems cannot be easily found.

As you already know, Thai universities are state universities and most, if not all, of the teachers and part of the non-teaching staff are government officials. So, in a way, we *are* a part of the provincial government, even though officially, we have little to do with it except for the routine paperwork. But this does not mean that the regional universities could not and should not establish the kind of relationship with the provincial government that would facilitate and accelerate development beneficial to the region. There are many possibilities if one believes in its value and really works at it. For example, we find it very helpful to invite capable personnel from government departments, whether they have a college degree or not, to be guest lecturers for both our students and teachers. The persons most often requested are those from the education department, health department and the department of community development. The Deputy-Governor and the District Officer have also been invited to speak at the university orientation programme. Their participation gives our students an opportunity to learn about local conditions and problems at first hand. On the other hand, it gives the government officials an opportunity to come into the campus to get to know our students and staff and to join in campus activities. Moreover, it gives them the much-sought-after status of a 'university lecturer' which they greatly appreciate. One good thing about this is that it is not a one-way process. We find that, once this informal relationship is established, they try to reciprocate the gesture by inviting us to participate in their local development projects and as resource persons when they have their in-service training programmes. This relationship is also useful because the university could make use of government officials to supervise students in field-work. These government officials are people who have practical experience in the field and they are particularly useful for our courses in rural sociology, community health and teacher training where field-

work is included in the curricula.

In this connection I feel that, more often than not, the curriculum offerings in the regional universities are too narrow and too highly-specialized at the undergraduate level. Students in technical fields, for example, gain very little insight into the actual functioning of their society. These are the students who would benefit most from exposure to the actual problems of society by coming under the supervision of government officials. When they graduate, these students would be better able to apply themselves to their jobs. I mention this because oftentimes students are uninformed about the structure, functions, responsibilities and problems of the province.

Because the regional university should relate itself to the province in which it is sited, a close relationship between the top administrators of the university and the top government officials in the province is most important, whether in formal or informal terms. I am sorry to say that this relationship is often not achieved because of personality clashes between the top administrators of the university and the provincial government. Too often the provincial government expects too much from the regional university, especially when it is a young university which has yet to develop its potentialities fully. Here, I feel, the provincial government ought to appreciate the university's limitations in its efforts to contribute towards the welfare of the region.

The last point which I would like to emphasize is that the provincial university must not become an instrument of politics if it is to fulfill its purpose to serve the region. Often a university is born out of political pressures and teachers as well as students get too involved in the politics of the region. When this happens, there will be disruptions to the university's role as an educational institution and as an agent for regional development.

Goodman

I am pleased to substitute for Dr. Tamano as a discussant for this session. It is a large task but I will attempt to fulfill this role of explaining the regional university-provincial government relationships in the Philippines. In a way, I do have two qualifications for this task. I had the pleasure of serving as a project specialist in engineering education for the Ford Foundation in the Philippines from 1968 to 1971. Two of those years were spent on the campus of Mindanao State University helping to develop the College of Engineering and working very closely with the univer-

sity administration as regards campus problems and university-community interaction. Then, I was honoured by the Mindanao State University, upon my departure in 1971, as a visiting professor for life.

It might be of some interest to note that there has been a proliferation of higher education institutions in the Philippines. Higher education actually falls into three categories:

- (i) State universities, such as the University of Philippines in Manila and Mindanao State University in Marawi City,
- (ii) Private universities and colleges that are church-affiliated, and
- (iii) Private universities and colleges that are run as business enterprises.

The number of institutions of higher learning exceeds 565. Therefore, there has been a problem of lack of quality education in most universities, particularly in a large number of the universities mentioned in item (iii) above. For example, many of the graduates of science and engineering have never had the opportunity to work in the laboratories or make use of reference libraries because of lack of these most important supporting facilities. President Marcos is concerned about this problem and has created an Education Task Force to implement recommended changes.

Let me illustrate the regional university-provincial or national governments relationships in the Philippines by using Mindanao State University as an example. Mindanao State University was founded in 1961 and opened its doors to students in 1962. The University was given two mandates by the national Government. These mandates are, stated in a simplistic manner, as follows:

- (i) Promote Muslim-Christian interaction, and
- (ii) Provide the necessary intellectual stimulation and expertise for local and regional economic and social development.

The student enrolment today totals approximately 1,800. For the first eight years, there was approximately 20 per cent. Muslim students and 80 per cent. Christian. Today, there are approximately 50 per cent. of each on the campus. It is of further interest to note that there is a good mix of Muslims and Christians on the staff.

Mindanao State University receives good support from the national Government because of its most difficult economic and political location and, of course, because of its two mandates. Relationships with local governments were not too good until

the University initiated interaction with the local community through its curriculum. This course was designed for engineering students and is required for graduation by all engineering disciplines. The course is concerned with physical planning, including attention to sociological considerations in the studies. The course was taught for the first time during the 1969/70 academic year. That year the students made a study of nearby Marawi City as a basis for developing a plan for economic and social growth of that city. The students satisfied final examinations requirements by presenting and defending the results of their studies before the Engineering Faculty, the Mayor of the City, his City Council, his engineering staff, and other invited guests. It should be noted that the City of Marawi adopted the student plan as a basis for their further development for the next five to ten years. Clearly, this resulted in a meaningful relationship between the University and the City. Two examples of local government assistance to the University following the first year of the course are providing campus security and paving of all the campus streets.

A final note of interest is that staff retention on Mindanao State University has been unusually high despite the relative isolation of the campus and the attendant difficult living and working conditions. This is attributed to the following:

- (i) Staff salaries -- these are at the same level as the University of Philippines in Manila and, therefore, very competitive.
- (ii) Teaching loads -- these are realistic to encourage staff members so inclined to engage in research projects.
- (iii) Stimulation by the University for research on local problems, such as safe water supply for drinking purposes, low-cost housing, irrigation systems to increase food productivity, etc.
- (iv) The relationship with the University of Philippines in areas of education and research, especially in the disciplines of economics, engineering and developmental planning.
- (v) Meaningful interaction between the University and local governments as the latter strive for a better standard of living for their people; and
- (vi) The provision by the University of adequate housing and recreation on the campus.

I am sorry that Dr. Tamano is not able to deliver this discussion himself. I trust that I have given you some indication of the nature and type of regional university he so ably heads.

Yip

As I re-read the papers last night for this morning's session and as I listened to the points raised by the discussants, I seem to be able to put the various countries in Southeast Asia into different stages of development in terms of the relationship and cooperation between the regional universities and the provincial governments. At the one extreme, we have a situation in which a dialogue has not yet been started between the regional universities and the provincial governments, as in the case of South Vietnam, while on the other extreme, we have a situation as in Indonesia where there is an institutional framework, a formal mechanism, linking up the regional universities and the provincial governments. The Atjeh Development Board, as mentioned by Dr. Madjid Ibrahim in his paper, is an example of this.

South Vietnam and countries like it may be said to be at the traditional stage of developing this regional university-provincial government interaction. Here, the primary aim of the universities is to provide trained manpower for the civil service and the private sector. In such a situation, there seems to be a ceiling to the extent in which the universities could contribute to regional or national development. That ceiling is defined in terms of providing high-level manpower needed in the development process and this, as has been mentioned, is essentially a passive role for the universities. Thailand and countries like it may be said to be at the take-off stage. Regional university-provincial government interaction is being actively pursued but as yet no formal institutional link exists, and such interaction is on an informal or personal basis. The danger with this sort of arrangement is that once the personalities in the university or in the government change, then whatever interaction that might be existing could be seriously disrupted. Finally, we have the Indonesian situation, one of the sustained interaction between the regional universities and the provincial governments, where a formal mechanism exists for this interaction to be maintained continuously. In the Indonesian situation, the sky seems to be the limit to which the regional universities could assist in regional development. The provincial universities in Indonesia are playing essentially a very active role.

What I am interested in as I listened to the various types or stages of regional university-provincial government interaction is how one country could learn from another as it moves from a non-dialogue situation and finally, to a situation where a formal link is established, assuming, of course, that this sort of inter-

action is desirable. I cannot help wanting to suggest that there is a need in each of the countries in the region to set up a National Institute of Higher Education and Development, just as we have the Regional Institute of Higher Education and Development, to try to promote university-government interaction within each country. In the case of Malaysia, such a national organization could come under the umbrella of the newly-established Higher Education Advisory Council. It would be the responsibility of NIHED, rather than RIHED, to try to promote university-government interaction within the country.

Steinberg

I would like to follow up on Dr. Yip's remarks. I am, indeed, very impressed with the Indonesian example which seems to have an institutional mechanism for solving the problem of regional university-provincial government relationship, something which other countries could perhaps try to emulate. However, in many of these countries, the problems seem a bit more complicated than in Indonesia. The lack of relationship between the regional university and the provincial government is very much a reflection of the lack of relationship between various government ministries and departments. In Thailand, if I am not mistaken, it is very difficult to get the Ministry of Agriculture to talk to the Ministry of Education. In Khon Kaen, we have an Agricultural Research Centre on one side of the town and a College of Agriculture on another side and it was only very recently that the two have begun to talk to one another. How do we solve this? Well, speaking as a bureaucrat for a moment, the best way to solve this problem is to let someone have a personal stake in trying to promote this regional university-provincial government relationship. In other words, the person gets promoted if he does a good job in promoting this relationship. In the government service, it does not appear if this is possible, but not so in the university. Suppose a regional university were to establish a fairly senior position for the purpose of promoting a working relationship with the provincial government through research, community service and so on, then this might probably work. Such a person, of course, would have to be a trusted member of the university staff in order to prevent the government from using him for its own short-term political interest. In this way, we may be able to begin to establish, although quite informally, a relationship between the regional university and the provincial government. This is still a

long way from the Indonesian situation but, nevertheless, a start is made towards that direction.

Tisna Amidjaja I support the idea put forward by Mr. Shahrudin that a regional university should become the growth centre for the province in which it is located or the catalyst for the social and economic development of the province. However, it should be borne in mind that the physical area for social and economic development which the growth centre tries to promote may not be congruent with that of a province. A province is an administrative unit and its physical area is determined by administrative, not social and economic considerations. Let me illustrate this with an Indonesian experience. When a regional university in South Sumatra was asked to prepare a development plan for the province in which it was located, it turned out that for social and economic considerations several other provinces had to be included in the plan because they formed a social and economic unit together.

Saisuree I would like to go back to a point raised by Dr. Steinberg about the possibility of creating a position within a regional university in Thailand, for example, for the purpose of coordinating regional university-provincial government interaction. Most of the conferences I have attended have never failed to come up with proposals like this, but I am afraid that it is easier said than done, particularly in Thailand where the universities are under the civil service system. In Thailand, the National Education Commission (formerly the National Education Council) has done some work in promoting this interaction between the universities and the provincial governments. It has tried to get the regional universities to work closely with the Department of Local Administration which is under the Ministry of Interior. For your information, in Thailand the Ministry of Interior takes charge of all the elementary schools. Khon Kaen University, for example, has a programme to train village teachers. Therefore, if any position such as that suggested by Dr. Steinberg were to be created in Thailand, it should come properly under the National Education Commission rather than within the universities, in which case we need to have several such positions which itself could create difficulties for inter-regional coordination.

Ungku Aziz The University of Malaya is not a planning agency the

government. We are not directly involved in planning functions as government development agencies are although members of the staff often participate in development projects. In this sense, the University is really not an agent of change as in the case of Indonesian universities. In Malaysia, the government has its own planning machinery. If the University of Malaya were to be a planning agency of the government in addition to its main function as an education institution, then my first reaction would be to insist that we have a separate machinery in the University to deal with planning. I cannot ask my professors and my lecturers who already have their teaching and research functions to be involved in drawing up development plans for the government. If they were asked to do this, their research would suffer even if they could keep up with their teaching function. For a university to take over the planning function, there needs to be a separate unit within the university, for example, a Planning Centre, with its own professional and administrative staff. Even if such a Planning Centre were to be set up, then there will be the question of how much of it should come under the control of the university and how much under the control of the government. Therefore, before involving a university in direct planning activities, we have to see what kind of a planning machinery the government has. If the government already has an adequate planning machinery, as in Malaysia, then the university does not have to become a planning agency for the government although it could assist the government in certain development projects. This could be done on a contract basis. I submit this as my ideas about the subject.

Hanh

I support the idea put forward by Dr. Steinberg regarding the creation of a special position in a regional university to liaise with the provincial government and its agencies. Most of the academic staff in a university are too preoccupied with teaching and research to be interested in going outside the campus and trying to create a dialogue with the government. Someone in the university should be given the special responsibility to do this. Let me draw an illustration from Mindanao State University in the Philippines. This University has two Vice-Presidents, one for external affairs and development, the other for extension service and training. It is their job to liaise with the local government and the community. In this way, the President of the University is relieved of this function and could devote his time to running

the University.

Romm

We have been hearing new approaches to the relationships between the regional universities and the provincial governments. It would seem to me to be very worthwhile if we begin to look at some of the ways in which these relationships have already been handled, how effective these are and the kinds of problems arising. I would like to ask the participants from Chiangmai and Khon Kaen Universities if they could discuss their advisory councils and explain how well they have worked in promoting regional university provincial-government interaction.

Hatid

I would like to explain the relationships between the regional universities and the provincial governments in Indonesia by using Hasanuddin University as an example. But first, let me say a bit about the Hasanuddin University. Hasanuddin University is convinced that a close relationship must be developed with the provincial government. To this end, the first step the University took, which was some time ago, was to put the provincial leaders on its Board of Trustees. At present, members of this Board of Trustees include the military commander and the governor of the province. Through this means, these important people in the province become involved in the development of the University.

In South Sulewasi, where the Hasanuddin University is located, the provincial government established a Provincial Development Coordination Board in 1968 to serve as the machinery for promoting university participation in regional planning. This Board has twenty-three members and they include politicians, academic staff, government officials and businessmen. For the drafting of the provincial development plan, the provincial government in 1968 appointed a working committee of nine members out of the twenty-three members on the Provincial Development Coordination Board. This working committee was, and still is, chaired by the Rector of Hasanuddin University while the Dean of the Faculty of Economics of the University is its Vice-Chairman. In October 1968, this working committee published a Five-year Provincial Development Plan for the province which was accepted by the provincial legislature. This Plan was subsequently accepted by the Central Government in October 1972 as the development plan for South Sulewasi.

Another mechanism through which Hasanuddin University

cooperates with the provincial government is through the provincial legislature. The chairman of the provincial legislature is a member of the Board of Trustees of the Hasanuddin University and of the thirty-seven members of the provincial legislature, nine are members of staff of the Hasanuddin University. As a result of this connection, a dialogue is always maintained between the Hasanuddin University and the provincial government.

Manap

I beg to differ with Professor Ungku Aziz when he said that the university should not get involved in the planning machinery of the government unless there is a separate planning machinery introduced into the university. In developing countries like Malaysia, a lot of brain-power is located in the universities and university staff should assist the government in development work, at least in acting as consultants and so on. It would be to the disadvantage of the country if the government is unable to exploiting this expertise available in the university.

Ungku Aziz

I just want to make a small clarification; I think Dr. Manap misunderstood my point. I think we must differentiate between the individuals within a university who make their contributions to the government and the university as an institution for doing this. Indeed, the staff in the University of Malaya have made many contributions in terms of assisting in development projects. I myself have served the government in one way or another continuously for almost twenty years; so hardly can I be said to be against it. To illustrate, in 1961 three colleagues and myself did a study for the government which was in the nature of a projection of the future demand for the port facilities of Port Swettenham, now called Port Klang. On the basis of this study, the government obtained a loan and expanded the wharf facilities of this port. This was a job involving staff members as consultants to the government. What I am concerned about is not this sort of involvement with the government, but the sort of involvement which requires the university to draw up a whole development plan. For such a job, we need to have additional staff or else those in the university would be diverted from what they should be doing. I admire very much Hasanuddin University for being able to prepare a five-year development plan for South Sulewasi. To be able to do this there must have been, by the law of economics, some reductions somewhere else which must be at the expense of that University. In the case of Hasanuddin

University, this might be a worthwhile effort in view of the conditions prevailing there. This might be too high a price to pay for universities in other countries under different conditions.

Koesnadi

I would like to refer to the relationships between the regional university and the provincial government, especially with regard to the role of the various ministries in the Central Government. In trying to secure an efficient relationship between the regional university and the provincial government, there are various ways and means, both through institutional as well as through personal relationships. A combination of both these approaches is the ideal situation. However, there are instances where this relationship is hampered through personal conflicts. These conflicts often jeopardize the institutional cooperation which is a prerequisite for the effective implementation of the regional universities' contributions towards the economic and social development process of the province. Knowing the bureaucratic system and the feudalistic hierarchy of the civil service, the involvement of the Ministry of Interior is a condition *sine qua non* in bringing about the cooperation of the provincial governor's office in its relations with the regional university. I would like to stress this point because I know that quite a few provincial governors in Indonesia do not listen to other ministers except the Minister of Interior. In situations where a provincial governor is unwilling, maybe for vested interests, to cooperate with a regional university, then this cooperation could be brought about by an instruction to the governor from the Minister of Interior. This cooperation on the national level between the Ministry of Education and Culture and the Ministry of Interior is of vital importance in the relationships between the regional universities and the provincial government. I hope this experience of ours in Indonesia would be of some use to other countries.

Okas

I would like to answer Dr. Romm's query about the advisory councils in Thailand. Actually, we call this Committee for the Promotion of University Activities. At the Chiangmai University, unfortunately, not much has been done by this Committee because so far only the Chairman of the Committee has been appointed.

Saisuree

Contrary to Chiangmai University, the Committee for the promotion of University Activities has been set up at the Khon Kaen

University and it is found to be workable. This Committee serves sixteen provinces in the north-eastern part of Thailand, each province having two members on it. The Committee meets once or twice a year. It is through this Committee that the University learns of the needs of the provinces. For instance, the Faculty of Education at the University of Khon Kaen was set up as a result of a proposal by this Committee. Later on, the Faculty of Nursing and the Faculty of Medical Sciences were also set up through the initiative of this Committee. This Committee has also stimulated a lot of extension work by the University in agriculture. Therefore, as far as Khon Kaen University is concerned, this is a workable Committee in the sense that it provides the machinery linking up the University with the provinces in north-eastern Thailand.

Madjid Ibrahim The success in the relationship between the regional university and the provincial government depends to some extent on the type of atmosphere and the sense of mission prevailing in the university, particularly among the younger members of staff. In Indonesia, this sense of mission is prevalent among those members of staff who have studied abroad, who have seen the higher standards of living existing in the developed countries and consequently have become aware of the poverty in Indonesia, and they have returned as angry young men who want to see rapid economic progress in the Indonesian society and are willing to make their individual contributions to achieve this economic progress. This sense of mission is a good thing for the universities in Indonesia for it encourages the academics to participate in the national and regional development process. I think this sense of mission among the angry young intellectuals in Indonesia is one of the key factors in creating the close working relationship between the universities and the government in Indonesia.

Chairman

Anwari Dilmy I will ask Dr. Romm to give a brief summing-up of the discussion this morning.

Romm I have been very excited by the discussion this morning because of the variety of conditions and situations that have emerged concerning regional university-provincial government relationships in the countries of this region. I think we are getting to the heart of the problem. However, despite the variety

of conditions and situations, there seems to be a number of common themes running through the discussion. An important one is that the initiative for this regional university-provincial government relationship seems to rest very much with the university. The provincial university generally has greater flexibility and therefore is better able to make the necessary compromises to get this relationship going with the provincial government. The second is that to be able to do this effectively requires some institutional arrangement, formally or informally, that would reflect what Mr. Shaharuddin has called a natural, not an imposed, process. We have had a rich variety of examples of different types of institutional arrangements in the discussion this morning which gives us many new ideas. At the same time, it becomes clear that the stronger the relationship between the regional university and the provincial government, the greater perhaps, are the tensions within the university itself. This calls for some reconciliation of the universities' function - teaching, research, community service, direct involvement in development activities, etc. This reconciliation would ensure that direct involvement in development activities would not be at the expense of teaching and research at the university. Another aspect is a political one. The more a regional university becomes involved with the provincial government, the more vulnerable it becomes to politicization of its own activities. This concern has come up throughout the discussion this morning. All in all, I think the discussion this morning has been very useful in examining the above themes.

PART V
THE REGIONAL UNIVERSITY AND ITS ENVIRONMENT

THE REGIONAL UNIVERSITIES IN THAILAND AND THEIR ENVIRONMENT

Sunga Subhasri

As can be seen from the title of this paper, I have chosen to speak on the subject with particular reference to Thailand. I suspect that many or all of my evaluations may apply to regional universities wherever they are located.

The concept of establishing regional universities in Thailand was formulated some thirty years ago. It was initially intended that such regional universities would provide higher education for youth in the regions. The Thai government decided to plan a university for each region outside Bangkok, which is located in the central region. In 1941, parcels of land intended to be the sites of universities were purchased in Chiangmai in the North, in Ubol in the northeast, and in Songkhla in the south. The plan was interrupted by World War II. However, demand by regional communities to have institutions for higher learning was recorded from time to time in the mass media and in campaign promises by political candidates. Public polls published in local newspapers included topics such as what faculties should be established first if a regional university were to be set up. In 1958 the idea of regional universities was revived and became a vital issue in government policy. In 1960 the Thai government approved the establishment of the first regional university in Chiangmai. The planning stage took almost four years and finally the university was officially opened in 1964. In the same year, quick action was taken to open Khon Kaen University, located in the provincial capital of the same name in the northeastern region. Although discussion and planning of the university for the southern region was also started in 1964, The Prince of Songkhla University Act came into force only in March 1968.

The objectives of regional universities seem to follow a common pattern, which is logical, as they are public institutions and must follow government policy. During their formation, the chief purpose seemed to be to provide a university education for youth in each region of the country. As government institutions, all regional universities in Thailand draw about 90 per cent. of their annual budgets directly from government funds, other sources of income are student fees, local and foreign aid, etc. The main objectives, as stated in the acts establishing the regional universities, are as follows: (i) to meet the rapidly-growing demand for university education by the nation and its neighbours; (ii) to improve the standard of general education in the regions; (iii) to stimulate economic growth in the region as a consequence of setting up the universities; (iv) to strengthen regional understanding and cooperation by providing support for staff and stu-

dent exchange with universities in nearby countries; and (v) to engage in such other activities as will promote the economic, cultural and social advancement in each region of the Kingdom.

It should be noted that the foundation of a university is based on (i) the need for qualified manpower to meet the demand for national development; (ii) the rapidly-growing demand for university education and (iii) the need to equip students from the various regions with an intellectual capacity, higher technical knowledge, and an ability to keep up with the latest advances in a rapidly-changing world. University education in Thailand has been treated as essential to both city and rural people. It has become a tradition for parents to make every possible effort to send their children to a university. Consequently, the competition for places in universities has become so severe that only less than one out of three eligible students can be admitted to a university. During the last parliamentary period, public pressure forced the government to establish an open university to cope with the large number of potential students who otherwise would be denied access to a university degree. It should be noted that many students sometimes seem more concerned with obtaining the degree than with obtaining the education and training which should lead to the degree.

It is too early to judge whether or not the regional universities have served their regional communities in the ways envisaged when their roles and purposes were first set forth. All that can be offered at this point in time are a few personal observations on some successes and failures that are readily apparent.

It appears that the regional universities have started off at least in offering education in the disciplines most needed by their regions. For example, all three include faculties of engineering and education. In addition, Chiangmai and Khon Kaen Universities offer agricultural and health science education. They appear to be trying to meet one of their main objectives, i.e., to produce the high-level manpower needed by their communities. Most of their graduates obtain their first jobs within the same region. It is encouraging to see more and more rural people exposed to innovations from these graduates.

Environmental factors in each university have influenced the rate of growth and improvement in quality and quantity of education that they offer. Environmental factors common to universities in Bangkok too include (i) decisions of the government as the basic funding and controlling agency as reflected in the university budget; (ii) the broad framework of salary scales for staff; and (iii) the conditions of service and fringe benefits which are similar to those of the rules and regulations established by the Civil Service Commission. The government also reserves the right to specifically approve the creation of any new university or faculty within an existing university.

Although the three regional universities were established and guided by common objectives, they have followed somewhat different operational patterns. Chiangmai University has grown rapidly, and its enrolment of over 7,000 now

outnumbers several of the older universities in Bangkok. Up to now, nine faculties have been established. Growth and expansion of Khon Kaen University has been conservative, and it now has about 2,000 students and six faculties. Prince of Songkhla University at present consists of three faculties and less than 1,000 students. Although the three regional universities occupy beautiful and spacious campuses as compared to the universities in Bangkok, they have up to now encountered several serious obstacles. These include difficulty in recruiting high-calibre staff; lack of funds for necessary equipment; and failure to attract the top students in the universal university entrance examination. In general, their performance in their three basic functions (teaching, research, and social service) is not yet fully realized; they are able to cope mainly with the first mission, that is teaching. In all fairness, it should be pointed out that few of the longer established universities in Bangkok do much more than teach.

There are certain social, cultural, economic, and governmental features, perhaps unique to Thailand which certainly affect or restrain the regional universities from carrying out their missions. First, Thailand is dominated by the Bangkok metropolitan area: the capital of the Kingdom, the seat of government and the major commercial centre. Out of the over thirty-five million people in Thailand, 10 per cent, or 3.5 million live in the metropolitan area. The next largest city has a population of only about 100,000 or less. Since university staff salaries are low, the opportunity to earn extra income by moonlighting and through having one's wife employed are important economic factors faced by many university staff. This is an important disincentive for staff to be recruited to regional universities. Again, as in many other countries, the quality of primary and secondary schools is much higher in large urban areas, especially in the capital, than it is in rural areas. So Bangkok children have an advantage from the time they start going to school over their rural cohorts. This has led parents in the regions to make every effort to send their children to Bangkok for secondary or pre-university school. The major exception is Chiangmai, which has had good primary and secondary schools for a number of years. So, whether it is true or not, there still is this strong feeling on the part of parents and children that they should try to go to Bangkok. One could conclude that an important phase of establishing a regional university ought to start first with the setting up of the very best primary and secondary schools in the same location as the regional university. High-quality local schools would also be an asset in university staff recruitment.

It is rather difficult to identify environmental factors that affect the 'academic atmosphere' on each campus. This might be called 'academic freedom' but it applies more to the students than to the staff. University students, either in Bangkok or in the provinces, play a relatively minor role in politics and attempts to affect government policy-making than their counterparts in some other countries. The atmosphere of government professional schools still exists. The students have become somewhat oriented to certain aspects of democracy by tak-

ing part in student body organizations and clubs and in extra-curricular activities, including sports. The students are counselled that they enter the university to learn, to observe, and to reflect. This is helpful in avoiding 'student activism'. But this does not mean that the universities have not seen violence. This has mostly been on the order of internal disorders, such as petty fights between students of different faculties, usually over petty issues, and sometimes clashes with other schools, usually technical schools, although the latter are more common in Bangkok. This may result from the fact that the formal learning process has not been geared to in-depth learning, and the university mechanism has not been able to cope with the changing world. Whether the fact that regional universities are operated as residential universities adds to or lessens tendencies for student disorder is not clear. Residential dormitories should provide an opportunity for students to learn and exchange ideas with their colleagues, especially with those who study in different disciplines. This should contribute to broad-mindedness on the part of students and prepare them to become scholars. (However due to its rapid growth, a fraction of the student body at Chiangmai University recently have had to reside off-campus due to limited dormitory space.)

The physical environments of the regional universities certainly are better than that of the universities in Bangkok. Chiangmai University is located on the edge of the city of Chiangmai, the second largest city in Thailand. The beautiful campus is in the foothills of lush green mountains which act as a watershed to feed the university's reservoir. The city itself lies in a large valley in the mountainous north, where rice, farm crops, and orchards are plentiful. A good irrigation system, in places developed by the farmers themselves over the past century, permit farmers to grow two or three crops per year in some places. There are a few technical institutions in the city, such as the Northern Polytechnic Institute, Chiangmai Teachers' Training College, and the Mae Jo Agricultural College. The mountains, waterfalls, forests, semi-temperate climate in the cool season, home industries and friendly people make Chiangmai a popular place for local and foreign tourists.

The city of Khon Kaen, which is the development centre for fifteen provinces in the northeast has given Khon Kaen University many favourable factors. The campus has 2,000 acres of land, in the vicinity of a hydro-electric irrigation dam. The city is at a major transportation junction for the northeast with roads leading in all directions, a major railway line to Laos, and a good airport. The campus is situated on the outskirts of the city, on a red-soil hill which is high enough to provide good drainage and firm enough for building construction. During the cool season the climate is cooler than in Bangkok. In close proximity are a number of research stations, such as the Water and Soil Conservation Center, the Northeast Agricultural Center, Highway Research Center, Meteorological Center, Rice Experiment Station and a Polytechnic Institute.

The Prince of Songkhla University was originally planned to have several campuses distributed in major cities in the south. The Faculty of Education was established in 1968 in Pattani Province. The main campus is located on a beautiful 280-acre tract in Hadyai District of Songkhla Province, one of the most vital commercial and transportation centres in the south. The rolling hills of the campus site offer excellent opportunities for creative architecture and landscaping. The physical environment provides firm support for an academic atmosphere.

The historical, geographical and cultural settings of these three cities have helped the new regional universities to achieve reasonable excellence in certain aspects of local arts, archaeology, cultural system studies, linguistics, rural sociology, anthropology, and interdisciplinary studies of regional environments and their problems.

All Thai universities, regional as well as those in Bangkok, are public institutions established by legislative action and supported financially by annual appropriations. As elements of the higher education system of the country, they come under the jurisdiction of the newly-formed Bureau of State Universities. (Formerly they came directly under the Prime Minister's Office.) There is no difference in official status among the universities, although parents and students do associate differential status with the universities, i.e. medicine and engineering rank higher than agriculture for example, but then this is not a problem unique to Thailand. Each university has freedom in establishing external contacts for technical assistance. The regional universities have been quick to take advantage of opportunities for technical and/or financial assistance from individual foreign governments, regional assistance agencies, foundations, and local sources as well. The main form of technical assistance is advisers (visiting professors) and scholarships for advanced studies abroad.

Research activities have been slow in starting and are still relatively minor at the regional universities, due to several factors. Staff members generally have heavy teaching assignments, and there are consequently few people to take on leadership of major or even minor research projects. A high proportion of the staff are fairly young, and quite often just returned from advanced training abroad, and therefore need a few years to formulate their ideas and research projects. Guidance in directions of research is needed in many fields. In addition, literature provided for research is insufficient, as libraries of regional universities largely consist of textbooks and reference books, but scientific journals and periodicals are few and back issues are rare in most fields.

Even given the obstacles listed above, the regional universities have shown a real commitment, promise, and potential in playing a role as source of techniques for and ideas on the productive and wise development of regional resources. For instance, the Faculty of Agriculture of Chiangmai University has engaged in the hill tribes programme sponsored by His Majesty King Bhumibol Adulyadej. The staff spend their weekends up in the hills with the tribesmen, visiting and giving

advice on various aspects of modern farming. They are a source of innovation in improving the cultivation system, and utilization of water and forest resources. It has been reported that the staff and students of the Prince of Songkhla University have volunteered to experiment on and then to demonstrate the proper application of fertilisers to southern farmers. Even more exciting is the practice of some regional university students to spend the holidays as unpaid volunteers working in low-income rural areas.

Attempts by regional universities to take the lead as a forum and catalyst for regional integration of organizationally-dispersed development programmes have encountered difficulties. There are many organizations and agencies working on the same kinds of projects with similar problems and yet no collaboration among them exists. University conferences, seminars and workshops continually point out this major organizational weakness in our social and economic development efforts, yet the desired integration has not come about. For example, the Faculty of Agriculture of Khon Kaen University and the Northeastern Agricultural Center are within fifteen kilometres of each other. Both engaged in agricultural research for over five years before any joint action was taken, and then only on a minor scale. It is hoped that Chiangmai University will produce a better record, for both the Northern Agricultural Center and the Northern Regional office of the National Economic Development Committee are to be not only physically located on the same university campus, but even within the same building, and one hopes that their courses will be supporting courses, rather than duplicating each other.

The function of service to the public is slow in the regional universities. Part of the difficulty lies with the public, who seem to regard the university as an institution existing solely to produce graduates with degrees. An extension arm as a source of information and skill relevant to local conditions and needs is not yet functional, and funding for such activities is insufficient. So some image-building, based on performance, is badly needed, aimed at both the public, as well as the sources of funds.

There are still many tasks ahead of the regional universities. First must come the improvement of academic standards. The rapid rate of creation of new faculties has tended to weaken academic standards by diluting available qualified staff and facilities. A slowdown on creation of new faculties and majors should be declared. There are problems in recruiting and holding staff, although the government has recently laid down rules prohibiting transfers of staff from the regions into Bangkok. Budget for staff housing and other benefits is being provided only to the regional universities in an attempt to make them even more attractive to staff. But staff improvement is only part of raising academic standards. A concentrated effort with a fresh approach is needed to attract the best high-school graduates to the regional universities. Incentives must be created.

There is also a need to forge closer links between the regional and Bangkok

universities. At this stage cooperation will be more productive than competition, especially for staff. Badly needed is a system for exchange of staff on a temporary basis, such as for one term or one academic year. Periodical conferences, seminars, and workshops could also foment exchange of ideas for the benefit of all.

Finally, it is hoped that the regional universities will be able to conduct meaningful programmes in education, research, and service that will help their communities in solving social, economic, and cultural problems.

DISCUSSION

Chairman
Thien

This afternoon's session is concerned with the regional university and its environment, and we have only one paper presented, by Dr. Sanga Sabhasri of Thailand. I wonder if we might discuss this topic under three headings. The first is motivation which we have touched on in an earlier session. Why is the regional university set up, from the point of view of the central government, the provincial government and the local people? Second, what would be the conditions of growth for such a university? Among these conditions which I can think of are central or provincial governmental support, local aid and resources available, and the suitability of the regional university to its immediate natural environment. Third, we may examine the inherent capability of the regional university for growth in relation to the quality of its staff, the relevance of its curricula to local needs and so on. But first, let us give the floor to the discussants for this session and we have three of them: Dr. A. Hafid of Indonesia, Dr. Abdul Manap Ahrnad of Malaysia and Dr. Louis J. Goodman of the Technology and Development Institute of the East-West Center in Honolulu.

Hafid

In discussing the relation between the regional university and its environment, I shall draw from the experiences of my own university, Hasanuddin University in Makassar. I am of the opinion that a regional university should be the centre of social and economic development of the region. By region, I do not mean a province which is an administrative unit but a social and economic unit which can comprise four to seven provinces. In order to be the centre of development of the region, a regional university has to involve itself in the development efforts of the government and the private sector. This implies additional activities for the university besides teaching and academic research. These additional activities include feasibility studies, project evaluation and appraisal, and other developmental activities. To be able to do all these, it is essential that the university cooperate very closely with the national and regional authorities, the private sector and foreign agencies. Without this cooperation,

Abdul Manap

In considering the topic, it is necessary first to decide what constitutes 'environment'. In this respect, I agree with Dr. Sanga that environment can be classified into physical, climatic and academic environment, and that each of these factors has a role to play in the development of a regional university. It is also important to appreciate the inter-relationship of these factors. Indeed, the most important condition for the growth of a regional university and its beneficial impact on the region is whether the university could integrate into its environment and *vice versa*. This depends largely on the motivation behind the establishment of the regional university, the local response, and the availability and suitability of local resources for its development. To make its impact on its environment, a regional university should provide the leadership in a wide range of social and economic activities. Through the research of its academic staff and the technical know-how available to it, the university could help to promote the development of human and natural resources in the region which will help to promote the social and economic progress of the region.

It is practically impossible for a regional university to play its role in regional development. Hasanuddin University is able to maintain this cooperation, as I have explained earlier, by inviting influential government officials and private entrepreneurs to sit on its Board of Trustees. Thus, Hasanuddin University is able to help in the design, implementation and supervision of regional development projects for the provincial government. A few months ago the University published a *Monograph on Eastern Indonesia* and this will be followed in a month or two by the publication of a *Master Plan of Sulawesi*. Also in print is a *Guide to Foreign Investors in South Sulawesi*. In addition, in the fiscal year 1971/72, the University has completed forty-four approved research projects and in the fiscal year 1972/73, twenty other research projects would be completed. At the end of last September, the University formulated a five-year development plan for the region comprising six provinces.

Goodman

I should like to emphasize the need for the regional university to completely understand its environment in order to be more effective regarding its role in regional development. Accordingly, attention must be given to economic, social cultural and political considerations in the development process. These

considerations have been touched on in the various papers and discussions but have not been pulled together in a cohesive manner. My institute, the East-West Technology and Development Institute (TDI), sees this as a challenge in relating the role of the university to development at the local community and regional levels. There can also be impact at the national level from a viable regional university. This impact can be realized through action-oriented curriculum and research.

This introduction might well be followed by comments on our two emerging thrusts at TDI. One is intimately concerned with the theme of this Workshop. It is recognized that a sound technological base must be established to promote economic and social growth in developing countries. At the same time there must be emphasis on development planning and development administration to provide direction and coherence to the development process. It is therefore clear that a team approach from a multiplicity of disciplines, particularly engineering, economics, business administration and political science, is needed in an imaginative problem-oriented approach of study, applied research and training on the technology and development inter-relationships. To make explicit this new focus, TDI has launched a series of programmes concerned with the development of university staff along with the necessary related action-oriented curriculum and research programmes in one selected cooperating non-metropolitan or regional university in each of four or five Asian countries, the Pacific and the US Mainland. The reason for this new focus is that there is increasing evidence regarding the significance of a viable non-metropolitan university as an important stimulus for achieving local and national development goals. Non-metropolitan or provincial universities are generally young and with limited capacities but they are relatively flexible and responsive to promising innovations. They are searching for an identity and for programme possibilities in education, research and extension services related to community/regional development needs.

Experience at one of our network institutions, Mindanao State University (MSU) in the Philippines, demonstrates that community development projects based on adaptive technology and entrepreneurship can be achieved through curriculum and applied research directed by a team of university staff who are responsive to the economic and social needs of the community and region served by their institution. One such example is an

action-oriented planning course which relates all senior engineering students to real-life problems of nearby communities. The course results in comprehensive studies, including attention to sociological considerations, leading to a well-documented plan for economic development. For example, the first year of this new course (1969/70) resulted in a tourism and attendant cottage industry development plan for nearby Marawi City. This plan was officially adopted by the City and implementation of a number of projects proposed by the students has commenced. In areas of research, a pilot project adapting local soil and cement as a low-cost building material has resulted in (i) a functional model house on the MSU campus at a total cost of only US\$600 (for 484 square feet of floor area), and (ii) national interest and financial support for in-depth research studies on the use of soil-cement building blocks for low-income housing needs in nearby communities. A second research area demonstrating technology adaptation is investigating soil and water conservation with an ultimate objective of developing efficient water storage and irrigation systems for the improvement of crop productivity.

Our second and major thrust is concerned with the concept of an 'Adaptive Technology Centre' (ATC). The major goal of the interlocking programmes of research, education and training at TDI is to increase our knowledge of the process of adaptation, generation and diffusion of appropriate production technologies relevant to particular stages of the development process with the ultimate aim of generating action-oriented programmes in this area. This concern over the effective generation and diffusion of appropriate technologies stems from the critical concern of policy-makers in many developing countries that technology design must respond to conditions where capital scarcity is accompanied by a concomitant growth in the supply of unskilled and semi-skilled labour and therefore where an urgent need exists to generate more employment opportunities. This concern is also related to the development of existing and potential entrepreneurs who will in fact adopt the technologies to generate increased employment opportunities. Analysis of the broad public policy issues and institutional framework required to implement these goals, are also emphasized. The concept of an ATC has therefore become a central programmatic thrust to consolidate various research and training activities developed under four focal themes of TDI: (i) employment-oriented development policy and planning, (ii) technology adaptation, (iii) small-scale entrepreneurship develop-

ment and (iv) developmental institution-building. In this connection, the first pilot study was undertaken during the summer of 1972 by an interdisciplinary team of experts organized by TDI in cooperation with the Bandung Institute of Technology in Indonesia. The reports of the survey team and evaluative discussions made by international authorities attending the subsequent TDI Seminar held in October 1972, have further supported the desirability and feasibility of the ATC concept.

In closing, I should like to note that TDI also proposes to develop, organize and implement a joint research project focussing on problems and potentials in establishing sub-regional ATC's at a number of cooperating non-metropolitan and regional universities in Asia. It is our hope that this research project will provide us with a concrete demonstration of how a non-metropolitan university can contribute in a significant manner toward the further socio-economic growth of its immediate environment or region.

I listened with great interest to Dr. Goodman's explanation of the two activities of TDI, one on regional university/local community interaction with the Mindanao State University as an example, and the other on Adaptive Technology Centre which TDI is pursuing in cooperation with the Bandung Institute of Technology. I will not comment on the latter of these two activities because, first, it lies outside the topic of discussion for this session and second, the staff of RIHED and TDI will be holding a seminar on it soon after this Workshop when a more extensive discussion could be held on this very exciting concept. I shall, therefore, confine my comments to Dr. Goodman's first point.

Dr. Goodman has explained how a planning course at the Mindanao State University has resulted in a well-documented plan for economic development of Marawi City and he quoted the case of a plan for the promotion of tourism. My first impression as I listened to Dr. Goodman was that this was similar to the situation in Hasanuddin University in Makassar where the university/local community and provincial government interaction has resulted in the University taking on many development functions in the region. However, on second examination, there seems to be significant differences between the two situations. In the case of Hasanuddin University, the University is involved in the formulation and implementation of a *comprehensive* development plan for the region. In the case of the

Mindanao State University, the planning seems to be *piece-meal*. My question to Dr. Goodman is this: how is this piece-meal plan integrated into the comprehensive plan for the region as a whole, if such a plan exists? One could be cynical and think of a situation in which expensive luxurious hotels are built and yet the tourists do not come because there are many other factors besides luxurious hotels that attract the tourists. Would not the Hasanuddin University's approach in comprehensive planning be more desirable if regional universities are to be involved in planning activities?

Romm

I suppose that what I have to say will constitute my kind of an answer to the question that Dr. Yip has put to Dr. Goodman although it is not intended to be in that light. I think that the differences in approach to regional university/local community interaction are inherent in the process due to different strengths and specializations of regional universities. Let me explain this a bit further. During the course of this Workshop, we have got into a number of dilemmas about regional universities where there tends to be pulls in two directions and there has been a lot of difficulties in finding a proper balance. An example is the balance between service and education functions in the allocation of university time. Another is the balance between increasing access to education and at the same time maintaining the quality of this education. The question of relevance *versus* quality has come up; so has the question of metropolitan/regional university exchanges where we found difficulty in finding mutually beneficial exchanges which could help both types of institutions.

Let me suggest that the environment of a regional university provides the clues by which a number of these dilemmas, as they are unique to particular situations, might be resolved and, in fact, are being resolved in many of the regional universities in Southeast Asia. Specifically, the environment can give a clue as to what the key problems of development are for a particular region. A university or universities in that region could then give special attention to these problems. Let me give examples in Southeast Asia where specialization has occurred in regional universities and is achieving levels of outstanding qualities. At Chiangmai University, for example, some of the best multiple cropping research in Southeast Asia is developing on the university campus. In a sense, the University is drawing sustenance from the environment in which it exists, an environment in which multiple cropping is a very crucial element in the future develop-

ment of the valley. In Khon Kaen University, development programmes in rural education is again in response to the needs of the environment and this is producing something that does not take second place to any such programme developed elsewhere in Thailand. In Kalimantan, the possibility of Lambung Mangkurat University and Mawlawarman in providing outstanding contributions in tropical rain forest management cannot be surpassed anywhere else in Southeast Asia. In each of these cases, the environment and the kind of problems it poses provides an indication of how a university could best deal with the problems of the region in which it exists.

Phiet

I find myself very excited by the remarks of Dr. Goodman. It seems to me that Dr. Goodman is in the midst of a very exciting experiment and I am green with envy that I am not a part of it. However, the project on regional university/local community interaction has raised more questions for me than it has provided answers. As Dr. Yip has said, he seems to have adopted a piecemeal kind of approach rather than a comprehensive one. Also, the students in Mindanao State University seem to have taken over the functions of the local planning agency. How long can they continue with this? What is TDI's input into this project and what would happen when TDI pulls out of that University, as it must some time in the future?

Anwari Dilmy

I would like to talk about the impact of a regional university on its environment and then the impact of the environment on the regional university. I will use my university, Lambung Mangkurat University, as an example.

The Faculty of Agriculture of the Lambung Mangkurat University is situated about 35 kilometres upland from the capital city of the province of Banjarmasin. As part of the fieldwork for our students, we have planted this year, in cooperation with the local agricultural service, 20,000 coconut seedlings for distribution to the farmers in the region at the end of the year. We have also grafted 10,000 tangerine plants to be distributed to the farmers in the region, many of whom are either ex-soldiers or have migrated from Central or East Java and from Bali. The Faculty of Forestry of the University, on the other hand, is investigating the possibility of replanting a species of tree known as *kaja kuku* which grows in the southern part of Kalimantan. This species of tree provides first-class timber for furniture and walls and is being

exported to Japan over the last ten years. Through research, we have also produced a variety of coconut tree which begins to bear fruit after only three years instead of the usual seven and reaches up to a height of only eight metres. In this way, our University is helping in the development of the region.

Now, let me explain how the environment has influenced the Lambung Mangkurat University. At the moment, the Lambung Mangkurat University has two faculties - the Faculty of Agriculture and the Faculty of Forestry. The Mawlawarman University in East Kalimantan has also two such faculties. It is now decided not to duplicate the efforts of the two universities but to allow each to specialize in a field which it is best suited for. Thus, the Mawlawarman University will close down its Faculty of Agriculture but will retain its Faculty of Forestry while the Lambung Mangkurat University will close down its Faculty of Forestry but will retain its Faculty of Agriculture. This move will allow the Mawlawarman University to specialize in forestry and the Lambung Mangkurat University to specialize in agriculture. This is dictated by the environment of the two regional universities. East Kalimantan, where Mawlawarman University is situated, is still 80 per cent. forest, while in South Kalimantan, where Lambung Mangkurat University is situated, there are 5,000,000 hectares of peat swamp which could be converted into rice fields, as has been done in Thailand. Thus, we can see the impact of the environment on the university.

Seward

I hate to have to add to Dr. Goodman's discomfiture but I would like to pile on top another four questions: (i) The report that Dr. Goodman's students produced is presumably a team effort; and it is well known that in team efforts it is difficult to distinguish accurately the contribution of one student from another. How was Dr. Goodman able to find out who did the good work and who were simply the idlers? (ii) This sort of study requires a small number of students and most universities in this part of the world grow rapidly. What happens when the student number grows so large that the team becomes unmanageable? (iii) What happens when you run out of useful projects? (iv) Especially about this study on tourism, who carries the responsibility if something goes wrong? I can see that in the situation of Hasanuddin University, the University has some sort of responsibility if the calculations go wrong.

Chairman

Thien

I will now ask Dr. Goodman to respond to the many questions directed at him.

Goodman

Let me first of all apologize to the Chair for taking so much time earlier on in talking about the ATC concept. I had to go into this because I look at this as being a very important part of the regional university's role in regional development.

With regard to the point raised by Dr. Yip concerning the question of piecemeal *versus* comprehensive planning or the Mindanao State University approach *versus* the Hasanuddin University approach, I must emphasize that the MSU planning course was supposed to be an exercise to get students involved in real-life situations. It was not intended to be a development plan for adoption by Marawi City. That just simply happened.

In answer to Dr. Phiet's question, let me say that TDI's input to get that course is zero. This course was in fact started when I was a Ford Foundation Visiting Professor in MSU helping to develop the Faculty of Engineering. The University has now taken over the course all by itself and is doing very well with it. TDI does have at the moment two staff members of MSU working for doctoral degrees at the University of Hawaii on TDI fellowships, one in engineering and another in political science, and we have also an MSU intern at TDI. This internship is a new programme at TDI and it attempts to train future university leaders.

In response to Dr. Seward's first question, let me say that the assessment of individual contributions in a team effort is not easy. But this could be done through careful observation on who are the doers and who are the non-doers during the fieldwork, through weekly reports by the students, and through the oral examination at the end of the course. On the question of student number and student/staff ratio, in the first year we had 18 students and 2 staff members, in the second year there were 28 students and 4 staff members, and in the third year there were 30 students and 4 staff members. With regard to Dr. Seward's third question of what happens when we run out of projects, I must say that I have never run into this problem. There are all sorts of problems and challenges which we can tackle. In ten minutes I can produce about twenty problems which can make ten years of study by the planning class. I do not think that this is really a problem at all. Finally, let me come to the question of who is

responsible if something goes wrong or if a hotel collapses immediately after construction. I must say that the designs by the students are very preliminary designs done by non-professional people. The report has made this very clear that this is simply a student exercise and should be treated as such.

Abdul Manap In his comment earlier on, Dr. Romm gave the impression that the regional university should respond only to its immediate environment. He quoted the case of multiple cropping in Chiang-mai University and forest management in Lambung Mangkurat University and the Mawlawarman University in Kalimantan. These might be specific cases. On the whole, most universities serve not only the immediate environment but the whole nation. The University of Agriculture in Malaysia, for instance, does not serve only the state of Selangor but the whole of Malaysia.

Romm I would like to respond to Dr. Manap's comment. I do not think that Dr. Manap disagrees with me. Let me indicate why. What I was basically saying was that quality seems to emerge when the resources of a university match the key environmental problems towards which these resources are directed and this could be achieved at many levels. A university like Dr. Manap's, the University of Agriculture in Malaysia, being situated so close to Kuala Lumpur, the federal capital of Malaysia, naturally tends to define its environment in national terms. But if this university were shifted to a place like Chiangmai in Thailand, then the environment is going to be quite different. I think that the main difficulty we have got into here is the definition of national university and regional university. A university situated in a capital city is likely to be confronted with a different set of problems from one situated in the provinces. Even with a national university, the programme of activities tends to have local biases. For example, the kind of agricultural research being done at the University of Agriculture in Serdang is very likely to be more suited to the farmers in the Serdang area than to the farmers in an area in Johore. This is also the case with Kasetsart University in Thailand where the scope and concern of agricultural research are nation-wide but in fact more attention is being given to the local needs.

PART VI
REPORT OF PROCEEDINGS: SUMMARY AND COMMENT

REVIEW AND COMMENT

Jeff Romm

The Workshop covered a remarkable amount of new ground, yet achieved a clarity of focus that should impress itself on future consideration of the topic. Key questions were winnowed from the raw material of each session, providing statements of the central dilemmas confronting universities as well as starting points for future discussion. Some prevalent notions were rejected, including those which make generalized distinctions between 'regional' and 'national' universities, and were displaced by more flexible perceptions of university needs and possibilities in particular contexts. The powerful forces which underlie the explosion of university development in Southeast Asia, and the difficult issues they create for the definition of university roles and functions, became apparent largely because the structure of discussion was so unable to capture them or their implications. Thus, the Workshop crystallized crucial issues, but resolved none of them; it transcended standard models by shifting focus to the processes of university evolution in dynamic societies, but did not specify approaches that could be generalized beyond national boundaries; it fostered awareness of powerful changes occurring in the context of higher education, but did not delve into them. In sum, the Workshop moved discussion about university development into a transitional state of new and exciting exploration, and laid the foundation for further analyses which can yield concrete proposals and programmes. Given the wide variance of national contexts, such analyses would most usefully be undertaken at national and local levels.

SESSION SUMMARIES

Session 1: Nature and Functions of the Regional University

Although regional universities vary in nature from place to place, they share certain common characteristics. All were created to increase access to opportunities for higher education, provide skills and services needed for national development, and preserve and enrich cultural heritage. Motivations for their creation have differed substantially from country to country, and have been largely political in character. They have left their imprints on the styles of university performance. However motivations have differed, regional universities have all been viewed as instruments for strengthening national integration through provision of educational developmental and cultural opportunities to those previously without access to them. They have all begun to fulfil these purposes by assuming responsibility, in one way or another, for the welfare of localities

and regions in which they are situated.

Among the functions of regional universities mentioned during this session of the Workshop are the following:

- Increase access to opportunities for higher education;
- Increase the availability of skills to populations which have not shared in the benefits of national development;
- Provide forums for the sponsorship and catalysis of modernizing interactions at local and regional levels;
- Generate and extend technological innovations needed for development of local and regional resources;
- Provide centres for the preservation of cultural heritage;
- Improve the relevance and quality of education at all levels;
- Transmit leadership values and skills;
- Support community service and action programmes;
- Provide expertise to local governments;
- Undertake research needed in development planning and implementation, and assist in preparation of local, regional and national plans;
- Promote equality and social justice;
- Provide economic opportunities;
- Reduce rates of urban migration by creating employment opportunities outside of metropolitan areas;
- Develop cooperative links between academic and local/regional communities;
- Act as catalysts for developmental activities by government and private organizations;
- Provide opportunities for continuing education; and
- Integrate developmental and traditional values in ways conducive to the achievement of progress and the preservation of culture.

Programmes utilized to satisfy these functions range from traditional disciplinary training to the preparation of regional plans, and include such diverse activities as the development of new agricultural technologies, the upgrading of primary- and secondary-level teachers and the development of teaching materials, student workcamps and community action projects, socio-economic research, provision of health services, explorations in interdisciplinary education, and the support of cultural centres.

This wide variety of activity is undertaken within severe constraints of very limited staff capacity and financial resources, generally adverse structures of incentives for professional performance, student motivations for the achievement of mobility to urban centres rather than education relevant to needs in the region, and often-difficult relations with local governments and communities.

The results are potentially serious problems of allocating limited resources among many competitive demands for them and maintaining the quality of educational pursuits. They stimulated a number of basic questions by participants:

- (i) To what extent is educational quality sacrificed in the performance of other university functions?
- (ii) How well does programme content fulfil objectives?
- (iii) What are the criteria for achievement in regional universities, and how do or should they differ from those of metropolitan universities?
- (iv) Are not resources better concentrated in institutions to the degree that they can support quality education rather than being dispersed spatially and functionally?
- (v) How significant are the contributions of regional universities to regional development?
- (vi) Is there, in fact, a relationship between regional education and regional development?
- (vii) How well are newly-trained students absorbed in local employment, or national employment, for that matter? What are the prospects for the future? Is it appropriate to increase access to education in the face of uncertain employment possibilities?
- (viii) Does regional education actually slow urban migration?
- (ix) How do functional objectives mesh with student motivations toward mobility, faculty orientation toward professional recognition and administrative advancement, the role of education as a social selection process?
- (x) What are the trade-offs between
 - increased access to educational opportunity and maintenance of academic standards?
 - educational 'relevance' and 'quality'?
 - concentration and dispersion of educational resources?
 - programme relevance and programme efficiency?
 - responsiveness to political initiatives and hasty improvisation?
- (xi) What are the conflicts between
 - actual motivations and stated purposes?
 - roles of promoter of change and preserver of cultural heritage?
 - increased access to education and limited employment possibilities?
 - education, research, public service and administrative functions?

During the course of discussion, it became clear that the nature and balance of functions of regional universities differed substantially from country to country, that general stipulations did not fit specific national contexts and the political, cultural and economic forces they comprised, and that, if regional universities held anything in common, it was the need to seek balance among many complex, powerful, changing and often-competitive demands and expectations. How this is or might be done, the implicit central issue of the discussion, was not confronted.

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Session II: Relations Between the Regional and the National/Metropolitan University

Relations between regional and national/metropolitan universities tend to reflect historical patterns of university development. Historically, new universities have been started around staff from established institutions. In general, they have been created to afford educational opportunity, developmental stimulation and national stature to groups of people, defined regionally, politically, economically or on religious grounds, that had previously lacked access to the benefits of older institutions. Relationships between the new and old have been based primarily on personal and organizational ties somewhat familial in character. They have been and are largely informal. Indonesia is an exception to this general pattern. Provincial universities in Indonesia were most often created through the motivation of local elites seeking greater prestige within national society. Because of this, it would seem, relationships between national and provincial universities there have been more dependent on formalized mechanisms of change, such as the *pembina* and consortium systems.

In all cases, however, older institutions have been placed in paternalistic roles, providing assistance to the younger in the form of faculty training, staff assistance, development of research capacities, curriculum improvement, and support of research programmes. In general, flows of resources have been uni-directional, from established institutions to the new. This is changing, particularly in research where collaboration joins the complementary strengths of national and regional points of view, disciplinary vigour and sensitive understanding of problems. Nevertheless, relationships continue to be predominantly at the expense of national institutions for the benefit of regional ones.

Participant comments indicated that this is not a sustainable pattern in most cases. Metropolitan universities do not possess the surfeit of human resources required to sustain support without considerable sacrifice to their own programmes and ambitions. Young universities are generally motivated to achieve national stature, to define their own independent identities, and to do so by the development of innovative orientations which their flexibility allows and which may not be strengthened by the influence of more traditional institutions. In addition, regional and metropolitan universities operate in quite different environments, face different balances of stress and opportunity and therefore assign different priorities to their various functions. As a result of these factors, communications and cooperation generally fail to become what might seem desirable from a detached point of view.

Two requisites for improved cooperation were forwarded in the course of discussion. First, it was felt important that regional universities be given the support they need to achieve national stature as quickly as possible, thus strengthening possibilities for relationships among equals. Second, it was suggested that potentials for mutually beneficial relationships be explored and developed so that

metropolitan universities would find collaboration productive within the framework of their own objectives. The first would require continued reliance on older institutions by younger ones for some period of time. The second depends, to a large extent, on increasing appreciation by both metropolitan and non-metropolitan universities of the unique contributions that regional institutions can make to academic programmes more oriented toward national issues. Both suggest the need for improved mechanisms of communication, planning, collaboration and exchange.

Specific possibilities for mutually beneficial relationships and improved mechanisms of cooperation were not systematically explored.

Session III: The Universities and the Government

Two streams of emphasis dominated this session. The first viewed relationship between universities and government in structural terms, emphasizing examination of the constraints and expectations that governments place on universities, the ways in which universities are affected by these pressures and exert their influence on government. The second viewed government and universities as part of one system, placing emphasis on flows within the system and the ways in which these flows are regulated.

In all Southeast Asian countries, the government is the predominant financier of universities and can exert constraints on university behaviour through its budgetary powers as well as through less formal means. As university people are generally government employees, their actions may be constrained by vulnerability of their tenure, and their performance may be adversely affected by resource limitations which restrict their professional activities. Substantial discussion, therefore, was devoted to issues of university autonomy and academic freedom. Although most universities are nominally part of the government, few participants seemed to feel that this causes any significant reduction in autonomy on practical matters or increases government demands for conformity to its wishes. University budgets have been increasing steadily. Government demands are generally limited to those for supply of a desired range of skills among graduates and for avoidance of excessive political annoyance. Further, as the functions of universities have diversified, and their capacities to provide them have increased, their practical level of autonomy has also increased. It seemed generally felt that, where freedom of action by the university is restricted, it is largely due to internal inhibition rather than external pressure, to the recognition of informal limits as well as to the need to accommodate divergent staff preferences for cloistered and activist university roles in society.

Relationships between government and universities were felt to be less limited by formal bonds of authority than by the motivations and capacities within the universities themselves, the ways in which relations between government and the universities are regulated through formal and informal mechanisms, and the extent

to which government is imaginative and open to uses of resources concentrated within the universities.

The extent to which governments actively pursue university participation in support of other governmental functions seems to relate to the extent that universities dominate command of unique skills. Where a high proportion of national expertise is located in universities, as in Indonesia, government use of university people is most active. Where the proportion is lower, relative to resources available within the private and governmental sectors, dependence on university people is less. Needs for expertise are growing rapidly, as is its availability within the universities throughout Southeast Asia. There is a trend toward increasing governmental reliance on university people. Its productivity and pace seem largely dependent on the kinds of mechanisms created to improve exchange between governmental and university communities.

The notion of the university as an 'ivory-tower' was discussed from several angles. It appeared from the discussion that the extent to which ivory-tower characteristics prevail is more a matter of the kinds of roles that universities play within specific social systems than one of design by either university people or the government. As the nature of these roles differs from country to country in Southeast Asia and is changing rapidly with the progress of national development, the elements of an ivory-tower definition are quite variable and perhaps beyond comparable meaning.

In addition to its command of expertise, an important aspect of university influence on government seems to reside in the unique symbolic role that the university plays in society. It verges on the mystical and protects the university from overly-specific demands. It was variously described as 'social consciousness', an integrated focus of cultural sensitivity and developmental perception, and a repository of brainpower, motivation, knowledge, dedication, and ethics. The *mystique* of the university seems a crucial source of its autonomy.

In the stream of emphasis on flows rather than structures, the point was made that communications between government and university people often founder on differences of bias, background and style of operation. Even when governmental and university interests are thoroughly compatible, cooperation will fail if adequate mechanisms for continuing communication and adjustment are not developed. The importance of these mechanisms was emphasized by a number of participants. That they be congruent with potentially viable patterns of communication within the social context, that they be as informal as possible, and that they be sufficiently specific to allow for concrete programmatic results, were indicated as requirements for their evolution. Productive relations between government and university in a dynamic society depend on the evolution of use of such mechanisms.

A significant point was made about the role of students in the university-governmental system. Student activism, and the conscience and vigour it mani-

ests, has assumed a major role in university-governmental relations, displaying wide swings from potential threat to accomplice, and strong commitment to equity and national development. It is a force that must be taken into account.

Session IV: The Regional University and the Provincial Government

University cooperation with provincial governments was seen to present significant opportunities for contributions to national development and improvement in the quality of higher education. Provincial governments generally suffer from scarcity of skilled people to formulate and implement development programmes. Universities can provide such people for participation in planning, action, research and extension. In doing so, they can increase their own capacities for public service, improve the quality and relevance of education by using the stimulating laboratory of local conditions, add to their own resources, and transmit a greater understanding of social issues to their students. The challenge to staff members of involvement in developmental activities can help to reduce the problem of staff retention. The challenge to students can provide incentives for their remaining in the region after graduation, as well as open possibilities for employment to them. Regional universities can exert significant leadership in local and regional development if they have the will to do so, and are probably in a better position to play such a role than are metropolitan universities.

The barriers to such involvement are often high. Differences in backgrounds, job orientations, and resulting norms and values, between government and academic personnel block potential paths of communication. Possibilities for cooperation rest heavily on the personal compatibility of government and university leaders. Motivation may be weak through lack of suitable incentives. Mechanisms of consistent exchange, formal and informal, are frequently inadequate. The result is an unfortunate failure to mobilize effectively resources that would otherwise contribute to the satisfaction of both developmental and educational objectives.

A number of university initiatives were advanced as means for overcoming these barriers. Among them were the use of government people in design and presentation of university courses, the stimulation of cooperative research and action programmes, the sponsorship of community-oriented projects which demonstrate university interest in local welfare, the recruitment of staff to communicate well within a non-metropolitan context, the recruitment of government officials into advisory roles, development of the ethics of public service, and the general provision of a stake for government and local people in university affairs, preferably through sustained kinds of active participation. Government officials frequently feel threatened by academia, even while holding universities in great respect. One implication of this is that they gain personal satisfaction by being afforded the status of university involvement. Another is that the alleviation of threat must largely occur through efforts by the academic community. Indeed,

a theme of discussion was that the initiative for improving relations between provincial governments and the university resides primarily with the university community and that there are many ways in which it can be exercised.

Good relations between provincial governments and universities can lead to problems as well as benefits. Development of excessive expectations on the part of government people may lead to disenchantment if the university does not produce; if performance is as expected, it may be at serious cost to other university functions. Activism is likely to place an additional administrative burden on the university. Participation in social affairs increases the university's vulnerability to politics. In sum, an effective role in the community can be at the cost of undesired effects on academic programmes.

These points suggest that relations between provincial governments and universities must be sufficiently dynamic to allow for changes in university role, capacity and scope. Regional universities are developing institutions which will probably outgrow their present situations rather quickly; external relations, if they are to be strengthened during this process of growth, must be able to adjust to the changes that will result. These points also suggest that an active role in development will require adjustments within the university itself. Specifically, it increases the need for university definition of its priorities among potentially competitive functions of education, research and public service, and for design of programmes which resolve conflicts by exploiting potential complementarities among functions. Many examples of such programmes were given during the course of the seminar.

Session V: The Regional University and its Environment

The bedding of a regional university in its environment influences the character of both. The university ... as a generator of new technologies, a source of broader horizons, a focus for modern organization and new behavioral patterns exerts considerable impact on local communities and the ways in which they develop their natural resources. The environment, in turn, applies selective pressures on its university's educational, research and public service functions, eliciting emphases that match the specific opportunities and needs it contains. A number of participants stressed the need for regional universities to understand and utilize their environments in order to provide education that is of both relevance and quality to improve their effectiveness as catalysts of development. This implies specialization of focus. In several regional universities, such focus has yielded educational, research and service programmes of sufficient quality and uniqueness to command national recognition. Regional planning in Indonesia and the Philippines, agricultural research and the improvement of rural education techniques in Thailand, were examples given during discussion. They suggest that sensitivity to a university's environment, and to the needs of local communities within it, can provide a basis for the setting of programme priorities.

Specialization in service activities proved a matter of serious concern because of its possibilities for diverting resources away from student education. A number of participants argued that emphasis on programmes such as regional planning and community development, under the common conditions of staff scarcity, would deprive students of the faculty attention due them. They felt that non-educational activities should not be pursued unless the requisites for quality education were being satisfied. There was some difficulty in discussing this point because of marked differences in experience and national contexts. But the issues of conflicting purposes and choice were posed with force and some urgency, as they had been throughout the Workshop.

COMMENT

One theme permeated the entire Workshop: universities in Southeast Asia are facing severe tensions between the demands of societies on them and the limited resources they have available. Virtually all discussion focussed on these tensions, marked by concerns for academic freedom, educational quality, university autonomy, relevance, participation in development, preservation of heritage, and advancement of knowledge, and on means to better resolve and respond to changes in them. Improved relationships with other universities, national and provincial governments, and local communities, were addressed as fundamental means by which universities could expand access to appropriate resources and thereby strengthen their responses to, and control of, demands on them. The possibilities and problems of such relationships were stressed throughout the Workshop. This is reflected in the kinds of summary questions reached by the end of each session:

- (i) How can the tremendous, often competitive, demands on regional universities be best satisfied in programmatic terms?
- (ii) How can mutually beneficial relationships between metropolitan and regional, established and newer, universities be developed, and what should their characteristics be in specific situations?
- (iii) By what mechanisms can relationships between government and universities be better regulated to the advantage of both parties, and how can these mechanisms be kept responsive to the rapidly changing conditions within and among institutions?
- (iv) In what ways do relations with local and provincial governments affect university autonomy and the balances of its functions the quality of education in particular and how can universities best respond to these influences?
- (v) How might a university's local environment be used as a source of academic vitality, a guide to the definition of priorities among educational, research and service functions, and a determinant of the kinds of relationships a university should try to foster?

These questions were not answered during the Workshop, although Indonesia showed notable progress in dealing with them for its own conditions. They seem fruitful beginnings for further explorations.

The evident commonality of problems and motivations among universities represented at the Workshop destroyed preconceived generalizations about 'national' and 'regional' institutions. All universities faced similar problems of balancing developmental, educational, professional and cultural functions. All are motivated to achieve academic excellence, national and international stature, and significance in development. All have different ranges of influence in different fields. Means for resolving tensions, through programmes and external relationships, vary widely among institutions and countries, but distinctions between regional and national, metropolitan and non-metropolitan, tended to block rather than clarify discussions about how to improve them. Real distinctions were more of age, history and environment than of 'national' or 'regional' status; the latter terms faded into irrelevance as the Workshop proceeded.

Another theme dominated the Workshop, although its importance emerged in stark relief because of its absence from discussion: the powerful context of the university in Southeast Asia today, and the university as a set of dynamic processes within it. The tremendous surge of university development in recent years is a process of historical significance. Creation and vitalization of the many universities termed regional or non-metropolitan in the Workshop indicate strong trends toward the democratization of higher education and of Southeast Asian life in general. University processes are being extended rapidly to populations without previous access to them. This implies a mandate to universities to provide education relevant to those raised outside of the relatively narrow confine from which students have been drawn in the past, to forge organic roles within local and national communities and, consequently, to turn outward in search of curricula, research and service programmes which satisfy the needs of extremely dynamic societies. The tensions on which the Workshop has focussed are crests of deeper forces. They cannot be resolved by prescription, but require pragmatic and sensitive responses to the social processes within which each individual university is bound.

Thus, the focus of 'Roles of Universities in Local and Regional Development' shifted, in the course of the Workshop, from distinctions between regional and national roles toward means for enhancing university processes in society. This is not a new topic, but it is one that has acute significance in Southeast Asia today. The very existence of the Workshop is notable in this respect; it would not have been convened but a few years ago. What are the ways in which universities can best exercise and expand their capacities at the turbulent front of national innovation? How can they work with one another, with governments and communities, in these efforts? The Workshop has shown that practical answers to these questions are attainable.

PART VII
BACKGROUND PAPERS

REGIONAL DEVELOPMENT IN KALIMANTAN: RESEARCH AND TRAINING NEEDS¹

Jeff Romm

INTRODUCTION

The forests of East Kalimantan and eastern South Kalimantan have been rapidly opened for exploitation during the past several years. The Indonesian government has granted logging concessions for almost 13 million hectares in these areas. Logging methods in use, while not particularly destructive to soil and water resources, are designed to selectively remove the most valuable trees rather than to maintain the value productivity of the forests. The government's policy, therefore, reflects an implicit decision to convert timber into other forms of capital needed for Indonesian economic development. Government revenues, logging road systems, processing plants, new communities and public service facilities are being developed at the cost of some reduction in forest capital values.

Timber exploitation and oil exploration are creating a highly dynamic economic situation in eastern Kalimantan. Wage rates and incomes are rising, attracting migrants from other areas. Residents are shifting from their previous occupations to employment on logging concessions. New skills are being developed in the labour force. Patterns of social organization and values are changing. New consumption and service requirements are increasing demands on governmental and market functions. Future patterns of regional development are being deter-

¹This paper was first prepared as a report to the Ford Foundation after a survey of South and East Kalimantan during February 1971. It was later published in the first 1972 issue of the journal *Ekonomi dan Keuangan Indonesia*. The journal's editors have kindly permitted inclusion of the article in this volume.

Since the original survey, conditions have changed significantly in Kalimantan. Increasing cooperation between, and capacities of, provincial and national planners, growth of knowledge about regional possibilities, consolidation of timber concessions, and substantial progress in programmes of forest regulation, research, education, and road integration, are among the more notable trends. The integration of provincial universities, to be formalized in a University of Kalimantan with specialized colleges at its provincial campuses in South and East Kalimantan, is of particular relevance to interests of this Workshop. It will involve, among other things, the concentration of forestry training at Mulawarman and agricultural training at Lambung Mangkurat.

The author has not been in Kalimantan since October 1971 and, despite his efforts to keep informed from a distance, he is aware that aspects of this paper are no longer timely. Nevertheless, he feels that the mode of analysis and the themes of the paper continue to have general validity.

mined by the location and qualities of new roads, markets, industrial facilities, and communities, and by the expansion of existing urban centres, public services, and private enterprises. Eastern Kalimantan is emerging as a potential centre of economic growth for the nation and as a source of incentives for transmigration.

Events in eastern Kalimantan are significant for the development of western South Kalimantan. In the past, potentials for agricultural development in South Kalimantan have not been exploited. Incentives to do so have been weak, and farmers too few. The government has felt insufficient reason to attack and solve the physical, technical and social problems that hinder agricultural development in the region. These conditions are beginning to change. The population of eastern Kalimantan is expanding, and its people are shifting from agricultural to other pursuits. Food prices and the need for food imports are increasing. They should enhance incentives for agricultural production in South Kalimantan, particularly after the road between Banjarmasin and Balikpapan is completed. The government of South Kalimantan is actively concerned with the improvement of agricultural opportunities by irrigation, rice intensification, and crop diversification programmes. Improved incentives, new agricultural opportunities, government interest, and the promises of East Kalimantan may begin to draw settlers to the productive agricultural areas of South Kalimantan.

The possibilities for Kalimantan development are encouraging. The reality of the future, however, will depend on the nature of governmental policies, planning, and administrative capacities, and on the extent to which they can elicit appropriate responses from people and organizations. The provincial governments are following strategies of regional development that seem suited to their circumstances. The government of East Kalimantan, confronting rapid and uncoordinated developments beyond its control, is emphasizing manpower, education, and transport/communications programmes that will stimulate a viable, integrated pattern of regional growth. The government of South Kalimantan, dealing with a relatively stagnant situation, has assumed dominant responsibility for developmental decisions and programmes; it has prepared a comprehensive plan for the Barito basin and is beginning to provide the infrastructural and technical service requirements of that plan. Both governments display astute perspectives of their regions' prospects and needs. They do not presently have the money, populations, technical and administrative skills, and essential information necessary to perform activities their perspectives and plans dictate, but their capacities are growing. Future coordination between them should generate the benefits that potential complementarities between their diverse regions afford. Such coordination is now absent. Bappenas, still struggling to define its own role in regional planning, has been unable to serve either as a source of specialized skills and information or as a catalyst of inter-provincial coordination.

The energies of eastern Kalimantan today were released by government policies. How they can be captured for maximum benefit to Indonesia is now the question.

Answers to it will evolve with the growth of concrete knowledge, skills, and organizational effectiveness. The following are some research, training, and organizational needs posed by the dynamic situation in eastern Kalimantan.

RESEARCH

Research needs differ with the perspectives of decision-makers. Some of our proposals may be useful to officials at the national level of government, others at the regional and local levels. We suggest five criteria for selection from among research possibilities:

- (a) importance to decision-makers;
- (b) availability of the resources required for a study;
- (c) potential to stimulate development of research capabilities and to generate interest in additional studies;
- (d) ability to elicit new patterns of inter-organizational coordination and communication;
- (e) generality of methods and information to be produced.

Our own judgment is indicated by the placement of projects into three categories: A, B, and C. Projects in the first category are of immediate importance, promise valuable results within a relatively short period of time, provide bases for future studies, and can be implemented with research talents that are presently available. Projects in the second category are of long-term importance, will yield information only through continuous development, are relatively specialized in their implications, and require further development of research capabilities. Projects in the last category are desirable, but likely to be stimulated by studies in the first two categories; resources may be available to accomplish them at the present time, but are better allocated to projects of more immediate importance.

1. *The Transformation of Capital*

Current modes of forest exploitation in Kalimantan selectively remove only the most valuable trees. While they are not particularly destructive, leaving ample vegetative cover to protect soil stability and fertility, they do not include considerations about the future quality and value of forest stands. Large trees (diameters in excess of 50 cm) of the *meranti* species are being logged; non-*meranti* species are not cut. Given the ecological characteristics of the forest stands, it seems unlikely that harvested trees will be replaced by harvestable *meranti* at the end of the 35-year cutting cycle. Rather, composition of the forest will shift toward presently non-commercial species of lesser potential value. The total value of forest stocks will decline.

Logging methods are 'cutting into' Indonesian forest capital stocks. As they are, in part, responses to governmental policies and regulations, they reflect an implicit decision by the government to convert timber stocks into other forms of capital deemed more important to the nation at the present time (e.g. industrial

plant, infrastructure). It seems important that capital transformation be accomplished in ways most favourable for Indonesian interests, that its effects be as beneficial as possible for the nation. Some economic, physical, administrative and legal aspects of the transformation process suggest that such a desirable condition has yet to be achieved.

- How effectively is the intent to transform timber into other forms of capital being fulfilled?
- What conditions restrict the efficiency of transformation, and how can they be improved?
- How do Indonesian benefits from logging operations compare with the actual value of harvested timber?
- If such benefits are less than they should be, where are the sources of discrepancy? Market organization? Concession agreements? Administrative capacity? Exploitation practices? Incentive policies?
- Where are revenues earned from log sales being allocated?
- How are their directions affected by national policies?
- Are present rates of conversion compatible with other aspects of national development plans?
- Can policies be improved to increase the effective rate of capital transformation?
- How can policy improvements be translated into specific changes in concession agreements and regulations, programmes for administrative development, import and export restrictions and stimulants, national planning activities, and centre-province relationships?
- Are incentives needed to attract investment in forest development? If so, should they be as large as, or larger than, those presently offered?

Studies

A.1. The distribution of logging revenues, the proportions and total amounts going to:

- (a) national, provincial, and local governments;
- (b) domestic labour;
- (c) foreign labour;
- (d) concession investments in roads, communications, communities, etc;
- (e) internal transport;
- (f) shipment to market;
- (g) imported equipment and supplies;
- (h) local equipment and supplies;
- (i) concession profit;
- (j) public capital investments enabled by logging revenues.

A cooperative effort between the Board of Investment, Forestry Directorate, and Bappenas should readily generate such information.

2. The effects of concession agreements, timber regulations, tax and trade policies on the development of wood processing plants and privately-financed infrastructure.

The Board of Investment, Bappenas, Forestry Directorate, and Institute for Economic and Social Research could work together or apart on this topic.

3. The market position of Indonesian logs; their production and transport costs; relationships between present royalty rates, log values, and concession returns.

Studies of foreign log market conditions are already proceeding within the Ministry of Trade. Hopefully, they are examining reasons why Indonesian logs are claiming lower prices than Philippine and Sabah logs. Studies of market conditions could be usefully coordinated with those of the forestry industry suggested above.

B.1 Uses and market possibilities for currently non-commercial timber species in the tropical forest.

The Forest Products Research Institute, Bogor, and the Wood Utilization Department, Faculty of Forestry, IPB, have the resources and interest to deal with such questions, and would probably benefit the nation most by doing so. They would probably gain from coordination with other research organizations in Southeast Asia working on similar problems.

2. Methods of mechanized logging and road construction, ways of minimizing differences between capital lost (e.g. timber downed, soil eroded) and capital gained (timber sold, stable roads constructed).

Perhutani is considering such studies on its concessions in South Kalimantan. It is willing to use forestry students from IPB and the provincial university for research work. Coordination of this kind would provide valuable information and training opportunities. The Soriano concession, a possible association of concessionaires, and a proposed Indonesia/University of California research programme, are other appropriate organizational niches for such studies.

II. Manpower

Shortages of manpower are serious bottlenecks for the development of Kalimantan. They exist for all skill classifications. The provincial governors of South and East Kalimantan consider them to be the most serious problem they confront. The agricultural development programme in South Kalimantan is expected to create a viable base for an agricultural population ten times the present one of one million people. But its fulfilment also depends on a rapid increase in the number of farmers. Without sufficient farmers, the programme is a hope rather than a possibility. Even with them, the programme will still require many more skilled technicians than are now available.

East Kalimantan faces a number of critical shortages. Heavy equipment operators are scarce; the Governor estimates his needs to approach 1,000 over

the next five years. As forest concessionaires continue to mechanize, the demand for equipment operators will increase. Malaysians and Filipinos are currently doing much of the mechanized logging work; Indonesia is thereby losing many high-paying job opportunities.

Another problem is that high wages on the concessions are drawing people out of occupations in agriculture, education, commerce and government. Although this may be an economically desirable trend that will stabilize eventually, it is creating some significant short-term social and economic strains.

Finally, shortages of trained technicians hinder governmental efforts to control forest exploitation and export procedures, and render the implementation of future-oriented development programmes almost impossible.

What are the characteristics of the South and East Kalimantan labour forces in terms of size, skill composition; wages and expectations?

What are present requirements for labour in the two provinces?

What are labour requirements likely to be in five years? Ten years?

What are the labour requirements implied by provincial development plans?

What are the differences between present labour availabilities and present and future requirements?

How can these differences be reduced?

What education and training programmes are now active in South and East Kalimantan? How well can they fulfil future needs? What additional capacity and programmes are advisable? What resources will they require for implementation?

How are changing wage differentials affecting the structure of employment within eastern Kalimantan, and the movement of labour between South and East Kalimantan?

What are the effects of government policies and programmes on manpower conditions?

Studies

A.1. Manpower survey in East Kalimantan:

- (a) current occupational distribution of the labour force;
- (b) skill characteristics of the labour force;
- (c) current labour requirements;
- (d) expected labour requirements in five years for 'progressive' activities:
 - oil industry
 - government and education
 - transportation
 - construction;
- (e) current training programmes, their quality and output, by:

- national organizations (e.g. centres of excellence, agencies)
- provincial schools (e.g. provincial university, vocational high-school programmes)
- timber corporations (e.g. on-the-job training, formal programmes and support)
- oil industry (e.g. Pertamina programmes and assistance)
- provincial government (e.g. 'short courses')
- (f) future programmes: plans and proposals, willingness and interest
- (g) disparities between quality and output of training programmes, present requirements, and requirements in five years
- (h) the extent to which requirements can be satisfied locally, the extent to which they must be filled by migrants.

A short-term manpower consultant to the Governor could supervise the collection of labour information and help in the formulation of provincial manpower policies and programmes. Necessary research assistance could be drawn from the local university and/or from the Agro-Economic Survey. Preferably, the consultant would come from Bappenas so that communication between national and provincial planners would be improved.

B.1. Labour markets:

- (a) wage structures in East and South Kalimantan and on Java;
- (b) availability and movement of job information;
- (c) recruiting practices by private and public organizations;
- (d) effects of national labour policies;
- (e) possible effects of a completed Banjarmasin-Balikpapan road on movements of labour and job information.

Bappenas seems the appropriate organization for a rather general examination of labour markets in Indonesia.

III. *The Balikpapan-Samarinda 'Growth Pole'*

The Balikpapan-Samarinda axis on the eastern coast of Kalimantan is a potential 'growth pole' for Indonesia. Samarinda is the market centre for a vast hinterland of timber concessions in the Mahakam River basin. Balikpapan, about one hundred kilometres south, is the centre for oil refining and exploration, possesses an excellent harbour, and will be the future site of wood processing plants. A road will soon connect the two cities. The Balikpapan-Samarinda area already contains most of the population and economic activity in East Kalimantan. It is rapidly creating employment opportunities, generating income, and attracting migrants from other regions. The processing of primary products has begun and will increase in the future as industries related to wood, mineral, and oil processing become established. National, regional and local effects may be substantial. Provincial officials are aware of the area's dynamism and are attempting to support it with suitable programmes. The national government seems unaware of

its potential significance.

How can Indonesia best exploit the energies of this 'growth pole'?

What effects do present national policies have on its vitality?

What changes in national policies (e.g. transmigration, training and education, taxation, infrastructure development, planning orientations) would enhance its impact?

What are the qualities and levels of current economic activity in the area, and in what directions are they changing?

What kinds of economic possibilities exist, and how might local, provincial and national governments best contribute to their fulfilment?

What lessons might the 'growth pole' yield for regional approaches to Indonesian development?

Studies

A.1. Potential economic and social effects of a completed Balikpapan-Samarinda road.

- (a) Current structure of economic activities in the area: sectoral distribution of employment, income, and investment; linkages between different activities; multiplier effects of different kinds of expenditures; leakages, their magnitude and direction; trends in structural change; effects of government programmes.
- (b) Current areal distribution of economic activities and factors determining it; patterns of resource capability and use; trends of change; forces encouraging concentration and dispersion of economic activity; effects of government programmes.
- (c) The economics and organization of individual enterprises — case studies and surveys of:
 - subsistence agriculture
 - irrigated agriculture
 - shifting cultivation
 - smallholder estate crop cultivation
 - inland fishing
 - ocean fishing
 - corporate timber concessions
 - small timber concessions
 - oil exploitation
 - oil refining.
- (d) Market operations for timber, fish, and coconut; locations, structure, and processes of markets; economics of marketing enterprises; government programmes and their effects.
- (e) Probable effects of the new road on the structure and distribution of economic activity, market patterns and processes, and the decisions of

characteristic enterprises.

- (f) Possibilities for agglomeration, their comparative economics, and the governmental programmes they would require.

The Institute of Planning, ITB, is designed and able to coordinate such a study. It can provide the necessary conceptual framework and integrative modes of analysis. The Agro-Economic Survey could study the marketing and resource management dimensions of the project. Members of the provincial Faculty of Economics might examine the structural questions with guidance from regional economists at Gadjah Mada and/or associates of the Agro-Economic Survey. Co-ordination with provincial planners, university staff, and Bappenas would be valuable in all cases. The question of agglomeration is one that can be handled in conjunction with a possible UNDP study to be described in Section IV.

2. Wage rates, incomes, and standards of living in East Kalimantan relative to those on Java: their influence on migration.

The Institute of Economic and Social Research, Bappenas, and the Ministry of Transmigration would all be suitable organizations for this simple, but useful, study.

3. Industrial possibilities created by the conjunction of wood processing and oil refining capacities on a good natural harbour.

This would be a useful study for members of the Faculty of Engineering, ITB, or researchers within the Ministry of Industry.

- B.1. Transmigration to East Kalimantan: its rates, organization and sources.

Migrants: their motivations and social, economic, and educational characteristics. Implications for transmigration policy and regional development.

2. Patterns of income expenditure, their responses to higher income levels, their implications for regional and national economic development, the ways in which they are affected by government policies and programmes.

- C.1. Effects of migration and development on social and economic organization and cultural values.

2. Transportation and communication developments as means for transmission of 'growth pole' energies to other parts of Indonesia: a comparative analysis of the probable effectiveness and costs of alternative programmes.

IV. Regional Development

Eastern Kalimantan

The development of timber and oil resources is creating a pattern of activity that will determine future economic characteristics of eastern Kalimantan. Road systems, communities, shipment points and plant locations are being established by concessionaires to fulfil present transport, marketing, and production needs.

They represent the beginnings of a structural imprint on an otherwise undifferentiated landscape of economic resources and possibilities. They provide bases for, and constraints on, future development.

The provincial government is aware that present locational decisions have permanent implications. Its planners are trying to link dispersed decisions within a more comprehensive vision of the region's future. They seek to encourage the Balikpapan-Samarinda axis, incorporate concession roads within a regional network, and allocate newly-opened lands to optimal future uses. However, they are hindered by the lack of fundamental information about regional resource capabilities, industrial possibilities, desirable locational patterns, and means of synthesizing these considerations into a plan for the future. Officials expect, for example, that about half of the land now being exploited for timber will eventually be used for agricultural purposes; another five million hectares in East Kalimantan will be managed for perpetual timber yields. The classification is arbitrary, however, for regional land capabilities for agriculture and forestry are not yet known. This does not reduce the classification's significance for current policy decisions.

As the regional situation is still fluid, the time is ripe for a reconnaissance study of resource capabilities and what they imply for optimal industrial and transportation development. A study of this kind in West Malaysia has come too late to have significant impact on development patterns.²

What are the physical possibilities for future land use in eastern Kalimantan? How much land will support a viable agriculture, where is it located in the region, and what crops should be grown on it?

Which lands are best suited for production forest, where are they located, and how much wood can they be expected to yield on a sustainable basis?

How large are existing timber stocks?

What kinds of technical research are needed now if agricultural and forestry possibilities are to be fulfilled in the future?

What are the optimal scales of plants for the processing of agricultural and forest products?

What do the locations and qualities of agricultural and forestry potentials, and the capacity characteristics of optimal processing plants, suggest for the location of road systems, market and shipment points, and plants?

How does the suggested pattern differ from present patterns of development?

What economics of agglomeration are possible? What implications do they have for locational decisions and for desirable locational patterns?

What government programmes might help to guide development toward a regionally 'optimal' pattern?

²See: *Forest Industries - Malaysia: An Analysis of Problems Affecting the Development of Forestry and Forest Industries in West Malaysia*, Rome, FAO/UNDP (FO: SI/Mal 16, Technical Report 2).

Studies

A.1 Resource capabilities.

- (a) Reconnaissance determination of present timber stocks.
- (b) Reconnaissance classification of land, according to 'best use', into protection forest, production forest, and agricultural land.
- (c) Classification of potential production forest by volumes, species composition, rates of growth, sustainable economic yield, accessibility and costs of transport, relative suitability for plantation forestry or management of natural stands.

2. Industrial location..

- (a) Optimal location, character and scales of wood processing plants with respect to quantities and qualities of available timber, transport requirements, the location of markets and shipment points, and industrial technology.
- (b) Kinds of enterprises needed to support, or made possible by, concentration of wood, agricultural, and oil processing plants.
- (c) Possibilities for agglomeration, their implications for industrial and road location.

FAO, CIDA, and UNIDO have experience doing projects of the kind described in A.1. and 2. above. UNESCO is beginning to take interest in the field of natural resources. The US Earth Resources Satellite Programme is gathering information that would provide many of the answers required. Such agencies, cooperating with the Forestry Directorate, provincial planners, concessionaires, and the 'growth pole' study group, could provide extremely valuable information to the government of East Kalimantan in a relatively short time.

B.1. Classifications of potential agricultural lands:

- irrigable
- non-irrigable
- wet season cropping
- dry season cropping
- multiple cropping
- plantation crops
- grazing.

Provincial agriculturalists should undertake this study in coordination with agencies doing projects A.1. and 2. At present, they would be unable to do an agricultural land capability map without some assistance, but field training with experienced people would be rapid and effective.

2. Crop suitability for potential agricultural sites in the region.

Provincial agriculturalists have begun crop trials on a very small scale, and should be encouraged to expand them.

3. Tree species trials for potential forest plantation sites in the region; techniques for plantation management.

Forestry personnel have begun some species trials near Balikpapan. They should be encouraged to expand their programme, perhaps by using student assistants from the provincial university, IPB, and Gadjah Mada. Concessionaires are now discussing the possibilities of starting species trials. A cooperative programme involving them, government foresters, forestry schools, the Forest Research Institute at Bogor, and a proposed Indonesia/University of California research effort would probably be more efficient than if organizations proceeded alone.

4. Silvicultural methods for management of the rain forest.

Silvicultural research is long-term and difficult, but it should be started as soon as possible in any region intended to support production forestry. The organizations under B.3. are the appropriate instruments for development of a silvicultural research network in the region. Silvicultural research and species trials might be coordinated by an officer of the Forest Research Institute to be stationed in Samarinda.

C.1. Classification of protection forest by primary reasons for protection:

- erosion and flood control
- ecological fragility
- weather control
- seed source wildlife
- preservation and research.

Some of the classification can be accomplished in the course of a reconnaissance resource survey.

Western South Kalimantan

The Banjarmasin area is emerging as a shipment and processing centre for wood products from Central Kalimantan. Its long-term development, however, will depend on the extent to which its agricultural possibilities can be exploited. The provincial government has prepared a comprehensive agricultural development plan that is to greatly increase the extent of irrigated and drained lands, expand opportunities for multiple cropping, diversify regional agricultural output, and intensify cultivation practices. The government is not likely to succeed until some serious bottlenecks are overcome. Much more knowledge is required about suitable crops, varieties, and farm management practices. Manpower is scarce. Production incentives are weak. Migration rates may be negative.

The government is developing irrigation and drainage, power generation, and transport facilities. Although such actions remove bottlenecks to plan fulfilment, they do not compel the kinds of developmental responses that are required.

What is the current pattern of land use in South Kalimantan?

How has it developed? How has it been affected by migration and new settlement?

What effects have transmigration policies had on development of the region?

How successful have transmigration policies been? Why? How might they be

improved?

What kinds of crops, techniques, supplies of inputs and credits, technical services, and incentives will be required if tribal irrigation projects are to be successful?

Studies

A.1. Present land use patterns, factors that maintain them, their sensitivity to different kinds of development programmes; land tenure, farm sizes, cropping patterns, production costs, yields, and returns on a micro-regional basis; case studies of characteristic enterprises.

Some research on this topic has already been done. More information is needed in order to judge potential responses in the region to plan programmes. The Agro-Economic Survey is perfectly suited for this kind of research. It has worked in South Kalimantan in the past, and has good relationships with agriculturalists at the provincial university.

2. Comparison of incomes, living standards, and production costs with places in Java; consideration of changes that should occur after implementation of the development plan.

The Agro-Economic Survey is a suitable organization to sponsor such research.

3.1. Regional marketing processes for agricultural commodities, their problems, their suitability for handling the increased volumes that should result from agricultural development, effects of governmental policies and programmes.

2. Transmigration: rates, multipliers, causes and motivations, reasons why some migrants remain and others leave, activities of those who remain, destination of those who leave.

3. Past responses in the region to changes in agricultural incentives, whether generated by market forces or governmental programmes.

4. Tests of crops, varieties, and farm management methods in the various agricultural regimes of the region.

Agricultural studies have some history in South Kalimantan, but they have tended to be uncoordinated and their results scattered. To gather together all written reports on agriculture in South Kalimantan would be useful. It should add substantially to ongoing field studies by government and university agriculturalists. Professor Dr. Ir. Schophuys of Bogor is an excellent source of information on the region and its agricultural possibilities.

C.1. Social aspects of current and probable future settlement patterns.

V. *Inter-regional Relationships*

Developments in south and eastern Kalimantan will complement and conflict with one another. Competitive bidding for labour is an example of conflict. Agricultural development in the Barito basin and industrial development in the east are potentially complementary processes. Agricultural production incentives,

now weak, may be strengthened by demands for food from a growing, more affluent non-agricultural population. Lower food prices in eastern Kalimantan might enhance the region's attractiveness for potential migrants from Java.

The extent to which potential complementarities can be exploited for the mutual benefit of both regions depends, in part, on national policies and programmes. Inter-regional coordination of planning activities is presently non-existent. Plan areas reflect political boundaries rather than economic realities; wasteful discontinuities result. Infrastructure projects have not been evaluated in terms of inter-regional consequences, nor have national policies and programmes affecting commodity marketing been based on inter-regional considerations. Regional planning in Bappenas is too weak to contribute much to the situation.

How can the regional development programmes of South and East Kalimantan be coordinated?

How might Bappenas play a coordinative role?

What patterns of organization and distribution of resources would be appropriate for relationships between Bappenas, provincial planning boards, and other agencies?

How can flows of information from provincial planners to Bappenas be improved? What changes in Bappenas are required if it is to utilize such information, assist provincial planners, and provide inter-regional coordination?

How do present national policies and programmes affect inter-regional relationships and how might they be improved?

What inter-regional effects will different patterns of transportation and communications development produce?

Studies

A.1. Present economic relationships between East and South Kalimantan: trade, transport and communications, prices, wage rates, income levels, market functions.

2. The Banjarmasin-Balikpapan road; its probable effects on patterns of trade, location of market centres, commodity cost and production incentives.

3. The economics of characteristic enterprises along the Banjarmasin-Balikpapan road; probable responses to the road.

4. BULOG rice policies and programmes: their effects on inter-regional economic relationships and on incentives for agricultural development.

5. Regional planning skills: their distribution among national and provincial agencies and means of coordinating them.

Topics A.1-3 are amenable to a cooperative effort between the Institute of Planning, IIB, and the Agro-Economic Survey. A.4 deserves consideration within Bappenas. A.5 is a topic for professors of public administration.

VI. *Economic and Social Aspects of Present Resource Use*

How people respond to new incentives and constraints in Kalimantan will depend on the nature of their present situations. The formulation of suitable development policies and programmes requires information about current activities, the choices they afford, the decisions that are made, and the changes in decisions that are likely to occur in different circumstances. Some information of this kind is available in largely uncollated reports of earlier research. Additional studies can be directed toward specific questions raised by the policy-oriented topics that have been presented in previous sections.

Studies

1. The economics and organization of characteristic enterprises; case studies and surveys.
2. Market operations for rice, rubber, timber, and fish; location, structure and processes of markets; economics of marketing enterprises; government programmes and their effects.
3. Trends in price and wage relationships, land and capital use, employment, population distributions; production and trade.

TRAINING

Trained people are scarce on Kalimantan. The need for them is growing rapidly. The Governor of East Kalimantan estimates that his province will require 600 additional teachers, 1,000 heavy equipment operators, a large, but unspecified, number of forest managers, technicians and guards, and a much-strengthened administrative cadre within his government. He presently has but eight graduate foresters and twenty-three graduates of three-year forestry programmes to administer almost 18 million hectares of forest land. The Governor of South Kalimantan faces similarly large needs for teachers and agricultural technicians. How such requirements are to be met is a question of importance. Existing programmes will not satisfy them. A manpower survey would assist planners in identifying crucial points for investment in training programmes. Other research activities should reveal areas of relative need and opportunity. At present, there are few contours and landmarks to suggest where 'upgrading' should begin. Some apparent strengths, weaknesses, and needs for change deserve comment.

1. *Problems and Possibilities*

1. *Three- and one-year 'packages' of technical education should be developed.* Present educational programmes do not seem compatible with skill requirements. Forestry provides an example. Graduates of six-year programmes at IPB and Gadjah Mada University are technically and psychologically prepared for careers in administration and research; they are not 'field workers', and should not be forced into that mould. Three-year programmes in provincial universities can,

given adequate academic and field content, produce effective forest managers who are able to develop rapidly with experience. One-year post-high school or vocational high school courses should be able to provide the forest technicians essential for control of field operations. All three tiers of professionals are important on Kalimantan at the present time.

Current forestry education, however, is geared to the production of six-year graduates, and does not generate the attitudes, skills and people that will fulfil field requirements. Rather, it tends to encourage lingering in an academic environment, fueled by usually futile aspirations for the Ir. title and a sense of incompleteness and unpreparedness if aspirations are not satisfied. It results in a wasteful storage of skills in an unproductive environment and, in the past, has been caused by a lack of positive alternatives. Alternatives are increasingly available on Kalimantan.

Compatibility is needed between programme concepts, personal abilities, professional objectives and values, social needs and incentives. In this sense, education fulfils a market function by matching abilities and needs. The Government of East Kalimantan has taken an encouraging step by developing a one-year post-high school forestry training programme. The programme began in June 1971 and will, after several years, graduate 100 technicians per year. The first class will contain sixty students and will be subjected to a concise survey of forestry principles and techniques. The three-year programme at Mulawarman University, however, continues to treat its students as if they were prospective transfers to the six-year programme at Gadjah Mada University. This does not mean that course quality is comparable to that at Gadjah Mada, although it may be. It does mean that the programme lacks identity, sense of purpose, and goals of its own, and is directed toward the needs of but a small minority of students. A self-contained professional programme, imbued with terminal value, might provide healthier expectations, better education, and greater compatibility with current needs.

The same comments apply to agricultural education in South Kalimantan. Graduates of the three-year programmes are in transition toward an academic validation most can never achieve. Yet it is precisely a three-year programme that can supply the professional agriculturalists essential to the success of the agricultural development plan. The development of three-year 'packages' of technical education seems a desirable objective.

2. Provincial universities on Kalimantan should specialize in disciplines for which they have comparative advantages

The provincial universities of South and East Kalimantan both offer three-year programmes in engineering, forestry and agriculture. While such duplication allows for the effective use of part-time teachers from local government offices, it also disperses scarce educational resources and helps to maintain low quality of training in both institutions. Specialization of institutions and concentration

of resources seem advisable. The Faculty of Agriculture at Lambung Mangkurat (South Kalimantan) has twenty full-time staff members and about eighty students; that at Mulawarman has only one staff member and twenty-seven students. Given the agricultural character of South Kalimantan and its comparative advantage in resources for agricultural education, it would seem appropriate to concentrate agricultural training in that province. The opposite holds for forestry and engineering. Educational opportunities in these disciplines, although not developed, seem greater in East Kalimantan. Specialization of university functions should improve the quality of technical programmes and benefit both provinces.

3. The 'consortium' relationships between provincial and national universities must be improved.

Lambung Mangkurat and Mulawarman currently send their best three-year graduates to Gadjah Mada University and IPB for completion of the six-year programme. However, relationships between the provincial universities and the 'Centres of Excellence' on Java are not working well. Gadjah Mada and IPB staffs feel over-burdened, consider 'consortium' transfer students ill-prepared, and accept them under protest. The flow of students is small and will not satisfy Kalimantan requirements.

There are a number of approaches to this problem. One is to strengthen the 'Centres of Excellence'. The national government has begun to direct substantial resources toward this end. Aid agencies have supported graduate training of staff members; hopefully, they will do so more actively in the future.

A second approach is to improve provincial three-year programmes. On Kalimantan, specialization of university functions is one means of improvement. Increased allocation of funds and staff development opportunities, and tightening of programme content are others. National education planners could usefully turn their attention to the design of three-year curricula that would have their own integrity, create incentives for quality, and provide adequate bases for additional studies.

A third approach is to restrict the length of time that students can seek degrees. Many students attain a semi-permanent status in universities. They impose an unproductive burden on their institutions, depress the total quality of education, and exclude other individuals who might make better use of their educational opportunities. The Faculty of Forestry at Gadjah Mada, for example, has twelve fulltime staff members to instruct about 500 students. About thirty B.S. degrees are granted each year. The unsuccessful can remain on in a perpetual search that saps staff energies and reduce the number of new students that can be admitted to the programme. The resulting structure of incentives opposes improvements in the quality of forestry education. The situation also contributes to strains in the 'consortium' programme.

4. Kalimantan development activities should be used to train university students in research, planning and management techniques.

University programmes contain field and research components for the Sardjana Muda and Ir. degrees. These offer potentially significant opportunities for combining educational objectives with regional requirements for research and technical skills. Students in planning, agriculture, forestry, engineering, economics, ecology, and other disciplines could both gain valuable experience and provide useful information and assistance if they were to do their field and research work on projects in Kalimantan. National agencies, provincial governments, public and private corporation could utilize student skills to satisfy their research and development needs. Doing so should improve the quality of their operations and contribute to the national reservoir of knowledge and technical capacities.

Organizations have expressed interest in a student programme. Perhutani and the East Kalimantan Forestry Department are examples. Balikpapan Forest Industries and Weyerhaeuser are open to the possibility. The Dean of Forestry at IPB has responded to the idea with enthusiasm. The Institute of Planning at ITB already uses students in field research projects and would be willing to fit them into Kalimantan studies if support were available.

At this stage of its development, Kalimantan provides a rather exceptional set of opportunities for significant work. Rapid development is revealing problems that are likely to emerge in the future, yet it has not proceeded far enough to reduce the scope for informed planning and management. Logging and oil operations, probable causes of future problems, are presently improving accessibility and communications, and are attracting expatriate technicians with knowledge that can be exploited for Indonesian benefit. Government officials recognize the dimensions and dynamics of their situation, and seem able to effectively employ additional skilled people. Kalimantan development can be a fruitful source of future competence if programmes are undertaken to utilize it for educational purposes now.

5. Short courses and information exchanges about resource development are valuable means for educating government officials; the potentially complementary relationships between national and provincial planning agencies should be strengthened for these purposes.

The Government of East Kalimantan recently sponsored a two-week staff course on various aspects of regional development planning and administration. Those who organized it had participated in an earlier three-week course at Bappenas on similar topics. Courses of this kind seem a productive form of education. Additional resources should be devoted to their development. Bappenas, although weak in regional planning, can perform valuable functions by offering short courses for provincial officials, supplying training materials and specialized expertise for provincial courses, and facilitating the movement of information among provincial planning offices. Provincial planning operations in Kalimantan are relatively strong and pragmatic, but they can benefit from improved access to specialized information. Bappenas should be able to provide such a service.

Manuals of regional planning have been issued by various agencies in the world. ECAFE is about to issue one from its office in Bangkok; it will be published in English and French. To translate, adapt and disseminate it and other useful materials are projects that regional planners in Bappenas might begin to undertake.

6. *Bappenas and provincial governments should exchange regional planning personnel, doing so in ways that take full advantage of 'upgrading' courses at national universities.*

Temporary exchanges of personnel between Bappenas and provincial offices would be valuable. Regional planners in Bappenas, now serving as 'desk officers' for particular parts of Indonesia, could be periodically assigned to provincial staffs in the regions for which they are responsible. Provincial officials could, in turn, join Bappenas, perhaps while participating in one of the University of Indonesia's 'upgrading' programmes.

Improvement of relationships between regional planners at provincial and national levels is important. Skills at both levels should complement one another. Bappenas possesses stronger abilities in the formal tools of planning; provincial people seem to have a better grasp of regional problems and pragmatic approaches to them. Physical and informational exchanges should help to strengthen the total planning picture.

II. *Modes of Support*

1. *The perspective: Kalimantan development as an educational process*

Public and private organizations should be made aware that the development process in Kalimantan is a potentially valuable source of skills and knowledge. Kalimantan can generate more than foreign exchange, increased income, employment possibilities and attractions for migrants. It can also be a classroom and laboratory in which essential personal and institutional capacities can be developed. In fact, such development must occur if the future of Kalimantan is to be a hopeful one.

2. *Academic field programmes on Kalimantan*

University interests in sending students to Kalimantan for field research and experience, and the willingness of provincial agencies and private corporations to utilize student energies, can be explored and encouraged. As we mentioned, some organizations have already expressed interest in such programmes. Others are likely to do so if presented with substantive possibilities. All should be asked to consider how academic field programmes might be implemented effectively. If and when programmes do develop, supplemental funds for transportation and subsistence should be provided.

3. *Exchanges of planning personnel*

Exchanges of personnel between Bappenas and provincial planning agencies can be encouraged and support given when financial impediments hinder them.

4. Information for provincial planners

Regional planners in Bappenas should begin to generate training materials of use to provincial planners and to function collectively as a communications link between planners in different regions. If funds and advice are needed as catalysts for such activities, they should be provided.

5. The structure and quality of regional education

The role of provincial universities in regional development, the effectiveness of current provincial curricula, particularly those for three-year technical training, means of strengthening them, and problems in 'consortium' relationships, deserve careful study. Support for an evaluation team and for implementation of some changes that it recommends would be sound investments.

If financial limitations prevent qualified provincial graduates from transferring to, or being admitted by, 'Centres of Excellence', scholarships and/or subsidies should be made available.

Promising provincial universities, faculties and programmes should be considered for institutional support. Universities in South and East Kalimantan are extremely weak at present, but may eventually develop capacities to use assistance well.

6. 'Upgrading' courses

'Upgrading' courses are valuable mechanisms for strengthening provincial capacities. Kalimantan officials would benefit from courses in regional planning and economics, development administration, and tropical forestry and agriculture. The development of such courses can be encouraged and assistance given when

necessary and appropriate.

7. Advanced education

Research and training needs suggest general areas in which support for advanced training will be most desirable.

(a) If the three-year programmes of provincial universities are to be strengthened, the size and quality of their staffs must be increased. This means that the capacities of 'Centres of Excellence' to train transfers from provincial universities must be expanded, for these transfers are the future teachers at provincial levels. Graduate training for staff at 'Centres of Excellence' should be accelerated.

(b) If Bappenas is to function as a source of specialized expertise in regional planning for provincial governments, its capacities in this field must be improved. Graduate training for regional economists and planners in Bappenas should be undertaken.

(c) If research programmes on manpower, resource potentials, and industrial possibilities on Kalimantan are to have sustainable effects on Indonesian capacities, qualified people should receive the training needed to implement them. Any research projects undertaken with foreign assistance should contain specific provisions for such training.

III. Strategy

The diffuse range of training possibilities on Kalimantan coalesces into practical units when related to planning and research needs. These suggest the timing, quality and organization of specific activities. 'Class A' research projects (described earlier) are of immediate importance to planners; they also have great training value. Programmes that develop capacities to implement them and utilize their results are of first priority. The second priority is to strengthen academic facilities that must provide the skills and information (e.g. 'Class B & C' research objectives) essential for sustained regional development.

Priority One: Capacities for the solution of immediate problems

Training activities can be grouped around Class A research projects, building skills to accomplish them and apply their results in policy design and execution, and binding research, planning and education in mutually supportive relationships. The following groups are drawn from the *research* section of this report.

1. National policy formation for research development.

Bappenas, the Board of Investment and the General Directorate of Forestry should develop their staff capacities to study policy issues. 'Upgrading' courses and advanced training in economics, law and public administration, preferably tied to continuing research efforts, would be appropriate training mechanisms.

2. Manpower analysis and planning.

Manpower studies in East Kalimantan can be used to train staff of Bappenas, national universities and provincial governments to do similar work in the future. A suitable mix of advanced training, short courses and field participation should exploit the educational value of these studies.

3. Regional and inter-regional planning.

(a) Members of Agro-Economic Survey and Institute of Planning research teams should receive the supplemental training needed for them to effectively undertake Kalimantan regional studies. Short courses and periodic seminars, sponsored jointly by the two organizations, would be good approaches for this purpose.

(b) Student field programmes should be developed in conjunction with research activities of the Agro-Economic Survey and Institute of Planning on Kalimantan.

(c) Provincial planning personnel should receive sufficient training to let them participate in and use regional and inter-regional research. 'Upgrading' and short courses, internships and information circulated by Bappenas are appropriate means.

(d) Bappenas requires specialized skills that would allow it to function as a source of expertise for provincial planners; advanced training in various aspects of regional planning for qualified staff members is desirable. Internal seminars and training programmes should also help the agency to become a useful centre for regional information and a focus for inter-regional research and cooperation.

4. Resource potentials and industrial possibilities

(a) Surveys of resource and industrial potentials are likely to involve groups of international experts. It is important that Indonesian counterparts receive the advanced training in survey and planning techniques that will permit them to continue and extend such activities throughout Indonesia. Candidates should be drawn from relevant directorates within the government.

(b) Student field programmes in forestry, agriculture and engineering should be developed in conjunction with resource and industrial surveys. Such surveys provide the expertise, focus and opportunity needed to launch programmes of this kind. They will create situations from which valuable training in research and survey operations can be derived. Provincial universities can be used as institutional bases for the field training of 'Centres of Excellence' students. This should strengthen the provincial schools and begin to generate reciprocal advantages that can make consortium relationships more viable.

Priority Two: Educational capacities for sustained development

Priority One activities will stimulate the development of provincial universities. At some point, however, direct support for such development will become necessary.

Three-year technical programmes should be strengthened on Kalimantan so that they are eventually able to satisfy regional skills requirements and support Class B and C research projects in cooperation with government agencies. This will require accelerated training of staff to the Ir. level, improved curricula, specialization of functions among provincial universities, and additional resources. It will also require strengthening of 'Centres of Excellence' and consortium relationships, and assistance in curricula design from national planners. Structural and curricular reforms should follow studies to find the directions they should take. Possibilities for such studies deserve immediate exploration.

TDI'S PROGRAMME MATRIX FOR NON-METROPOLITAN/ REGIONAL UNIVERSITY DEVELOPMENT

Louis J. Goodman & Young-whan Hanh

BACKGROUND

It is recognized that a sound technological base must be established to promote economic and social growth in developing countries. At the same time there must be emphasis on development planning and development administration to provide direction and coherence to the development process. It is therefore clear that a team approach from a multiplicity of disciplines, particularly engineering, economics, business administration and political science is needed in an imaginative, problem-oriented approach of study, applied research and training on the technology and development interrelationships. To make explicit this new focus of the East-West Technology and Development Institute, TDI has launched a series of programmes concerned with the development of faculty and staff along with the necessary related action-oriented curriculum and research programmes in one selected cooperating non-metropolitan or regional university in each of four or five Asian countries, the Pacific and the US Mainland.

The reason for this new focus is that there is increasing evidence regarding the significance of a viable non-metropolitan university as an important stimulus for achieving local and national development goals. Non-metropolitan or provincial universities are generally young and with limited capacities but they are relatively flexible and responsive to promising innovations. They are searching for an identity and for programme possibilities in education, research and extension services related to community/regional development needs.

Experience at one of our network institutions, Mindanao State University (MSU) in the Philippines, demonstrates that community development projects based on adaptive technology and entrepreneurship can be achieved through curriculum and applied research directed by a team of faculty/staff who are responsive to the economic and social needs of the community and region served by their institutions. One such example is an action-oriented physical planning courses which relates all senior engineering students to real-life problems of nearby communities. The course results in comprehensive studies, including attention to sociological considerations, leading to a well-documented plan for economic development. For example, the first year of this new course (1969-70) resulted in a tourism and attendant cottage industry development plan for nearby Marawi City. This plan was officially adopted by the City and implementation of a number of the projects proposed by the students has commenced. In areas of

faculty research, a pilot project adapting local soil and cement as a low-cost building material has resulted in (i) a functional model house on the MSU campus at a total cost of only \$600 (for 484 square feet of floor area), and (ii) national interest and financial support for in-depth research studies on the use of soil-cement building block for low-income housing needs in nearby communities. A second research area demonstrating technology adaptation is investigating soil and water conservation with an ultimate objective of developing efficient water storage and irrigation systems for the improvement of crop productivity.

SELECTION OF NON-METROPOLITAN UNIVERSITIES IN INITIAL NETWORKS

Criteria for Selection

- (i) Highly visible, distinctive relevancy to immediate local needs of non-metropolitan areas.
- (ii) Explicit concern with science-technology and development economics in its educational programmes.
- (iii) Highly competent and committed leadership towards building up their respective institutions.
- (iv) Relatively new, emerging institutions with higher structural flexibility to absorb the innovative potentials of TDI programmes.

Institutions Selected

Number of institutions with potential to fulfil the necessary role in community, regional/national development, as are set forth above, have been identified. Others will be identified in the near future to provide broad coverage throughout Asia, the Pacific, and the United States. This has been and will be accomplished by personal experiences including visits of TDI staff. The following non-metropolitan universities have been identified:

1. Mindanao State University, Marawi City, Philippines.
2. Hasanuddin University, Makassar, Indonesia.
3. Yeungnam University, Taegu, Korea.
4. University of Khon Kaen, Thailand.
5. University of South Pacific, Fiji.
6. Tuskegee Institute, Alabama.

PROGRAMME SCOPE AND INSTRUMENTS

An overview diagram showing the non-metropolitan university environment and typical development needs is attached.

Multi-faceted scope of TDI programmes, including graduate education programmes, professional training and workshops, and research projects, will be

integratively utilized to assist those collaborating universities in building their institutional capability.

Faculty Development Through Graduate Education Programmes

TDI will assist selected non metropolitan universities in their faculty development programmes by providing postgraduate degree opportunities for young faculty members from these institutions. Individuals of high institutional and academic leadership potential will be invited to the University of Hawaii under the joint sponsorship of the home institution and the East-West Center for an appropriate postgraduate degree. Such jointly-sponsored degree programmes will provide a highly-coordinated programme of appropriate postgraduate courses relevant thesis research, and suitable field training opportunities for the grantee.

Academic fields. TDI will offer postgraduate degree opportunities to our network institutions primarily at the master's level. Exceptions will be entertained in a limited number of cases where institutional faculty development needs require Ph.D. level programmes. Following is a partial list of academic disciplines within the scope of this Institute's interest:

Business administration	(MBA)
Political science	(MA & PhD)
Economics	(MA & PhD)
Social work	(MSW)
Public health	(MPH)
Civil engineering	(MS)
Mechanical engineering	(MS)
Electrical engineering	(MS & PhD)
Ocean engineering	(MS & PhD)
Information science	(MS)
Architecture	(M.Arch.)

Relevancy of academic programmes. TDI staff will assist in the preparation of relevant graduate programmes for each student in concert with his University of Hawaii college or department, and will coordinate in a joint advising system with University of Hawaii faculty advisers for semestral checks on status, progress, problems, etc., to assure relevancy of their study programmes.

TDI student workshop. The objective of the workshops will be to demonstrate the role and significance of problem-oriented, interdisciplinary programmes for development through education and research. These will be clustered around the present TDI themes of entrepreneurship, technology adaptation, development planning, and institution building.

Administrative Capability Through Training and Workshops

Conferences, seminars and workshops related to TDI objectives and involving student participation will be scheduled periodically. One such workshop was

held in January 1972 which brought together a good mix of IDI students, staff, senior fellows, University of Hawaii faculty members and four invited guests from Asia. The theme of this workshop was 'The Responsibility of the University to the Community'.

Our four invited Asian participants represented academic disciplines of economics, engineering and regional planning. They were unanimous in expressing the opinion that the workshop was most fruitful in bringing together a good mix of participants to create an awareness of the need for relevant university-community interaction. They confirmed the significance of IDI's programme plans for non-metropolitan universities in Asia, stressing the need for faculty development through the collaboration linkages. The IDI concept of the engineer/planner/manager as an interdisciplinary team approach to the development process was well received.

Concern was expressed on the faculty retention problem at many provincial universities, with assistance in solving this problem requested from IDI.¹ The desirability of a three-way link, IDI/metropolitan centre of excellence/non-metropolitan university was raised as an issue for IDI. This may provide the basis for a possible future workshop.

Professional Participant Internship Project

This represents a new category in the IDI programme and is intended to provide individualized programming for a small number of young professional-level participants who seek additional job-related administrative experience and skills. IDI, through various training programmes, will assume responsibility for this project. The objectives for this project are:

- (i) To develop skills and abilities in programme building through active participation in programme development of IDI and other appropriate Hawaii-based organizations.
- (ii) Increase knowledge relevant to the intern's area of professional expertise and future administrative responsibilities.
- (iii) Develop leadership potential in cooperating institutions.

The main approaches used to accomplish the training objectives are:

- (i) On-the-job assignments at IDI and other appropriate Hawaii-based administrative programme units of at least six months' duration.
- (ii) Participation in appropriate University of Hawaii academic courses, intensive short courses, seminars, conferences, guided reading, institute training projects, or institute research projects.
- (iii) Opportunities for associating with IDI staff in the development and execution of institute research and training projects.

¹Workshop Committee note. University-community/Industry interaction can provide an effective solution to this problem.

Matrix of Programme Instruments

This is illustrated by the table below.

Development Needs	TDI, University of Hawaii Programme			
	MA, PhD Grants	Internship	Conferences ^a / Seminars/Workshops	Thematic Research ^b
1. Faculty	x	x	x	x
2. Administrative staff	x	x	x	x
3. Curriculum innovation			x	x
4. Research and extension			x	x

^aDevelopment planning and policy technology adaptation.

^bEntrepreneurship; Institution building.

GRADUATE DEGREE STUDY PROGRAMME

Degree study is the largest component of TDI programmes and is carried on in cooperation with relevant graduate departments and colleges of the University of Hawaii. This programme is conceptualized to provide students with a gradual re-orientation of their education toward one or more of the programmatic themes of the Institute. The combined acquisition of academic competence and a developmental orientation by the students is the explicit goal of the Institute education programme.

Degree grants are made on the basis of experience and professional or academic interests in relation to TDI objectives and programmes. Applications are encouraged from an appropriate mix of potential graduate students who have career commitments with institutions such as metropolitan and non-metropolitan universities, governmental agencies, industrial firms and development banks. Applicants must meet the minimum requirements for admission to the Graduate School of the University of Hawaii as well as the department in which the degree study will be undertaken. Each degree grant normally provides for a short-term field education and/or training experience. *The primary objective of the field phase of the grant is to complement the academic programme in such a way as to enhance professional development, and expertise.* This is normally accomplished by means of an internship programme with an appropriate governmental agency, industrial firm or consulting group in Hawaii or on the Mainland. In certain cases a semester may be arranged with a Mainland university. For the Asian grantee, opportunity will also be provided to visit relevant programmes in one or two Asian countries enroute home to encourage Asian country interaction and to

foster cooperation. For the American grantee field education programmes may be arranged in an Asian setting.

FDI STUDENT DISCIPLINES AND DEGREE OBJECTIVES FOR ACADEMIC YEAR 1971/72

<u>Discipline</u>	<u>Masters</u>	<u>Doctorate</u>	<u>TOTAL^a</u>
Business	9		9
Economics	9	5	14
Engineering ^b	21	4	25
Political science	10	5	15
Others ^c	15	3	18
<i>TOTAL</i>	<i>64</i>	<i>17</i>	<i>81</i>

^aFDI students come from twelve Asian countries, US Trust Territories and the United States.

^bCivil, 8; Mechanical, 3; Electrical, 12; Ocean, 2.

^cInformation science, 5; Physics, 2; Chemistry, 2; Public health, 2; Social work, 2; Sociology, 1; Geography, 2; TESL, 1; Science education, 1.

PLANS FOR INSTITUTION-BUILDING WORKSHOP

A major workshop based on the FDI/non-metropolitan university collaboration linkage is presently being planned for its first meeting around May 1973. This workshop will be held in Honolulu.

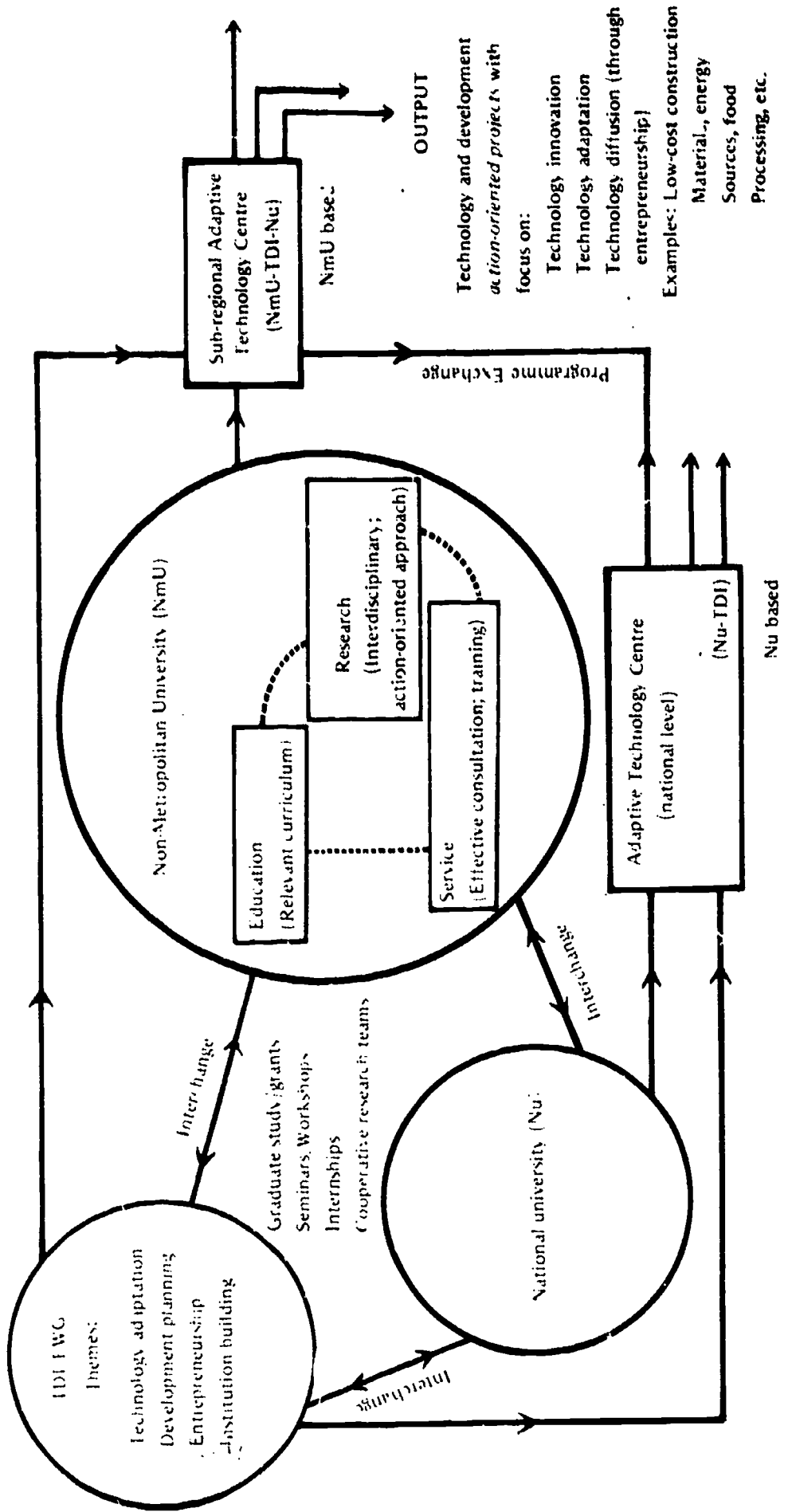
Objectives

- (i) To establish a shared understanding between FDI and non-metropolitan universities on the purpose and direction of FDI's Non-Metropolitan University Project.
- (ii) To help establish linkages to facilitate regional cooperation among non-metropolitan universities in the process of their institutional development.
- (iii) To obtain a set of realistic case materials on institutional building process in the areas of non-metropolitan universities for a further comparative research.

Substantive Issues for Panel Discussions

- (i) *University-community interactions*
 - (a) Unique role for a non-metropolitan university in relation to the community

AN ACTIVITY LINKAGE MODEL FOR THE TECHNOLOGY AND DEVELOPMENT INSTITUTE
 (EAST-WEST CENTER, HAWAII), A NATIONAL UNIVERSITY,
 AND A NON-METROPOLITAN UNIVERSITY BOTH IN ASIA



and regional development.

- (b) University/community interactions: (1) extension and research services, supplying skilled manpower strategic for community development.
- (c) University/community interaction (2) resource intaking such as student selection from the region, financial and other supports from the community.
- (ii) *Internal university framework*
 - (a) Relevancy and effectiveness of academic programmes and activities – curricula, faculty load, teaching materials and method, and specific research projects.
 - (b) University administration-decision-making procedures and channels, inter-collegiate and/or interdepartmental cooperation, research facilities.
- (iii) *Faculty development programme*
 - (a) Priorities in terms of academic fields and numbers.
 - (b) Selection procedures and implementation.
 - (c) Better absorption and/or retention of newly-returned faculty members.
- (iv) *Plenary session*

Better ways of cooperation for faculty development programmes between TDI and host institutions.

KOREA'S COMMUNITY DEVELOPMENT MOVEMENT IN THE 1970's AND THE ROLE OF YEUNGNAM UNIVERSITY IN TAEGU (SAEMAUL-UNDONG)

Ki-Ho Chung

KOREA'S ECONOMIC DEVELOPMENT IN THE 1960's

With the completion of two successful economic development plans (the first was for the period 1962-6; the second for 1967-71), the Korean economy has taken a big stride towards industrialization in an attempt to overcome the problems of underdevelopment. During this decade, the gross national product (GNP) grew to 7,920 billion dollars in 1971; while the per capita income increased from \$95 in 1961 to \$252 in 1972. A highly-accelerated growth rate of 12.6 per cent. per annum has been maintained since 1967, which compares very favourably with the growth rate of 8.3 per cent. during the first plan period. The present growth rate is second only to Japan's (which is the highest in the ECAFE region), and is thus an indication of the speed with which the nation's economy is headed towards industrialization.

As shown in the tables below, the Korean economy underwent a significant structural change during the two plan periods. The secondary sector (mining and manufacturing) increased from 16.7 per cent. in 1962 to 26.1 per cent. in 1969; and the tertiary sector (social overhead capital and other services) rose from 43.6 per cent. to 45.8 per cent.; while the primary sector (agriculture, forestry and fisheries) decreased from 39.7 per cent. to 28.1 per cent. All of these changes are characterized by a rapid modernization of the industrial structure.

TABLE I

Composition of GNP by Industrial Origin

<u>Year</u>	<u>Total</u>	<u>Primary</u>	<u>Secondary</u>	<u>Tertiary</u>
1962	100	39.7	16.7	43.6
1966	100	37.9	19.8	42.3
1969	100	28.1	26.1	45.8

TABLE 2

Growth Rate by Industrial Group

<u>Year</u>	<u>Primary</u>	<u>Secondary</u>	<u>Tertiary</u>
1962-6	5.5	14.8	8.9
1969	10.7	21.3	15.5

A marked expansion in the secondary sector, especially in manufacturing, is consistent with the plan's original industrialization goals. Up to 1960, this sector was dominated by light industries (textiles, food processing, leather, rubber etc.) with the leading position being held by textiles. The emphasis, however, has shifted gradually towards heavy industry (chemicals, metals, machinery), which recorded annual average growth rates ranging from 22 per cent. in metals to 27 per cent. in machinery.

The most noteworthy achievement in this sector was the establishment of two import-substitute projects, the petro-chemical complex in Ulsan and the integrated iron and steel mill in Pohang, each project required more than 5 per cent. of the budget for manufacturing investment in the Second Five-Year Development Plan.

Eight petro-chemical plants, including naphtha, cracking facilities, and plants for ethylene derivatives, were constructed with a total investment of \$239 million at Korea's southeast coast to help supply local markets with synthetic resin, chemical fibres and other intermediate products. This has resulted in effecting savings of tens of millions of dollars a year.

The iron and steel industry was not in equilibrium, the bulk of the nation's pig-iron production went into castings, so that the tonnage of crude steel production was less than half that of iron, forcing the steel production to rely upon imported scrap. The integrated iron and steel mill in Pohang was constructed to redress the imbalance between pig-iron and crude steel production and to introduce the production of more specialized steel products. This 1.03-million-ton-a-year steel mill is busy now with the preparatory work to expand its capacity to three million tons per year. The five-stage expansion programme will cost the government \$326 million, including \$220 million in foreign capital. When the three-million ton capacity is achieved, the government will start a second stage expansion project calling for the annual crude steel production to be increased to a five-million level.

In its course of formulation, the planning methodology of the Second Five-Year Plan involved a two-pronged approach. With the aid of the Bank of Korea's 1960 and 1963 input-output tables, a macro-econometric growth model was prepared at first to select a growth rate consistent with the supply of foreign and domestic savings and foreign exchange. Sectoral models were designed next to

check the consistency of the macro-model and to select the appropriate sectoral allocation of investment funds.

All of these laborious tasks were performed by a sizeable number of young Korean government officials with the cooperation of Korean academicians and small group of foreign advisers. Their accomplishments must all the more be applauded when it is remembered that, within nine months of its start, the planning effort was joined too by government participation. In retrospect, we see that the gaps between targets envisaged in the original plan and the results achieved were much smaller than any other data-based development plan undertaken in the underdeveloped world.

BACKWARDNESS OF REGIONAL COMMUNITIES

Although Korea's planning model has been extraordinary in a number of ways, it did not contain any regional parameters, and the decisions on industrial structure were dominated by the desire for high national rates of growth and increased efficiency. No matter how desirable this may be, such policy-making decisions have created at least two related harmful socio-economic disparities: (i) there has been a too-rapid expansion of population in Seoul, and (ii) too wide a gap of per capita income between urban and rural dwellers has resulted. In Korea, cultural, political and economic activities are at present too strongly concentrated in Seoul. According to 1966 statistics, approximately 35 per cent. of the nation's manufacturing income and 25 per cent. of the gross domestic product (GDP) originated within the boundaries of Seoul, which contains less than 1 per cent. of the nation's territory and 18 per cent. (6 million) of total population. Dispersion of population and decentralization of industrial facilities from Seoul to rural areas is now becoming a topic of concern among government and academic circles.

Per capita income in Seoul is, on the other hand, about two and a half times as great as in the backward agricultural areas, which have the lowest income levels.

With regard to an equitable regional distribution of income and hence to the increase of productivity in rural areas, there have been a number of shifts in thinking on the part of policy-makers since the termination of the Korean war in 1953. The Nathan (Robert) Plan submitted to the United Nations' Korean Reconstruction Agency (UNKRA) in early 1950 emphasized the expansion of primary production—agriculture and fisheries—for the main purpose of satisfying domestic demand, even if this meant cutting down on exports. The general recommendations contained in this plan were aimed at restoring pre-war consumption levels and to achieve a viable, self-supporting agricultural economy. The Korean government, however, never agreed to this objective, and did nothing to support it, partly from political reasons. Other proposals, for instance, those raised by J.C.H. Fei and G. Ranis, argued for the continued expansion of agricultural production, but with increasing reliance on a rural-oriented, labour-

intensive manufacturing industry to supply the export commodities. This proposal was intended to provide stronger interaction between urban and rural communities and to increase the income of farmers so that they could buy more of the rapidly increasing range of industrial products.

The rapid growth of purchasing power in the rural community was reckoned as the irrefutable precondition for industrialization. However, these proposals for agricultural development together with the legitimacy of the goal of self-sufficiency in food grains received a great deal of criticism and opposition from Korean policy-planners. They believed that Korea's long-range comparative benefit lies elsewhere than in agriculture, possibly in urban industrialization. With one of the world's highest man-land ratios, with limited capability of cultivating 67 per cent. of its mountainous zones and also with uncontrollable fluctuating cycles of flood and drought, Korea's agriculture seems to require too much in terms of development costs. Even the idea of constructing small-scale industrial projects in rural areas was also rejected, in part out of concern that decentralized small-scale producing units might be less efficient and therefore impair the competitiveness of Korean export commodities on the world market.

Such being the thinking of Korean policy-planners, the productivity of the agricultural sector and hence the welfare of regional community were largely ignored during the first and the second plan period, thus resulting in the farmers' income rising by only 8 per cent. between 1960-6.

RURAL COMMUNITY DEVELOPMENT MOVEMENT

Under the Third Five-Year Economic Development Plan (1972-6), intensive attempts are being made to eliminate these regional distortions, and the utmost effort has been centred on the rural community development movement (Saemaul movement). During this plan period, the share of the agricultural sector in gross investment will increase from 11.8 per cent. to 16.8 per cent. while infrastructures and other service sectors will be decreased from 59.4 per cent. to 53 per cent. Along with investment on such long-projected heavy industries as a new large shipyard, a heavy machinery complex, an alloy steel mill, a cast iron plant and a rolled copper mill, the government has decided to set aside 600 billion won (\$1.5 billion) for a new community drive, bringing the total investment in the agriculture-forestry sector in effect to 1,600 billion won (\$4 billion) during the third plan period.

The breakdown of the 1,642 billion won fund requirement by projects is as follows. A sum of 207.1 billion won (\$243 million) is for the comprehensive development of four river basins. Development of the nation's four major rivers Han, Kum, Nakdong and Yongsan will be promoted. These projects will include erosion control, construction of twelve multi-purpose dams, the repair of a 2,500 km-long river embankment, industrial waterworks and irrigation facilities to make possible the additional supply of 7.2 billion tons of water on 150,000

hectares of flood-and-drought-free land.

A sum of 128.1 billion won (\$236 million) will be used for expansion of irrigation projects. Of the total rice paddy area of 1.3 million hectares (1970 figure) the area of irrigated paddies will be expanded to more than 1 million hectares. During this plan period, irrigation of 1,176,000 hectares will be completed.

A sum of 82.2 billion won (\$158 million) is allocated for mechanization of farms. A total area of 450,000 hectares is being set for mechanization. Some 38,700 power-tillers, 98,000 pesticide control units and a number of grain threshers and water pumps will be involved.

A total of 93.2 billion won (\$179 million) will be for restructuring of rice paddy fields. Rearranged rice paddy area reached only 158,000 hectares in 1970. During the plan period this will be increased to 450,000 hectares or 75 per cent. of the total rearrangeable 600,000 hectares.

In addition, 60.4 billion won (\$138 million) is for electrification of farmers' buildings. The government plans to provide electricity to at least 80 per cent. of the rural population by 1976. At present 50 per cent. of the rural population uses electricity, though Korea has currently one million kilowatts of installed generating facilities in excess.

A sum of 41.8 billion won (\$83 million) has been allocated for goods processing plants. In order to prevent idle labour caused by farm mechanization and by migration into urban areas, unique, specialized and indigenous industries such as yargoods, ceramics, wooden handicrafts and rush products will be developed to produce some forty-three kinds of items of economic value.

The government plans to construct 770 such medium and small-scale plants in key villages by 1976, which will absorb 100,000 unemployed idle units of labour by 1973 and 600,000 by 1976. To back up the projects, forty-three of the nation's leading manufacturing plants and 184 export industry plants were asked to participate positively in the project. With this non-farming income, the rural people will gain \$30 million in 1973 and \$225 million in 1976, so that the combined income of a farming household in the country would reach \$3,300 by the year of 1981.

A total of 21.9 billion won (\$49 million) is for the primary products development plan. Agriculture research and experiment for the improvement of major seed crops, along with the technical education and guidance of farmers will be intensified during the plan period. Specialists in cash crops, livestock and sericulture will also be trained.

Finally, some 999.7 billion won have been set aside for the development of various 'Other' industries.

Brief mention should be made here of forestry and fisheries which are also strongly connected with the interests of rural communities.

In Korea, forests account for 6,683,000 hectares or 67 per cent. of the nation's territory, which is made up of natural forests of very low economic value. During

the plan period, 275,000 hectares of treeless land will be planted with economically valuable trees, while existing natural forests will also be planted with trees of economic value. Recently the government stressed that all arable hilly land should be developed in large-scale units which should be planted with beans in the first year to increase the fertility of the land and then with fruit trees of economic value to increase farmers' productivity. Thus, in the years to come, not a single square inch of land in the country will remain idle.

The fishing industry, on the other hand, gradually changed in the 1960's from coastal to deep-sea fishing and agriculture. The demand for marine products is expected to increase by 55.8 per cent. during the plan period from 935,000 metric tons in 1970 to 1,457,000 metric tons in 1976, while the export of marine products will increase from \$72 million in 1970 to \$180 million in 1976.

The total tonnage of fishing vessels will be increased from 54,000 gross tons in 1970 to 67,000 tons in 1976. As for deep-sea fishing, the tonnage of tuna seiners will be increased from 90,000 tons in 1970 to 238,000 tons in 1976. To this end \$180 million will be invested during the period.

THE ROLE OF YEUNGNAM UNIVERSITY

Yeungnam University in Taegu, Korea was founded in 1967 as the outgrowth of a merger between two independent colleges: Taegu College and Chung-Gu College, which were founded in 1947 and 1950 respectively. These two private colleges had been run independently for the past twenty years, and the merger was achieved in response to the urgent demand of the regional community to establish a more efficient institute of higher learning in Yeungnam area. Since its foundation the University has aimed to train future citizens to be useful in private life and public service, to conduct research in all fields that promise to assist in development of the region's resources, and to carry the fruit of that research to every possible part of the country.

With more than 6,000 students, Yeungnam University is now composed of eight colleges and two graduate schools as follows:

1. College of Liberal Arts and Sciences
2. College of Engineering
3. College of Law
4. College of Commerce
5. College of Home Economics
6. College of Pharmacy
7. College of Animal Husbandry
8. Evening College
9. Graduate College
10. Graduate School of Business Administration.

Through a number of research and service agencies, the University has thus far extended services of high technical and professional calibre to the govern-

ment as well as to the regional community. Principal agencies interested in the development of regional community include the Research Institute of Industrial Technology, Institute of Management Research, Research Institute of Public Administration, and others. All of these institutes have pursued in the past decade the promotion of mutual understanding and assistance between academic circles and regional communities through such multifarious activities as publication of their research activity, holding of seminars and workshops, and on-the-job technical training of community leaders.

Meanwhile, largely as a result of ever-increasing public desire for the more active participation of universities in the regional development, the Institute of Regional Development and Planning (IRDP) was inaugurated in Yeungnam University in October 1972 in order to control and coordinate the independent activities of various research institutes. The authorities of the university moved increasingly towards the recognition that an organization like IRDP should provide a theoretical background for the development of Naktong river basin, thereby helping the government to achieve more effective community development that was so strongly reflected in the spirit of the Third Five-Year Economic Development Plan. Noteworthy in the functional structure of IRDP is the formation of three industrial committees to aid in the development of up-to-date detailed technological and demand information: agriculture, manufacturing, and social overhead service. These committees, composed of engineers, business experts, economists, provincial government officials and other experts will soon initiate their original technical function and become vehicles of consensus-building for the implementation of Naktong river development projects.

In the author's view, IRDP's important joint venture seems to be the model-building of Naktong river basin development planning, for, aside from its academic interest, this programming technique might suggest the most effective regional investment allocation strategy. In the course of establishing many small-scale factories in backward regions, there always arises an important question: What types of investment are most appropriate for a region, when such diverse geographic and demographic characteristics as the endowments of immobile natural resources for production, transportation costs, availability of labour, saving and consumption behaviour of the people and other pertinent factors are taken into account?

Roger D. Norton, an assistant economic adviser to the US Operations Mission to Korea during the formulation period of the Second Five-Year Plan, undertook a vigorous mathematical approach to build up Korea's regional planning model.¹ In this article, Norton has developed a linear input-output programming model

¹ See, Irma Adelman (ed.), *Formal Approaches to Korea's Regional Planning: Korea's Second Five-Year Plan*, Baltimore, John Hopkins, Ch. 7.

for analyzing multi-regional multi-industry investment choices.

Contained in these algebraic equations are such diverse matrix coefficients as input-output ratios in each region; coefficients of consumption and savings relative to income; coefficients related to transportation, interregional migration relative to employment change, water capacity, man-year of labour used per unit of each region; and a few other regional constants. The objective function to be maximized was selected as the GDP rather than consumption, because it is income rather than consumption that policy-planners in Korea are trying to adjust more equitably throughout urban and rural areas.

IRDP of Yeungnam University may formulate similar programming models applicable to the Naktong river basin which can be successfully translated into operationally-meaningful programmes. A medium-sized computer (FACOM 230-25) with central processing unit of 32 KB memory capacity and with such necessary peripheral equipment as card-reader and puncher, paper-tape reader and writer, magnetic drum, magnetic tapes, and line printer is to be introduced in Yeungnam University by May 1973, which will be utilized, if necessary, to help solve complicated mathematical equations appearing in the aforementioned programming model.

With the emergence of a nation-wide campaign committed to the development of regional communities, there are indeed a number of fields too numerous to cite individually here, to which Yeungnam University can render service and help. A selected number of these topics will be published in the university's reports, and my fellow colleagues will undoubtedly shed light on some of our worthwhile undertakings dedicated to this purpose.

CONCLUSION

While the Third Five-Year Economic Development Plan was drafted and announced to achieve an 8.6 per cent. annual rate of GNP growth, a series of dramatic political changes have taken place in Korea. The South-North dialogue to achieve peaceful unification of this divided country, the announcement of the new draft 'Constitution for Revitalizing Reforms' designed to pave the way for sweeping reforms in the political and economic structure of the country have occurred. On 21 November 1972 a national referendum was held throughout the country to determine whether or not the new Constitution should be approved and the result was that the new Constitution was adopted by a landslide ('ayes': 92 per cent.), thus manifesting the nation's desire for the peaceful unification of Korea.

Parallel to the announcement of 'The October Revitalizing Reforms', the government disclosed, under the instruction of President Park Chung-hee, a trillion-won revised comprehensive plan for national economic development which would enable the GNP to reach \$36 billion in 1981 - a level of 4.5 times higher than the \$8 billion reached in 1971. The plan also indicated that the average

economic growth rate will be set to 15 per cent. instead of the 8.7 per cent. for the 1970's, thereby raising the per capita income to 1,000 dollars, and the nation's export to \$10 billion by 1981. However, the government will review and revise economic growth targets in the annual investment plans through yearly adjustments in the coming decade.

Launched on this ambitious project, Korea intends to make more headway towards high growth rate policy. Export promotion, the ongoing new community movement projects, and heavy industries will serve as the main bulwarks for economic progress.

Thus, by the year 1981, Korea may be able to get rid of its backwardness and be ranked in the lower stratum of the so-called 'advanced countries'. By that time, the economic gap between urban and rural communities in Korea should be completely eliminated to create a uniformly prosperous nation.

'10 (October) Revitalizing Reforms

10.0 (ten billion) dollar export

1,000-dollar per capita income'

is the catch-phrase now being heard from every corner of the country. It remains to be seen if Korea can really attain this record high growth rate of 15.9 per cent., the figure that the nation had once reached in the year 1969. However, in Korea today, public confidence in this respect is being generated in the pragmatic, career-minded government officials because of past economic achievements; and this confidence is felt in all sectors of the population. Should this plan materialize, Korea can once again recapture her past glory, and the once poverty-stricken country will be elevated to the status of a peaceful and prosperous 'Land of Morning Calm'.

PROGRAMME OF WORKSHOP

Monday, 4 December

10.00 a.m. - 10.30 a.m.

Official Opening: Science University of Malaysia

Welcome Address by Dr. Yip Yat Hoong,
Director of RIHED

Opening Address by His Excellency,
Tun Datuk Syed Sheh Alhaj bin
Syed Hassan Barakbah,
The Governor of Penang

2.30 p.m. - 5.30 p.m.

*Session I: 'Nature and Functions of the
Regional University'*

Chairman: Dr. Yip Yat Hoong (RIHED)

Papers presented by:

1. Dr. Anwari Dilmy (Indonesia)
2. Dr. Bimala Kalakicha (Thailand)

Discussants:

1. Dr. Abdul Manap Ahmad
(Malaysia)
2. Dr. Amnuay Tapingkae
(Thailand)
3. Dr. Nguyen Van Thuy
(Vietnam)

Tuesday, 5 December

9.00 a.m. - 12.00 noon

*Session II: 'Relations between the Regional
and the National/Metropolitan University'*

Chairman: Professor Hamzah Sendut
(Malaysia)

Papers presented by:

1. Mr. Koesnadi Hardjasumantri
(Indonesia)
2. Tan Sri Mohamed Suffian bin Hashim
(Malaysia)
3. Dr. Okas Balankura
(Thailand)
4. Dr. Ton-That-Thien
(Vietnam)

- Discussants:
1. Dr. A. Madjid Ibrahim
(Indonesia)
 2. Datuk Dr. Ariffin bin
Ngah Marzuki
(Malaysia)
 3. Dr. Sanga Sabhasri
(Thailand)

2.30 p.m. - 5.30 p.m.

*Session III: 'The Universities and the
Government'*

Chairman: Professor You Poh Seng
(Singapore)

Papers presented by:

1. Mr. George E. Bogaars
(Singapore)
2. Dr. Vinyu Vichit-Vadakan
(Thailand)
3. Dr. Nguyen Van Thuy
(Vietnam)

- Discussants:
1. Professor D.A. Tisna Amidjaja
(Indonesia)
 2. Professor Ungku Abdul Aziz
(Malaysia)
 3. Dr. Nguyen-Tien-Ich
(Vietnam)

Wednesday, 6 December

9.00 a.m. – 12.00 noon

Session IV: 'The Regional University and the Provincial Government'

Chairman: Dr. Anwari Dilmy (Indonesia)

Papers presented by:

1. Dr. A. Madjid Ibrahim
(Indonesia)
2. Dr. Nguyen-Tien-Ich
(Vietnam)

- Discussants:
1. Mr. Shahrudin bin Haron
(Malaysia)
 2. Dr. Saisuree Chutikul
(Thailand)
 3. Dr. Louis J. Goodman
(TDI)

2.30 p.m. – 5.30 p.m.

Session V: 'The Regional University and its Environment'

Chairman: Dr. Ton-That-Thien (Vietnam)

Paper presented by:

1. Dr. Sanga Sabhasri
(Thailand)

- Discussants:
1. Dr. A. Hafid
(Indonesia)
 2. Dr. Abdul Manap Ahmad
(Malaysia)
 3. Dr. Louis J. Goodman
(TDI)

Thursday, 7 December

2.30 p.m. 5.30 p.m.

Session VI: Report of Proceedings: Summary and Comment

Chairman: Dr. Yip Yat Hoong (RIHED)

Summing up: 1. Dr. Jeff Romm
(Ford Foundation)
2. Dr. Nguyen Truong
(RIHED)
3. Mr. Mochtar Naim
(RIHED)

Discussion: All participants and observers

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Dr. Jeff Romm (*Ford Foundation Consultant*)

REGIONAL INSTITUTE OF HIGHER EDUCATION AND DEVELOPMENT

RIHED is a regional and autonomous institution established for the purpose of stimulating and facilitating cooperation among the universities and the governments of the countries in Southeast Asia, and to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole. To achieve this primary objective, the activities of RIHED are focused principally on the following:

- (i) To provide statistical, clearing-house and documentation services;
- (ii) To conduct or arrange for the conduct and publication of studies of ways to extend the contributions of universities to development and of the functioning and organization of universities in this role;
- (iii) To sponsor seminars and conferences;
- (iv) To provide advisory and technical services;
- (v) To cooperate with other agencies whose objects are related to the objects of the Institute; and
- (vi) To encourage and facilitate inter-university and inter-country cooperation in the planning and conduct of mutually beneficial projects in higher education and development.

The Institute is supported and financed jointly by the Governments of Indonesia, the Khmer Republic, Laos, Malaysia, Singapore, Thailand and the Republic of Vietnam and the Ford Foundation.