This study attempts to provide a better understanding of the role of institutions of higher learning in national development planning in Thailand, and further attempts to provide some answers to the question of the involvement of the university in development planning in the regions as a whole. Emphasis is placed on the historical background, development objectives, and strategy, major problem areas, and the role of the university. (MJM)
DEVELOPMENT PLANNING IN THAILAND:
THE ROLE OF THE UNIVERSITY

by

Saeng Sanguanruang

Amnuay Tapingkae, Editor

Regional Institute of Higher Education and Development
Singapore
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ONE OF THE MAIN OBJECTIVES OF THE REGIONAL INSTITUTE OF HIGHER EDUCATION AND DEVELOPMENT IS TO BRING ABOUT COOPERATION BETWEEN THE UNIVERSITY COMMUNITY AND GOVERNMENT AGENCIES IN NATIONAL DEVELOPMENT EFFORTS. TO THIS END, THIS INSTITUTE HAS LAUNCHED SEVERAL RESEARCH PROJECTS, ONE OF WHICH IS "DEVELOPMENT PLANNING IN SOUTHEAST ASIA: ROLE OF THE UNIVERSITY".

This country study from Thailand by Dr. Saeng Sanguanruang of the School of Business Administration, The National Institute of Development Administration, Bangkok, is an important part of this project. It has followed the same outline required of all country studies in the project. It is hoped that this study will render better understanding of the role of institutions of higher learning in national development planning in Thailand and, along with other country studies completed, provide some answer to the question of the involvement of the university in development planning in the region as a whole. It is also hoped that such studies will lead to a more meaningful and closer cooperation between universities and governments in the development of countries in Southeast Asia.

Originally, the plan called for publication of these research studies in three volumes. Volume One, consisting of an introduction and country studies on Malaysia, Singapore, South Vietnam and the Philippines was published in 1973 (see Yip Yat Hoong, Development Planning in Southeast Asia: Role of the University, RIHED, 1973). The second volume was to consist of the remainder of the country studies on Indonesia, Khmer Republic, Laos and Thailand, with the third and final volume being a comparative analysis of the studies. However, because of unforeseen circumstances and problems, country studies on Indonesia, Khmer Republic and Thailand will be published individually. It is disappointing that a country study from Laos will not be completed because of the uncertain and difficult situation in that country. It is also regretted that a comparative analysis of these country studies will not be attempted for two main reasons: First, the completion dates of the country studies come at different times, and second, since the completion dates of

*This research project was initiated and supervised by Prof. Yip Yat Hoong, former Director of RIHED, with collaborators from Indonesia, Khmer Republic, Laos, Singapore, Thailand, South Vietnam and the Philippines.
some of the country studies, new developments within the countries make a comparison out of date. These two factors seem to prevent a meaningful and relevant comparative analysis.

On behalf of the Regional Institute of Higher Education and Development, I wish to express appreciation to Professor Yip Yat Hoong, Deputy Vice-Chancellor of the University of Malaya, for his supervision of this significant research project, and to Dr. Saeng Sanguanruang for his contribution. Thanks are also extended to UNESCO for its partial support of this research project.

Amnuay Tapingkae
Director

Regional Institute of Higher Education and Development
Singapore
September 1972
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I. HISTORICAL BACKGROUND

A Brief Description of Social and Economic Development over the Past Ten Years

Amidst the turbulent changes that have erupted in mainland Southeast Asia, Thailand stands out as a nation of remarkable stability. Intimately involved in the long and miserable war in Indochina, Thailand has managed to escape the horror of the war while her economic fortune has waxed and waned with the tempo of the American involvement. In the process of accommodating external change, the Thai population has undergone the necessary pains associated with this change, both physically and psychologically. Undoubtedly, there is no lack of verdicts from all sides on the performance of the Thai society during the past decade and beyond.¹ For some, what has transpired has almost amounted to the total destruction of long-cherished Thai customs, mores and the beauty and security of the past.² To them the materialistic progress, if it can be called progress, has been achieved at the expense of "Thainess", whatever that phrase comes to mean, with the obvious implications that there should be other ways of bringing about progress consistent with the cherished values. For others, "Thainess" stands in the way of achieving progress by putting a premium on traditional complacency as against seriousness of purpose, on compromise of principles as against rational approach to problem solving and on superficial impression as against excellence.³ Differences in opinion are probably largely a matter of emphasis stemming from different views on the process of growth or from simply sheer impatience. Yet Thailand has come out not too badly. Of course, luck has much to do with the satisfactory performance of the economy, but it may be argued that luck would probably have not worked so well without

¹ As examples of the soul searching in the midst of changes, see the Committee of Arts Conservation, Notes on the Seminar on Future Social Identity of Thailand, (Bangkok: Association of Arts and Environment Conservation, 1972) in Thai; and Chulalongkorn Alumni Association, The Present and the Future of the Thai Society (Bangkok: Chulalongkorn University, 1971), in Thai.


³ See, for example, Prasert Yaemklinthung, in The Present and the Future of the Thai Society, op. cit., p. 6.
the vigorous entrepreneurship on the part of the people, and the conscious efforts of the Thai bureaucracy.

Thailand entered the sixties with a strong government. The 1957 coup which brought Marshal Sarit Thanarat to power ended in a self-inflicted coup in 1958 which did away with any remnants of democratic institutions. Thailand was to be under an autocratic rule until 1968 when a new constitution was promulgated and a National House of Representatives elected. The constitution has been enforced barely three years when it again was scrapped in late 1971.

Under the autocratic form of government, the country went about trying to solve her basic economic problems. During the Sarit regime in early 1960's, there seemed to be, at least in appearance, a sense of urgency to get on with the basic problems of the country. For the first time, intellectual resources were mobilized to give advice to the government on economic, scientific and other matters. A Ministry of National Development was set up to minimize delays in development work. The First Six-year National Economic Development Plan was prepared by the newly created National Economic Development Board. A Budget Bureau directly under the supervision of the Prime Minister was set up to engage in the preparation of annual government budget. The National Education Council, the National Research Council, the Board of Investment, the Board of Export Promotion and the Board of Tax Supervision were created during this period and are testimony to the efforts to provide the country with organizations needed for the task of development administration.

The sixties also saw an influx of foreign-educated individuals into the civil service. Unlike their predecessors who had been forced to manage largely from guesswork, these young government officials had been exposed to scientific principles of management requiring the use of data. It is difficult to say how much the "modernized bureaucrats" contribute to the well functioning of the economic system, but one can hardly avoid the impression that these modernized elements must have some impact on the performance of the economy.

The following paragraphs summarize the economic performance during 1960-70. Gross Domestic Product at current prices increased from 53,884.9 million baht in 1960 to 135,600 million baht in 1970 with an average rate of

1In early 1973, the official name of the National Education Council was changed to the National Education Commission, but for convenience, its old name and abbreviation will be used throughout this study.
growth of 9.8 per cent per annum. The Gross Domestic Product at constant prices (1962, see Table I) grew from 56,069.4 million baht in 1960 to 119,604 million baht in 1970, implying an average rate of growth of 8.1 per cent per annum.

The growth performance has not been even during the decade; the highest rate of growth was attained during the 1965-69 period as can be seen from Table II.

The breakdown of the expenditures on Gross Domestic Product at current market prices indicates a substantial decline of private consumption expenditures from 75.1 per cent in 1960 to 69.4 per cent in 1970 with the share of government consumption expenditures increasing slightly from 10.2 per cent in 1960 to 12.5 per cent in 1970.\(^1\) Gross investments rose rapidly from 16.1 per cent in 1960 to 25.7 per cent in 1970. Exports of goods and services decline slightly as a proportion of Gross Domestic Product from 18 per cent in 1960 to 16.8 per cent in 1970 while the share of imports of goods and services rose from 19.4 per cent to 21.1 per cent during the same period.

Almost all of gross investments were financed by gross national savings until after the mid-sixties. Even in 1969, the gross national savings financed about 80 per cent of the gross investments with the rest coming from the net import of goods and non-factor services.

The favourable investment climate during the 1966-67 period resulted in a strong investment demand which was made possible by the large inflow of foreign exchange. The investment boom and the growth of foreign exchange earnings have been important sources of growth until the last two years of the 1960's when investments and the American military expenditures began to decline. The fastest growing source of demand during this later period was the rising government consumption expenditures.

The percentage distribution of Gross Domestic Product at market prices indicates a declining share of agriculture from almost 40 per cent in 1960 to approximately

\(^1\) These figures and those appearing in the following paragraphs, unless indicated otherwise, are taken from the unpublished records of the Office of the NEDB. For a scholarly description of the performance of the Thai economy during the 1950-70 period, see James C. Ingram, *Economic Change in Thailand 1850-1970* (Stanford: Stanford University Press, 1971), chs. 11 and 12, which are added to a former book, *Economic Change in Thailand since 1850*, by the same author.
### TABLE I
Gross Domestic Product at Current and at Constant (1962) Prices

<table>
<thead>
<tr>
<th></th>
<th>Current Prices (million baht)</th>
<th>Constant Prices (million baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>53,984.0</td>
<td>56,069.4</td>
</tr>
<tr>
<td>1961</td>
<td>58,970.0</td>
<td>59,029.2</td>
</tr>
<tr>
<td>1962</td>
<td>63,793.0</td>
<td>69,793.0</td>
</tr>
<tr>
<td>1963</td>
<td>68,078.6</td>
<td>69,125.3</td>
</tr>
<tr>
<td>1964</td>
<td>74,667.3</td>
<td>73,692.9</td>
</tr>
<tr>
<td>1965</td>
<td>84,303.0</td>
<td>79,486.5</td>
</tr>
<tr>
<td>1966</td>
<td>101,374.7</td>
<td>83,189.6</td>
</tr>
<tr>
<td>1967</td>
<td>108,224.3</td>
<td>94,109.3</td>
</tr>
<tr>
<td>1968</td>
<td>117,306.7</td>
<td>102,578.4</td>
</tr>
<tr>
<td>1969</td>
<td>130,612.7</td>
<td>112,377.5</td>
</tr>
<tr>
<td>1970</td>
<td>135,600.0</td>
<td>119,604.0</td>
</tr>
</tbody>
</table>

**Source:** For 1960-69, Office of the NEDB, National Income of Thailand, 1968-69 edition, Table 1 and 7. For 1970, from unpublished estimates prepared by the Office of the NEDB.

### TABLE II
Growth Performance (per cent per annum)

<table>
<thead>
<tr>
<th></th>
<th>1960-65</th>
<th>1965-69</th>
<th>1969-70</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP average rate of growth (1962 prices)</td>
<td>7.7</td>
<td>9.1</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Source:** For 1960-69, Office of the National Economic Development Board, National Income of Thailand, 1969, edition. The 1970 figure is a preliminary estimate by the National Income Office.
30 per cent in 1970, while the share of manufacturing in the total product gained from 12.1 per cent in 1960 to almost 15 per cent in 1970. The share of construction rose materially although it was still small (7 per cent) in 1970. The share of trade, banking, insurance and real estate increased from 17 per cent to 21.3 per cent during the same period.

During the past decade, population has increased at a rapid rate of over 3 per cent per annum from 26,634,000 in the 1960 census to 36,218,000 in 1970 when the latest census was conducted.

Although agriculture accounted for only 30 per cent of the Gross Domestic Product, it still is the most important source of employment, taking in about 78 per cent of the total employment in 1970 compared with 83 per cent in 1960. While there has been an increase in the share of the labour force employed in manufacturing, it was still at a low level of 4.3 per cent in 1971, indicating a poor employment generating capability.

Examination of the external accounts reveals a weak performance of the merchandise export sector and a heavy dependence on the American military expenditures as a source of foreign exchange. Merchandise exports grew at an average rate of 5 per cent per annum during the 1960-70 period but only 2.4 per cent per annum during the Second Plan period. The expenditures of the military services (mainly American) sharply increased from 438.7 million baht in 1964 to the peak of 4,918 million baht in 1968 and declined to 4,192 million baht in 1970. It should also be noted that the export of tourist services increased dramatically from a negligible 183 million baht in 1962 to 2,175 million baht in 1970.1

There has been a substantial change in the composition of exports from Thailand during the last decade. The share of the four traditional exports (rice, rubber, tin and teak) declined from 70 per cent of the total merchandise exports in 1960 to 50 per cent in 1970. The "new exports" that have gained importance include maize, cassava, kenaf, oilseeds, beans, shrimp, precious and semi-precious stones and gunny bags. Although these exports accounted for only 16.7 per cent of the total merchandise exports in 1961, they increased to 27 per cent in 1970.2

During the decade (1960-70) and indeed during also most of the previous decade, Thailand has experienced a consistent deficit in the merchandise account. Although there has been a persistent surplus on the service account, the surplus has not been large enough to offset the widening deficit in the trade account, resulting in a deficit in the current account in all the years except 1961. The deficit in the current account represents a real transfer of capital from abroad and has been financed by the inflow of capital, foreign aid and grants. As the current account deficit has been less than the net inflow of foreign capital (in most years), the transfer has not been completed resulting in an accumulation of foreign resources. The foreign exchange reserves declined for the first time in 1969 and continued to decline in 1970. It is expected that the decline in reserves will continue during the Third Plan period.

The swing of the balance of payments into the deficit side has caused quite a concern within the government, the business circle and the intellectual community. At least three explanations can be given for this situation. First, Thailand has enjoyed a surplus on the balance of payments account over the years and has come to expect it as a normal situation. Second, the traditional financial policy of the Thai authority has been one of conservatism, which puts a premium on the accumulation of foreign reserves. This may be because the authority believes that for an agricultural country like Thailand facing relatively uncertain market and widely fluctuating prices for its own products, a large cushion of foreign exchange reserves is necessary. The third and most troublesome reason that explains the concern over the worsening balance of payments difficulties is the deeply-rooted pessimism over the poor export performance of the country in the face of rapidly rising imports. Of course, the reduction of the flow of foreign exchanges (e.g. on account of the reduction of the American military expenditures) would tend to directly and indirectly reduce the size of the current account deficit.

1 For an excellent treatment of the Thailand's balance of payments problem, see Ingram, op. cit., pp. 306-322.
2 There was an increase in foreign exchange reserves of 160.1 million dollars during 1972, however.
3 Evidence for this concern can be seen by glancing through the daily papers issued during '1970-71.'
but this reduction would be at the expense of the growth performance which the authority would be highly reluctant to permit. Thus the concern over the balance of payments difficulties really centres around the perception that the performance of the external sector in effect constitutes a limit to the growth performance.

One aspect of the growth experience needs to be mentioned to complete this brief survey of economic development. Much has been said and discussed about the uneven development that has taken place in the country (see Table III). Substantial physical growth has been visible in the urban areas, especially in the Bangkok Metropolitan region. Under the present system, one can hardly visualize the development otherwise. With heavy social infrastructures in the metropolitan area and with the advantage of Greater Bangkok as the major port, the only financial and trade centre, the hub of all means of transport and the seat of the central government, one would believe that investment opportunities would naturally be more abundant here than elsewhere. This observation is confirmed by an evidence indicating that there has been a net transfer of bank deposits from the provincial branches to the headquarters in Bangkok.¹

There have been many attempts on the part of the government to diversify the development efforts away from the metropolitan area. Examples are the establishment of regional universities in the North, the Northeast and the South, the allocation of large amount of investment expenditures on irrigation works and the development of highways and feeder-roads. But these have been an integral part of national planning which allocates resources among competing claims without sufficient considerations as to how these investment expenditures can contribute to the development of regional centres. This results in each investment being considered on a piecemeal basis rather than within a total regional framework. The role of the public sector in changing the resource balance presupposes clear and definite development objectives and serious sub-national planning based on existing stock of knowledge of the resource potentials of different regions. It is here that there is a large gap in knowledge which impedes intelligent regional planning and development. We shall return to this subject later in this report.

<table>
<thead>
<tr>
<th>Region</th>
<th>1960 (baht)</th>
<th>1966 (baht)</th>
<th>Average Annual Growth Rate (%) (1960-66)</th>
<th>1970 (baht)</th>
<th>1967 (baht)</th>
<th>Average Annual Growth Rate (%) (1967-70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>1,627</td>
<td>2,167</td>
<td>4.89</td>
<td>2,620</td>
<td>2,248</td>
<td>3.3</td>
</tr>
<tr>
<td>Northeast</td>
<td>1,260</td>
<td>1,479</td>
<td>2.71</td>
<td>1,840</td>
<td>1,436</td>
<td>2.8</td>
</tr>
<tr>
<td>Central Plain</td>
<td>3,499</td>
<td>4,588</td>
<td>4.62</td>
<td>6,470</td>
<td>5,750</td>
<td>6.0</td>
</tr>
<tr>
<td>South</td>
<td>3,013</td>
<td>3,103</td>
<td>0.49</td>
<td>3,622</td>
<td>3,072</td>
<td>4.2</td>
</tr>
<tr>
<td>The Entire Kingdom</td>
<td>2,264</td>
<td>2,822</td>
<td>3.66</td>
<td>3,165</td>
<td>3,165</td>
<td>4.6</td>
</tr>
</tbody>
</table>

History of Development Planning in Thailand

The first national economic development plan was launched on January 1, 1961 but the history of planning went back a decade earlier. The National Economic Council, the predecessor of the present National Economic Development Board, was set up in 1950 to provide staff services to the government in the areas of current economic studies and research, and analysis of fiscal and monetary problems. A Committee on Economic Plan was organized within the National Economic Council with the primary function of evaluating the capital budget requests from different government agencies. Thus development planning was undertaken in an embryonic form by this committee.

Later in 1951 the Thai Technical and Economic Cooperation Committee (TTEC) was set up in the National Economic Council to administer the economic and technical assistance offered by the United States. Because the staff of the National Economic Council and of the TTEC were intimately involved in the analysis of development projects originating from the government itself or from abroad under foreign assistance programmes, it gained valuable experience in the area of benefit and cost analysis. Yet whatever planning was done was far from systematic. For one thing, the projects were analysed on an individual basis without much regard to linkages with other projects to consistency overtime. Lack of long term planning made it necessary to appropriate the budget on an annual piecemeal basis while the demand for resources for development efforts was continuously rising.

At the request of the Thai government, an IBRD Survey Mission arrived in Thailand in July 1957 to start a

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1 For a definitive treatment of the history of economic development planning in Thailand, see Snoh Unakul, "History of Economic Development Planning in Thailand", in Monetary and Fiscal Policies, and Economic Development Planning in Thailand, (Bangkok: Ramindra Press, 1972), ch. 11, from which this section heavily draws upon. The book is a collection of articles, both in Thai and English, by one of the most prominent planners in Thailand.

2 In December 1972, the official name of the NEDB was changed to the National Economic and Social Development Board, but for convenience, its old name and abbreviation will be used throughout this study.
comprehensive study of the current economic problems and potentials. The team spent almost a year in the country; this was longer than usual for this type of assignment. The IBRD report, *A Public Development Programme for Thailand*, published in 1959, was the first comprehensive study of the development problems and potentials of the Thai economy. A major feature of the report was a five-year forecast of the development needs and financing with the Bank's suggestions on the pattern of resource allocations, and policy measures as well as administrative requirements for development work. Several of the Bank's recommendations were directly implemented while others were acted upon in modified forms.

Among the Bank's recommendations which had direct bearing on development planning is its suggestion that a permanent, central planning agency be set up to undertake economic studies and research, and to prepare the national development plan.

The proposed central planning agency would be called the National Development Board, and to provide access to the highest political leadership, would be chaired by the Prime Minister, with ministers closely involved with development work serving as the Board members. The Central Statistical Office, the National Income Office and the TTEC would be integrated with the proposed Board to ensure a ready flow of statistical information and cooperation required for planning.

The Sarit government upon assuming absolute power following the coup in October 1958 began a series of administrative reforms and innovations. The National Economic Development Board was founded in July 1959 with the National Economic Council now called the Office of the National Economic Development Board, acting as its secretariat. The organizational setup of the newly created NEDB was somewhat different from that proposed by the IBRD team. The Board consists of 45 members drawn from all quarters and is chaired by the Prime Minister. All cabinet members serve as advisors to the Board with each minister directly involved in development activities chairing the sub-committee on the affairs concerning his own specialized field. The Secretary-General, who is the administrative head of the Office of the National Economic Development

Board, serves as a member and secretary to the Board.

Given its large size and its diverse composition, the Board meets only infrequently (usually once a year). Policy decisions are made by the Executive Committee of the Board consisting of nine highly qualified members. The day-to-day operations and staff work are carried out by the Office of the NEDB headed by the Secretary-General.

The major administrative reorganization in 1963 removed the Central Statistical Office and the TTEC from the Office of the NEDB, the former becoming the National Statistical Office under the Office of the Prime Minister while the latter acquiring the departmental status in the newly created Ministry of National Development.

Nature and Scope of Development Planning

The nature of the planning process can be discussed at two different planes, the political plane and the ideological plane. On ideological grounds, in a relatively free-market economy like Thailand, planning is an attempt to rationalize the resources utilized in the public sector while guiding the private sector by way of public policy signals and measures affecting the profitability of investment undertaking.

The emphasis on the promotion of the private sector, however, reflects not so much ideological preference as the pragmatic adaptation dictated by the nature of the situation. The ruling group which was in power prior to the 1958 coup had established numerous state enterprises on nationalistic and security grounds. A common justification in setting up a state enterprise is that the domination of the economy by the Chinese minority can be reduced or that the enterprise is vital for security reasons. It is clear, however, that apart from these nationalistic and security motives, the ruling group saw the operation of state enterprises as an avenue to achieve personal or oligarchic gains. As it turned out, many of those enterprises were operating at a loss. To carry on as state corporations, they would require large amount of subsidies from the public coffers. The pragmatic solution would be to sell these losing enterprises off and to refrain from setting up additional ones. This was precisely what was done in the early sixties. The pledge of not creating new state enterprises was offered to assure the private sector of non-competition from the government.
In political terms, planning has been considered as the manifestation of the national government's commitment to progress. As far back as 1932, which saw the change in the form of government from an absolute monarchy to a constitutional one, one of the six points pledged by the coup group was to prepare a national economic plan to improve the standard of living of the people. The plan, devised by a leader of the coup, Dr. Pridi Bhanomyong, was discarded on grounds of its socialistic content. The several coups during the forty-year span since 1932 were all justified by the coup makers on economic grounds, although no commitment to formal economic planning was made until the coup in October of 1958. It is significant that the promulgation of the First Six-Year Development Plan in 1960 was considered by the political leadership as the "auguring of the new economic life, a new dawn of our economic history" which would begin a new era of national building.

The scope of development planning has widened with time. The First Six-Year Plan was no more than a collection of government projects submitted to the NEDB by different government agencies for inclusion in the Plan. The Plan itself was divided into two phases, each covering a period of three years. A justification offered for splitting the planning period into two phases was that inadequate statistical data made detailed planning beyond the three-year horizon unfeasible, thus it was stated that the substance of the Plan for the second phase would be revised in the light of the additional statistical information expected to be increasingly forthcoming.

The revision of the second phase of the First Six-Year Plan covering the years 1964-66 attempted to make the Plan a more comprehensive public document, covering not only the development activities of the central government but also those of state enterprises, local governments and

1For the text of the Economic Programme proposed by Pridi and the commentaries, see Duan Bunnag, Pridi: the Elder Statesman (Bangkok: Sermvit Banakhan, 1957), in Thai.

2The Plan was announced on the second anniversary of the coup on October 20, 1960 but was to take effect on January 1, 1961.

regional development activities. Also an attempt was made for the first time to estimate the manpower requirements of the Plan.1

The Second Five-Year Plan for Social and Economic Development which covered the period 1969-71 was an improvement over the First Plan in terms of coverage and methodology.2 Manpower planning was extended beyond the estimate of the manpower requirements of the First Plan to the estimation of the needs and considerations on the supply side. For the first time, the Private Sector Planning Committee was set up to: (1) improve the realism and consistency of the national plan by intensive analysis of the components of the private sector; (2) guide the formulation of national economic policies affecting the decision-making of the private sector; and (3) identify the promising investment opportunities in the private sector.3 Financial planning was also improved by forecasting foreign exchange requirements, availability and the gap in exchange rates.

The Third Five-Year Economic and Social Development Plan4 covers the planning for development activities of the central and local governments, private sector and state enterprises planning, regional planning and manpower development planning. Planning for the private sector development includes: (1) the statement of public policies towards business; (2) the formulation of measures designed to promote private investment in agriculture, industry and the development of the capital market; and (3) the estimation of the investment fund requirements of the private sector during the plan period as well as the identification of their sources.

Planning for state enterprises includes the formulation of public policies concerning the types of the


2For a comprehensive examination of the methodology of the Second Plan, see Office of the NEDB, "The Methodology for Preparing the Second and Social Development Plan of Thailand", mimeographed.

3Ibid., pp. 78-79.

nterprises to be promoted and retained, a pledge not to establish new enterprises to compete with the private sector, the estimation of investment expenditures of these enterprises, the sources of funds and the expected profits to be transferred to the government treasury.

Regional planning was made by the Regional Development Committees set up for each region. Planning activities include the establishment of development guidelines appropriate to the situation in each region, preparation of the list of sectoral development activities to be undertaken in the regions, and the estimated size of expenditures and their sources of financing. So far only a summary of the "plans" for the North and the Northeast appears in the Third National Plan.

Manpower planning includes the population projection for the plan period, the estimation of employment potentials of the plan, forecasting of manpower requirements and supplies in different fields including employment problems in the rural sector and the formulation of policies to meet the manpower needs for development.

Evaluation of Development Plans

The Office of the NEDB is charged with the function of evaluating the development plans. This evaluation is carried out in terms of the comparison of the production targets with the actual achievements, comparison of planned development expenditures with budgeted and actual disbursements, by projects and by operating units. Problems encountered in the execution of the plans are identified along with recommendations to mitigate or avoid the problems proposed. The plan evaluation is undertaken to cover the entire plan period but an attempt has been made to evaluate the plan on an annual basis to throw light on the changes that need to be made and incorporated in the annual plan. Standard forms and procedures developed by the NEDB are used in progress reporting and plan evaluation.¹

II. DEVELOPMENT OBJECTIVES AND STRATEGY

Social and Economic Policy

The clearest expression of the "national" social and economic policy is given in the text of the Third Five-Year Economic and Social Development Plan. The six-point development policies or "guidelines" include:1

1. strengthening of the nation's economic structure and the enhancement of the national income and production;
2. maintenance of economic stability;
3. promotion of regional development and reducing regional income disparities;
4. fostering of social justice;
5. manpower development and job creation; and
6. encouragement of the development efforts of the private sector.

In the first development plan promulgated in 1961, most of these aggregate guidelines were not explicitly articulated although some of them were scattered about in the text of the Plan. Notably absent from the First Plan are the policies on the regional income disparities and the question of social justice. In striking contrast, the Second Plan explicitly recognized as one of the policy guidelines the reduction of income inequality and geographical imbalance.2 Presumably, the growth of Bangkok, the primate city, the teeming investment, especially that supporting construction activities in the metropolitan region, an increase in the use of luxuries of certain groups of the urban population made possible by the prosperity in the mid-sixties, and the investment in such activities as nighteries and restaurant undertakings, accentuated the regional income disparity. At the same time, it has been increasingly acknowledged that the fruits of economic growth had not been equally shared by the different groups.

1The Third Plan, p. 31.
2The Second Plan, p. 34.
of the population.¹

One of the most persistent policy guidelines is the encouragement of the private sector's development effort. Under this guideline, the private sector is assured that the government will not establish new enterprises in direct competition with it.² As previously stated, the experience with state enterprises in the fifties conceived on nationalistic and on less idealistic grounds has demonstrated the high cost of the state's direct participation in business activities. Moreover, to induce foreign capital inflow, foreign investors have to be assured of the government's non-competition. Since 1961 a few losing state enterprises had been sold off to the private sector and some others had been amalgamated.³

Another persistent policy guideline is the intention to maintain economic stability. Thailand has a long history of conservative fiscal and monetary policies dating back to the period when the country was first opened to the West. Under the expansive colonial climate, less conservative fiscal and monetary policies were perceived as a threat to national sovereignty.⁴ The conservative tradition has continued long after this "external threat" became less real. There were times when pressures from the political leadership demanded an expansive and less orthodox fiscal management. On the whole, however, thanks to its top professional staff, the Bank of Thailand has succeeded in maintaining internal and external financial stability.

The monetary authorities have, however, occasionally been criticized for their overemphasis on stability at the expense of development.⁵ At issue is the problem of a classical trade off between "liquidity" and "profitability" considered from the standpoint of the economy as a whole.

¹See for example, the NEDB, Evaluation of the First Six-Year Plan 1961–66, Bangkok 1967, p. 6.
²See, the Thai versions of The Second Plan, p. 111, and The Third Plan, p. 134.
³The Third Plan, p. 149.
⁴Ingram, op. cit., p. 170.
⁵For example, Ingram in ibid., p. 317, was ambivalent on the wisdom of accumulating reserves.
Implicit in the central bank's conservative "external" policy line is the judgement that for an agricultural country like Thailand, international liquidity commands a high premium, hence the accumulation of foreign exchange reserves. Also implicit in the conservative internal fiscal management is the judgement that inflation hurts more than it helps economic development. During the major part of the 1960's the emphasis was on keeping inflationary pressures from going out of hand, while the influx of foreign capital inflow added to the accumulated foreign exchange reserves. One of the more challenging tasks of development facing Thailand is how to achieve a high rate of growth and yet maintain reasonable external balance.

Development Objectives

The following development objectives are envisaged in the Third Five-Year Plan.1

(1) To help strengthen national security in view of the intimate interrelationships between the national economic well-being and national security. It is recognized that economic development is a sine qua non of national security and vice versa.

(2) To redress the current economic recession and to cope with the economic problems anticipated during the plan period.

(3) To correct the balance of payments difficulties thereby preventing the heavy drawing down of foreign exchange reserves.

(4) To maintain economic stability.

(5) To raise the income level and the standard of living of the population residing in the outlying areas.

(6) To decentralize the public services so that they reach all strata of the population.

1 The Third Plan, pp. 91-92.
(7) To slow down the rate of population growth by providing assistance in family planning to the needed families.

(8) To create job opportunities to absorb the increase in population, both in the urban and rural areas.

**Development Targets**

In line with the above objectives and following the policy guidelines mentioned above, the following overall development targets have been set for the Third Plan period.1

(1) To raise the national income at an average rate of 7 per cent per annum. This targeted growth rate compares with the actual growth of 8.1 and 7.2 per cent per annum achieved during the First and the Second Plan periods respectively. The Third Plan contends, however, that with the slowing down of the population growth to the 2.5 per cent growth rate targeted for 1976, the per capita income growth would be higher than an average rate of 4 per cent realized during the Second Plan period.

(2) To maintain adequate foreign exchange reserves in order to assure Thailand’s strong international position.

(3) To maintain economic stability and to gear production to the market demand.

To achieve the targeted growth rate with economic stability, public investment expenditures will be increased at an average rate of 8.5 per cent per year during the Third Plan period to the level of 15.5 billion baht in 1976. This growth in investment expenditures will be lower than the 9.1 per cent average rate of increase planned for in the Second Plan. Private investment expenditures are estimated to grow to 30.5 billion baht in 1976,

1Ibid., p. 96.
representing a 7.3 per cent average rate of growth per year. Table IV indicates the targeted national expenditures during the Third Plan period compared with those during the earlier years.

Under the Plan, total domestic expenditures will increase at an average annual rate of 7.5 per cent compared with a 7 per cent annual growth in production. Thus it is believed that there will not be a violent change in the price level if production and expenditures are more or less in line with the Plan.

The performance of the foreign trade sector looms large in the development planning of Thailand. The export growth of 7 per cent per annum is considered a reasonable target, while, in order to correct the balance of payments difficulties, the import growth for the plan period is set at a low level of 2.8 per cent per annum compared with the annual growth of some 7 per cent during the previous five years.

The sectoral production targets under the Plan compared with the estimated performance in 1971 are shown in Table V.

In line with the anticipated growth of different economic sectors and with the public policies to be effected, it is estimated that jobs will be created for 19.5 million people representing an increment of job opportunities for 2.6 million persons during the plan period. Compared with the estimated growth in the labour force, the size of employment generation implies that some 80,000 additional persons will be added to the rank of the unemployed during the Third Plan period.

The sectoral employment targets imply a slight change in the employment structure as indicated in Table VI.

**Sectoral Development Projects**

**Agriculture**

The agricultural sector continues to assume a central position in the Third Plan. The prime objectives in agricultural development are to raise the level of living of the agricultural population, to enlarge the foreign exchange earning capacity, to reduce rural underemployment and to promote the organization of farmers to foster their
## TABLE IV
Targeted National Expenditures (billion baht)

<table>
<thead>
<tr>
<th></th>
<th>1966</th>
<th>1970</th>
<th>Second Plan Average Annual Rate of Increase (1967-71) %</th>
<th>1976</th>
<th>Third Plan Average Annual Rate of Increase (1972-76) %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption Expenditures</td>
<td>9.3</td>
<td>16.9</td>
<td>14.8</td>
<td>24.7</td>
<td>6.1</td>
</tr>
<tr>
<td>Investment Expenditures</td>
<td>6.7</td>
<td>10.0</td>
<td>9.1</td>
<td>15.5</td>
<td>8.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16.0</td>
<td>26.9</td>
<td>12.4</td>
<td>40.2</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Private Sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption Expenditures</td>
<td>66.7</td>
<td>93.9</td>
<td>7.3</td>
<td>140.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Investment Expenditures</td>
<td>13.6</td>
<td>20.5</td>
<td>10.4</td>
<td>30.5</td>
<td>7.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80.3</td>
<td>114.4</td>
<td>8.3</td>
<td>170.9</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Foreign Sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports of Goods and Services</td>
<td>19.3</td>
<td>22.1</td>
<td>3.8</td>
<td>28.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Imports of Goods and Services</td>
<td>-19.7</td>
<td>-29.3</td>
<td>8.2</td>
<td>-34.0</td>
<td>3.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-0.4</td>
<td>-7.2</td>
<td>-</td>
<td>-5.3</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Domestic Expenditures</strong></td>
<td>-95.9</td>
<td>134.1</td>
<td>8.1</td>
<td>205.8</td>
<td>7.5</td>
</tr>
</tbody>
</table>

**Source:** National Economic Development Board, The Third Five-Year Economic and Social Development Plan, Bangkok 1972, Table 3, p. 105
<table>
<thead>
<tr>
<th>Sector</th>
<th>1971 Production (estimated)</th>
<th>Target in 1976</th>
<th>Annual Average Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GDP %</td>
<td>GDP %</td>
<td>1967-71 1972-76</td>
</tr>
<tr>
<td>Agriculture</td>
<td>37.3 29.5</td>
<td>47.8 26.8</td>
<td>4.1 5.1</td>
</tr>
<tr>
<td>Crop</td>
<td>26.0 20.5</td>
<td>32.5 18.2</td>
<td>2.7 4.6</td>
</tr>
<tr>
<td>Livestock</td>
<td>3.9 3.1</td>
<td>4.7 2.6</td>
<td>2.4 3.4</td>
</tr>
<tr>
<td>Fishery</td>
<td>4.3 3.4</td>
<td>6.9 3.9</td>
<td>17.3 10.0</td>
</tr>
<tr>
<td>Forestry</td>
<td>3.1 2.5</td>
<td>3.7 2.1</td>
<td>6.5 3.4</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>2.1 1.7</td>
<td>2.8 1.6</td>
<td>8.3 6.0</td>
</tr>
<tr>
<td>Industry</td>
<td>21.4 16.9</td>
<td>31.4 17.6</td>
<td>9.2 8.0</td>
</tr>
<tr>
<td>Primary Processing</td>
<td>6.5 5.2</td>
<td>8.3 4.6</td>
<td>5.1 4.8</td>
</tr>
<tr>
<td>New Industries</td>
<td>14.8 11.7</td>
<td>23.1 13.0</td>
<td>11.4 9.2</td>
</tr>
<tr>
<td>Construction</td>
<td>8.4 6.6</td>
<td>11.7 6.6</td>
<td>8.4 6.5</td>
</tr>
<tr>
<td>Utility</td>
<td>1.9 1.5</td>
<td>3.9 2.2</td>
<td>19.0 15.0</td>
</tr>
<tr>
<td>Communications and Transport</td>
<td>8.6 6.8</td>
<td>11.5 6.5</td>
<td>7.5 6.0</td>
</tr>
<tr>
<td>Trade</td>
<td>20.5 16.2</td>
<td>29.3 16.4</td>
<td>7.5 7.0</td>
</tr>
<tr>
<td>Banking Insurance and Real Estate</td>
<td>5.1 4.1</td>
<td>11.0 6.2</td>
<td>14.4 15.0</td>
</tr>
<tr>
<td>Residential Construction</td>
<td>2.4 1.9</td>
<td>2.7 1.5</td>
<td>4.1 2.5</td>
</tr>
<tr>
<td>Public Administration and Defence</td>
<td>5.7 4.5</td>
<td>7.6 4.3</td>
<td>10.0 6.0</td>
</tr>
<tr>
<td>Service</td>
<td>13.0 10.3</td>
<td>18.5 10.3</td>
<td>8.8 7.0</td>
</tr>
</tbody>
</table>

Source: NEDB, The Third Five-Year Economic and Social Development Plan, Bangkok, 1972, Table 1, p.98
**TABLE VI**

Employment Estimates Under the Third Plan by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>1972 Employment</th>
<th>1976 Employment</th>
<th>Incremental Employment</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, hunting, fishing</td>
<td>13.076 million persons</td>
<td>14.606 million persons</td>
<td>1.530 million persons</td>
<td>59.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>0.051 million persons</td>
<td>0.066 million persons</td>
<td>0.015 million persons</td>
<td>0.3</td>
<td>4.0</td>
</tr>
<tr>
<td>Industry</td>
<td>0.751 million persons</td>
<td>0.785 million persons</td>
<td>0.034 million persons</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Construction</td>
<td>0.150 million persons</td>
<td>0.191 million persons</td>
<td>0.041 million persons</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Utility</td>
<td>0.042 million persons</td>
<td>0.066 million persons</td>
<td>0.024 million persons</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Trade</td>
<td>1.278 million persons</td>
<td>1.688 million persons</td>
<td>0.410 million persons</td>
<td>7.6</td>
<td>8.7</td>
</tr>
<tr>
<td>Communication, warehousing, transport</td>
<td>0.317 million persons</td>
<td>0.404 million persons</td>
<td>0.087 million persons</td>
<td>0.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Service</td>
<td>1.273 million persons</td>
<td>1.658 million persons</td>
<td>0.385 million persons</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>16.920 million persons</td>
<td>19.464 million persons</td>
<td>2.562 million persons</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: NDB, The Third Five-Year Economic and Social Development Plan, Bangkok, 1972, Table 3, p. 194.
own as well as national interests.\(^1\)

The overall target for agricultural development during the Third Plan period is to increase the agricultural production at a rate of not less than 5.1 per cent per annum.\(^2\) This targeted growth rate compares with an average rate of increase of 4.1 per cent per annum achieved during the Second Plan period. In the pursuit of this objective, several development projects are proposed which are summarized here.\(^3\)

Research and extension are among the major projects proposed. Attention is given to practical research into ways and means to increase per acre yield and to identify crops suited to the local conditions for which there is market demand. An agricultural research centre will be set up in the North whose activities will include the promotion of permanent cultivation as a measure against slash-and-burn agriculture commonly practised by the hill tribes.

Fishery development is also an important aspect of the agricultural development programme. Marine fishery is given special attention with a view to increase the supply of protein food for domestic consumption and to increase export earnings.

Important among the livestock development programmes is the promotion of beef cattle for local consumption as well as for export.

As the destruction of forest resources has become a serious natural concern during the past few years, the forest development programme includes forest surveys, reforestation and forest conservation.

The Plan does not provide for any radical change in the land holding system although there has been much talk lately about a land reform programme, the nature of which has not yet been made clear.

\(^1\)Ibid., p. 221.

\(^2\)Ibid., p. 99.

\(^3\)The following paragraphs are a summary of important sectoral development projects proposed in the Third Plan, no specific references will be given.
At present, some 096,000 farm families or 14 per cent of the total of 5,000,000 families belong to some type of agricultural institution, which includes agricultural cooperatives, farmers' associations and private irrigation associations. The Third Plan contemplates setting up multi-purpose cooperatives in which production and marketing activities are integrated for the benefit of the members.

Large irrigation projects were started under the First and the Second Plans but none is contemplated during the Third Plan period. Emphasis has been shifted to the completion of the distribution systems connecting the dams and the reservoirs with the farms.

An element in the agricultural development package is the provision of agricultural credits by the Bank for Agriculture and Agricultural Cooperatives. It is estimated that at the end of 1970, some 10 - 15 per cent of the total agricultural credit needs were supplied by some type of agricultural institution.

Also included in the agricultural development programmes is the provision for additional warehouses, silos and other storage facilities, and the provision of equipment and pesticides at reasonable prices.

**Industry and Mining**

The overall target for industrial development is to increase industrial production at an annual rate of 8 per cent, raising the share of industry in the Gross Domestic Product to 17.6 per cent at the end of the Third Plan period. The strategy in industrial development is to encourage private investment by appropriate policy measures. The Industrial Promotion Act will be revised to give special privileges to export industries, import industries with high value added and industries to be set up outside the metropolitan region.

Elements of the industrial development programme also include the promotional activities of the Industrial Finance Cooperation of Thailand which will be geared to serving priority industries mentioned above. It is estimated that the demand for funds to be supplied by the TFC during the Third Plan period will amount to 1,700 million baht. In addition to financing services, technical assistance and training programmes will be offered to some 300 small businesses a year.
Another project of high priority in the industrial development programme is the proposal to set up an Industrial Estate Committee to study and make recommendations on matters of zoning, including free port and export promotion zoning. Other auxiliary industrial promotion services include standardization of industrial products and the establishment of industrial information centres to serve the information needs of both the private and the public sectors.

The Third Plan enumerates a list of private industries to be given high priority, which include mining and mineral processing, food processing, machine tools, chemical and petroleum industries, steel sheeting, animal products industries, automobile assembly and other industries requiring locally produced raw materials such as paper manufacturing, toy and furniture making, and tanning.

Trade and Service

Projects for the development of the trade and service sectors include the improvement of the marketing system by creating facilities needed for the efficient functioning of the market, e.g., warehouses, silos and storage facilities at different stages of the marketing channel, the agricultural price support programme and the establishment of marketing boards for major agricultural products.

Realizing that foreign exchange earning capacity is strategic in the development process, the Plan attaches substantial importance to foreign market research, trade exhibition and trade information services.

In the service sector, attention will be given to the development of insurance and tourist industries.

Communications and Transport

In contrast to the previous two Plans under which development efforts in the field of land transport had concentrated on the building up of important major national transport networks, the Third Plan aims at improvement of the feeder and rural road systems. Construction of the road systems to relieve the traffic congestion in the metropolitan region is also given special emphasis in the Plan.
In connection with air and water transportation, economic and engineering feasibility studies of the second international airport and deep sea port will be conducted during the Third Plan period.

Communications development includes the extension of the telephone network both within and outside the metropolitan region and the installation of additional television stations in the northern and southern regions.

Power

Power development projects covered in the Plan include the installation of both production facilities and the distribution system to accommodate the anticipated increase in the demand of the industrial users. As part of the effort to diffuse development benefits to the outlying areas, a widening of the rural electric power system is contemplated. A feasibility study of the oil pipe lines connecting the East with the Northeast and the South is also planned. The third phase of the economic and engineering studies of the Pamong Project (lower Makhong basin) is also scheduled during the Third Plan period.

Social Development

Two objectives are of overriding importance in the minds of the Thai social development planners. The first is the improvement of welfare of the population while the second aims at changing the attitudes, behaviour and modes of living of the people in keeping with the times. It is officially admitted that the material gain brought about by the development effort of the last decade brings with it a host of social problems. In the eyes of the planners, the social problems that should be given adequate attention include unemployment, both urban and rural, land fragmentation, rural migration, employment safety and the cultural "tensions" concurrent with the development process. To cope with these problems, the Plan proposes a number of development measures which include rural public works, provision of information on the labour market, labour training, a more efficient land allocation system, community development, revision of the existing labour laws to provide for an appropriate collective bargaining process, extension of the welfare services for underprivileged groups, religious training in schools, and renovation and preservation of historical sites and shrines.
Urbanization and Local Development

The Plan pays special attention to the urbanization problems in the metropolitan region admitting that public investment in the social overhead facilities has heretofore been inadequate. The urban problems as visualized by the planners include the lack of comprehensive city planning, housing shortage and increasing slum areas, shortage of water supply, traffic congestion, sewage and drainage problems, and almost a total lack of parks and recreational activities.

To remedy the situation, it is proposed that the City Planning Act be promulgated during the first years of the Plan, that the metropolitan government be revised to ensure greater efficiency, that the now scattered housing authorities be amalgamated to take charge of all public housing activities, the water works authority be reorganized, a metropolitan traffic plan be drawn up, a special road authority be set up, and the construction of sewage and drainage systems be started.

Health

Standing out among the major programmes in the development of the health sector are the family planning programme aiming at reducing the population growth rate to 2.5 per cent per annum by the end of the Third Plan period and the programme for rural health which includes, among other things, the improvement of nutrition for the young rural population and the provision of the village water supply.

Education

Educational development activities encompass the upgrading of the different levels of education as well as increasing the number of school enrolment. For primary education, the programme includes increasing the number and upgrading the quality of the teachers as well as the provision of teaching materials to needy children. The strategic stage in the primary education ladder that receives special attention in the Third Plan is the last leg of the ladder, i.e., Grades 5 through 7, where it is estimated the school enrolment will jump from 32 per cent of the number of the Grade 4 population to 50 per cent by the end of the Third Plan period.
For secondary education, the development activities include the expansion of this level of education into some additional 180 districts where no secondary schools now exist and the improvement of special comprehensive secondary schools in the rural areas. To strengthen the quality of secondary education run by private schools, a private school teachers' training centre is contemplated.

Development programmes for vocational education include the improvement of agricultural and industrial vocational schools, which is an extension of the activities started during the first two plan periods, and the strengthening of the vocational teachers' training programme.

The guiding philosophy in the development of higher education under the Third Plan is to stress the quality of education in applied scientific fields, i.e., medicine, agriculture, science and education. Enrolment at the university level is expected to increase from 45,100 at present to some 63,500 by the end of the Third Plan period.

**Policy Instruments**

Policy instruments and measures envisaged in the Third Plan can be classified into four major groups:

1. those designed to correct the present and anticipated balance of payments difficulties;
2. those designed to maintain economic stability;
3. those designed to promote the desired change in economic structure; and
4. long term measures which will provide continuity in the planning process.

**Policies on the Foreign Trade Sector**

As the foreign trade sector is considered to be a limiting factor on growth during the Third Plan period, several policy instruments are contemplated and made explicit in the Third Plan.

(1) Export promotion measures. Three broad policy measures are proposed to boost export earnings during the Third Plan period:

(a) promotion of the line of export in which Thailand has a clear comparative advantage by way of tax incentives designed to lower the cost of production;

(b) public investment in overhead facilities to bring down the transport and service components in the cost of exports, e.g., expansion and improvement of the port facilities; and

(c) encouragement of private investment in silos and warehousing facilities for exporting agricultural produce is also contemplated.

(2) Measures to improve the import structure consist of:

(a) tax measures designed to reduce consumption by the wealthier classes of luxury goods having high import contents;

(b) promotion of import substituted products such as cotton, tobacco, pulp, iron ore and dairy products; as it is recognized that there is a long gestation period in promoting these products, the plan proposes that pending the successful implementation of this programme, the products may be imported through long term financing to alleviate current pressures on the balance of payments;

(c) discouragement of investment in the product lines already having excess capacities so as to prevent wastes in import contents; these industries will be encouraged to make fuller use of their capacities so that capital import capacities may be released for use in other industries; and

(d) outright curtailment of consumption good imports by way of tariff and, if necessary, by direct import control.
In addition, activities which bring in foreign exchange, e.g., tourism, airlines and shipping industries will be promoted while foreign exchange using activities including foreign travel by Thai citizens will be discouraged.

Measures to Maintain Economic Stability

The Plan is quite explicit in admitting that during the Third Plan period the Thai economy will be in an unfavourable financial position. During the period under the first two Plans the economic expansion has been accompanied by the built-in-stabilizers as tax revenues and cash on hand had accumulated along the way siphoning off the potential excess monetary demand. At the beginning of the Third Plan period the economy has turned into a lull, thus taxing the capability of the government to effect speedy adjustment. To correct the situation the following fiscal and monetary policies are proposed:

(1) Tax incentives will be given to export-oriented industries to assist in the recovery of the economy. It is recognized, however, that this measure, unaccompanied by the collection of other taxes, will reduce the tax base thus limiting the capability of the government to undertake needed development activities. Thus the long term planning and implementation of the overall tax reform programmes is deemed necessary for development and equity purposes.

(2) Ways and means will be found to effect speedy disbursement of public funds. In the past the ratio of the actual disbursement and budgeted allocation has shown a declining trend, thus creating an undesirable "fiscal drag". A number of factors have accounted for this slow disbursement process including inadequate operation planning, cumbersome fiscal and budgetary management and tardiness on the part of the financial personnel.

(3) Revision of the public debt policy. At present, the law stipulates a gross debt
ceiling at 20 per cent of the annual expenditure budget, with the result that the size of net borrowing depends on the amount of loan repayment in a particular year regardless of the economic conditions prevailing in that year. Thus the debt policy instrument is rendered a less potent tool for economic stabilization. The plan proposes that the ceiling should be stipulated on a net basis.

(4) Improvement of debt management. In the past, the government has primarily relied on long term debt financing, i.e., issuing long term bonds carrying high interest rate. This has at times resulted in an incongruent stabilization policy, i.e., long term bonds are issued at times of economic recession while it should have been more appropriate to issue short term, highly liquid treasury bills. This inappropriate use of the public debt instrument, apart from rendering it a less potent stabilizer, has also resulted in high financial costs. A reorientation of the debt management is thus required.

(5) A more effective monetary policy. The planners believe that the history of monetary policy has accounted for much of the economic stability experienced by the economy. During the Third Plan period, it is proposed that apart from the maintenance of stability, the monetary policy should have as one of its objectives the promotion of the desired change in the economic structure by using selective credit policies as promotional measures.

Measures to Promote the Desired Change in the Economic Structure

It is recognized that agriculture will continue to be the most important sector of the Thai economy, at least in the foreseeable future, while at the same time it has become increasingly apparent that reliance on traditional agriculture will not pay off. To accommodate the change
in the world demand structure while keeping agriculture at the front line, the following measures are proposed in the Plan:

(1) Strengthening the market for Thai rice. Apart from the abolition of the rice premium (the rice export tax) system and the sale of rice on a long term financing plan both of which had become effective prior to the promulgation of the Third Plan, the Plan also advocates the sale of rice on a barter basis and more aggressive trade policies towards importing countries.

(2) Improving agricultural productivity. The programme instruments include the introduction and extension of superior strains for priority crops, i.e., maize, soybean and coconut; the improvement of irrigated agriculture; allocation of land to landless peasants and the liberal provision of agricultural credit.

(3) Adjustment of the industrial structure. Measures will be given to promote priority industries by way of tax measures and provision of industrial credits on liberal terms. Industries on the priority list include those with good export prospects, labour intensive industries requiring domestically produced raw materials and industries which can be put up outside the metropolitan region.

(4) Promotion of the housing industry. This industry is singled out in the Plan for special consideration because it is an immediate job creator and because it has a low import content.

(5) Development of national resources. Attempts in this area will be directed towards surveys of natural resources such as land, water, forest and mineral resources and the introduction of efficient utilization process consonant with the conservation requirements.
Long Term Policy Instruments

To provide continuity between the Third and subsequent Plans and to indicate the direction where the economy is going, the following guidelines are offered in the Third Plan:

(1) Agriculture will continue to be the most single important sector but changes in the composition of the sector towards more modernized elements will be necessary. Agriculture-related industries and services will be promoted and encouraged.

(2) Thailand will continue to subscribe to the free market system within the framework of overall social benefit principle. As such, the government will play an important role in formulating development policies as well as implementing these policies. It will actively guide the development efforts, both in the public and the private sectors. Thus cooperation between the government and the business community is to be actively sought and maintained.

(3) The diffusion of economic growth among the regions is considered an important developmental goal. Efforts will be directed towards seeking active participation in the growth process by the different groups, especially by the farmers who form the bulk of the population.

(4) Population planning has become a long term measure to achieve a reasonable balance in the man-resource ratio. Population control activities have still been limited but the fact that there is an official population policy which is publicly proclaimed is an important step forward.

The Role of the Private Sector

Every development plan has advocated the efficient functioning of the free market system subject to the social benefit constraint. Public development efforts thus far have been directed towards providing social overhead facilities needed for the private sector's development, and
towards developing measures affecting the nature and the
direction of the private sector's growth.

It is estimated that during the Third Plan period, the
demand for investible funds originating from the pri-
ivate sector would amount to 13,100 million baht compared
with 92,000 million baht estimated under the Second Plan.1
The private sector's demand constitutes some 67 per cent
of the total demand for investible funds during the Third
Plan period. A large amount of these fund requirements is
expected to be supplied by retained earnings, the unorga-
nized market and foreign sources, while about 15 per cent
is estimated to be generated from the organized financial
institutions and money and capital markets. Table VII
indicates the different sources of investible funds.

Special attention is paid in the Third Plan to the
identification of the measures to induce the organized
financial market to make greater contributions to the
development of the private sector. The whole gamut of the
public policy measures includes: (1) the special privileges
to be granted to the commercial banks which are actively
involved in providing agricultural credits and loans for
local development; (2) extension of rediscounting services
offered by the Central Bank to the commercial banks, the
Bank for Agriculture and Agricultural Cooperatives and the
Industrial Finance Corporation of Thailand; (3) greater
equity participation by the government in the capital
structure of the Bank for Agriculture and Agricultural
 Cooperatives; and (4) designing a more effective control
system for insurance companies, aiming at increasing public
confidence in their transactions. Several measures are
also contemplated to develop a small and young capital
market in the country, including legal and tax measures
designed to encourage the creation of public companies,
private pension and provident funds.

The role assigned to the private sector can be
better appreciated by investigating the public policies
towards its main competitors, i.e., the state enterprises.
A state enterprise is legally defined as one in which all
or more than 50 per cent of the equity capital belongs to
the government.2 As defined, there are at present 80 state
enterprises, 49 of which the government possesses total

1Ibid., p. 142.
2Ibid., p. 146.
**TABLE VII**

Sources of Investible Funds in the Private Sector 1972-76

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>(million baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic corporate and household savings</td>
<td>96,700</td>
</tr>
<tr>
<td>Foreign sources</td>
<td>13,850</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>20,450</td>
</tr>
<tr>
<td><strong>Commercial Banks</strong></td>
<td>12,500</td>
</tr>
<tr>
<td>Bank for Agriculture and Agricultural Cooperatives</td>
<td>3,250</td>
</tr>
<tr>
<td>Industrial Finance Corporation of Thailand</td>
<td>1,700</td>
</tr>
<tr>
<td>Small Business Finance Office</td>
<td>300</td>
</tr>
<tr>
<td>Insurance Companies</td>
<td>200</td>
</tr>
<tr>
<td>Money and Capital Markets</td>
<td>2,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>131,000</strong></td>
</tr>
</tbody>
</table>

Source: The NEDB, The Third Five-Year National Economic and Social Development Plan, p. 142.

Note: Net Investment.
ownership, the rest being partially owned. The development expenditures of state enterprises were estimated at 8,655 million baht in the First Plan, 9,858 million baht in the Second Plan and 21,257 million baht in the Third Plan. The figures for the first two Plans are not comparable to the one estimated for the Third Plan as the latter includes both the expenditures on "development projects" and the investments in regular assets while the former includes the first type of expenditures only.

The past performance of the state enterprises during the first two Plans left much to be desired, as explicitly admitted in the Third Plan. Major difficulties which have accounted for poor performance, and in some cases, outright losses, are listed below:

1. Poor management. It is found that many state enterprises have not formulated long range plans for their operations, resulting in misallocation of investment funds, inadequate control system and poor staffing.

2. Inadequate market research and marketing planning. This has resulted in poor sale performance and high cost of sales.

3. Poor accounting and performance reporting system. This gives rise to inadequate working capital and cash management.

4. Some state enterprises have travelled far from the territories demarcated for them by laws and by public policies to compete directly with the more efficient private enterprises.

5. Profitable public enterprises have tended to reinvest their profits in lines which may not be consonant with the national development objectives while in some cases it might have been more desirable to

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1Ibid.
2Ibid., p. 149 and Table 2, pp. 156-157.
3Ibid., pp. 152-153.
transmit earnings to the public treasury for better utilization elsewhere.

To remedy the situation, the following policy guidelines concerning public enterprises are proposed in the Third Plan.¹

(1) The enterprises to be given support to maintain their present state enterprise status are:

(a) public utilities;

(b) enterprises requiring substantial investment with low economic returns during the initial period but with good prospects for substantial subsequent returns; once self-supporting, these will be sold off to the private sector;

(c) enterprises which are security related monopolies which must be reserved for the government for revenue purpose and those which should be government run for the purpose of training and increasing the Thai entrepreneurial ability; the merit of maintaining the state enterprise status of the enterprises of this nature will be considered on a specific case basis; and

(d) enterprises which, if left to the private sector, would be monopolized, or enterprises which should be state owned to maintain price stability.

(2) As a general rule, the state will not set up new enterprises nor expand existing ones to compete directly with private firms except in cases warranted by public interest and security consideration.

(3) The government will tailor activities of state enterprises to place them in line with the national development policies as well as to improve their management to achieve efficiency.

¹Ibid., pp. 153-154.
The government will review the activities of all state enterprises to ensure that the guidelines and policies originally laid down for them are adhered to.

Administrative Machinery for Planning and Implementation

The administrative machinery for the development planning and implementation has been evolving through experience and commitment, from a rudimentary skeleton since the introduction of formal development planning in Thailand to a more sophisticated and systematic machinery as it stands at present. The machinery may be discussed at the national, regional and local levels.

I. National Planning Machinery

Planning at the national level is carried out by the cooperative efforts of the National Economic Development Board (the NEDB), the central planning agency, the individual ministries and departments responsible for development activities in specific sectors, and the agencies involved in central financial and fiscal functions, i.e., the Bank of Thailand, the Budget Bureau, the Ministry of Finance, and the Department of Technical and Economic Cooperation. The bulk of the central planning function rests with the NEDB whose activities are described below but the coordination network extends to all of the agencies mentioned above.

The National Economic Development Board is organized into three layers, i.e., the Board, the Executive Committee, and the Office of the NEDB which serves as the Secretariat of the Board.

Members of the Board include the Prime Minister and the Deputy Prime Minister, who serve as the Chairman and the Vice-Chairman of the Board respectively, the Secretary-General of the NEDB, and other qualified members appointed by the Cabinet. The Board meets infrequently, usually once a year, to decide on matters submitted to it by the Secretariat and to formulate broad policy guidelines.

The planning machinery as well as the functions of the Office of the NEDB are described in detail in Snoh Unakul, "History of Economic Development Planning in Thailand", op. cit.
Operative functions are relegated to the Executive Committee of nine members who usually meet once a week to decide on matters within the jurisdiction of the NEDB. The staff work is carried out by the Office of the NEDB, which is a government unit having a departmental status headed by a Secretary-General and attached to the Office of the Prime Minister.

The functions of the Office of the NEDB as prescribed by the National Economic Development Board Act are to:

1. propose, in the light of the analysis and examination of the economic conditions of the country, for study by the National Economic Development Board the economic development objectives and policies for achieving economic development and maintenance of economic stability;

2. evaluate, in cooperation with respective ministries and departments, economic plans and development projects originating from such ministries and departments and to prepare an aggregate development plan for a given period of time in the light of development objectives and available resources as well as of the priority in allocating resources for approval by the National Economic Development Board;

3. examine matters concerning existing and potential resources and propose for consideration by the Board alternative courses of action by which the government may meet its financial requirements;

4. prepare recommendations, in cooperation with the ministries and departments concerned, on matters involving acquisition of assets by state enterprises and their financing;

5. investigate actual expenditures and budgetary requests for the maintenance of assets used in promoting economic development and make recommendations on the revision of such expenditures to ensure efficiency;

*Ibid., pp. 121-123.*
(6) investigate actual expenditures and budgetary requests for providing economic services and make recommendations on necessary revisions;

(7) evaluate requests for foreign technical and financial assistance and foreign loans, advise on project requests and coordinate, in cooperation with ministries and departments concerned, foreign assistance requests; in this connection the Office of the NEDB may recommend such additional assistance requests as may be deemed necessary;

(8) investigate and make progress reports on the implementation of development projects as well as recommend more speedy action on, or revision and liquidation of, any projects as may be deemed desirable;

(9) propose for consideration by the National Economic Development Board any policy measures designed to promote economic development;

(10) evaluate and prepare development plans of corporations and juristic partnerships which are non-state enterprises but in which the government has equity participation when such enterprises agree to abide by the procedures laid down for state enterprises; and

(11) perform any other functions stipulated by laws.

The proposals, recommendations and advice which are not to be submitted to the Board must be placed before the Council of Ministers.

The list of the functions of the Office of the NEDB described above indicates the comprehensive nature of the activities performed by the Office. It should be noted, however, that in all cases no final authority rests with the Office: either it must seek the approval of the Board itself or it has to refer to the Council of Ministers.

Operating procedures followed by the Office of the NEDB may be briefly summarized here. All matters referred to the NEDB by the various ministries, departments and state enterprises will be first studied by the staff economists
of the NEDB. This may involve joint efforts of the NEDB staff and the staff of the ministries and departments concerned. The matters are then submitted to the NEDB Secretary-General, who will then make appropriate comments or instructions on the matters and pass them on to the Executive Committee of the Board for further consideration. The Executive Committee, in deliberating on the matters, usually requests the staff economists, or in some cases, the staff of the originating ministries and departments, to present their arguments and then reach their own decisions. The matters may then be passed on to the Prime Minister in his capacity as Chairman of the Board or may be referred back to the Office of the Board as deemed appropriate.

Any matters to be submitted by the Office of the NEDB to the Board itself must be first scrutinized by the Executive Committee of the Board.

As regards the relationships between the Office of the NEDB and the ministries, departments and state enterprises, the procedure is that the projects originating from these organizations are studied jointly by their staff and the staff of the Office of the NEDB. By nature of its staff functions, the Office of the NEDB does not originate nor write up detailed projects for the operating departments but will give advice on project preparation, project analysis and the analysis of the relationships of a given project to the overall development policies, the spillover effects of a given project on other projects, and the interrelationships between a given project and the aggregative resource constraints.

The planning functions of the Office of the NEDB require that close coordination be maintained between it and the Budget Bureau, which is responsible for the preparation of the overall annual budget. Especially important is the allotment of annual development and current expenditures in line with the expenditure pattern indicated in the Plan. At present, there is a close working relationship between the Office of the NEDB and the Budget Bureau but there is room for improvement in their coordinating efforts. Firstly, it appears that the two agencies have not reached agreement on the definition of the "development expenditures" and on the criteria to appraise a development project. Secondly, agreement should be made on the progress reporting of the implementation of development projects so that annual budget allocation may be more in line with the economic justification as visualized by the planners.
The interrelationships among the different components of the NEDB and between the NEDB and other agencies are depicted in the following chart.

II. Regional Planning Machinery

Growing regional income disparity has been a major concern of the Thai government for quite sometime but attempts to find a solution to this widening gap by ad hoc regional policy measures during the periods under the first two plans had not proven successful and the regional income differences grew wider. The realization that the regional dimensions of the first two plans were inadequate has led to a more systematic attempt at regional planning for the Third Plan.1

The country is geographically divided into four regions: the North, the Northeast, the Central Plain and the South. For development purposes, however, the NEDB classifies the country into six development regions by subdividing the Central Plain into three development regions: the Central, the East and the West, while keeping the other geographical regions intact. A Regional Development Committee has been set up for each region with broad functions related to regional development. Two Regional Planning Projects have been initiated, one for the Northeast (North East Economic Development Project, or NEED), the other for the North. A summary of the "plans" for the two regions appear in the Third National Plan.2

III. Local Planning Machinery

Two types of local plans may be distinguished for discussion purpose: those for local governments, and those for the provinces, the subsidiaries of the central government. The coverage of development activities of local

1For the history, techniques and principles of regional planning in Thailand, see Nok Unakul, "Principles and Policies in Regional Planning", in Monetary and Fiscal Policies and Economic Development Planning in Thailand, op. cit., ch. 42, in Thai.

2Actually what appears in the Third Plan are not the "plans" for the two regions as such but rather brief statements of objectives policy guidelines as well as some major sectoral development projects to be undertaken in the two regions.
The Executive Committee of the NEDB

Various National Committees

Ministry of Finance

The Bank of Thailand

The Budget Bureau

Department of Technical and Economic Cooperation

Ministries and Departments

The Prime Minister Chairman of the NEDB

Council of Ministers

Committees Sub Committees Working Groups

Specific Development Committee appointed by the Council of Ministers

Autonomous State Enterprises

Other Organization and Government Institutions

Operating line

Coordinating relationship

Resolution of the Council of Ministers

Instruction of the Prime Minister

governments under the first category includes the development of the Bangkok Municipality and the development of activities of all other local governments. The plan for these local governments is treated as an integral part of the Third National Plan and appears as its 14th chapter. However, the plans for provincial development in the northeastern region do not appear in the Third National Plan.

The section of the Plan for Bangkok Municipality incorporates a broad assessment of anticipated major urban problems of which four were singled out: city planning, housing, water supplies and traffic congestion; a list of major measures and projects envisaged during the Five-Year Plan period; and the size and sources of financing. For other local governments, the content of the plan generally follows the same pattern.

The local plan of this type was prepared through the joint effort of the local government organizations and the NEDB, the central planning agency. The NEDB sent out questionnaires to be filled out by the local governments stating their plans of operations for the five-year period as well as the anticipated size and sources of financing. The sources of financing include the local governments' own revenues and grants from the central government. The programmes and projects were then submitted to the NEDB through the Department of Local Administration and were screened and adjusted by the NEDB planning staff and the staff of other agencies concerned with local governments. The coverage of the local development plan as appeared in the National Plan is not limited only to those activities to be performed by the local governments themselves but also extended to the provision of public facilities in the local areas by the various central government agencies.

The link between the local plan of this type and the regional plans is non-existent, simply because the local plan covers the development activities in specific local jurisdiction while the regional plans deal with economic sectors ignoring the spatial dimension. The local plan and the national plan are linked together simply by the fact that the former is treated as one of the "sectors" of the latter, and also that some of the local development funds will have to be financed from the central government grants.

Apart from the plan for local government organizations, which appears as a separate "sector" of the National Plan, there are 15 Provincial Development Plans prepared by each of the province in the Northeast, which have been
singly set out for an experiment on provincial planning on account of the relatively urgent need for local development of this region. 1

Each Provincial Plan is prepared by the Provincial Planning Project Committee appointed from provincial officials. The Committee is assisted in technical matters by the centrally appointed Provincial Planning Working Group, chaired by the Director-General of the Department of Local Administration with representatives from central operating agencies involved in local development as members. The NEDB has also prepared a provincial planning manual for the local committees to ensure consistency in methodology. Coverage includes macro considerations such as economic and social situations of the province, development objectives, financing and sectoral development projects. Development activities of all operating agencies, including the local governments, planned to be undertaken in a province are included in the Provincial Plan. The Provincial Plans, upon completion, are supposed to be submitted to the Regional Development Committee for inclusion in the Regional Plan, and ultimately passed on to the NEDB for inclusion in the National Plan. Thus the links between the three levels of plans will be more or less formed through the process of summation along the sectoral and functional dimensions. At present, these links have not yet been established.

Machinery for Plan Implementation

Implementation of a plan may be discussed at two levels: implementation of policies and measures proposed in the plan and execution of development projects by operating agencies. At the national level, planned policies and measures are implemented through the resolution of the Council of Ministers, the highest executive body, and, in some major cases, through the legislative acts. The execution of development projects is translated into annual implementation through the annual budgetary process.

The NEDB has access to the highest political leadership through a number of channels. Organizationally, the Prime Minister chairs the Board while members of the Cabinet serve as advisors to the Board. The Board members

1 For details in provincial planning, see Snoh Unakul "Techniques in Provincial Planning", in Monetary and Fiscal Policies and Economic Development Planning in Thailand, op. cit., ch. 45, in Thai.
are drawn from qualified personnel in various fields. The members of the Executive Committee of the Board are appointed from high-ranking government officials and retired personnel usually well regarded by the political leadership. The Secretariat of the NEDB is attached to the Office of the Prime Minister. Moreover, the Secretary-General of the Board, who supervises the work of the Secretariat, has access to the Prime Minister through regular briefing sessions. Of course, access to the high political leadership does not necessarily guarantee the approval of the Council of Ministers of policies and measures proposed by the NEDB, but on the whole the degree of success has been fairly high. In this connection, however, it should be noted that the NEDB as the central planning agency has contributed relatively little in terms of specific economic policy matters except to lay down broad development guidelines.  

At the operating level, the working relationships between the Budget Bureau, the NEDB, the concerned ministries and the Ministry of Finance are crucial in translating the plan into annual implementation. More will be said on this matter later.

At the regional and local levels, implementation of the plans is constrained financially by the amount of financial resources made available for spending directly by the central operating agencies in the regions or in the local areas, or indirectly as grants to the local authorities as well as by the revenue proceeds of the local governments themselves. Given the limited tax collection authority of the local governments and the tax base, sizable central government grants are required each year to implement the development projects. The Department of Local Administration and the Office of Accelerated Rural Development in the Ministry of Interior serve as the coordinating bodies through which the central government grants are given to the local authorities. Grants are divided into three categories: general and specific grants, and grants for primary education. The general grants are nominal and are given on welfare bases determined some years back while the specific grants are evaluated on a project basis involving the usual bargaining process between the coordinating bodies and the Budget Bureau. Grants for primary education are given from the Ministry of Education's budget to Provincial Administrative Organizations through the

1Snoh Unakul "Annual Planning in Thailand", in *ibid.*, ch. 37, p. 542.
Department of Local Administration. A host of problems and issues exist in the area of grant management, notably the lack of systematic allocation procedure, inefficient grant disbursement system and the problem of grant control.¹

III. MAJOR PROBLEM AREAS

Technical Problems in Planning

As mentioned earlier, the planning process in Thailand has been continuously improved from a mere assembly of public development projects to a more detailed planning with some sort of macroeconomic model to ensure the internal consistency of the plan. Yet several problem areas can be identified where further improvement can be made. To facilitate the discussion, the problem areas may be classified according to their scope, i.e., at the macro, micro and sub-national levels.

I. Macro Economic Planning

Macro economic planning in Thailand involves the setting up of the macroeconomic targets, establishing overall economic balance, the estimation of the size of population, the financing of the plan as well as manpower and employment planning.

The process of establishing macro targets and overall economic balance involves fixing the targets for exogenous variables of which three are important: (1) export earnings, government expenditures and the desired level of foreign exchange reserves; (2) fixing the overall GDP growth target within the capacity constraints; and (3) the development of the expenditure model to test the consistency of the GDP estimates derived from production data and the articulation of the government policy instruments to make the growth targets achievable.\(^1\)

For forecasting purpose, exports are divided into four major groups:\(^2\)

1. traditional exports including rice, rubber, tin and kenaf;
2. significant products: maize, soybeans, groundnuts, shrimp, silk and livestock;


\(^2\)Ibid., pp. 493-494.
(3) Products which have good export prospects, but whose production costs should be brought down to be competitive in the world market, include tobacco leaves, mungbeans, cotton, oilseeds, fluorite and certain industrial products using local raw materials; and

(4) Other export products.

Two working groups consisting of the staff of the operating agencies and representatives from the private sector involved in export trades were set up for the purpose.

The overall economic target of the Third Plan, i.e., the GDP growth rate of 7 per cent per annum, was fixed on three basic considerations: 1

(1) The GDP growth rate should be sufficiently high not to generate an unacceptable unemployment rate.

(2) The growth rates of respective sectors, the summation of which is an overall growth rate, should be consistent with the desirable changes in economic structure as dictated by the change in the demand structure.

(3) The overall growth performance should be within the capacity constraints in each economic sector.

In determining the size and financing of the plan, the Office of the NEDB in preparing the Second Plan relied on the incremental capital-output ratio which, when applied to the estimated growth in output, gave the size of the investment required. In preparing the Third Plan this practice is abandoned as it was believed that the incremental capital-output ratios computed were not realistic for an agricultural economy like Thailand where the vagaries of climate and world market conditions loom large. 2 For the Third Plan, the expenditure model referred to above was constructed and used to estimate the endogenous variables of the system. The exogenous variables include government

1 Ibid., p. 495.
2 Ibid., p. 491.
investment and consumption expenditures, earnings from export of goods and services and proceeds from export taxes. The targets for these exogenous variables were arrived at through studies of each important item by special committees with the Office of the NEDB acting as the coordinating body. The simultaneous solution to the system yields values for the Gross Domestic Product, private consumption and investment expenditures, and different categories of imports.\(^1\) This expenditure model was used to test the GDP growth determined independently by the production approach.

Three problems may be raised here. For a country whose exports are largely agricultural, the difficulties in making accurate forecasts should be evident, given the vagaries of weather, the violent changes in the agricultural price levels in the world market, and the changes in the tariff and non-tariff policies of the importing countries. A model which hinges heavily on the highly uncertain future export earnings must therefore be taken very cautiously. Moreover, no intensive foreign market research activities exist to provide the planners with basic information on which to make sound forecasts.

The second problem is concerned with the treatment of private investment expenditures. For prediction purposes, the parameters obtained from a linear regression of investment on changes in GNP might be employed in estimating future investment expenditures. But as investment is an important determinant of the changes in GNP, one would probably need to isolate the exogenous effect of investment on changes in income. This gap has been partially filled by treating government investment as an exogenous variable. Yet one would be happier if the effect of the total investment expenditure on changes in income is taken into account.

The third problem is that the reliability of the GDP estimates is determined in large part by the reliability of production data. It is known that agricultural production data, despite the long history of collection in some cases, still leave much to be desired in terms of reliability and coverage. In the case of paddy production which looms large in the national income estimation, for example, there are at least four different data sources giving conflicting figures. The time series collected by

\(^1\)Ibid., pp. 500-506.
the Rice Department invariably indicate a lower production than what can be substantiated by the Agricultural Census or by the per capita consumption figure revealed by the Household Expenditure Survey, and by the evidence from crop cutting surveys conducted by the National Statistical Office. In estimating annual production for national income accounting purpose, the NEDB adjusted the Rice Department's figures by a correction factor determined largely from the result of a survey.¹

Production data on other major crops and on livestock were also adjusted by appropriate correction factors.

The criticism on the reliability of production data loses some weight, however, if the interest centres around the trend because in that case, consistency in the method of estimation is of primary importance. The Office of the NEDB has apparently decided on the estimation method and revised the national account series back to 1960 using the same estimating procedure.

Another data problem which should be noted here is the inconsistency of the fiscal year, the crop year and the construction season. In 1961 the start of the fiscal year was changed from January 1 to October 1 which is the beginning of the long dry season during which government construction activities can be undertaken without interruption. But the budget calendar requires that revenue and expenditure estimates be submitted for consideration to the cabinet by the middle of June so that the budget may take effect on October 1. Now the estimation of revenues hinges heavily on the estimate of the rice production, the planting of which starts only in June. "Since the planting may be delayed in certain years and in certain parts of the country, and rice production may be greatly affected by the course of rainfall during the growing season, it is extremely difficult to predict accurately in May and June the amount of rice crop in the current year".² This problem is particularly serious in connection with annual planning.

The Office of the NEDB has become increasingly conscious of the need for inter-industry analysis to establish planning consistency among different sectors, and has for a

long time pushed for the construction of an input-output table for the economy of Thailand. It appears that a preliminary 54 x 54 table may be completed in time for the preparation of the Fourth Plan. Two basic problems may be identified in this connection, i.e., the paucity of the data needed and the lack of technical capabilities on the part of the NEDB staff. A few inter-industry studies are being undertaken on a piecemeal basis by the NEDB but these are a far cry from the workable inter-industry matrix. A necessary data input for the construction of an input-output table is a good census of the industrial sector from which inter-industrial technical coefficients may be computed. The first industrial census in Thailand was undertaken in 1964 covering the 1963-64 period, but the types of the information obtained, inadequate coverage and the unreliability of the responses made the construction of the input-output table unfeasible while the second industrial census is not yet in sight.

At present, a Japanese specialist is being assigned to the Office of the NEDB to get the inter-industry study project off the ground. No Thai technical counterparts, however, can be found to collaborate with the Japanese expert who is being assisted only by junior staff with no previous exposure to this type of work.

Under the present circumstances, the best one could hope for is what has been recommended by the Japanese specialist, i.e., the construction of preliminary input-output matrix using technical coefficients which have been found to exist in other developing countries and from piecemeal studies made by the NEDB. Given the lack of data and technical expertise on the part of the Thai staff, the construction of a comprehensive input-output matrix derived from local conditions does not appear likely before the Fourth Plan to be commenced in 1976.

Another weak spot in overall planning in terms of the quality of the data and the technique used is the planning for manpower and employment. The objectives of manpower development are:

1. From an interview with the Chief of the Capital Formation Division, Office of the NEDB.
3. From an interview with the Chief of the Capital Formation Division, Office of the NEDB.
(1) to generate sufficient employment to absorb the increasing labour force, and

(2) to improve the quality and quantity of human resources needed for development.

The increase in the labour force was determined by the growth in population and by the assumption on the anticipated participation rate. The Third Plan envisages a decline in the population growth rate from the present 3.2 per cent per annum to 2.5 per cent per annum by 1976, the end of the plan period.\(^1\) This goal appears rather ambitious given the existing high rate of growth and the small-scale family planning currently practised. The participation rate, however, is unlikely to undergo a radical change, especially in the short run.

Other dubious assumptions were made in the projection of the balance between future growth in the labour force and the employment potential, the most important of which are the projected labour productivity increases in different sectors. The indices of labour productivity were given by the GDP per worker and assumptions were made as to the likely changes in sectoral GDP per man.\(^2\) Missing from the calculation is the likely capacity utilization rate, the probable changes in the choice of techniques and the probable effects in the improvement of the organizational methods on labour productivity.\(^3\) It is in these specific areas that research studies are needed to generate necessary information for planning purposes.

II. Micro Planning

At the micro level, two major problems may be identified. The first is that greater interest and more time have been devoted both by the central planning staff and the staff of operating agencies towards project evaluation

\(^1\) The Third Plan, p. 190.

\(^2\) These same assumptions were made in manpower planning for the Second Plan, see Office of the NEDB, "The Methodology for Preparing the Second Economic and Social Development Plan of Thailand", op. cit., pp. 59-60.

\(^3\) These criticisms were voiced with respect to the Second Plan, in ibid, and are also applicable here.
rather than piecing various development activities together as a package whole.\textsuperscript{1} In other words, development activities are considered rather on a project basis but inadequate attention has been paid to sectoral programming.

Another problem is the lack of efficient information system relevant for planning and implementing decisions. Good planning requires that important and relevant information be made available in a reasonably short time. It would be pointless to expect the complete availability of all information needed for planning purposes but the present information system is such that the available information is not made in the form relevant for planning. A major case in point is the classification of the project expenditures for budgetary approval. The budget is usually submitted by operating units using the standard classification, i.e., salary, land and equipment, materials and supplies, etc., but this system of classification applies to the total budget proposed by the operating units and not at the project level. In most cases, the expenditures proposed for a given project appear as a lump sum, making it impossible for the planners to identify the different cost components of the project. Thus when the budget of an operating unit is cut, the cut applies across the board affecting all projects, or certain cost components of all projects. Until the various cost components of the project can be identified and grouped according to the standard classification, the process of budget allocation for development purposes would be misguided.

\textbf{III. Sub-national Planning}

At the sub-national level, a major problem lies in the fact that the regional analysis and planning techniques used were sectoral in nature based on conventional sectoral accounts with little consideration of the spatial dimensions. The link between the regional plan and the national plans appears to be such as would tend to negate the whole concept of regional planning. For example, the development outlays recommended for the Northeast by the North East Economic Development Planning Advisory Group was merely a summation of the public development expenditure estimates proposed by various operating agencies to be included in the Third National Plan and to be expended in the Northeast.

\textsuperscript{1}\textit{Snoh Unakul, "Annual Planning in Thailand"}, \textit{op. cit.}, p. 530 and pp. 553-554.
during the plan period. Thus the national development funds were merely regionalized on the sectoral basis instead of being allocated on the basis dictated by regional comparative advantages, existing as well as potential. This same observation is also applicable in the case of provincial planning which has been attempted in every province in the Northeast region.

Political Constraints

Planning is an effective exercise insofar as it is fully accepted and given support by the highest political leadership. As has been indicated in several places in this study, the Thai political leaders have begun to be committed to planning as an instrument for national development. Several constraints, however, still have to be faced by the Thai planners, the major ones of which are summarized here.

Firstly, although the Council of Ministers as a group is committed to planning and although several key ministers serve as advisors to the NEDB, this sense of commitment has not been equally shared among the top cabinet ministers. There have been occasions where certain influential cabinet members have shown apathy (and one may go so far as to say "outright antagonism") towards the NEDB, the central planning agency. The relationships between the ministries and the Office of the NEDB depend very much also on the personalities of the top executives of the planning Board itself. Over the years the relationships between the Board and the operating agencies have been carefully cultivated with the staff of the NEDB realizing that the burden is on them to sell the planning ideas. Yet these relationships have left something to be desired, as evidenced by the fact that important projects originating from the ministries have not been submitted to the Executive Committee of the NEDB for scrutinizing.

Secondly, by nature of their coordinating function, the planners have to come to grips with political jealousy among operating agencies, especially when vested interests are involved. Thus it may happen that certain projects fall within the jurisdiction of an operating unit but do not get approved by the highest authorities on the grounds that influential organizations will not get credit for the

job if they are not given the authority to execute the projects. There is not much one can do about this political reality as political infighting will always exist, but ways and means should be found to reach a compromise in one way or the other so that the projects get started instead of being in a state of impasse to the detriment of the public.

Thirdly, the NEDB is directly concerned with planning for development expenditures while the Budget Bureau has the authority in the preparation of the annual budget and the Ministry of Finance has the responsibility in making revenue estimates. The Budget Bureau generally accepts the Five-Year Plan as a guideline for budget preparation yet it could always exercise its "legal rights to make its own judgements on the annual budget receipts and expenditures, whether developmental or non-developmental". An attempt has been made to institutionalize the coordinating machinery by setting up a high-level Financial Policy Subcommittee. The Chairman of the NEDB Executive Committee served as Chairman of this Sub-committee and its other members were the Under-Secretary of State, Ministry of Finance; the Director of the Budget Bureau; the Director of the Fiscal Policy Office, Ministry of Finance; the Governor of the Bank of Thailand; and the Secretary-General of the NEDB. As is true of numerous other committees and sub-committees, the lack of active participation of certain key members has effectively put the Sub-committee out of action even before it started functioning. The coordinating work has, however, continued through unofficial agreement among the parties concerned and also through personal contacts outside of the official channels.

Socio-cultural Constraints

There do not appear to be overriding socio-cultural constraints acting directly upon the planning process in Thailand. The individualistic nature of the Thai people may make difficult the realization of group effort which is essential to the planning process but the national trait does not prevent planning to take place. Also the pragmatic rather than the ideological approach to the pursuit of national goals automatically makes for flexibility in executing the plan. This is all for the better as the changes in the circumstances may be adequately accommodated. There

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2 Ibid., p. 546.
always exists the possibility, however, that given individualism and pragmatism, planning may be taken too lightly and hence no serious commitment is given to the planning process itself.

One may argue that the long subjugation of the Thai people to autocratic rule both before and after the advent of the constitutional monarchy makes it difficult to elicit the popular participation of the masses in the planning process, thus rendering the "bottom-up" approach planning an irrelevant concept in the case of Thailand. What appears in the plan and what is undertaken by the government is almost exclusively what the government or the planners believe the people want. It is not fruitful, however, beyond a certain point, to press for the type of planning as dictated by the "felt needs" of the populace as there are limitations to the degree to which those "felt needs" can be translated into a formal plan at the national level. A proper place where this transformation of the public needs into government action would seem to be at the local government level and it is here that popular participation has never been strong in Thailand. To cope with this problem requires a major overhaul of the local government system, the subject of which cannot be adequately dealt with here.

Administrative Obstacles

Development planning and implementation operates within an administrative system which may impede or facilitate the functioning of the planning process. The present administrative setup in Thailand poses a number of problems in the organization for planning and implementation.

(1) Inadequate coordination among different government units concerned with essentially the same task. For example, at least three organizations are involved in the provision of water supply to the rural population, i.e., the Department of Health, Ministry of Health; the Department of Mineral Resources, Ministry of Industry; and the Department of Local Administration, Ministry of Interior; but coordination among the three in terms of setting up priority lists in well digging and scheduling is lacking. Also there apparently has not been a coordinated effort among the agricultural extension service, agricultural research organizations and agricultural credit institutions. Other
examples of the lack of coordination among government units can be adduced, especially in the field of industrial development and public utilities. During more than a year of absolute rule after the coup in 1971, the National Executive Council had attempted to simplify the administrative setup and to facilitate coordination among government units by amalgamating the units which had duplicating functions, such as putting the previously scattered housing activities under the newly created National Housing Authority, creating coordinating committees, such as the Committee on Public Utilities Planning, the Committee on Rural Development, etc. These measures constitute a step forward in the attempt to achieve better coordination and should be welcome as they are long overdue.

(2) Excessive centralization of authority in the capital city. The present administrative setup does not permit flexible implementation of the development plan as the authority of the provincial governors and district officials is quite limited. There are many instances where a provincial governor has to refer to a director-general in Bangkok for approval before he can disburse even a small sum incurred in executing rural development projects.

(3) Bureaucratic personnel management. The weakness of the Thai civil service system has long been recognized and many attempts have been made to improve the efficiency of the system. Underlying this poor state of affairs is the incentive system which does not encourage work productivity. The low basic pay scale, the promotion scheme which rewards mediocre performance, and the fact that in some cases, individual talents are not fully utilized because of misplacement, bureaucratic rules and regulations, lead to a demoralized civil service system and the bidding away of scarce talents by private enterprises. Although the net loss to the government is a net gain
to the private sector, the economy as a whole is likely to suffer from this "brain-drain" as the mediocre or downright inefficient performance of the former is likely to damage the functioning of the latter. It is not implied here that all those who remain in the service are of mediocre capability; on the contrary, many have outstanding qualifications, but in order to supplement their income, not a few have to spread themselves thinly over several positions with the end result that activity is likely to suffer.

Manpower Constraints

Manpower constraints upon development planning in Thailand apply to all levels: national, ministerial as well as local. At the national level, the Office of the NEDB with its varied planning functions, has been and still is understaffed. Table VIII below shows the number of professional staff of the Office of the NEDB, the sources of their academic degrees.

TABLE VIII
Professional Staff of the Office of the NEDB
(1973)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Doctorates</th>
<th>Masters</th>
<th>Bachelors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>4</td>
<td>76</td>
<td>16</td>
<td>8</td>
<td>104</td>
</tr>
<tr>
<td>Local</td>
<td>-</td>
<td>11</td>
<td>100</td>
<td>1</td>
<td>112</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>87</td>
<td>116</td>
<td>9</td>
<td>216</td>
</tr>
</tbody>
</table>

Source: From the file of the Personnel Section, Office of the NEDB.

The number of professional staff shown in the above table does not indicate the scarcity of the technical capability in planning which is generally admitted.1

1See, for example, Snoh Unakul, "Annual Planning in Thailand", op. cit., p. 538.
Of the four doctorates listed, only one is in economics while the others are in mathematics, law and public affairs. The bulk of the bachelor's degree holders are junior staff, who have limited experience having just graduated from college. Yet, the scarcity of the technical capability is greatest at the middle and upper levels where a high degree of professionalism is required. The number of foreign master's and bachelor's degree holders may look impressive but the figure does not indicate the effective contributions to planning capability of these personnel, as many of them lack the skills required.

Moreover, the manpower problem faced by the NEDB is that the rate of turnover of the professional staff is rather high, especially at the strategic levels. The reason behind this is that highly capable personnel with years of experience behind them will naturally be offered positions elsewhere, which are more lucrative or more glamorous, or where there are better prospects for promotion. It is estimated that an average of three years of experience is required to produce a good economist-analyst.¹ The high rate of turnover of top professional staff having the status of the Chief of Division or higher will probably lengthen this gestation period. During the period of less than the past two years, the Office of the NEDB has lost at least three top planners to other government organizations, including a Deputy Secretary-General, the Director of the Planning Division and the Director of the Social Development Projects Division. More would probably have left had the "free transfer system" been operating. But one doubts whether those who must stay because they are not allowed to move can contribute much to the organization to which they do not "belong".

Manpower problem at the ministerial and local levels may be briefly discussed. In the major reorganization of the administrative system made in late 1972 by the National Executive Council, several planning units were set up, both at the ministerial and departmental levels. At the ministerial level, there are planning units at the Ministries of Agriculture, Communications, Commerce, Education, Interior and Health.

The creation of planning units at the ministerial level is a big step toward improving the planning process in Thailand, but much more experience is needed:on the part

¹From an interview with Mr. Krit Sombatsiri, Deputy Secretary-General of the NEDB.
of the planning staff in the way of project preparation and evaluation. Moreover, ministerial planning units with certain exceptions are largely staffed by the personnel in each ministry, who may claim the knowledge and expertise in their own specialized fields but who have never been exposed to planning techniques and who lack appropriate knowledge in such planning aspects as social cost and benefit analysis, evaluation of economic choices, the repercussions of the project on other sectors and establishing a monitoring system for the project. The same observations are applicable in connection with the shortage of planning staff at the local level.
IV. THE ROLE OF THE UNIVERSITY

A Brief Description of Higher Education Development in Thailand

The system of higher education in a country is largely shaped by the needs and aspirations of its articulate members. The universities and institutions of higher learning are called upon to play an important role in fulfilling the manpower needs dictated by the current stage of development. Apart from being expected to produce technicians and intellectuals, the universities are also expected to articulate the hopes as well as the direction towards which the country is moving. The history of higher education in Thailand reveals a close interrelationships between the nature and functions of the universities and the demands placed on them by the society.

The contact of Thailand with the West during the reign of Rama IV brought with it a complex of forces working toward modernization. The grim reality of the imperialistic expansionism threatening national security made it clear that in order to survive, the country must somehow get on the road of modernization which implies a host of basic economic, social and administrative reforms. The pragmatism of the Thai absolute rulers was clearly demonstrated in the outward looking approach toward accommodating the change. The personal interest of the King Rama IV himself in Western sciences and technology was also responsible for the acceleration of modernization. Contacts with the West through personal observations, commercial and cultural intercourses also widened the horizon of choices and perspectives of development potentials and opportunities on the part of the Thai ruling group.

The long history of absolute rule and the absence of popular participation in the political process necessarily imposed upon the government the modernizing role. It was in this context that a higher education system in Thailand was born.

The first Medical School in Thailand was founded in

1Ingram, op. cit., p. 33.
Eight years later, a Law School was established in the Ministry of Justice. In 1902, the Royal Pages School was set up to train young persons for government service; later in 1910, the name of the School was changed to the "Civil Servants' School" which would offer training in the fields of education, medicine, agriculture, jurisprudence, commerce, foreign relations, and public administration. However, only the Engineering School was established in 1913.

The first university in Thailand was founded in 1916 when the Civil Servants' School was elevated and named Chulalongkorn University incorporating the Medical School and the Engineering School established previously in addition to the newly created Faculty of Arts and Sciences and the Faculty of Political Science.

After the 1932 revolution, the University of Moral and Political Science was created, at first offering only courses in law and jurisprudence, and later in economics, commerce and political science.

It can thus be seen that the institutes of higher learning were created to train men for the government service which needed to be improved, created and expanded to meet the new challenges arising from changing conditions. As stated by a former Minister of Education of Thailand, "... the chief motive for the establishment of the first university in Thailand was mainly to train civil servants to serve the numerous branches of the government of the country which was emerging from feudal past into the new era as a modern state, and concurrently fighting extremely hard to survive and to keep intact her age long independence .... The University established at that time as meant to meet the manpower needs as required in the attempt to run the country, fully determined to maintain its own sovereignty ... and the independence of its people who had never been under alien tutelage before".2

Following the creation of the University of Moral and Political Science, or Thammasat University as it is now known, the creation of monocollegiate university was apparently quite fashionable. Thus in 1942, the Faculty of

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1Sukich Nimmanheminda, "Higher Education in Thailand", Journal of the National Education Council, January 1970, p. 11. This article is the main source of the material given in this section.

2Ibid., p. 12.
Medicine was separated from Chulalongkorn University, and elevated to the University of Medical Sciences under the Ministry of Health. Kasetsart University (literally means "Agricultural Science University") was created in 1943 under the Ministry of Agriculture aiming at improving the field of agriculture. In the same year, the Silpakorn University was established within the Ministry of Education to engage in the study and preservation of Thai art and archaeology.¹

In an apparent attempt to improve the teaching profession, and with the assistance offered by the U.S. government, the College of Education was instituted in 1954 offering courses in the liberal arts in the first years and courses in educational profession in the last years. Educational research and educational administration were also the principal concerns of the College.²

The institution of the monocollegiate or the "single profession" universities under the jurisdiction of different ministries was not only characteristic of the higher educational system of the country, i.e., to produce trained manpower needed in the different areas of the government service but was also characteristic of the Thai bureaucracy in going it alone without adequate coordinating effort in the light of overall assessment of the demands placed on the higher educational system.

Following the 1958 coup which ushered in the era of formal planning for economic and social development, the five existing universities (Chulalongkorn, Thammasat, Kasetsart, the University of Medical Sciences and Silpakorn) were all taken out of the then respective ministries and put under the jurisdiction of the Office of the Prime Minister apparently to facilitate overall coordination and to make available greater financial support, while the College of Education was and still is left under the jurisdiction of the Ministry of Education.³

Thailand has a long history of sending a limited number of her bright young men abroad for advanced training but during the fifties these youngsters were sent abroad in

¹Ibid., p. 13.
²Ibid.
³Ibid.
great number for academic and professional training under the auspices of the Thai government as well as a number of international agencies, notably International Corporation Agency of the U.S. government. Toward the latter part of the decade, these promising young men had begun to return home and brought with them the technical skills they had acquired from their respective places of learning, the hopes for their potential contributions to the national causes as well as the frustrations necessarily brought about by the many limitations obstructing the realization of their contributions. Many of these foreign trained intellectuals and technicians were assigned to various universities and other institutes of higher learning.

The widely felt urgency for the need for economic and social development planning with the attendant manpower requirements together with the fact that the trained personnel had started coming back from abroad during the late fifties and the early sixties led to increasing awareness on the part of the academic world of its role in the development process. This academic awakening resulted in the attempt on the part of the universities to expand their course offerings, upgrade the quality of their faculty members and set up graduate programmes in various fields. Courses such as the sciences and the humanities were initiated to provide a strong liberal arts orientation before specialized professional training was given. To upgrade the quality of teaching staff, young faculty members were sent overseas for further training, and faculty research was encouraged.

The National Education Council was established in 1959 to serve as the coordinating machinery as well as the clearing house for higher educational planning.

In an attempt to meet the increasing manpower requirements and to achieve a more geographically balanced economic and social development, regional universities were set up in different regions of the country, namely, Chiangmai University in the North in 1964, Khon Kaen University in the Northeast also in 1964 and the Prince of Songkhla University in the South in 1968. It should be noted, however, that a major objective in setting up these regional universities, namely, to induce local young people to enrol in their local universities in order to maximize the contributions made by native talents is partially cancelled by the enrolment system. Applicants into the universities are required to state their preferences for places of study they would like to be enrolled in, and usually the most prestigious universities located in Bangkok are chosen by the candidates. If their relative
performance does not warrant the entrance into these prestigious universities, they may be admitted to one of the regional universities which appear in the bottom of their priority list. This method of admission has two unfavourable effects on regional development: those students admitted into the regional universities tend to be inferior in quality and the enrolment into these universities tends to bear no relationship with the geographical origin of the students admitted.1

In 1966, the National Institute of Development Administration (NIDA) was established to offer graduate programmes in public administration, business administration, development economics and applied statistics. NIDA, which is an outgrowth of the Institute of Public Administration formerly associated with Thammasat University, is the only institution which is engaged in full-time graduate education. Chulalongkorn, Thammasat and Kasetsart Universities offer graduate programmes on a part-time basis. Finally, Ramkhamhaeng University was founded in 1971 purportedly to serve as an "open" university.

To cope with the expanding need for higher education and the shortage of teaching staff, a recommendation was made in 1964 that "... in order to improve their educational standards and achieve expansion in enrolment, all universities should pool their resources and develop strong graduate programmes in certain specific areas in accordance with the manpower needs of the country, especially in connection with the National Economic and Social Development Plan".2 To implement this recommendation, a University Development Commission was set up in 1967. One of the Commission's earliest projects was to develop graduate programmes of high standards in certain fields which were seen as an avenue by which the acute shortage of teaching personnel might be alleviated. On the priority list to be implemented during the initial period were graduate programmes in English, mathematics, physics, chemistry, biology and economics.

As of now only the English programme has been implemented. Bright young university teachers who are now

Starting from the 1973 academic year, apparently to retain local talents, the top 10 per cent of high school graduates in each region will be admitted to the university in their region without having to sit for the entrance examination.

2Sukich Nimmanheminda, op. cit., p. 16.
teaching or will be teaching mathematics, chemistry, physics, biology and some area of social sciences have been given intensive training in English in preparation for extensive work in the graduate programmes in their respective fields where English is an essential tool.¹

So far the development of higher education has been limited to those institutions which are operated by the government. All universities and institutes of higher learning are government agencies and all the staff members are government employees. During the past ten years, however, it has been apparent that the demand for higher education resulting from the spectacular increase in the university population has far outstripped the capability of the government to accommodate them. To meet the excess demand private colleges have sprung up, all in the Bangkok area. At present there are seven private colleges, six offering courses in the field of business administration and related subjects while only one offering courses in engineering.

These private colleges have long applied for the permission by the government to grant degrees to their students. It was recently agreed that the private colleges may grant undergraduate degrees after their curricula have been adjusted to meet with the National Education Council's requirements.

At present there are 14 non-military universities and institutes of higher learning operated by the government (counting six colleges of education as one) and seven private colleges. The student enrolment in 1970 reported by the state universities and institutes is shown in Table IX.

Note that Table IX includes the graduate students enrolled in the Asian Institute of Technology which is located near Bangkok. However, as its name implies, this Institute caters to the students from the region in the fields of physical sciences and engineering. The enrolment in the six private colleges stood at 1,893 in 1970.²

The breakdown of the student enrolment by field of study indicates a heavy concentration in the fields of social sciences and education as is shown in Table X.

¹Ibid.
TABLE IX
Enrolment by Levels and Universities* (1970)

<table>
<thead>
<tr>
<th>University</th>
<th>Under Graduates</th>
<th>Graduates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kasetsart University</td>
<td>4,648</td>
<td>304</td>
<td>4,952</td>
</tr>
<tr>
<td>Khon Kaen University</td>
<td>1,154</td>
<td>-</td>
<td>1,154</td>
</tr>
<tr>
<td>Chulalongkorn University</td>
<td>10,309</td>
<td>1,156</td>
<td>11,465</td>
</tr>
<tr>
<td>Chiangmai University</td>
<td>5,447</td>
<td>-</td>
<td>5,447</td>
</tr>
<tr>
<td>Thammasat University</td>
<td>10,399</td>
<td>1,364</td>
<td>11,763</td>
</tr>
<tr>
<td>Mahidol University</td>
<td>4,146</td>
<td>183</td>
<td>4,329</td>
</tr>
<tr>
<td>Silpakorn University</td>
<td>913</td>
<td>-</td>
<td>913</td>
</tr>
<tr>
<td>Prince of Songkhla University</td>
<td>533</td>
<td>-</td>
<td>533</td>
</tr>
<tr>
<td>National Institute of Development Administration</td>
<td>-</td>
<td>556</td>
<td>556</td>
</tr>
<tr>
<td>Asian Institute of Technology</td>
<td>-</td>
<td>195</td>
<td>195</td>
</tr>
<tr>
<td>College of Education</td>
<td>10,465</td>
<td>319</td>
<td>10,784</td>
</tr>
<tr>
<td>Thai-German Technical Institute</td>
<td>133</td>
<td>-</td>
<td>133</td>
</tr>
<tr>
<td>Thonburi Technical Institute</td>
<td>882</td>
<td>-</td>
<td>882</td>
</tr>
<tr>
<td>Nonhaburi Institute of Telecommunication</td>
<td>488</td>
<td>-</td>
<td>488</td>
</tr>
<tr>
<td>Military and Policy Academy</td>
<td>1,653</td>
<td>-</td>
<td>1,653</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>51,170</strong></td>
<td><strong>4,077</strong></td>
<td><strong>55,247</strong></td>
</tr>
</tbody>
</table>


*Does not include enrolment at Ramkhamhaeng University, opened in 1971.
### TABLE X

Enrolment by Level and Field of Study  
Academic Year 1970

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Under Graduates</th>
<th>Graduates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>2,995</td>
<td>135</td>
<td>3,130</td>
</tr>
<tr>
<td>Education</td>
<td>12,935</td>
<td>741</td>
<td>13,676</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>879</td>
<td>-</td>
<td>879</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>12,463</td>
<td>2,339</td>
<td>14,802</td>
</tr>
<tr>
<td>Law</td>
<td>3,548</td>
<td>120</td>
<td>3,668</td>
</tr>
<tr>
<td>Sciences</td>
<td>2,734</td>
<td>155</td>
<td>2,889</td>
</tr>
<tr>
<td>Engineering</td>
<td>4,381</td>
<td>264</td>
<td>4,645</td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>6,164</td>
<td>183</td>
<td>6,347</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3,486</td>
<td>140</td>
<td>3,626</td>
</tr>
<tr>
<td>Military and Police Academy</td>
<td>1,653</td>
<td>-</td>
<td>1,653</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>51,238</strong></td>
<td><strong>4,077</strong></td>
<td><strong>55,315</strong></td>
</tr>
</tbody>
</table>

Source: Educational Report: Institutes of Higher Learning, op. cit., Table 2.
In 1969, the total number of students who graduate from the state universities and institutes was recorded at 10,023.

Some 7,500 teaching staff members were involved in the 1970 academic year. Their academic background is shown in Table XI. The overall student faculty ratio registered at a little more than 7 : 1.

Table XI indicates that almost 60 per cent of the teaching staff possess academic qualifications lower than the Master's level. The task of upgrading the qualifications of the teaching staff is thus quite apparent.

The figures on enrolment and the number of teaching staff do not include those pertaining to the Ramkhamhaeng University, which purports to be an "open" university and which, after some eight months of preparation, was started in August 1971. The total enrolment of the university stands at 1,700 in the last semester of the 1972 academic year.

Coordination of Higher Education Planning with National Economic Planning

In an attempt to coordinate education planning with national economic and social development planning, four educational planning committees were set up to draw up the Third Educational Plan. The committees consist of high-ranking representatives from government agencies involved in education operations, i.e., the Office of the NEDB, the Department of Local Administration, the National Statistical Office and the Office of the National Education Council.

The Third Educational Plan has as its objectives the production of manpower in sufficient quantity and quality to fill up the development needs of the country, the inculcation in the population attitudes conducive to the maintenance of social stability, and the preparation of the country for its place in the age of science and technology.

During the Third Plan period the increase in


2Ibid., p. 6.
### TABLE XI

Number of Teaching Staff by Qualifications,
Academic Year 1970

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full-time Teaching Staff</strong></td>
<td>43</td>
<td>379</td>
<td>1,669</td>
<td>467</td>
<td>2,274</td>
<td>287</td>
<td>5,119</td>
</tr>
<tr>
<td><strong>Part-time Teaching Staff</strong></td>
<td>18</td>
<td>304</td>
<td>659</td>
<td>93</td>
<td>701</td>
<td>117</td>
<td>1,892</td>
</tr>
<tr>
<td><strong>Foreign Teaching Staff</strong></td>
<td>2</td>
<td>97</td>
<td>96</td>
<td>7</td>
<td>101</td>
<td>5</td>
<td>308</td>
</tr>
<tr>
<td><strong>Other Instructors</strong></td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>21</td>
<td>38</td>
<td>124</td>
<td>187</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>63</td>
<td>780</td>
<td>2,428</td>
<td>588</td>
<td>3,114</td>
<td>533</td>
<td>7,506</td>
</tr>
</tbody>
</table>

**Source:** Educational Report, Institute of Higher Learning, *op. cit.*, Table 5.

**Note:**
1 = Honorary Doctorates
2 = Doctorates
3 = Masters
4 = Higher Certificates
5 = Bachelors
6 = Diploma & Lower
7 = Total
manpower requirements in all fields of occupation is estimated at 2,586 million,\(^1\) not all of whom will need higher education training. The assessment of the increase in manpower needs in important fields and the increase in the supply likely to come forth during the Third Plan period is shown in Table XII. Several things are brought out by these figures and brief comments on them are in order.

As can be seen, the most acute shortage in skilled manpower will be in the area of management. This is so despite the fact that sizable number of students have graduated from business courses and other related subjects each year. Academic training cannot quite alleviate this shortage, as the requirements are located at top and middle level management requiring a great deal of practical experience. This shortage will be the more acute in the light of the new Alien's Business Act requiring participation of the Thai citizens in the management and ownership in a long list of industries.

The Plan admits that academic training offered by the universities and other institutions would not be able to cope with this shortage;\(^2\) indeed many graduates in business administration, commerce and economics cannot find jobs as these new graduates lack practical experience in management, the qualification which is most looked for in the business community.

In the field of medical science, increasing effort has been made to remedy the acute shortage of medical personnel which has long plagued the country. It is estimated that some 2,000 additional doctors will be produced during the Third Plan period and that some 6,200 doctors will be in active practice at the end of the plan period, raising the doctor population ratio from 1 : 8,000 at the end of the Second Plan period to 1 : 7,000.\(^3\) While this ratio is still short of what is desired, the major problems in this connection are:

1. to raise the quality of graduating doctors;

\(^1\)The Third National Economic and Social Development Plan, Table 3, p. 194. The following paragraphs draw heavily on the Third Plan.

\(^2\)Ibid., p. 196.

\(^3\)Ibid., p. 197.
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Requirements</th>
<th>Supplies</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executives and managers</td>
<td>30,000</td>
<td>2,000</td>
<td>30,000</td>
</tr>
<tr>
<td>2. Doctors</td>
<td>2,700</td>
<td>2,000</td>
<td>-</td>
</tr>
<tr>
<td>3. Nurses and midwives</td>
<td>14,000</td>
<td>7,600</td>
<td>-</td>
</tr>
<tr>
<td>4. Scientists</td>
<td>8,500</td>
<td>3,400</td>
<td>-</td>
</tr>
<tr>
<td>5. Engineers</td>
<td>2,500</td>
<td>4,700</td>
<td>2,200</td>
</tr>
<tr>
<td>6. Agricultural operations</td>
<td>110,300</td>
<td>12,200</td>
<td>11,900</td>
</tr>
<tr>
<td>- University level</td>
<td>3,600</td>
<td>5,400</td>
<td>-</td>
</tr>
<tr>
<td>- 15 year education</td>
<td>5,700</td>
<td>3,700</td>
<td>-</td>
</tr>
<tr>
<td>- 13 year education</td>
<td>1,600</td>
<td>3,200</td>
<td>-</td>
</tr>
<tr>
<td>7. Teachers and professors</td>
<td>101,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Scientific and technical</td>
<td>14,500</td>
<td>assessed in 4 to 6</td>
<td></td>
</tr>
<tr>
<td>- Academic</td>
<td>10,500</td>
<td>20,000</td>
<td>9,500</td>
</tr>
<tr>
<td>- Teachers training</td>
<td>80,900</td>
<td>77,000</td>
<td>-</td>
</tr>
<tr>
<td>- Vocational certificate</td>
<td>5,400</td>
<td>assessed in 8 and 9</td>
<td></td>
</tr>
<tr>
<td>8. Technical workers</td>
<td>7,600</td>
<td>15,300</td>
<td>7,700</td>
</tr>
<tr>
<td>9. High school vocational</td>
<td>17,100</td>
<td>8,900</td>
<td>8,200</td>
</tr>
<tr>
<td>certificates</td>
<td></td>
<td>20,600</td>
<td></td>
</tr>
</tbody>
</table>

Source: Office of the NEDB, The Third National Economic and Social Development Plan, 1971-76, Table 5.

Bi Notes: 1. Maximum requirements: if the development effort slackened owing to budget constraints or if the increase in production were less than anticipated, the requirements during the Third Plan period would be less than calculated here.

2. Includes only graduates in education.

3. 8,000 graduates from vocational schools operated under the loan programmes, and 20,600 graduates from other schools.
(2) to induce more doctors to take up practices in the area outside the Bangkok metropolis; and

(3) to arrest the brain-drain flowing to foreign countries.¹

At the end of the Third Plan period, the supply of nurses will be 5,400 short of the requirements and the major problems pertinent to the case of doctors apply in the case of nurses as well.

During the Third Plan period, some 8,500 science-based personnel with university training will be required compared with 3,400 additional graduates expected during the same period, leaving a deficit of 5,100 persons. These figures, however, do not tell the whole story as it appears that the more pressing problem will be to upgrade the quality of the graduates.

An anomaly is found in the requirement-supply relationship in connection with engineers. During the Second Plan period owing to economic expansion, especially in construction and industrial activities, the shortage of engineers was acutely felt and production of additional engineers was much emphasized.² A retention system was initiated whereby students who did not plan to work with the government agencies upon graduation were required to pay a sum of 5,000 baht whereas those who wanted to do so were not. Twilight classes were also open to accommodate the required increase in enrolment. During the Third Plan period, however, on account of the anticipated slowing down of certain industrial sectors, only some 2,500 additional engineers will be required compared with the 5,000 engineers to be newly graduated. The surplus of engineers is expected to coincide with the shortage of experienced specialists in this field.

This anomaly is also found in some areas of agriculture. An additional 3,000 technicians with university training will be required during the Five-Year Plan period compared with 5,260 expected graduates. The anticipated

¹Ibid. For the problem of brain-drain in Thailand, see Office of the NEDE, "Problem of Brain-Drain in Thailand", Technical Paper A.1, Manpower Planning Division, June 1972, mimeographed.

²The Third Plan, p. 198.
surplus is a spillover from the attempt to redress the shortage of agricultural technicians experienced during the first two plan periods. The requirements were estimated on the basis of the needs of government agencies, assuming that the agricultural development plan would be fully implemented. Despite the anticipated surplus, effective manpower may be short of the requirements because of two main reasons. First, the quality of training for these technicians is low and apparently needs upgrading. The second reason is that some of the technicians will take up employment in the cities which is not related to their agricultural training because they are not willing to be based in the rural areas where their services are required. Thus the major task facing planners is not to produce more university graduates in agriculture but to upgrade the quality of training for the graduates and to find ways and means to induce these young graduates to take up employment in the outlying regions.1

As for teaching manpower, the surplus is envisaged at the degree level while the demand for teachers holding higher certificates will be 3,000 short of supply. In addition to increasing the production of teachers at this level, the tasks also include raising their quality as well as distributing them among the different regions in a more balanced manner.

In quantitative terms, the increase in the number of technical graduates with 15 years of education will be greater than what is required with the implication that at least in the immediate future no additional technical schools of this nature should be set up and that greater emphasis should be placed on curriculum improvements as well as strengthening the quality of the teaching staff.2

The most glaring problem in "educated unemployment" is located at the vocational high school level. Increasing number of these graduates have joined the unemployed as their training has not sufficiently fit in with the requirements of the market. It is estimated that 20,600 of these graduates will not be able to find jobs after their graduation. A remedy was proposed in the Third Plan to raise the standards of all of the 121 vocational schools to those schools operated under the loan programme whose graduates have apparently been successful in finding

1 Ibid., pp. 199-200.
2 Ibid.
At present there are 14 such schools with appropriate training facilities supported by the loan programme.1

The brief description of the manpower requirements and the production of graduates indicates a number of problems which need to be seriously considered. First, except in the case of medicine, the manpower deficiency lies in the low quality of the graduates rather than in the quantity. Several factors may have been responsible for this deficiency. The nature of the curriculum is largely academically oriented with little and inadequate practical relevance. Thus the graduates spend their time learning the things that are not required and not learning what are needed. Lack of qualified teachers, especially in practical experience, lack of facilities, shortage of textbooks in the Thai language and shortage of teaching materials suitable to the local conditions all make for poor education. The second problem brought out by this brief survey of the manpower requirements supply situation which is related to the first problem is that the educated unemployment problem, especially in the urban area, will grow to serious proportions unless drastic changes are made in education planning. Despite the explicit acknowledgement of the potential seriousness of this problem in several places, the Third Plan anticipates the expansion of all universities and all departments in a university. Moreover, the creation of Ramkhamhaeng University appears to be unjustified in economic terms considering the fact that this new "open" university offers courses in precisely the fields where manpower surplus is already existing (education, and other social sciences). Although there is an acute shortage of business executives and managers, some 5,000 students enrolled in the School of Business Administration of the new University cannot be expected to fill up this huge gap but rather to add to the urban unemployment now prevalent on account of inadequate training. One may argue whether opening a new university of this type may not be an expensive method of postponing the urban unemployment problem which does not get solved but which may indeed take a more serious form as the graduates join the labour force in droves.

A Survey of University Resources Available for Development Planning

It is impossible to determine in exact quantitative

1Ibid., p. 201.
and qualitative terms the university resources available for development planning purposes, as it would depend on the fields of academic training of the faculty members, their time availability and their personal as well as professional interests. The following account may give the picture of the potential available resources in the broadest terms.

According to the latest data available for the 1970 academic year, some 7,506 faculty members were involved in university teaching. Of these, 5,119 were full-time teaching staff while 1,892 faculty members taught part-time, the rest being foreign teaching staff and other instructors. A large number of the teaching staff, especially those holding bachelor's degrees, even though classified as full-time instructors were not actively teaching but rather were being trained or waiting to be trained either abroad or at home. Also many faculty members who were classified as part-time teaching staff in one university actually were full-time teachers in another university; thus the total number of faculty members as appeared in the statistics is to some extent inflated. If we arbitrarily assume that only full-time doctor's and master's degree holding faculty members constitute the manpower pool which can be potentially tapped for development planning activities, then the number is reduced to 2,048. Of course, a large proportion of these faculty members cannot be readily drafted to work on development planning on account of lack of academic training in the planning related fields, and time constraints.

Even if we arbitrarily assume that 10 to 15 per cent of these teaching staff can be actively involved in planning, the number would still range between 200 - 300. By involvement in planning activities we mean undertaking research work related to development planning and implementation, giving consulting services to the ministries and departments, and serving as active members in development planning committees.

If the definition of university capacity in this connection is restricted to the doctorates in economics, the field most closely related to economic development planning, then not more than 20 university personnel are now available for planning. But it should be evident that this definition is too restrictive as it excludes the

\[\text{See Table XI.}\]
highly qualified non-doctorate holders and the doctorates in other important fields such as sociology, education, public administration, business administration, agriculture and the physical sciences. Altogether the number of doctor's degree holders teaching in the universities was reported at 379 in the 1970 academic year.\footnote{See Table XI.}

The above assessment of university resources available for planning is highly arbitrary and was made difficult by the fact that the time availability of capable university personnel cannot be accurately estimated. One of the major constraints on the contributions of the faculty members to outside agencies is precisely the time limitation. More will be said on this point later on.

**Extent of University Involvement Currently Prevailing in the Formulation and Implementation of Development Plans**

In the narrowest terms of actually assisting in development plan formulation and implementation, the university involvement is still very limited. Some 14 university personnel actually served in the various committees appointed to assist in preparing the Third Economic and Social Development Plan.\footnote{From various official records obtained from the Office of the NEDB, and the Office of the National Education Council.} Two of these faculty members assisted in the formulation of agricultural development plan, two in social development plan and 12 in educational development plan. A few others were engaged in the evaluation of these plans.

In broader terms, the university involvement in development planning has been greater than indicated in the previous paragraph. Right after the Revolutionary Party took over power in late 1971, some university staff members were assigned to work in various committees or working parties of the National Executive Council.

The NEC was divided into four directorates: the Directorate of National Security; the Directorate of Development, Agriculture and Communications; the Directorate of Health and Education; and the Directorate of Finance, Industry and Commerce. In the Directorate of National Security alone, some 20 university faculty
members were involved while some others were assigned to other directorates, notably the Directorate of Health and Education. While none of these committees were involved in the formulation of any specific development plans, all were involved in the formulation of policies or the reorganization of the administrative setup which has important impact on the development of the country and on the implementation of the Third Plan now in effect. The committees were engaged in many diverse fields such as agricultural and rural development, public utilities, housing, reorganization of the national and local administrative systems, educational and health development, etc. The university personnel worked on these committees jointly with other people outside the university on a part-time basis while retaining their teaching load without any monetary compensation. While the experience of the different committees varied from one area to the other, on the whole, important contributions were made during the NEC rule of a little over a year. The contributions took the form of laws and regulations as well as policy guidelines in a number of important fields.

Apart from the experience of actually assisting in the preparation of the Third Plan and in taking up various assignments during the NEC rule, university involvement in national affairs affecting the development of the country is also seen in the recent appointment of the National Legislative Assembly and the Constituent Committee. Of the 299 members appointed to the National Legislative Assembly, 10 are university personnel and of the 21 members of the Constituent Committee, four are university professors. It must be noted, of course, that the National Legislative Assembly is a political body within the framework of a rather rigid regime, and by virtue of the fact that university personnel constitute a tiny fraction of the total membership, it would be unrealistic to expect significant contributions on the part of the appointed university people.

Looking even more broadly and in a more significant sense, the university as an academic institution has been more actively involved in the development process than previously indicated. We can take up the contributions of the universities to national development planning by discussing the traditional roles of the academic community, namely, training, research and consultancy.

1From official record of the Directorate of National Security.
I. Training

Apart from preparing graduates to fulfill manpower requirements as previously discussed, the universities in Thailand have been giving training to people directly involved in the formulation and implementation of the development plans. The creation of the Institute of Public Administration (IPA) in Thammasat University in 1958 was one of the earlier attempts to give the students who were largely government officials exposure to basic public administrative principles and techniques needed for carrying out government activities. The whole concept of creating the National Institute of Development Administration, which is an outgrowth of the IPA, is oriented to prepare development administrators both in the public and the private sectors. NIDA offers graduate education in four fields: Public Administration, Development Economics, Business Administration and Applied Statistics; in addition, it has a Research Centre, a Training Centre and a Development Documentation Centre. The Programme in Development Economics offers, among others, courses in general theory of economic development, economic planning and project evaluation while the Programme in Public Administration covers many areas of development administration including performance evaluation. The School of Applied Statistics, apart from offering courses in quantitative techniques extremely useful for development planning such as programming techniques, also includes in its curriculum courses in such applied fields as operations research and demographic analysis. The School of Business Administration designs its programme to train junior managers for the private sector.

In addition to training given to master's degree candidates, NIDA has been conducting training programmes for government and private agencies either by its Training Centre or by the various Schools. Some of these training programmes are offered on a regular basis while others are on an ad hoc basis as demanded by the requesting agencies. Examples of the regular training programmes which should be cited include the Executive Development Programme given each year to the special grade government officials (mostly provincial governors) by the Training Centre and the Programme in Economic Development for middle level government officials concerned with development planning and implementation conducted by the School of Development Economics. Recently, the School of Business Administration has conducted the

1There was also a training programme in 1968 on Project Evaluation offered jointly by the NEDB, NIDA and Thammasat University.
Junior Executive Development Programme for business managers in cooperation with the Thailand Management Association.

As a result of the reorganization of the administrative system recently instituted by the National Executive Council, which set up the planning and policy offices in practically all government departments, the need for planning capability on the part of the staff of these planning units has become more evident and NIDA has been requested by the NEC to conduct training programmes on planning for the government planning personnel at all levels—a gigantic task compared with the training programmes which NIDA has been giving in the past. NIDA is currently at the planning stage to map out this new assignment in terms of the requirements, resource capability, possible foreign assistance, and the scope and substance of the programmes to be offered.

II. Research

An important role of the university in the development process is to increase knowledge which has bearing on the development planning through research. Ideally, the knowledge obtained from research activities should be of a practical nature and should be made available to the planners in due time, and it should be of value to the formulation of development policies and action programmes. The ideal, of course, is difficult to achieve, especially when there is a lack of coordinating effort to set up a priority list specifying the research areas which have the most relevance to the development problems of the country, and when research studies are not accessible or accepted by the potential users. The end result is that the scarce manpower is largely engaged in producing something irrelevant, or something which gets shelved the minute it is published.

In the 1969 academic year, of which the latest data are available, some 720 faculty members or 17 per cent of the total full-time staff of all universities and institutions of higher learning were engaged in research on some 520 research topics. Of these, 82 research workers were

1The NEC Announcement No. 5, 256, 257, 262, 263, 264, 265, 267, 268, 269, 271, 272, 274 and 277.

from Kasetsart University working on 61 research topics. The research problems under study involved such technical problems of agriculture as effects of soil and fertilizers on yield improvement, breeding of fish, forestry research, agricultural economic research, labour utilization in rural areas, etc. In the same year, 117 faculty members of Chulalongkorn University were engaged in conducting research on some 100 research studies, ranging from pathology to politics, while 317 faculty members of Mahidol University were involved in some 240 research studies in the medical field. The faculty members of other universities also undertook research projects of some kind. The number of faculty members involved in research, the number of research topics and the amount of research funds for the 1970 academic year are shown in Table XIII.

The research funds were financed both by the universities and other agencies, domestic as well as international. Some universities have research promotion funds which are granted to applicants upon approval of the research committees. It is difficult to evaluate the utility of the research efforts financed by the varied university research funds, but two general observations may be made. First, in one case the university research funds have been set up primarily for welfare purposes and not primarily for producing research output. A major original objective of establishing a research fund at NIDA was to supplement the regular income of faculty members in the form of 25 per cent bonus if their research projects are approved by the Research Promotion Committee. The faculty members are entitled to draw from the Institute's research funds an extra salary to the amount of 25 per cent of their basic salaries as long as their research projects are still outstanding. The bonus is terminated when the deadline is due. The effectiveness of this kind of research promotion system depends crucially on the screening and follow-up process, as there is a tendency for applicants to overestimate the length of time required to undertake the research projects and to cram up the research activities during the short time just before the due date. Under these circumstances, it is difficult to expect a good quality research output. This observation by no means implies that no good quality research has been produced, but on the whole it is natural to expect sub-standard research work from this kind of incentive system. The second observation to be made is that there does not seem to be coordinating effort in assigning priorities to the research problem areas to make the research projects relevant to development planning and implementation. The coordinating work should not be limited to all universities but must involve the research using agencies as well.
<table>
<thead>
<tr>
<th>Institution</th>
<th>No. of Faculty Members Involved</th>
<th>No. of Research Topics</th>
<th>Amount of Funds (baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kasetsart University</td>
<td>82</td>
<td>61</td>
<td>1,198,730</td>
</tr>
<tr>
<td>Khon Kaen University</td>
<td>8</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Chulalongkorn University</td>
<td>117</td>
<td>101</td>
<td>746,995</td>
</tr>
<tr>
<td>Chiangmai University</td>
<td>33</td>
<td>14</td>
<td>118,516</td>
</tr>
<tr>
<td>Thammasat University</td>
<td>11</td>
<td>4</td>
<td>290,000</td>
</tr>
<tr>
<td>Mahidol University</td>
<td>317</td>
<td>243</td>
<td>1,192,680</td>
</tr>
<tr>
<td>Silpakorn University</td>
<td>7</td>
<td>7</td>
<td>58,300</td>
</tr>
<tr>
<td>NIDA</td>
<td>105</td>
<td>70</td>
<td>1,022,355</td>
</tr>
<tr>
<td>Colleges of Education</td>
<td>40</td>
<td>9</td>
<td>20,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>720</strong></td>
<td><strong>517</strong></td>
<td><strong>4,647,576</strong></td>
</tr>
</tbody>
</table>

*Source: Office of the National Education Council, Report on Institutions of Higher Learning, Table 12.*
Another major problem in connection with faculty research is the limited time availability of faculty members for research as a result of competing demands on their time resources. An example of a one week time allocation of instructors of Chulalongkorn University is shown in Table XIV.

As can be seen, more than 75 per cent of the total hours were devoted by faculty members to teaching, teaching preparation and student guidance, while only 13 per cent were taken up in research. The above figures do not reveal the allocation of earning hours or the hours on weekends, but it is a common practice for a large number of faculty members to take up extra teaching at evening schools in order to supplement their regular income. Research does not necessarily render remunerative benefits and requires much self-discipline which not all the faculty members are prepared to accept.

There are many areas where fruitful research could be carried out to provide the information needed by the planners. Three areas have been identified by a leading planner. The first involves the identification and specification of economic relationships and changes in technology such as aggregates as well as sectoral capital-output ratios, the capital-labour ratios, substitutability between various factors of production and discovery of new types of raw materials. The second problem area has to do with socio-economic characteristics of the population, including their social behaviour and motivation. The construction and simulation of the development models of the country should constitute the third area of useful research by university staff members.


2 Ibid. At present, two faculty members, one from the Faculty of Economics, Chulalongkorn University, and the other from the Faculty of Economics and Business Administration, Kasetsart University, are working on a comprehensive econometric model for the development of the Thai Economy, financed by a grant from USAID. Also, a number of faculty members of Chulalongkorn, largely from the Faculty of Engineering, have been conducting studies on the urban problems of the Bangkok Metropolis.
TABLE XIV
Time Allocation of Chulalongkorn University Instructors (1970)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>10.7</td>
<td>28.2</td>
</tr>
<tr>
<td>Teaching preparation</td>
<td>12.7</td>
<td>33.4</td>
</tr>
<tr>
<td>Student consulting and guidance</td>
<td>5.6</td>
<td>14.7</td>
</tr>
<tr>
<td>Administrative work</td>
<td>4.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Research</td>
<td>5.0</td>
<td>13.2</td>
</tr>
<tr>
<td><strong>TOTAL HOURS IN ONE WEEK</strong></td>
<td><strong>38.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Chattip Nartsupa, et. al., "Problem in Faculty Research in Chulalongkorn University", in A Seminar on Academic Crisis in Chulalongkorn University, 17-18 January 1970, Chulalongkorn University Faculty Club, Bangkok, 1970, p. 96, in Thai.
Other areas of fruitful research which should be undertaken jointly by the university personnel and the staff of the concerned operating agencies are the study of foreign market research, the tariff structures of important trading blocks, pre-investment feasibility studies in all fields and the regional resource endowments and potentials.

Some good works on demographic aspects of planning have been made by the Institute of Population Studies, an autonomous research unit attached to Chulalongkorn University, staffed entirely by the university personnel and assisted by foreign as well as local specialists. Apart from carrying out research, the Institute also provides consultative services to government agencies concerned with population matters and also offers graduate programmes in varied areas of demography. As of 1971, the Institute has produced six publications, and 44 reports, articles and theses on population studies apart from organizing seminars on a wide range of subjects of demography.¹

III. Faculty Consulting

Apart from training and research activities, university faculty members are also engaged in consulting work. Faculty consulting in development planning has been quite limited but is increasing as a result of the recent establishment of planning units in operating ministries. A NIDA faculty member has been giving consulting services in the area of regional planning for quite sometime, but now a large number of NIDA staff are assisting in various planning activities launched by the Ministry of Interior and the newly founded Bangkok Metropolis government. The arrangement is still largely informal: faculty members, through personal contacts, are requested to sit in working groups and committees on different aspects of planning and, in some cases, to actively get involved in actual planning work on a part-time basis. So far the services are given without any sort of compensation but arrangements are being made to provide the outside personnel with nominal compensation.

A comment is in order on the effectiveness of faculty consulting planning as it is currently practised. Due to time limitations and a load of other commitments on

¹From a brochure of the Institute of Population Studies, Chulalongkorn University, 1972.
the part of the faculty members, it is probably safe to say the provision of consulting services on an ad hoc basis would be somewhat short of the ideal. Planning requires the assessment of the present situation, the problems faced by the operating personnel, the potentials for development and the areas in which limited resources can be put to most effective use. The study of all these facets presupposes a certain minimum of time which the present arrangements do not make available.

Problems Preventing Closer Cooperation between the Universities and the Government

Despite the efforts made by the academic community to serve development planning and implementing agencies, a number of problems and difficulties stand in the way of cooperation. In March of 1972, a conference was held in Bangsaen to discuss the relationships between the universities and operating agencies by the representatives of both groups.1 The consensus appeared to be that a two-way cooperative effort is needed in order for the academic community to make the greatest contribution to the development planning agencies.2 Several problems have been cited, some being concerned directly with the universities themselves and others with the operating agencies. Internal problems of the academic community are:

(1) Inadequate capability of the university personnel. Despite their high academic achievement, some university teachers lack the ability to identify problems faced by the planners. Given a well-defined problem, academicians are


2 See for example Pattaya Saihoo, "Cooperation and Coordination between the Universities and Development Planning Agencies", Paichitr Uathavikul, "Problems and Difficulties in the Cooperation between the Universities and Development Planning Agencies", papers presented to the Seminar; the papers also appear in The Journal of the National Education Council, April 1972, in Thai.
equipped with technical capability to proceed with the analysis but they often times are at a loss if asked to tackle the vague problems which need to be more clearly identified in the first place. Lack of experience, unfamiliarity with the practical aspects of operations and irrelevance of the nature of the courses taught in the university to the real world problems are some of the factors accountable for this inadequate capability.

(2) The present incentive system does not act as an inducement for capable university personnel to make contributions to government agencies. Low pay level in the civil service forces many university professors to take outside paying jobs, e.g., teaching or conducting research for international agencies, leaving no time for making available their free services for government units. Moreover, internal promotion is usually evaluated on the basis of the work accumulated at the university: university teachers working for other government units are thereby penalized promotionwise.

(3) Oftentimes, academicians insist on the adequacy of data before taking up the analysis work. But a major problem in planning in developing countries is precisely the unavailability and unreliability of pertinent data. Under these circumstances, academicians would be asking for something which does not exist and as a result conclude that no contributions on their part could be made. Until the academicians realize that their tasks are to make the best of available

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2 Ibid., pp. 59-60.
3 Ibid., p. 56.
data and to suggest ways and means to make available those data that are currently missing; the contributions from the academicians will regrettably fall short of what is required and expected.

Not all the barriers preventing closer cooperation between the agencies and universities originate from the latter alone. Problems arising from the side of the operating agencies are summarized below.

(1) The operating agencies tend to expect too much from the academicians, hoping for ready-made solutions to the planning problems they are facing which can be immediately implemented. When the academicians cannot produce a magic formula, the trust and the confidence of the operating agencies in the academicians' capability wanes, making future cooperation difficult.

(2) Part of development planning involves the articulation of the areas where institutional changes are needed to make possible the smooth execution of development work. But changes are likely to entail the conflict of vested interests which, given the parochial nature of the bureaucracy, are strongly resisted. Bona fide advice given by the academicians would then be looked upon as unrealistic, impractical or politically unfeasible, thus giving rise to frustrations on the part of the advisors and possibly creating the uneasy climate of distrust and misgiving.

(3) Another weakness on the part of the operating agencies is what may be called the "dependency syndrome". It has been a practice among the operating agencies to request foreign assistance in the form

1 Ibid., p. 55.
2 Ibid., p. 58.
of advisors whenever problems arise.\textsuperscript{1} It is by no means implied here that the services of all foreign advisors have been useless; what is being stressed here is the "dependent" attitude or the mentality of a number of high-ranking government officials to seek foreign advice. It may be true that the use of foreign experts is dictated by political reasons when controversial issues are involved, but it may be questioned whether the price is not too much in terms of resources used and in terms of the opportunity lost of not using and developing locally available talents. It should be added that this foreign "dependency syndrome" is not limited to the planning bodies and other operating agencies alone. One can see it at work in the academic communities as well.

(4) The lack of cooperation between the academic communities and development planning agencies may arise because these agencies do not feel the need for the services of the university personnel either because no systematic planning is being done at the ministries, or because internally available services are thought to be adequate in the light of the type of planning envisaged by the agencies.\textsuperscript{2}

The provision of services of university personnel has so far been carried out largely through personal contacts on an individual basis. An attempt has been made by a group of university teachers to mobilize research and consultancy capabilities outside the official framework by founding in 1971 the Thai University Research Association (TURA) under the auspices of the Social Science Association of Thailand. At present, TURA is engaged in a two-year research into the different aspects of urbanization of the Bangkok Metropolis with an objective of providing alternatives to sound metropolitan planning.

\textsuperscript{1}Pattaya Saihoo, \textit{op. cit.}, p. 41.

\textsuperscript{2}Ibid.
It should be pointed out, however, that within the official framework increasing contacts have been made between the operating agencies and the departmental and ministerial units. An example is the request for the services of NIDA's teaching staff by the newly created Office of Policy and Planning, Ministry of Interior. NIDA itself is in the process of framing guidelines to systematize the provision of this type of services to outside agencies.

Some Recommendations towards a Closer Cooperation between the University and the Development Planning Agencies

To alleviate the problems cited above, a few following recommendations are proposed:

(1) The university personnel in designing course outlines for teaching purpose should enhance the relevance of these courses by incorporating the situations, problems and prospects in the local scene, both for the benefit of the students and as a means to familiarize the teachers themselves with what is going on locally. Familiarity with the local, practical problems is a prerequisite to the building up of a viable relationship between the academic community and the development planning agencies.

(2) The first recommendation made above implies that research activities must be carried out. Two types of research works are envisaged here. One is more of a pedagogical nature and the other more of practical use to the planners. Under the first type of research, case studies on the decision-making process in planning, institutional and administrative constraints on planning and implementation, project preparation and evaluation, evaluation of different segments of the development plans, etc., should be written and used as teaching materials in planning courses. These case studies should be appropriate for the exercise and training of problem solving capability. The second type of research involving more time and resources should address itself to increasing knowledge needed by planners. The
identification and filling up of data gaps, the long term behaviour of aggre-
gative economic variables and their relationships, the economic and social motivation mechanism which brings about desired changes, the responses of different economic and social groups to motivating forces, the effective plan monitoring system, foreign market re-
search, pre-investment studies, and regional resources and potentials are some of the major areas where fruitful research could be made.

(3) To promote research activities, a better system of research management is required. All universities and institutions of higher learning have their research pro-
motion funds, but to get the most out of these funds requires research planning, indicating priority research areas, and a more effective quality control system. The philosophy of using research funds for welfare purposes, though appealing in the context of the poor pay scale offered by the civil service system, should be done away with as it tends to encourage poor quality research while welfare can be better improved by other methods.

(4) To meet the needs of the planning bodies and to inform them about the research activities being carried out as well as to make available the relevant research output produced by the university personnel, a Joint Planning Bodies-University Research Committee is proposed. This Committee should comprise the representatives of the planning units, the university community, the representatives of the Office of the National Education Council and the Office of the National Research Council. It should be charged with the functions of identifying the research areas, research planning and control, remuneration system as well as the dissemination of research output and other research clearing house activities. To fit in with the role of the Office of the National Research Council, this Committee may be set up and located in
that Council which provides the administrative services to the Committee.

(5) To make available the consulting services of the academic community on a more permanent basis, faculty members should be granted a leave with pay to work full-time with planning agencies for an adequate duration. This recommendation may be difficult to implement in some cases where teaching staff is in acute shortage, but certainly there is room to manoeuvre in many other cases by appropriate course scheduling and faculty rotation. It is difficult to generalize as to what constitutes adequate duration since this would depend on a specific case requirement. Of course, to be effective, the consulting services offered to the planning bodies would have to be counted as an output produced by the faculty members and should have appropriate bearing on their promotion. Moreover, the arrangements should be institutionalized rather than made on an individual basis.

(6) All recommendations proposed above would come to naught if the planning bodies are not willing to accept the services of the academic community nor appreciate its role in the development process. The use of foreign experts may still be necessary in some cases, but there are many instances where talents from local universities are available and could be put to more effective use. Neither too great an expectation (hoping for ready-made solutions) nor too little expectation on the part of the planning personnel is conducive to the needed joint cooperation. A resolution of the Council of Ministers to the effect that wherever possible local talents should be tapped for development planning and related activities would probably be a welcome move. But, ultimately, the effective use of university resources would depend to a large extent on the perception on the part of the planning bodies of the role of the universities in the development process.
V. CONCLUSION

There is no question that Thailand has been committed to take up the difficult task of modernization not only to raise the standard of living of her largely agrarian masses but also to gain her respectable place in the community of nations. During the past decade through exogenous factors beyond her control, through sheer luck and conscious effort, the country has weathered the pains of growing rather well.

Basic problems, however, still remain. The destruction of valuable natural resources, the uneven development pattern responsible for the rural-urban income disparities, the sluggish growth of merchandise exports, urbanization, pollution, the social tensions brought about by changes and the encroachment of new life styles on the cherished cultural heritages are some of the outstanding basic economic and social problems, which have to be seriously coped with through careful planning and multidimensional efforts.

Planning has been accepted as the expression of the government's will to develop and as an indispensable tool for rational resources allocation. There is no objective way to judge how much planning has contributed to the growth of the nation but prima facie at least it is not claiming too much to say that considerable wastes have been prevented through planning. Planning problems still exist: inadequate planning techniques dictated by inadequate data bases, shortage of capable planners, especially at the middle and upper levels, and the preservation of parochial vested interests on the part of operating agencies are some of the major problem areas that the planners will have to face with for sometime. Some of these problems will be alleviated in the course of time when planning experience has accumulated and pertinent data are increasingly available. Yet the academic community has an important role to play in helping to solve these problems.

The role of the universities in the development process has in the past been largely in the area of the production of manpower needed to perform the varied development tasks in the public sector. This production of skills will have to continue and expand in some crucial areas, especially in the medical, management and technical fields, and at some levels of teacher education, but caution must be taken in expanding some areas of the social
sciences, lest the problem of the "educated unemployment" will get out of hand.

More will have to be done by the universities in the areas of training in planning, research and consultancy. It appears that university resources are potentially available for these purposes and can be made effective if certain conditions are met. The role of the universities in the development process will have to be better understood both by the academic community and by the operating agencies. University personnel will have to take upon themselves the task of upgrading their capability in the application of theoretical knowledge and techniques to the local situation and, at the same time, make the courses they are teaching relevant to the Thai setting. Research management and control will have to be improved through a better incentive system and better information flow. The university authorities should recognize that research and consulting services offered to outside agencies constitute important elements of the total output produced by the faculty members and should be rewar'd accordingly. On the part of the planning practitioners, too high hopes or too low expectations for the contributions of the academic community would not be healthy to the cooperative efforts.

We may conclude this study on the optimistic note that given the will power, the honest recognition of the roles and limitations of either partner, the cooperative venture in improving the planning process as a means toward national development will pay rewarding dividends.
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(iii) To sponsor seminars and conferences;

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(v) To co-operate with other agencies whose objects are related to the objects of the Institute; and

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