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## ABSTRACT

The World Bank's Operation Evaluation Department (OED) evaluates educational development in Thailand and assesses the cumulative impact of the Bank's projects on development in that country. From 1966 to date, the Bank supported six education projects with an estimated cost of a half billion dollars. The report covers: (1) economic and educational planning, from 1961-86; (2) a descriptor of each project; and (3) an evaluation of the impact of the Bank's lending program. Appendices include background data, details of lending projects, and a list of 22 references. (NL)

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# Educational Development in Thailand

## THE ROLE OF WORLD BANK LENDING

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**A WORLD BANK OPERATIONS EVALUATION STUDY**

# **Educational Development in Thailand**

**THE ROLE OF WORLD BANK LENDING**

**Operations Evaluation Department**

**The World Bank  
Washington, D. C.**

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## FOREWORD

This is a report by the World Bank's Operations Evaluation Department (OED). Operations evaluation in the World Bank aims to provide a systematic, comprehensive and independent review of the Bank's development experience. The Director-General, Operations Evaluation (DGO) has overall responsibility for the evaluation function. The DGO reports directly to the Bank's Board of Executive Directors, who represent its member governments, and has an administrative link to the President. The OED is the staff arm of the Director-General. All its reports are made available to the member governments of the Bank and those of general interest are published.

While preserving their statutory and professional independence, OED staff work with Bank staff and country officials so that the views, including dissenting views, are adequately reflected in OED reports. This practice has been followed in producing this report which has been distributed to the Executive Directors. The opinions expressed in the report, however, do not necessarily represent the views of the Government of Thailand or the World Bank.

This report evaluates the experience with educational development in Thailand and assesses the cumulative impact of Bank projects on development in the sector. Over the period 1966 to date the Bank has supported educational development in Thailand through six education projects with total estimated cost of just under half a billion dollars equivalent.

This study was carried out by two consultants, Professors David Throsby and Kenneth Gannicott, and coordinated by OED staff member Hans Thias.

We hope that the material in the report will provide useful insights that are relevant to the further development of education in Thailand as well as elsewhere, and that the material in this report will provide a basis upon which a wider discussion of future directions would be based.

Yves Rovani  
Director-General  
Operations Evaluation

March 1989

EDUCATIONAL DEVELOPMENT IN THAILAND:

THE ROLE OF WORLD BANK LENDING

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LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
AVC	-	Area Vocational Centre
CIDA	-	Canadian International Development Agency
CSS	-	Community Secondary School
DGE	-	Department of General Education
DOVE	-	Department of Vocational Education
DSS	-	Diversified Secondary School
IDEA	-	Institute for the Development of Educational Administrators
IPTST	-	Institute for the Promotion of Teaching Science and Technology
LSS	-	Lower Secondary School
MOE	-	Ministry of Education
NCDC	-	National Curriculum Development Centre
NEC	-	National Education Commission
NESDB	-	National Economic and Social Development Board
PIU	-	Project Implementation Unit
RSS	-	Rural Secondary School
UNDP	-	United Nations Development Program
UNESCO	-	United Nations Educational Scientific and Cultural Organization
USAID	-	United States Agency for International Development

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EDUCATIONAL DEVELOPMENT IN THAILAND:

THE ROLE OF WORLD BANK LENDING

PREFACE

In 1984, the Operations Evaluation Department (OED) proposed that a number of studies on the impact of Bank lending for education be carried out, in order to assess the cumulative impact of Bank-supported projects in education on educational development and to evaluate and document the experience from the standpoint of reorienting education systems towards a more effective support of the development strategies adopted, particularly with regard to the production of trained manpower.

As part of the field work for the Thailand study, the National Education Commission (NEC) arranged for the preparation of a series of seven reports by Thai officials and educational administrators under the overall heading "Major Advances in Educational Development." These papers were discussed at a symposium held at the NEC on November 29-30, 1984, and a draft summary report was produced in June 1986.

Early in 1987 it was decided to review this work and to follow it up with a study focussing in greater detail on one or two areas of major interest to the Bank and to the Government of Thailand. Following discussions in Bangkok in June 1987 it was agreed that this further study should look particularly at secondary and vocational education within the broad context of the Bank's overall educational lending program in Thailand.

This paper presents the results of this study. It draws to some extent on the beforementioned earlier work, and on the seven reports from the November 1984 symposium noted above, as well as on the internal Bank documentation relating to specific projects (Project Completion Reports, Project Performance Audit Reports, etc.). This report also incorporates new data and findings arising from the two field missions undertaken as part of the study, the first in June 1987 and the second in November 1987.

Grateful acknowledgement is due to the many Government officials in the NEC, the MOE and elsewhere who assisted in the preparation of the present study, and to the Bank's operations staff for constructive comments on earlier drafts of this report.

## EDUCATIONAL DEVELOPMENT IN THAILAND:

### THE ROLE OF WORLD BANK LENDING

#### SUMMARY

1. Public expenditure on education in Thailand has risen to about 20 percent of the national budget, and the education sector accounts for about 4 percent of GNP. Thailand has now achieved universal primary education, and secondary enrollments have risen to just under 30 percent of the relevant age group. The most dramatic expansion in the last twenty years has been in the tertiary education sector.

2. National economic planning in Thailand is the responsibility of the national Economic and Social Development Board. Five plans have been completed in the period 1961-86. Three phases can be discerned in economic planning over this period. The first is that of the early plans, up to 1971, when the emphasis was on high rates of economic growth (around 7-8 percent). The second phase covers the decade of the 1970s, and is characterized by an increased concern with the distributional impact of growth, regional development, the lessening of rural-urban income differentials, and equal access to job opportunities and social services. Finally, the early 1980s have been a time for sober reassessment, with planners having to cope with lower growth rates and a more difficult external economic environment.

3. Educational planning in Thailand has developed as an integral part of national economic planning. As a result, the phases noted above in regard to economic planning can also be discerned in the educational area. The first two plans (1962-71) concentrated attention on developing the secondary education sector to provide the medium- and high-level manpower requirements of a rapidly-growing economy. The Third Plan (1972-76) continued this theme but introduced also explicit policies aimed at improving rural access to schooling. The Fourth Plan (1977-81), in which matters of national security assumed a dominating influence, signalled a major shift towards improving the administrative system, reforming the curriculum, and encouraging equality of educational opportunity across the country. These three concerns were pursued in the sweeping educational reforms of 1978. In these reforms, central educational administration was unified under the Ministry of Education, the dual cycle primary system was replaced with an integrated six-year course and the upper secondary cycle extended from two to three years, and a diversified curriculum introduced. The Fifth Plan (1981-86) carried these same concerns into the more uncertain environment of the present time.

4. Over the period from 1966 to date the World Bank has provided assistance for six education projects whose total estimated cost was US\$453

million. Bank lending amounted to US\$154 million,<sup>1/</sup> or approximately 35 percent of total project costs. The First Project (Loan 471-TH) was based explicitly on manpower forecasts, and involved the construction or renovation of 25 vocational institutions. The Second Project (Loan 822-TH) was similarly directed towards manpower concerns, though this time at the tertiary level. The objectives of the Third Project (Credit 369-TH) were broader than those of the first two, reflecting the shift of focus in the Third National Plan from growth towards distributional issues. This project included the improvement of 32 rural secondary schools. In the Fourth Project (Loan 1271-TH), provision was made for the extension of diversified secondary education to provinces outside Bangkok and the establishment of a nationwide adult education system. Both components were explicitly aimed at strengthening educational opportunity in rural areas. The Fifth Project (Credit 913-TH) was a crucial one in furthering the 1978 reforms. It created 12 centralized workshop complexes (Area Vocational Centres), extended educational radio facilities, and set up units to improve educational management, planning and administration. Finally, in the Sixth Project (Loan 2178-TH), attention switched to the lower secondary level; this project also further strengthened the administrative framework for central, regional and provincial educational planning.

5. The overall direction of Bank lending through these six projects supported and reinforced the evolution of Thai educational policy. In the first three projects, the emphasis on manpower planning reflected the Government's concern with labor market shortages in several key areas such as agriculture, medicine and teaching. In the subsequent projects, the shift towards improvement of educational access dominated the lending program.

6. In regard to the manpower targets which underlay the first three Bank projects, a superficial examination of project performance would suggest on the whole a successful outcome, with the majority of targets reached or exceeded. However, the manpower forecasts themselves can be seen in retrospect to have been wide of the mark, and as early as the Third Plan period (1972) there was evidence of an oversupply of graduates from vocational secondary and technical schools and agricultural institutions. The project vocational schools were popular with students as they were being used as stepping-stones towards tertiary entrance by students unable to gain access to the more favored academic stream. It can be concluded that these early Bank loans gave a spurt to secondary education at a time when secondary expansion subsequently proved to be unwarranted.

7. Later Bank projects have enhanced the Thai Government's quantitative objectives for improved rural access to education. This conclusion can be drawn on four main grounds. Firstly, physical facilities have undoubtedly improved in regions outside Bangkok. Secondly, the projects

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<sup>1/</sup> The total amount of loans/credits was nearly US\$182 million: the above figure of US\$154 million excludes cancellations of funds in the six projects totalling US\$31.6 million. Total final disbursements for the Sixth Project (Loan 2178-TH) were not yet determined at the time of drafting this report.

themselves have been characterized by increased sophistication in targeting, with specific criteria to encourage rural development being applied. Thirdly, data on participation rates in urban and rural areas (e.g., at the lower secondary level) show a relative improvement in rural enrollments between the early 1970s and the early 1980s. Finally, the widening of education reach through nonformal channels has been particularly effective.

8. The curriculum in use in 1960s and early 1970s was regarded as contributing to the weaknesses of educational policy of that period. Its bias towards preparation for post-secondary study was seen as promoting the aspirations of students to seek higher qualifications. The curriculum reform of 1978 was intended to play a major role not just in improving the content and quality of secondary education but also in preparing students better for productive employment. The introduction of the diversified curriculum was supported by the Bank through the Fourth, Fifth and Sixth Projects. Over this period the performance of project institutions has been on the whole successful, and the diversified curriculum has been shown to be not only desirable but also practicable in the Thai system. Nevertheless, it has not achieved everything that has been expected of it. There is still a tendency for students to press for tertiary entrance, guided by relative rates of return to qualifications at different levels together with the social standing of tertiary qualifications. As a result, and despite the new curriculum, there has been little change in the proportions of students going on to higher education. Some project institutions, too, have experienced difficulties, including the Area Vocational Centres which have suffered from transport and administrative problems. Some of these Centres are now considering alternatives such as adult education and evening classes.

9. The later Bank projects have also established a number of educational support units, including the national Curriculum Development Centre and the Institute for the Development of Educational Administrators. Overall these institutions have had a net positive impact on the development of administrative and managerial capacity in the Thai educational system, but there are still problems of fragmentation and lack of coordination to be overcome. There has, however, been progress towards strengthening local and provincial-level capacity in educational management, and the Bank's lending program has made a contribution towards achievement of this goal.

10. Cooperation between the Bank and the Thai Government has enabled the development and enhancement of some significant skills in project management amongst Thai officials, although there is still a feeling amongst some Thai educational administrators that on occasions there has been insufficient involvement of local planners in project generation and design stages, and that as a result some opportunities for transfer of skills or for more effective project design have been missed.

11. Early Bank projects in Thai education experienced some implementation problems including procurement delays, planning difficulties and cost overruns. Later project have been of the "multipurpose" variety, being made up of a number of disparate components. However, this increased complexity has not led to heightened problems of implementation. In fact, the centralization of project administration for the Fifth and Sixth Projects

in the Central Project Unit in the Ministry of Education appears to have been successful in improving coordination and efficiency in project administration.

12. The Thai educational system has continued to evolve in a flexible way, with a willingness to adapt in the light of experience. For instance, new curricula for self-employment emphasizing both production and management skills are being developed. A broader view is being taken of the role of manpower planning; studies of manpower needs are now being used to provide general indications for planning rather than as a basis for slavish adherence to precise manpower forecasts. Efforts are also being made to develop a balanced approach to "economic" and "social" demands for education, so that employment considerations, though undeniably crucial in guiding decision-making, are not seen as the only aspect of education to be taken into account in the planning process.

## EDUCATIONAL DEVELOPMENT IN THAILAND:

### THE ROLE OF WORLD BANK LENDING

#### I. INTRODUCTION

1.01 Education has played an increasingly important role in the Thai Government's strategy for economic development over the last twenty years. Public expenditure on education rose from around 15 percent of the national budget in the mid-1960s to just over 20 percent in 1984. In 1966 the education budget comprised 2.4 percent of GNP, a figure which had risen to just under 4 percent by the early 1980s. Over this period the Government also introduced major educational reforms at all levels of the system and in almost every subsector.

1.02 This expansion of educational expenditure is reflected in the performance data for the educational sector. The number of primary students rose from 4.1 million in 1961 to 7.4 million in 1980, the latter figure representing an enrollment ratio of 95 percent. Thailand has now achieved universal primary education, and the recent moderation in the population growth rate means that maintaining 100 percent primary participation is not likely to present any immediate problems. Secondary enrollments have risen to just under 30 percent of the relevant age group. However, the greatest change between 1961 and 1980 has occurred in tertiary enrollments, where a ten-fold increase has been recorded. Even this figure is understated, because it follows official Thai practice in excluding enrollments at the "open" universities.

1.03 Educational planning in Thailand has evolved through a complex system of administrative arrangements. The establishment of the National Education Commission (NEC) and the National Economic and Social Development Board (NESDB) in 1959 marked the transition to systematic educational planning in the modern sense. Since the period of the Second Development Plan which began in 1967, educational planning has been an integral part of the process of economic and social development planning in Thailand.

1.04 To support the process of educational development, the Government of Thailand has obtained foreign loans and credits for infrastructure development, technical assistance and other purposes amounting to about 4,775 million baht (approximately US\$227 million) since 1960. These loans and credits have been provided by the World Bank, the Asian Development Bank, the Canadian International Development Agency, the U.S. Agency for International Development and the Danish Government; in addition technical assistance grant aid has been received from a number of countries, including the Federal Republic of Germany, Canada, Australia and Japan.

1.05 The World Bank has been the major external lending agency providing funds for education in Thailand, with six projects to date involving loans/credits totalling approximately US\$154 million. The objectives of these projects have been orientated towards fostering manpower development, improving access to education especially in rural areas, supporting the



Government's efforts in curriculum reform, raising the quality of education provided and promoting more effective educational administration.

1.06 The Bank's lending program has been permeated by two major and interrelated themes. The first has been concerned with the efficiency of the educational system in providing the appropriate balance between vocational and general training, so that disequilibria in labor markets can be reduced or eliminated. This theme has found its expression especially through curriculum reform and through the development of appropriate types of institutions particularly at the secondary school level. The second theme has related to equity in educational provision, and has been concerned especially with the problems of rural areas. These two themes also provide a basis for the analysis in this paper. In the next section we look at economic and educational planning in Thailand, and in section three at the way in which the Bank's lending program has related to this planning context. In section four we evaluate the impacts of the lending program, with particular emphasis on secondary and vocational aspects. Some conclusions are drawn in section five. Appendix I contains background socio-economic and educational data. Appendix II lists details of lending programs for education in Thailand, including fuller details of the six Bank-supported projects.

## II. ECONOMIC AND EDUCATIONAL PLANNING IN THAILAND

### National Economic Planning 1961-86

2.01 There have been five National Economic Plans in Thailand, all of them compiled by the NESDB, and spanning the period 1961-86. The First Plan, which appeared in 1961, was not so much an integrated development plan as a series of separate profiles of the various sectors such as agriculture, industry, communication, and energy. The NESDB was no doubt feeling its way in these early days, but the attitudes permeating the plan were unmistakable. This was quite clearly a plan for growth and expansion, with a concentration upon explicitly economic matters. The desired annual growth rate of GDP was set at 7.2 percent with a focus on the need to maintain rapid agricultural growth and to increase employment opportunities. It may be noted that this first plan was called a National "Economic" Development Plan while all later plans were qualified by addition of the word "Social" (Banphot, 1984).

2.02 The Second Plan, 1967-71, continued the earlier stress on promoting fast economic growth. The growth target was raised to 8.5 percent per year, and the explicit objective of the Plan was to raise living standards of the Thai population. To accomplish this objective, planning efforts were directed towards the expansion of national resources for greater productivity. Although agriculture was to remain the most important sector, manufacturing, construction, communication and transportation, and banking and insurance were also to be developed as important productive sectors.



2.03 The Third Plan, 1972-76, signified both a change of pace and a change of direction. By providing economic infrastructure, by encouraging the private sector to expand without rigid price controls, by opening the economy to external trade without heavy dependence on foreign capital, and by expanding land under cultivation, Thailand was able to achieve high economic growth during the 1960s and early 1970s. Good rates of growth (though somewhat moderated from the earlier period) did in fact continue during the latter half of the 1970s, but the Third Plan was characterized by a shift away from a prime concern with trying to maximize the growth rate. The desired GDP growth rate target was reduced to 7 percent per annum, and the growth rates of other productive sectors were all set at lower rates than those of the Second Plan.

2.04 A major external influence on implementation of the Third Plan was, of course, the oil crisis and subsequent macro instability of the mid-1970s. While Thailand shared the experience of other countries in having to adjust to these events, the structure and objectives of Thailand's national affairs were also being shaped by the political, military, and social changes occurring in South-East Asia during this period. Thai planners were well aware of the economic dominance of Bangkok, and of the socio-political challenge that could confront the majority of population living in the countryside. The lessons about income distribution, regional development, rural-urban income disparities, and expenditure for, and equal access to, health, education, and social services were there to be learned, and the Third Plan marked the effective start of an enhanced concern with socio-economic rather than purely economic matters in Thai national planning.

2.05 The Fourth Plan, 1977-81, continued to reflect the strategy proposed under the Third Plan, i.e., to alleviate problems related to the widening income gap and inequitable distribution of social services. Its principal objectives were to achieve 7 percent real growth, equitable distribution of income, reduction in population growth, faster generation of employment opportunities, and balanced regional development. With national security a fundamental consideration, the Government planned to improve the distribution of development benefits between regions, income classes and urban and rural areas. Public expenditure was to be increased to extend education and health services to rural areas where they were lacking, and to reorient those services to suit more closely the needs of the majority of the population. While growth in the agricultural sector was expected to remain fairly rapid in the short run, it was becoming evident to the planners that the burden of sustaining future growth must shift progressively to the industrial sector, with construction and services also providing an increasing share of employment for the rapidly growing labor force.

2.06 These themes from the Fourth Plan were taken up and developed in the Fifth Plan, 1982-86, which placed emphasis on balancing socio-economic development, ameliorating poverty in disadvantaged rural areas, and mobilizing the cooperation of the private sector. Despite adverse external factors and diminishing land availability, relatively high growth rates had continued throughout the 1970s. However, growth during the Fourth Plan had been accompanied by rapid inflation, growing dependence on foreign

borrowing, large deficits, and a slowdown in efforts to reduce poverty. It was with this in mind that the primary objective of the Fifth Plan was to accelerate the development of the modern sector so that Thailand could become a semi-industrialized country before the end of the 1980s, with the proportion of GDP originating from the industrial sector being roughly equal to that from agriculture (around 22 percent).

2.07 Under the Fifth Plan, policies to stimulate more export-oriented industrial production were given high priority, with the realization that increasing incentives to exports rather than import-substitution, and rationalizing the system of protection, were central to the promotion of efficient industrial growth. Towards the end of the Fifth Plan period (i.e., in the last several years), a coherent industrial strategy has been emerging in Thailand. This strategy has aimed at furthering efficient industrial growth with increases in industrial employment, the expansion of small- and medium-sized firms, improvement in the living standards of the poor, and an improved regional distribution of industry.

2.08 This brief review of 25 years of economic planning suggests that three phases can be discerned. The first phase is that of the early plans, up to 1971, which covered a time of "going for growth." Distributional or equity issues received only cursorily explicit treatment in these plans. The second phase covers the decade of the 1970s. From the early 1970s onwards Thai development planning has been much more concerned with the distributional impact of growth, with regional development, with the lessening of rural-urban income differentials, and with equal access to job opportunities and social services. This concern with the balance of socio-economic development is a characteristic of the Third and Fourth Plans. Finally, the early 1980s--the period of the Fifth Plan--has been a time of sober reassessment, with lower growth rates and a more difficult external economic environment.

#### The Development of Educational Policy 1961-86

2.09 Educational planning in Thailand has developed as an integral part of national economic planning. Between 1966 and 1986 NEC prepared a series of National Education Development Plans which have followed the same five-year sequence as the economic plans, and in fact the education plans have been executed within the framework of the National Economic Plans. It is not surprising, therefore, that the themes and objectives of educational policy have reflected the changing perspectives of the National Economic Plans. It is fair to remark, however, that this close relationship between educational and economic planning was not explicitly intended at the outset; rather, it came about because of the fact that NESDB's ambitious growth targets for the First Plan period (1961-1966) were formulated without taking into account the essentially separate educational plan which had been developed by NEC in 1961. Experience during this early stage of planning was important, not only in creating the post-1966 formal linkages between educational and economic plans, but also in shaping the nature of the educational planning that was subsequently undertaken.

2.10 By the mid-1960s there had emerged a clear belief that manpower shortages during the First Plan had constrained the rate of economic growth. Since NEC had warned in 1961 of the need for technical manpower, the result was that from the Second Economic Plan onwards educational policy in Thailand was heavily geared towards manpower. As Sanong (1984) comments, "the manpower plan was employed as the linking issue between socio-economic planning and educational planning until the end of the fourth plan." In view of this development, it is not surprising that the publication of the 1960 Population Census--the first reasonably comprehensive source of data on the entire labor force--led almost immediately to a pronounced interest in manpower problems (Silcock, 1967). Prior to 1960 there had been no comprehensive source of data on the entire labor force of the kingdom. Between 1963 and 1967, no less than five different groups prepared manpower forecasts for Thailand.

2.11 We shall return below to the manpower forecasts of the First and Second Plan period. For present purposes it is sufficient to note their role in educational policy during the 1960s. From the point of view of both their methodology (i.e., trying to link education directly to economic development) and their conclusions (i.e., that Thailand would experience severe shortages of technically-trained secondary graduates) manpower forecasts dominated educational policy at that time. They led to a concentration on the development of medium- and high-level manpower especially in "vocational technicians, medicine, engineering, agriculture, and science" (Sanong, 1984, p. 5).

2.12 As noted above, the Third National Economic and Social Plan fell into a transition period between the "go for growth" attitudes of the first two Plans and the greater concern with equity and distributional issues of the Fourth and Fifth Plans. These comments apply equally well to educational policy during the Third Plan. Considerable emphasis was still given to satisfying the demand for technical personnel that had been such a strong feature of the Second Plan. Ruang (1984, p. 4) describes the prime objective of education during the Third Plan as being the upgrading and expansion of secondary schools in response to middle manpower requirements. This view is endorsed by Virat and Vichitra (1984, p. 7), who emphasize that heavy stress was still being placed on producing middle-level skilled workers and technicians. Specific policies were put in place to improve and expand vocational schools at the upper secondary level and to increase support for teachers of vocational subjects.

2.13 But educational policy during the Third Plan was more than just a continuation of trends from earlier plans. Explicit policies aimed at improving rural access to schooling started to appear. For example, the Strategic Secondary Schools Establishment Project was designed to upgrade 38 provincial upper secondary vocational schools. Its principal aim was not simply manpower expansion but to improve educational opportunities for students who would otherwise have to come to Bangkok for schooling. Similarly, there were policies for nonformal education, agricultural training, and curriculum improvement through the rural Secondary Schools Improvement Project, all of which were aimed at better rural access rather than at quantitative manpower targets.

2.14 By the beginning of the Fourth Plan, 1977-81, these concerns with distribution and equity had moved to centre stage. As we noted earlier, the period of the Fourth Economic and Social Development Plan was dominated by national security considerations, and a prominent feature of that plan was Government's intention to improve the distribution of development benefits between regions, income classes, and urban/rural areas. Educational policy during the Fourth Plan reflected precisely this switch of emphasis. Educational development, and secondary education in particular, was no longer focussed primarily upon the attainment of manpower targets. Enrollment targets were still ambitious--the target for the Fourth Plan period was for total secondary enrollments to increase at 11 percent per year--but the general tenor of educational policy under the Fourth Plan was unmistakably that of "improving the administrative system, curricula and learning processes, and encouraging equality of educational opportunity" (Sanong, 1984, p. 7).

2.15 This change of emphasis was to be achieved through three related features of educational planning. The first was to tackle directly the question of equality of educational opportunity. There remained a persistent difference in educational quality (facilities, equipment, and standard of teachers) between schools in Bangkok and those in rural and provincial areas. At the start of the Fourth Plan, upper secondary schools were located predominantly in Bangkok and the provincial capitals. The result was that in the Central Region (which includes Bangkok), 42 percent of the relevant age group was enrolled in lower secondary and 23 percent in upper; in the Northeast Region the figures were 18 percent and 3 percent respectively. But the question of equal opportunity was not simply one of inferior quality outside the capital; an additional aspect was that the strong concentration of higher education institutions in Bangkok meant that low-income students in rural areas had a reduced opportunity to progress beyond the compulsory level.

2.16 The second key feature of education planning in the Fourth Plan was curriculum reform. We have emphasized above that educational planning during the 1960s and early 1970s was dominated by manpower forecasts for the shortage of middle-level technical manpower. By the time of the Fourth Plan, the view had formed strongly among Thai educational planners that this 15-year stress on secondary vocational expansion had not achieved what was expected of it, and that the cause was the "academic bias" of the secondary curriculum. Rather than producing graduates who were responsive to middle-level market demands, the education system was instead producing people who preferred to use their secondary qualifications as a stepping stone to tertiary entrance.

2.17 There was thus a disjuncture in Thai educational planning during the first three Plans. The formal planning process emphasized the creation of secondary vocational manpower: students, on the other hand, were "clamoring for the founding of an open admissions university ... paralleled by continual demands for the establishment of new universities and the upgrading of existing colleges" (Banphot, 1984, p.4). As a consequence of this demand for tertiary education, a regional university had been opened in Chiangmai in 1964, Khon Kaen and Prince of Songkla Universities were

established, King Mongkut's Institute of Technology was set up with three campuses, Ramkhamhaeng (Open) University opened in 1971 to a first-year enrollment of some 37,000 students (equal to the combined total of all other universities), and there was throughout this period considerable expansion and upgrading of existing colleges and universities.

2.18 The third planning concern of this period was the issue of educational management. The Bank commented in 1979 that administration of the education sector was inefficient as a result of overcentralization, fragmentation of responsibilities among several agencies, and a lack of requisite managerial skills among educational administrators. Educational management was both centralized in Bangkok yet divided among a plethora of agencies. The Ministry of the Interior supervised most primary schools, but the Ministry of Education (MOE) had responsibility for educational aspects of primary education. MOE had sole responsibility for secondary and non-university tertiary education, but a different agency, the Office of University Affairs, looked after Government universities. Other ministries were also involved in various educational programs. It is not difficult to see that this complicated administrative structure, with its consequent inadequate coordination between the different levels of education, could be held at least partly responsible for the disjuncture in Thai educational planning that we described above.

2.19 Thus, education policy during the Fourth Plan was dominated by the three related features of equality of opportunity, the curriculum and structure of secondary schools, and the management of the education system. In 1978, early in the Fourth Plan period, the Government introduced a sweeping reform designed to tackle these three key issues. Central educational administration was unified under the MOE, while much operational responsibility was devolved to the provinces; the dual cycle primary system (4 plus 3 years) was replaced with an integrated six-year course, and the upper secondary cycle extended from two to three years; the existing academic secondary schools were diversified into comprehensive schools; entrance exams to secondary schools were abolished in favor of geographical quota systems; and fragmented curriculum subjects were consolidated around a flexible national core curriculum with regional variations. In short, these changes were to provide more equity, flexibility and diversity, and to prepare students better for the world of work.

2.20 The changes in secondary education in particular were aimed at revamping the system by merging the academic and vocational streams, and altering the curriculum content so as to change the expectations of students. This aspect is worth emphasis because the reforms of 1978 represent a key break with the past. Secondary schools now became comprehensive, with a diversified curriculum designed to be self-contained (i.e., terminal) at each level. If, in caricature fashion, we can describe the pre-1978 curriculum and structure as resulting in the preparation of students academically for entry to the next higher level of schooling, with all the disadvantages to rural/provincial students that we described earlier, then the post-1978 reform can be characterized as one in which the curriculum is seen as an instrument to support rural development by integrating the educational process with the local environment. This was to be



achieved by combining basic academic instruction with practical skills training, with appropriate regional and language adaptations, and by including practical work options in the local community/Area Vocational Centres (AVCs) were set up in each of the 12 educational regions, 10 new agricultural schools were established, and there was a general upgrading of rural secondary schools. Bearing in mind the political and economic environment in which these reforms were discussed and implemented during the late 1970s, we might describe the thrust of educational planning under the Fourth Economic Plan as a attempt to bring as many Thais as possible from the periphery of society into the mainstream.

2.21 This theme was continued into the Fifth Plan, 1981-86. We earlier described the economic perspective of the Fifth Plan as that of "sober reassessment," in which macro-economic difficulties dictated a lower economic growth rate. This perspective set the scene for the educational policies of the period. In general, the Fifth National Education Development Plan placed emphasis on quality and equity improvement rather than on enrollment growth. The specific policies adopted for the Fifth Plan were very much an extension of developments set in train during the reforms of the Fourth Plan: efforts continued to strengthen educational management, to emphasize the expansion of educational opportunities and educational quality in the countryside, and to continue to implement the curriculum changes of the previous period.

2.22 The latter part of this period, 1984-86, was marked by the introduction of a modified educational plan in which educational expenditures were reduced in line with general reductions in public expenditure in the economy, and by the emergence of unemployment among graduates of vocational colleges and of higher education. It is perhaps ironic that 25 years of educational planning opened in 1961 with a concern about manpower shortages, and closed with the emergence of unemployment among educated people.

### III. OUTLINE OF BANK LENDING FOR EDUCATION IN THAILAND

3.01 Over the period from 1966 to date, the Bank has provided assistance for six education projects in Thailand whose total estimated cost was US\$453 million. Bank lending amounted to US\$154 million or approximately 35 percent of total project costs. An indication of estimated project cost is given in Table 1. Fuller details of the projects are given in Appendix II. In this section we simply summarize the main elements of each project in turn, and, in the light of our discussion in the previous section, we locate each project in the context of the economic and educational policy prevailing in Thailand at the time of project appraisal, loan approval and project implementation.

Table 1: Thailand: Estimated Education Project Costs and World Bank Loans/Credits

<u>Project</u>	<u>Number</u>	<u>Year of Approval</u>	<u>Est. Cost</u>	<u>Est. Loan/Credit</u>	<u>Bank as Proportion of Total</u>	<u>Actual Cost</u>	<u>Actual Loan/Credit</u>	<u>Bank as Proportion of Total</u>
			US\$m.	US\$m.	%	US\$m.	US\$m.	%
First	471-TH	1966	21.0/ <u>a</u>	6.0	28.6	21.7	6.0	27.6
Second	822-TH	1972	28.3	15.4	54.4	38.5	15.4	40.0
Third	369-TH	1973	39.0	19.5	50.0	47.0	19.5	41.5
Fourth	1271-TH	1976	78.3	25.6/ <u>b</u>		60.3	31.0	51.4
Fifth	913-TH	1979	70.3	35.0	49.8	62.1	31.7	51.0
Sixth	2178-TH	1982	216.0	52.7/ <u>c</u>		n.a.	n.a.	n.a.
Total	--	--	452.9	154.0	--	n.a.	n.a.	n.a.

/a Excluding technical assistance.

/b Not including an amount of US\$5.6 million subsequently cancelled at the request of the Government.

/c Not including an amount of US\$22.3 million subsequently cancelled at the request of the Government.

Source: World Bank and data supplied by MOE.

### The First Education Project (Loan 471-TH)

3.02 The principal objective of the First Project, approved in 1966, was to improve the quality and increase the output of trade, industrial and agricultural schools by upgrading instruction facilities in those schools, as well as in the relevant teacher-training institutions. The main elements of the project were construction and renovation works for 25 vocational institutions, together with the appropriate instructional equipment. There was also provision for technical assistance with project implementation and equipment procurement.

3.03 The First project was clearly designed to fit the overall development strategy of the country at that time. As noted above, this was the era of national economic planning when the emphasis was on maximizing economic growth and when the role of educational planning was to supply the middle-level skilled manpower that was thought necessary to achieve that growth. The links between economic planning, educational policy, and Bank loan were clear-cut: the major manpower forecasting exercise of the First Plan 1961-66 was undertaken by a joint Thai-USAID team, and the Bank's appraisal team itself relied heavily upon this manpower forecast in preparing its loan recommendations in 1964. Nor does this linkage come as any surprise:

the 1960s were the heyday of the manpower forecasting approach to educational planning, and the Bank shared the prevailing disposition of other international agencies to emphasize not only the role of vocational skills in economic development but also the manpower requirements approach to assessing the need for those skills.

#### The Second Education Project (Loan 822-TH)

3.04 The central objective of the Second Education Project was to assist in university training and research in agriculture and related fields. This was to be achieved by expanding Kasetsart University, which was Thailand's main source of graduates in most fields of agriculture. Expansion would take place both on the existing campus at Bangkok (a Bangkok suburb) and at a new campus (Kamphaengsaen), 80 km from Bangkok. As with the first loan, there was also provision for technical assistance and a project implementation unit.

3.05 Running right through the Project Performance Audit Report is an unmistakable sense of mystery at why the Bank had felt that this project was economically justified. The loan was signed in 1972, which places it during the currency of the Third National Plan of 1972-76. But in this case such a simple chronology is misleading. The justification for this loan can only be understood when it is realized that the generation of this project took much longer than usual. The Bank was the first approached about the Kasetsart loan in 1968, and this project really belongs to the period of the First and Second Development Plans when the manpower requirements approach still held sway. The Performance Audit Report notes that Bank economic missions of that period had emphasized the lack of qualified manpower at various levels and the need for upgrading education and training.

3.06 The Thai-USAID long-term manpower forecast which had figured so prominently in shaping the first Bank education project had not predicted significant shortages of tertiary-trained people. It did, however, emphasize the need for qualitative improvement at that level (Silcock, 1967, p. 284). Moreover, to this requirement for qualitative improvement from the time of the First Plan must be added the quantitative arguments that come from later manpower forecasts: by the time of the Second Plan the manpower forecasts had shifted ground to predict shortages by 1971 of university graduates in agriculture, animal husbandry, forestry and fishing, as well as in the vocational/technical areas that had been cited during the First Plan (NESDB, 1967, p. 40). There is little doubt, therefore, that the Second Education Project shares with the First a common set of themes and attitudes. They were both projects designed to support very precisely Thai educational objectives during the 1960s--objectives which were dominated by considerations of economic growth, and which aimed to remedy quantitative and qualitative deficiencies predicted by manpower forecasts.



### The Third Education Project (Credit 369-TH)

3.07 We earlier described both economic and educational planning as embarking on a change of pace and of direction during the Third National Plan, 1972-76. This shift of focus away from economic growth per se and towards a greater concern with equity and distributional issues is reflected clearly in the Third Education Project which was signed in 1973. The objectives of the Third Project were broader in scope than the First or Second. They were stated as:

- (a) improving and extending elementary teacher training facilities in the provinces;
- (b) introducing a diversified program in existing rural secondary schools;
- (c) improving educational research and curriculum design; and
- (d) extending science programs and formulating a long-range development plan at the Prince of Songkla University in the south of Thailand.

3.08 The Performance Audit Report indicated that there was a clear thrust underlying these objectives to reduce the imbalance in educational opportunity among the various regions, to promote decentralization and to accelerate rural development. Indeed, one can see in this loan the preliminary moves to a diversified secondary curriculum which were to figure so prominently in the reforms of 1978. While the primary objective of the project was to assist in improving curricula and modernizing facilities, particularly in the provinces, it was also intended to contribute to alleviating shortages of teachers and scientists.

### The Fourth Education Project (Loan 1271-TH)

3.09 By the time of signing the Fourth Education Project in 1976, Thailand was moving from the Third to the Fourth National Economic Plan, a period in which national security was a fundamental consideration. In education planning, as we saw earlier, the concerns with regional opportunity and curriculum reform which had gathered pace during the Third National Plan culminated in the educational reform of 1978. This was the social and political environment in which the Fourth Education Project was negotiated. The main objective of this project was to assist the Government in developing its program of educational reform in two key areas:

- (a) the extension of diversified secondary education to provinces outside Bangkok; and
- (b) the establishment of a nationwide adult education system.

3.10 Both components of the project were explicitly aimed at strengthening educational opportunity in rural areas. The diversified secondary curriculum was intended to play a major role in supporting rural development and mitigating to the extent possible the inequitable distribution of income. The new secondary curriculum would contribute towards this by giving general knowledge and practical instruction thus fostering favorable attitudes towards manual work.

3.11 The second project component--to develop the institutional capacity of the Government to manage and operate a national program of Adult Education--was also targeted at the rural and educationally disadvantaged population. As well as measures to improve the planning and administration of adult education, the project provided for the setting up of regional and provincial Adult Education Centres, the training of adult educators, and the development of a community-level basis for establishing village newspaper reading centres.

#### The Fifth Education Project (Credit 913-TH)

3.12 With the broad objectives and instruments of reform established in 1978, the Fifth Education Project, which commenced in 1979, falls neatly into place as a continuation of themes already in train, not just in Thai educational policy but in the thrust of Bank lending. The Fourth Project had emphasized the rural secondary curriculum, and the administrative infrastructure for development of adult education. The Fifth Project took up and extended these developments with three broad objectives:

- (a) to continue the program of diversified secondary education by creating centralized workshop complexes (AVCs) and providing lower secondary schools in disadvantaged rural areas with practical facilities;
- (b) to equalize the quality of school education and expand the coverage of out-of-school education through educational radio by strengthening the Centre for Educational Technology (which was responsible for radio programs for the Ministry of Education) and establishing a second national radio network to be used for educational broadcasting; and
- (c) to improve Government management and planning by establishing a civil service training centre and a centre for the in-service training of educational administrators.

3.13 The intended role of the secondary curriculum proposals to improve rural educational opportunity has been sufficiently described above and need no further emphasis. The proposal for educational radio programs was also aimed at strengthening the quality of education in rural areas. This would be achieved partly by in-school programs, but an important ingredient was out-of-school broadcasting to service adults (mainly in rural areas) who had little or no access to formal education. New studios would be built to meet programming needs in the South, North, and Northeast Regions.

3.14 Under the Fifth Development Plan (1982-86) the Government's main objectives for the education sector were to expand educational opportunities and improve quality in formal and nonformal schooling in response to local labor market and cultural demands, and to improve efficiency in educational management. We earlier characterized the period of the Fifth Plan as a time of sober reassessment in both economic and educational policy. By the start of the Fifth Plan, the central themes which we have discussed in this section--the educational reforms of the late 1970s and the steadily increasing emphasis on rural equity--were well accepted, but implementation had not proceeded as rapidly as expected. Regional disparities in access to secondary education persisted, and the overall quality of education had been affected by the shortage of specialized teachers in science and work education subjects, inadequate textbooks, ineffective teaching methods, and inadequate supervision as well as shortage of physical facilities. This applied in particular to the smaller lower secondary schools in rural areas.

3.15 Moreover, the process of education planning and management was still seen to be in need of strengthening. Among the specific concerns were inefficient allocation and utilization of resources, fragmented managerial responsibilities, lack of coordination between NEC and MOE, a lack of sectoral development strategy, and inadequacies in regional management.

#### The Sixth Education Project (Loan 2178-TH)

3.16 This was the climate in which the Sixth Education Project was signed in 1982. The broad objectives were:

- (a) to improve lower secondary education performance in disadvantaged areas relating to access, relevance, quality and efficiency through new and renovated classrooms and equipment, and through improved teacher utilization; and
- (b) to strengthen education planning and management through improvements in central, regional and provincial planning in the MOE, the NEC, and the NESDE.

3.17 Consistent with the overall thrust of economic and educational planning in Thailand in the early 1980s, the Sixth Project introduced little that was new, but aimed instead to consolidate and extend the policies already in place.

#### IV. EVALUATION OF THE IMPACT OF THE BANK'S LENDING PROGRAM

4.01 It is clear from the previous section that the overall direction of Bank lending for education in Thailand has reflected and supported the development of Thai education policy over the last twenty years. The shift

in emphasis in Government policy from a preoccupation with manpower requirements for growth in the 1960s and early 1970s towards a more recent concern for equality of access throughout the Kingdom is mirrored in the objectives of the six Bank projects as they have evolved over time. Nevertheless, the more difficult question must be asked as to whether the lending program has been successful in achieving these objectives, and whether in retrospect these objectives were the appropriate ones to be pursued.

4.02 In this section we examine the impact of Bank lending on education development in Thailand by looking in turn at manpower aspects, improvement in access, curriculum reform and structural evolution at the secondary level, educational administration and management, and aspects relating to project design and implementation.

#### Manpower Aspects

4.03 As seen above, the first three Bank education projects were formulated over a period when the need to satisfy skilled manpower requirements figured prominently in economic policy formation in Thailand. A number of manpower forecasts were made during the 1960s and early 1970s which played an important role in shaping both education policy and the context of Bank projects at that time.

4.04 The first of these major forecasting exercises was carried out in 1963 by a joint team of officials from the US Agency for International Development (USAID) and the Educational Planning Office of the MOE. The flavor of educational policy that was then emerging is well encapsulated in the terms of reference of the joint team:

"priority should be given to (i) ... work in the development of overall manpower requirements at two specific target dates, i.e., 1966 (end of current ... plan) and 1980 (sufficiently long to give the widest latitude in educational planning) and (ii) assessment of the current educational system's capacity to supply manpower for economic and social development at the suggested target dates .... The exercise would develop areas of student supply in surplus, or in shortfall, which would then suggest the possible alternatives in adjusting the educational system to supply the educated manpower at each educational level." (quoted in Blaug, 1973, p. 110).

The major recommendation that emerged from this exercise was a proposal to expand significantly the scale of secondary education, particularly of secondary vocational education.

4.05 The second major forecasting effort was carried out in 1966 by a research group of the MOE. This team concentrated its efforts on secondary education, and concluded by reinforcing the message of the Thai-USAID forecasts: by 1986 there was estimated to be a gap of 3 million between the demand and supply of secondary school graduates (Research Committee, 1966, p. 169). The third set of forecasts was prepared explicitly for the

Second Plan by Tilak of the ILO and McCusker of the Stanford Research Institute (NESDB, 1967), and they too predicted shortages of manpower during the second plan period. Dominating their results was the forecast of a shortage of 10,000 trained craftsmen in building, metal trades, and electrical industries, but shortages were also forecast for other categories, in particular nurses (2,000 shortfall), physicians and surgeons (900), trained teachers (1,000), and university graduates in science (1,600), agriculture/animal husbandry (750) and forestry/fishing (420) (NESDB, 1967, p. 40).

4.06 The fourth forecast, carried out by Hunter for UNESCO, was the only one of these exercises to put less stress on the desirability of secondary and vocational expansion, and it is interesting to note Blaug's remark that Hunter's work "seems to have attracted little attention in Thailand" (Blaug, 1973, p. 122). The fifth forecast, carried out by the ILO in 1968, was consistent with earlier ones in predicting that demand for craftsmen and process workers would increase rapidly between 1967 and 1971.

4.07 The Thai-USAID forecast was used explicitly to justify the manpower expansion funded by the Bank's First Education Project (Loan 471-TH). The forecast of annual demand for skilled workers used by the Bank appraisal team is shown in Table 2. This demand was to be met by expansion of places at 14 trades/industries schools. Other manpower-related components of the First Project were the expansion of enrollments at nine agricultural schools, and at related teacher training institutions.

Table 2: Demand and supply of Skilled Workers 1980-80

Skilled Workers		
1980 Stock	80,000	
1980 Stock	288,000	
Average Annual Demand		
For Replacement	9,300	
For Expansion	10,400	
Total Skilled Workers		
Required Annually	19,700	
Estimated Percentage Requiring		
Secondary Education	13%	
Resulting Annual Demand for Certificate		
Level Trade School Leavers	2,600	
Annual demand for Technical Positions	<u>1,000</u>	3,600
Annual Out-turn of the Existing		
Trade Schools	2,720	
Additional Requirements per Year	880	
Annual Out-turn of 14 Trade Schools at		
Project Appraisal	1,220	
Proposed Out-turn with Project Expansion	2,110	
Additional Graduates per Year	890	

Source: World Bank

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4.06 The quantitative outcome of the First Project is indicated in Table 3, which compares the number of enrollments in the project institutions in 1972 with the projections made at the time of project appraisal.

Table 3: Predictions and Outcome, First Project (Loan 471-TH)

	<u>Enrollments</u>		
	<u>At Time of Appraisal</u>	<u>Proposed for 1972</u>	<u>Actual 1972</u>
Trade/Industry Schools	4,815	6,940	7,992
Teacher Training	280	550	528
Agriculture Schools	1,990	4,430	4,224
--Secondary	1,900	4,100	2,848
--Technician	90	330	1,376

Source: World Bank

4.09 While some elements seem to have fallen short of target, this is more apparent than real. For example, the course at teacher training college was extended from two to three years in order to provide a higher level qualification. Similarly, the apparent discrepancies in the enrollments for agricultural schools were the result of the conversion of four schools into post-secondary institutions. With these adjustments in place, it is clear that the project fulfilled its manpower target. Indeed, Table 3 understates the success of the project schools since enrollments in trade/industry schools, for example, continued to increase year by year after 1972, reaching a peak of 13,385 in 1977-78, 93 percent above project target.

4.10 Similar conclusions can be drawn about the Second Project which, as we saw earlier, had as its principal objective an increase in the supply of agricultural manpower from Kasetsart University. Table 4 displays the project outcomes.

Table 4: Predictions and Outcome, Second Project (Loan 822-TH)

<u>Faculty</u>	<u>Number of Places to be Provided</u>			
	<u>Bangkok</u>		<u>Kamphaengsaen</u>	
	<u>Predicted</u>	<u>Actual</u>	<u>Predicted</u>	<u>Actual</u>
Agriculture	380	615	955	914
Fisheries	165	192	--	--
Forestry	170	396	--	--
Veterinary Science	--	--	400	327
Engineering	--	--	130	146
Economics & Business				
Administration	90	60	35	41
Misc. Agriculture	740	594	--	--
	<hr/>	<hr/>	<hr/>	<hr/>
	1,545	1,857	1,520	1,428

Source: World Bank



It is apparent that the Kamphaengsaen campus has not expanded to the extent expected of it. This is not surprising, when it is recalled that the project was delayed through difficulties in decision and in staff relocation. But from the overall perspective of manpower supply the project demonstrably achieved its objectives: the total numbers enrolled (3,285) exceeded predicted enrollments (3,065) by over 7 percent.

4.11 The Third Education Project had a more variable outcome, as can be seen from Table 5.

Table 5: Predictions and Outcome, Third Project (Loan 369-TH)

	<u>Number of Places to be Provided</u>	
	<u>Predicted</u>	<u>Actual</u>
21 Rural Secondary Schools	42,720	58,820 (1978)
Prince of Songkla University	2,500	1,688 (1978)
Teacher Training Colleges	20,000	12,181 (1980)

Source: World Bank

At first sight this Third Project can be counted only a partial success: only the rural secondary schools achieved their target for enrollment expansion. Nonetheless, impressive rates of expansion were still achieved by the Prince of Songkla University and the teacher training colleges. The actual university enrollments of 1,688 were still 176 percent higher than the 610 students enrolled in 1973. Similarly, the teacher training colleges did not expand up to planned capacity, but the actual outcome of 12,181 enrollments still represented a 500 percent increase on the 2,000 enrollments at the time of signing the project loan in 1973.

4.12 Later Bank projects also contained manpower components, but we shall not consider those aspects here, partly because the outcomes of later projects cannot yet be fully assessed, and partly because subsequent projects did not have manpower supply as a primary objective. The superficial evidence from the first three projects, as summarized in Tables 3-5 is that the Bank projects were very successful in increasing the supply of trained manpower. Specific targets were not always achieved, but there were very rapid enrollment increases in all project categories of manpower.

4.13 However, there is good reason to believe that this optimistic conclusion will not survive closer scrutiny. Firstly, not all the expansion which took place can be attributed to Bank projects. While Bank funding played a catalytic role in the expansion of teachers' colleges, enrollments in the universities grew rapidly for other reasons. The Bank's funding of Kasetsart University (Second Project) was directed towards developing the Kamphaengsaen campus, which contributed little to enrollment growth. Similarly, Bank funds for the Prince of Songkla University (Third Project) were used to improve the Faculty of Science and upgrade equipment,



rather than to finance expansion directly. University expansion in this period was more a product of Thai Government policies and expenditure on tertiary education than of these Bank projects.

4.14 Secondly, Tables 3-5 assess the manpower outcomes of the three Bank projects against the enrollment targets that were formulated at the time of project appraisal. But this provides only a very limited test. The wider and more important question is whether those manpower/enrollment targets set by the Bank were themselves a sensible method of supporting Thai educational objectives of the time.

4.15 The crucial point that emerges from a wider analysis is that the manpower components of the first three projects were based upon forecasts of manpower requirements that have turned out to be wide of the mark. Indeed there is no convincing evidence that any of these forecasts was at all reliable. This is not the place to embark on a detailed postmortem of these forecasts (Blaug, 1973, contains a good survey). The deficiencies of long-term forecasts are now well known, and the Thai examples were no worse than any of a multitude of such forecasts being made around the world at that time.

4.16 Nonetheless, it needs to be stated for this evaluation that the First and Second Education Projects had as their central objective the expansion of vocational manpower (especially secondary vocational) when, with hindsight, there was never any real evidence that the alleged shortage was genuine. As early as the Third Plan Period (1972) there was evidence that there was in fact "an oversupply of graduates from vocational secondary, technical schools, and agricultural institutions" (Sanong, 1984, pp.12-13). Blaug carried out an extensive rate of return analysis for Thailand in 1970, and his conclusion is worth quoting in full:

"In terms of the social rate, we see that vocational schooling, whether public or private, yields a lower rate of return than does academic schooling due, in main, to the higher costs of vocational schooling, as there is no statistically significant difference in our sample between the earnings of an academic and vocational school graduate. This is a striking finding as vocational secondary education is now the most rapidly growing part of the Thai educational system. A whole series of manpower forecasts that were done in Thailand between 1963 and 1968 led to the conclusion that there were serious shortages of middle-level manpower in the Thai economy and hence that the priority area was secondary education. None of these forecasts actually had much to say on the question of the appropriate mix of academic and vocational schools but somehow they were translated at the policy level into a prescription for expanding vocational rather than academic schooling. We have already seen that secondary education is not a priority area in terms of economic objectives; now we see that there is even less justification for pouring extra funds into vocational rather than academic secondary schools" (Blaug, 1976, pp. 280-281).

4.17 If the evidence from social rates of return can be accepted, the conclusion is inescapable: early Bank projects were encouraging expansion in precisely the wrong areas and levels of the education system. The consequence of this is that, as Tables 3-5 make clear, the Bank's project vocational schools were extremely popular with students, and hence they met or exceeded the specific project targets, but they were being used as a second-chance avenue to tertiary entrance for students who could not get access to the favored academic stream.

4.18 It is this phenomenon which accounts for the massive shift from trade certificate enrollment in the First Project's schools to higher level diploma enrollment. In short, while the early Bank projects were meant principally to service the needs of industry for skilled middle-level manpower, it appears that formal vocational training was widely perceived in Thailand as a method of obtaining secondary and even post-secondary education for those who were unable to gain direct admittance to academic schools leading onto universities.

4.19 It may therefore be concluded that these Bank loans gave a spurt to secondary expansion, and consequently to pressure on tertiary admissions, at just the time when secondary expansion was quite unwarranted. Social rates of return were lowest at secondary level, and substantial secondary expansion was already in the pipeline because primary school had been the fastest growing sector of education throughout the 1950's. It may be objected that the Bank projects at least helped the Thais to provide the facilities and equipment needed for the expansion that was being driven by social demand. Furthermore, it could be argued that the expansion of secondary education at least served to enhance the levels of basic literacy, numeracy and general education necessary for further skill development in the population. No doubt Thailand benefitted both from assistance in coping with strong social demand for secondary education and from the consequent expansion in its educational base. The problem is that vocational schools are an extremely expensive way to do this. In 1969, current and capital costs in such schools were three times the cost of academic secondary schools. The opportunity cost of vocational manpower expansion in the early Bank projects has been very high.

#### Improving Educational Access

4.20 We noted earlier that from the early 1970s onward, i.e., from the period of the Third Economic Plan of 1972-1976, Thai educational policy shifted from a preoccupation with quantitative manpower targets to a greater concern with improving rural access to education. In this section we begin an evaluation of the role of Bank lending in contributing to more equitable educational opportunity. The extent of the problem in 1975 is readily indicated by the fact that in that year Bangkok had 10 percent of the nation's population but 60 percent of upper secondary and 85 percent of higher education enrollments.

4.21 In fact the movement towards greater stress on educational access in Bank lending had already begun in the Third Project. One component of

the Third Project was an improvement in the quality of secondary schools outside Bangkok through the funding of extensions and the purchase of furniture and equipment for rural secondary schools. Additionally, the ten teacher training institutions which were financed under the Third Project had the twin objectives of expanding opportunities for students in rural areas to pursue further studies, and at the same time of alleviating shortages of primary school teachers. These teacher training institutions were all located far from Bangkok. Seven colleges were brand new, and provided places for 14,000 students. Three existing colleges, for which equipment was provided under the project, had places for 6,000 students. As a result, 20,000 student places became available in rural areas, providing opportunities for study close to home and, by catering to rural students, increasing the likelihood that graduates would be willing to serve in rural areas.

4.22 There is no doubt that this project succeeded in expanding educational opportunities in the provinces. Enrollments in the seven new institutions grew from zero at the beginning of the project (1973) to 7,646 at the end of 1980; enrollment in the three existing colleges grew from 2,000 to 4,535. As we noted in regard to Table 5, these are (at a superficial level of analysis) impressive rates of expansion. However, this element of the Third Project failed to achieve the increase in opportunity that was anticipated at project appraisal. In 1980 the new institutions were operating at only 55 percent of capacity, and the existing colleges at 76 percent of capacity.

4.23 Although this underutilization of facilities can be attributed partly (and paradoxically) to their rural location, the main explanation lies directly in the mistaken manpower forecasts which we have described above. The Third Education Project was approved in 1973, at a time when manpower forecasts were predicting a shortage of qualified teachers of over 50,000 between 1971-72 and 1980-81. In the event, actual teacher output over that period exceeded forecast supply by a factor of 2.3 (365,000 in 8 years, instead of 157,000). This miscalculation was not marginal, it was large and came about as a result of the forecasters' vastly underestimating the strength of social demand for tertiary places. The expansion of the secondary system that had been put in place emerged during the 1970s as a barely containable pressure for tertiary places: many of those admitted to tertiary institutions enrolled in the education faculties, including many of the very large number of students in the "Open" University.

4.24 It may be concluded that neither the manpower supply nor the equity aspects of the Third Project can be said to have been successful. With the signing of the Fourth Project in 1976, concerns with equitable access to education moved into prominence, and those concerns formed the basis not just of the Fourth but of the Fifth and Sixth Projects as well. But the tighter focus of these subsequent projects does seem to have let unambiguously to improvements in rural educational opportunity.

4.25 The two relevant features of the Fourth Project were to provide practical facilities for 50 diversified secondary schools outside Bangkok,

and to establish a nationwide adult education system. Quantitative targets for both these components were achieved or surpassed. Enrollments in the 50 project schools were expected to rise from 82,000 in 1975 to 98,000 on project completion. In fact, by 1983 enrollments had reached 116,000, surpassing the target by 18 percent. Similarly, the adult education component more than achieved its quantitative aims. For example, in 1982 there were 8,405 village newspaper reading centers and 43 provincial centers; radio-correspondence reached 13,500 youths and adults as against 2,800 targeted; and over 3 million people benefited from audio-visual activities, public libraries, etc. compared to the target of 1.8 million.

4.26 The same story can be told about the Fifth Project, which continued the aim of strengthening rural secondary schools by providing practical facilities, and of expanding formal and nonformal schooling through educational radio. The establishment of 12 Area Vocational Centres (AVCS) and upgrading of 42 secondary schools were intended to provide quality and equity benefits to an annual total of about 50,000 students by 1985. About 75 percent of the students were to come from disadvantaged rural areas, where average provincial income per-capita was under US\$300 per year. The educational radio component was intended to provide in-school and nonformal instruction to nearly 12 million people by 1985, including inhabitants of the remote North and Northeast. Out-of-school listeners (3 million) would benefit from the acquisition of basic literacy and numeracy skills.

4.27 The Sixth Project also had as its central theme the reduction in regional disparities, particularly at the secondary level. Under the project, 480 schools would be provided with new or upgraded classrooms, workshops, laboratories, equipment and furniture. In 1981 these 480 schools enrolled 171,000 students. The target for project completion in 1987 was 334,800 pupil places.

4.28 Documentation of the more recent projects is still incomplete. The Ministry of Education has prepared a Project Completion Report for the Fifth Project (MOE, 1986), and the National Education Commission has completed mid-term and outcome evaluations of the Fifth Project (NEC, 1983; 1987b), and a mid-term evaluation of the Sixth Project (NEC, 1987a). However, it is not yet possible to carry out a full and final evaluation of these projects, and hence the foregoing description necessarily focuses on project targets rather than on actual outcomes. Nevertheless, even at this relatively early stage, it can be concluded that Bank projects have enhanced the pursuit of the Thai Government's quantitative objectives for improved rural access to education. This conclusion can be drawn on four main grounds.

4.29 Firstly, physical facilities have undoubtedly improved in the regions outside Greater Bangkok, and project institutions have contributed directly to this growth in the physical infrastructure in rural areas. These institutions include: the extensions to the 21 rural secondary schools in the Third Project; the construction and site development of 50

diversified secondary schools at strategic provincial towns spread throughout the country in the Fourth Project; the 42 community secondary schools in rural areas and the 12 AVCs constructed as part of the Fifth Project; and the provision of academic and workshop facilities and site development at 480 lower secondary schools spread out in rural areas throughout the country in the Sixth Project.

4.30 Secondly, recent projects have been characterized by a growing sophistication in targeting. As we saw in the Third Project in 1973, the equity aims were conceived almost as an adjunct to manpower supply objectives, and they failed when the manpower targets themselves failed. By the time of the Fifth Project (1979) the Bank was targeting school facilities on the basis of provincial income per capita. In the Sixth Project (1982) the Bank followed precise criteria in targeting rural areas with disadvantaged secondary facilities. Schools were selected for inclusion only if the school was located in one of the officially designated rural poverty districts that had been accorded development priority under the Fifth Plan and was located in an area with low transition rate from the last grade of primary to first grade of secondary and had a minimum of 70 and a maximum of 400 students in first grade secondary, and so on.

4.31 This steadily improving skill in targeting has, however, not always been carried through into project implementation. For example, the NEC has pointed out that the actual selection of lower secondary schools into the Sixth Project was not completely consistent with the selection criterion that all such schools must be those with a low transition rate from primary school to lower secondary. Moreover, NEC found that although the transition rate of project schools increased, the increase was lower than anticipated, and the gap between planned and actual enrollments into lower secondary widened in later years of the project. Nevertheless, despite these shortcomings, progress has clearly been made in the more accurate selection of project schools.

4.32 Thirdly, although measures of the reduction in provincial inequality do not exist in any systematic fashion, such evidence as there is shows convincingly that inequality in lower secondary enrollments has narrowed since the Bank first became involved in this issue in Thailand. Table 6 shows representational indices for lower secondary enrollments in 1973 and 1986. The data are arranged by the 12 administrative regions used by the Ministry of Education, with the region's principal city in brackets. The representation index is calculated by dividing the share of enrollments in each province by its share of the relevant school-age population. An index of more than one shows over-representation, lower than one shows under-representation. In 1986 regional inequality was still pronounced (compare Northeast with Central), but it is clear from the indices that overall disparity has narrowed considerably since 1973. It is reasonable to suppose that when the full effects of the Fifth and Sixth Projects have worked through, disparity will have been further reduced.



Table 8: Representational Indices of Lower Secondary Enrollment

<u>Region</u>	<u>Representational Index of Lower Secondary Enrollments</u>	
	<u>1973</u>	<u>1986</u>
1. Central (Nakornpathom)*	2.72	2.04
2. South (Yala)	0.82	0.65
3. South (Songkhla)	1.14	1.28
4. South (Phuket)	1.10	1.13
5. Central (Ratchburi)	0.95	1.09
6. Central (Lopburi)	1.18	1.21
7. North (Phitsanulok)	0.65	0.83
8. North (Chiangmai)	0.71	0.93
9. Northeast (Udon)	0.56	0.68
10. Northeast (Ubon)	0.52	0.70
11. Northeast (Korat)	0.49	0.59
12. Central (Chonburi)	0.91	1.09

Note: (\*) Bangkok is a separate region from those listed in the Table. For ease of comparison between 1973 and 1986, figures for Bangkok are included as part of Region 1.

Source: 1973 data: World Bank  
1986 data: Estimated from data supplied by Central Project Unit, MOE.

4.33 Finally, the widening of educational reach through nonformal channels has been a very successful aspect of the Bank's lending program and the major benefits from these developments have accrued to provincial areas. Relevant project components include the 4 regional adult education centers and the 24 provincial adult education centers in the Fourth Project, and the strengthening of the Centre for Educational Technology and the establishment of a second national network for educational radio in the Fifth Project. The outcome of the Fourth Project in the nonformal area was very impressive, with the project targets reached or surpassed. Increased participation in nonformal education can be seen from the growth in numbers benefitting from direct services in the nonformal sector (literacy, general education, special interest groups, radio-correspondence) from 355,000 in 1977 to 535,000 in 1982. It might be noted in passing that the Thailand Fourth Education Project represents one of the few instances where Bank lending for nonformal education has been successful. It is not entirely clear why this is so,<sup>1/</sup> although it is not unrelated to the fact that, even before the project commenced, Government priority for adult education was

<sup>1/</sup> Bank operational staff feel that the sharp focus and superior design of these programs and the fact that they were less subject to modifications arising out of political considerations than formal education activities are major explanatory factors.

already high, with a three-fold increase between 1966 and 1976 in the budget share going to informal education (Sanong, 1984, Table 5). Furthermore, the special extension programs reaching remote as well as urban areas were well designed, and were oriented effectively towards the perceived needs of the recipients.

#### Curriculum Reform and Structural Evolution at the Secondary Level

4.34 Although much still remains to be done, it is clear from the preceding section that the shift towards improving rural access to education in Thailand has been achieving results in quantitative terms. We turn now to an analysis of the more qualitative measures taken since the mid-1970s to correct distributional inequities in the education system, i.e., the substantial reforms of the secondary curriculum, which started to be introduced in the early 1970s and which formed the central theme of the educational reform of 1978. In parallel with the curriculum changes there has been an evolution in the types of schools and associated institutions for delivering secondary and vocational education in both urban and rural areas. Support for curriculum reform and institutional development has been a major theme of the Fourth, Fifth and Sixth Projects.

4.35 We noted earlier that the secondary expansion of the First and Second Bank Projects in the 1960s added to the pressure for tertiary places rather than supplying the middle-level manpower which had been these projects' objective, and that there was some feeling at that time that the secondary curriculum was at least partly to blame for this social demand because Thai schooling was oriented towards the inculcation of "academic" values. Social mobility has always been very high in Thailand, and education, especially if it could lead all the way to obtaining foreign education, was seen as a way "for many ambitious young men from Bangkok and from the provinces to move up the social ladder" (Evers and Silcock, 1967). The pinnacle of that social ladder was found in the public service in Bangkok. Given this social background, it is hardly surprising that Thai schooling in the 1960s should be so strongly oriented towards the more academic streams that would facilitate the next step up the ladder. Nor is it surprising that the secondary vocational schools promoted by the Bank at that time would be looked on as a second-best option, and that they too would become "academicized."

4.36 The implications of these aspects of the educational system for rural education can be readily imagined. Students were allegedly being taught material of little relevance to the rural environment in which most would spend their lives, were being encouraged to join the paper chase for higher qualifications which could in practice only be obtained by moving to a large provincial city or even to Bangkok. At the end of the day many aspirations would be disappointed, especially following the slowdown in public sector jobs from the 1970s onward. Thus, provincial people would be at a double disadvantage. The inferiority of provincial schools in places, facilities, and equipment would make it difficult for rural students to climb the educational ladder to the same extent as their counterparts in

Bangkok. At the same time there would be feedback effects because rural development and job growth could hardly take place if the human capital had either migrated to the cities or had skills inappropriate to rural life, leading to still further difficulties in providing a viable rural education.

4.37 The diversified curriculum introduced in the reforms of 1978 turned away from a preoccupation with preparation for post-secondary education. It had as its central theme the improvement of rural opportunity through the preparation of students for local life and employment, to be achieved by supplementing traditional academic subjects with occupational subjects, including work education. For example, all students would take at least four periods a week of work education subjects, and in other subject areas there would be an increasing emphasis on practical and manual activities. Other key features were that literacy in the Thai language had primary emphasis since a foreign language was no longer compulsory; students were encouraged to fulfill their course requirements in practical subjects in vocational or skill training centers that would make use of local materials and resources; the content of employment education would be increasingly designed at regional level; and the curriculum would be terminal for both lower secondary and upper secondary education.

4.38 In short, the curriculum reform was intended to play a major role not just in improving the content and quality of secondary education, but also with greater attention given to work education, secondary education would prepare students better for productive employment: secondary education would be "de-academicized," the schools would inculcate better attitudes towards vocational subjects, and the nexus between secondary schooling and demand for tertiary entrance would be broken.

4.39 The introduction of the diversified curriculum was supported by the Bank through the Fourth, Fifth and Sixth projects. In the Fourth Project, buildings, furniture and equipment were provided for 50 diversified secondary schools (DSS) in which the new curriculum was to be implemented. In the Fifth Project, 42 community secondary schools (CSS) were chosen from those co-educational secondary schools established in rural areas which were providing resources for community development activities in addition to regular school programs, and were equipped with the facilities for the implementation of the practical part of the new curriculum. Also as part of this project, the 12 AVCs were established to provide practical instruction for students from nearby schools. Finally, in the Sixth Project attention switched to the lower secondary levels, providing furniture and equipment for 480 lower secondary schools (LSSs) where the introduction of the new curriculum was being hampered by inadequate facilities.

4.40 It goes almost without saying that there is much in the concept of the diversified curriculum that can be accepted without demur. The compulsory foreign language requirement of the old curriculum was a good example of the orientation towards academic (and preferably foreign) qualifications, something to which only a tiny minority could aspire. Practical



work options in a local community, or through supervised home activities using local materials, must help students to select subjects that are consistent with both their aptitudes and their chances of post-secondary employment. Moreover, initial evidence about actual outcomes is favorable. Internal efficiency of the diversified schools is high. Of the schools supported under the Third Project, for example, repetition and dropout rates were lower for diversified schools than the national average. Further favorable evidence comes from the MOE's tracer study of the early diversified schools. This study found definite indications that there is a favorable turn towards vocational studies.

4.41 Furthermore, the project institutions have shown "that the diversified curriculum is not only desirable but also practicable for the Thai system" (Ruang, 1984, p.37). Students have been able to choose between preparation for further learning, or termination of schooling with skills broad enough for apprenticeship, further on-the-job training or self-employment. Project schools in the DSS project have become leaders in the implementation of the diversified curriculum, and have provided examples in this respect to other schools across the country. The CSSs have similarly provided a model for curriculum development while at the same time furthering the sense of community involvement in education in rural areas.

4.42 Despite this favorable evidence, however, it is also apparent that the diversified curriculum has not achieved everything that was expected of it. The diversified secondary schools were expected to offer both compulsory and elective vocational subjects, the latter being far more specialized. In practice, all the Bank's project schools offer the compulsory part of the curriculum, but rarely do they (or other diversified schools) offer the specialized practical subjects as major electives. One reason is that students and schools continue to aim at tertiary entrance, and the universities do not require the specialized vocational electives as a condition of entry. A more important reason is that shortage of vocational teachers, overcrowded workshops and unsuitable facilities have meant that the AVCs cannot offer the specialized vocational subjects required by students. In any case, only twelve AVCs were established, which is quite inadequate to service the needs of all potential feeder schools.

4.43 The consequence is that although the diversified curriculum was intended to help provide a terminal education at each level, AVCs have played only a limited role in enhancing the implementation of a diversified curriculum. In practice, there has been little change in the proportions of students going on to higher education. Approximately 90 percent of lower secondary graduates continue their studies into upper secondary, and only about .8 percent of upper secondary graduates take up jobs, the vast majority of the remainder entering tertiary institutions. In short, Thailand's experience in this respect is not very different from that of many other countries where there is "little evidence to suggest that the new type of schools improved the quality of education, changed students' attitudes toward the labor market, or had the intended effect on employment prospects" (Psacharopoulos and Woodhall, 1985, p.230).

4.44 Furthermore, problems have arisen in the evolution of some project institutions. The AVCs, for example, have experienced difficulties because they come under more than one administration (DOVE and DGE), with DOVE being concerned with straight vocational education, while DGE has a more general focus on skill-base development. In addition, enrollments at AVCs are declining somewhat, due partly to the fact that the cost of transport of students to the Centres has to be borne by the students themselves, and partly because secondary schools in the catchment areas of the AVCs are building their own capacity and drawing numbers away. As a result, AVCs are looking to alternatives such as adult education, evening classes, and so on. A report just completed by NEC is expected to recommend continuation at least of project Centres but with cut-backs in the financing of any new ones. Recommendations have also been made for improvements in management, administration, and coordination between AVCs and schools (NEC, 1987b, pp. 29-33). Further, the CSSs of the Fifth Project have not been as successful as had been hoped, partly because the administrators of these schools have not fully understood their role as serving lower secondary needs with a diversified curriculum, and have wanted to expand to meet demands for upper secondary education, a move encouraged by parents who want their children to be trained in an academic rather than a vocational stream as a preparation for tertiary entrance (NEC, 1987b, p. 84).

4.45 In summary, although the diversified curriculum has been progressively introduced from the early 1970s onwards, the evidence suggests that it has not contributed greatly towards a shift from academic to occupational or vocational secondary education. Neither the diversified secondary schools, nor the community schools, nor the lower secondary schools are currently providing work-oriented subjects that are really congruent with local needs. Shortage of specialized vocational teachers in some areas, together with inappropriate or underutilized equipment, provide at least part of the explanation.

4.46 The NEC has argued that the underutilization of equipment started with the Fourth Project (1976), under which furniture and equipment were procured for secondary schools. This equipment was not fully used because vocational teachers were scarce and because enrollments were low. Once the Fourth Project was completed, a lack of explicit Government policy on the operations of the project schools or on the continued use of the equipment meant that much of what had been procured under the Project fell into disuse. The same specifications for furniture and equipment were used in the Fifth and Sixth Projects, but the major curriculum reforms of 1978 now meant that those specifications were no longer appropriate. Once again expensive procurements were not being fully used. It is now the view of the NEC that the implementation of the diversified secondary education has been too costly in comparison with its utility, and that the effort to reform Thai secondary education towards diversified and work-oriented education is still far from successful.

### Administrative Aspects

4.47 We noted earlier that during the 1960s and 1970s, educational administration in Thailand had become fragmented, overcentralized, uncoordinated and inefficient. An important aspect of the 1978 reforms was an attempt to rationalize the administration of the educational system. Bank projects from the mid-1970s onwards contained significant elements to assist the Government in its efforts to improve the efficiency of educational administration throughout the country. These project elements were of three types: the establishment or strengthening of administrative institutions, provision for in-service training and technical assistance to benefit educational administrators, and support for research and evaluation studies to provide better data for planning.

4.48 The first Bank project to contain a major administrative component was the Third Project, which made provision for a National Curriculum Development Centre (NCDC), to undertake research, development and evaluation of curricula for both primary and secondary schools, production of text-books and teaching aids, and so on. The NCDC was to concentrate on areas other than science and mathematics, these two fields falling within the responsibility of the Institute for the Promotion of the Teaching of Science and Technology (IPTST), which had been already established under a UNDP/UNESCO project. It was proposed that on project completion the NCDC and the IPTST would merge (see further below).

4.49 In the Fourth and Fifth Projects, further support for institutional development was provided. As part of the secondary education component of the Fourth Project, the Training and Maintenance Centre in the DGE, producing teaching aids and providing in-service training in equipment and building maintenance, was extended. In the Fifth Project, a Civil Service Training Centre was established within the Civil Service Commission, and a Centre for Educational Administrators was set up in the MOE. The former was to provide systematic in-service management training for middle- and senior-level civil servants, while the latter was aimed specifically at improving managerial skills of administrative staff within the school system (mainly headmasters of primary and secondary schools).

4.50 This apparent proliferation of administrative units invites the question as to whether the system was and is just as complicated after the reform measures as it was before. This question might be answered at two levels.

4.51 Firstly, at the level of the specific institutions themselves, the performance has been somewhat variable, but on the whole the units supported under the Bank projects have been successful in achieving the objectives set for them. For example, the NCDC has had a substantial and positive role in the implementation of the new curricula from 1978 onwards, through intensive and well-designed in-service training programs, and the production of new teaching materials, despite some staff shortages and budget problems along the way. Although the proposed merger of NCDC with the IPTST encountered problems, a satisfactory compromise was worked out whereby the two institutions have retained their separate identities but work side by side in the same Department of the MOE under a single

Director-General. Another example of successful institutional development is the Centre for Educational Administrators, now called the Institute for the Development of Educational Administrators (IDEA). At first, utilization of the Centre was below target, and difficulties in obtaining well-qualified and experienced staff hindered its development. But more recently its performance has improved markedly, with substantial improvements in its staffing base. Over 6,000 school principals received training in educational administration at IDEA in 1986.

4.52 Even so, a number of Thai educators still believe that these and similar institutions were created without sufficient consideration being given to their relationship to existing departments, agencies and other educational units, or to their long-term role in the system as a whole. There is scope for some rationalization of these institutions in pursuit of long-term efficiency gains, and studies currently underway may provide some indication as to how such rationalization might best be effected.

4.53 Secondly, at a broader level, there remains some overlap in function and some lack of coordination between NEC, NESDB, MOE, and other Government departments and agencies, particularly in the educational planning area. Inconsistency between the objectives of different arms of the Government can create tensions; for example, the use of Budget Bureau criteria in planning the location of AVCs raised difficulties in integrating educational and financial requirements for the placement of the Centres.

4.54 We noted above that administrative support has been provided through Bank projects not only via establishment of functional units and via the provision of training and technical assistance, but also by means of support for research and evaluation aimed at improving the analytical basis for decision making. An example of this latter type of support has been the school mapping project in the Fifth Project, which has aimed at defining school building needs throughout Thailand, particularly in order to foster greater educational equality in primary school expansion. In the early stages of the project, serious difficulties were encountered in deriving data at local levels. More recently performance has improved and a number of innovations arising from the mapping project can now be discerned, including the development of useful data bases in some provinces, improvements in admission procedures, and better planning of school transport arrangements.

4.55 Overall on administrative issues, it can be concluded that Bank project elements for in-service training and technical assistance and support for research and evaluation studies have enhanced Thai skills in educational planning and administration. However, while individual efficiency can be raised through training, the problem of improving the structure of management in Bangkok's fragmented, overcentralized, uncoordinated and inefficient educational administration persists. This is, of course, a problem of Thailand's bureaucracy that is not limited to educational administration. But Bank projects have at the very least clearly identified planning, management and educational administration as being important areas for the allocation of resources. Furthermore even though many problems of inadequately defined function and centralized control still remain

in the system, there has been clear progress towards strengthening local- and provincial-level capacity in educational management in recent years, and the Bank's lending program has made a contribution towards achievement of this goal.

#### Aspects of Project Design and Implementation

4.56 In an earlier section we noted that the design of successive Bank projects in the education sector in Thailand was responsive both to the changing demands of an evolving educational policy and to the lessons learned from earlier projects. In the later projects both of these effects contributed to the formulation of projects with a relatively large number of disparate components. As a result these projects might appear at first glance to lack a coherent philosophy. Yet closer examination, not just of each project on its own, but also of its relationship to previous projects, reveals a consistent evolutionary thread that draws together the apparently uncoordinated elements. The wide spread of project components can be seen to reflect an appreciation by the planners both of the complexity of the task facing the education system and of the need to advance on several fronts simultaneously in bottlenecks and constraints were not to arise in specific parts of the system.

4.57 Nevertheless such complexity could well have given rise to problems in project implementation. Overall, however, the experience in this respect has been pleasing, and indeed the major cases amongst completed projects where significant implementation difficulties were encountered (school design problems, procurement delays, cost overruns) were in the earlier (simpler) projects, such as the First. By the end of the period under study many of these inadequacies had been overcome, with increased responsibility being given to the Central Project Unit in MOE for coordination amongst project components (Fifth and Sixth Projects). This resulted in an easing of problems of fragmentation of managerial responsibility and a reduction in the number and length of procurement delays. Other improvements introduced in these later stages included efforts to standardize the specifications for furniture and equipment, and the streamlining of purchasing procedures.

4.58 During loan negotiations, the Thai Government and the Bank agreed on a number of recommendations which were intended to enhance the success of project implementation. Examples include the completion of a study on procurement procedures in the Fourth Project, the utilization of mid-term and final evaluations of project components in the Fifth Project, and the preparation of selection criteria for LSSs in the Sixth Project. In some cases, recommendations were not fulfilled, including one for the establishment of an inventory control system for school radio equipment, and a proposal to make the NEC a more effective coordinator for inter-ministerial planning. However, in most cases these agreements were fulfilled, at least in part, with consequent benefit to project performance.

4.59 Finally, it can be remarked again that an important factor in successful project implementation lies in the involvement of local officials in project design and management. This has occurred in the case of the Thai education projects, and it has not only improved coordination



between the Bank and the Government, but has also enabled the development and enhancement of significant managerial skills amongst the Thai officials involved. Nevertheless, there remains a strong feeling among some educational administrators in Bangkok that the nature of the Bank's project preparation and implementation in the first three operations in the sector limited the process of skill transfer to local planners. While the present report has emphasized that Bank educational lending has acted in support of Thai educational policy, these earlier projects were introduced and shaped both by general Bank lending policy of the time and by the Bank/UNESCO appraisal teams sent to Thailand in the project preparation phase. A striking example of this is provided by the Third Project. The Performance Audit Report for that project noted quite clearly that this project emerged from the recommendations of a UNESCO mission which had visited Thailand in 1970 to identify education projects suitable for Bank support. The Thai response to the Audit Report emphasized the local view that this project had been very much a Bank initiative, formulated according to Bank policies of the time, and that Thai planners had been only minimally involved in detailed project design and appraisal.<sup>2/</sup> In these circumstances it is likely that project management skills were not transferred to Thai officials to the fullest possible extent, and that some possibilities for improvements in project design may have been missed. Observation suggests that in the Fourth and subsequent projects, Thai officials took on increasing responsibilities for project design and preparation.

#### V. CONCLUDING REMARKS

5.01 In this paper we have emphasized the logic of the Bank's lending program for education in Thailand. This program, as it has evolved over the last twenty years, has had two major and interrelated aspects: firstly, design of an appropriate secondary system to cater to both academic and vocational needs, with a focus particularly on improving equality of access in rural areas, and, secondly, support for the Government's implementation of educational reform. We have shown how this lending program has grown out of, and remained responsive to, the development of educational and economic planning in Thailand.

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<sup>2/</sup> Bank operational staff involved in several of the Bank's education projects in Thailand emphasize that while this may have been a valid criticism in the case of the first three projects, subsequent operations were conscious of this shortcoming and aimed at involving Thai education authorities as much as possible in the process of project formulation and preparation. The history of the Fifth (Multipurpose) Education Project (Credit 913-TH), for example, would appear to support this observation.

5.02 The turning point in Thai educational development in the period under study was 1978, the year of the introduction of the Government's sweeping program of educational reforms. The Bank played a key role in supporting the introduction of these reforms and has continued to make an important contribution in furthering their implementation. In the broad view, the reform program has been successful in bringing about significant improvements in the educational system. The new diversified curricula have provided a basis for meeting both academic and vocational demands for secondary education, and there have been major gains in improving educational access amongst the disadvantaged rural population.

5.03 It is too early to judge the outcome of the most recent initiatives, but the system has remained flexible, with a willingness to "learning-by-doing" and to adapt approaches if they fail to meet objectives. For example, there is a feeling in some quarters that existing curricula may have become too specialized at the secondary level, and that further rationalization and streamlining is necessary. In addition, new curricula are being introduced to meet evolving needs, such as DOVE's promising new curriculum for self-employment which emphasizes both production and management skills; this type of training may in due course be complemented by possible Government moves to encourage the establishment of small businesses, especially in the agricultural area.

5.04 We have pointed to the eclipse of "rigorous" manpower forecasts as a basis for educational planning, brought about partly by a shift in emphasis from purely economic considerations to a concurrent concern for social dimensions of development, and partly by the inadequacy of the manpower forecasts themselves. This is not to say that manpower considerations should be neglected in educational planning, but rather that a broader and more dynamic view needs to be taken of market demands for labor in different areas.<sup>3/</sup> The keynote here for curriculum design is flexibility, with vocationally-orientated education providing simply a basis on which can be built further learning-on-the-job, apprenticeship or self-employment in any one of a wide variety of fields.

5.05 We have also noted that the diversified curriculum has not resulted in a marked downward shift in continuation rates to tertiary education. The problem of "too many" academic secondary and tertiary graduates will continue while relative private rates of return to academic qualifications convey the appropriate signals to students and their parents. In a strictly economic sense, overproduction of educated people is inefficient and wasteful of scarce resources. However, it must also be remembered that too narrow a focus on employment as the final and only arbiter of education as a means of preparing for life. This social element is never far from the surface in Thailand.

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<sup>3/</sup> Bank operational staff also stress the importance of institution building in this area (monitoring and evaluation efforts, more systematic and regular labor market information, etc.) to improve the reliability of the manpower approach as a planning instrument.



APPENDIX I

EDUCATIONAL DEVELOPMENT IN THAILAND:

THE ROLE OF WORLD BANK LENDING

BACKGROUND DATA

1. Socio-Economic Background

Thailand, with a total area of 514,000 sq.km., is divided into 4 main geographical regions: Central Plain (which includes Bangkok), North, Northeast, and South. Appendix Table 1.1 illustrates the socio-economic situation in 1985 (or latest year) and compares it with that in 1961, the first year of formal national economic planning in Thailand.

TABLE 1.1

THAILAND: BASIC SOCIO-ECONOMIC INDICATORS

	<u>(Units)</u>	<u>1961</u>	<u>1985</u>
<u>Population</u>			
Total	(million)	27.2	51.3
Growth Rate 1961/85	(%)	-	2.7
Literacy Rate	(%)	68	86
Life Expectancy at Birth	(years)	52	63 (1981)
Proportion Rural	(%)	88 (1980)	83 (1981)
<u>Economy</u>			
GNP per Capita	(US\$)	n.a.	723 (1980)
GDP Growth Rate	(%)		8.2 (1960-1970) 7.1 (1970-1977)
Contribution of Agriculture to GDP	(%)	39	20 (1984)
Proportion of Labor Force in Agriculture	(%)	84 (1980)	68 (1982)

Sources: Compiled from UN Demographic Yearbook and World Bank Atlas (several issues).

## 2. Structure of the Education System

In 1978, Following the reforms initiated by the NEC and approved as part of the Fourth Development Plan (1977-81), the structure of the education system was changed from a 4-3-3-2 system (or 4-3-3-3 system for the vocational stream) into a simpler 6-3-3 system. The changes are shown in Table 1.2. The resulting structure is shown schematically in figure 1.1.

TABLE 1.2

### THAILAND: STRUCTURE OF THE EDUCATIONAL SYSTEM

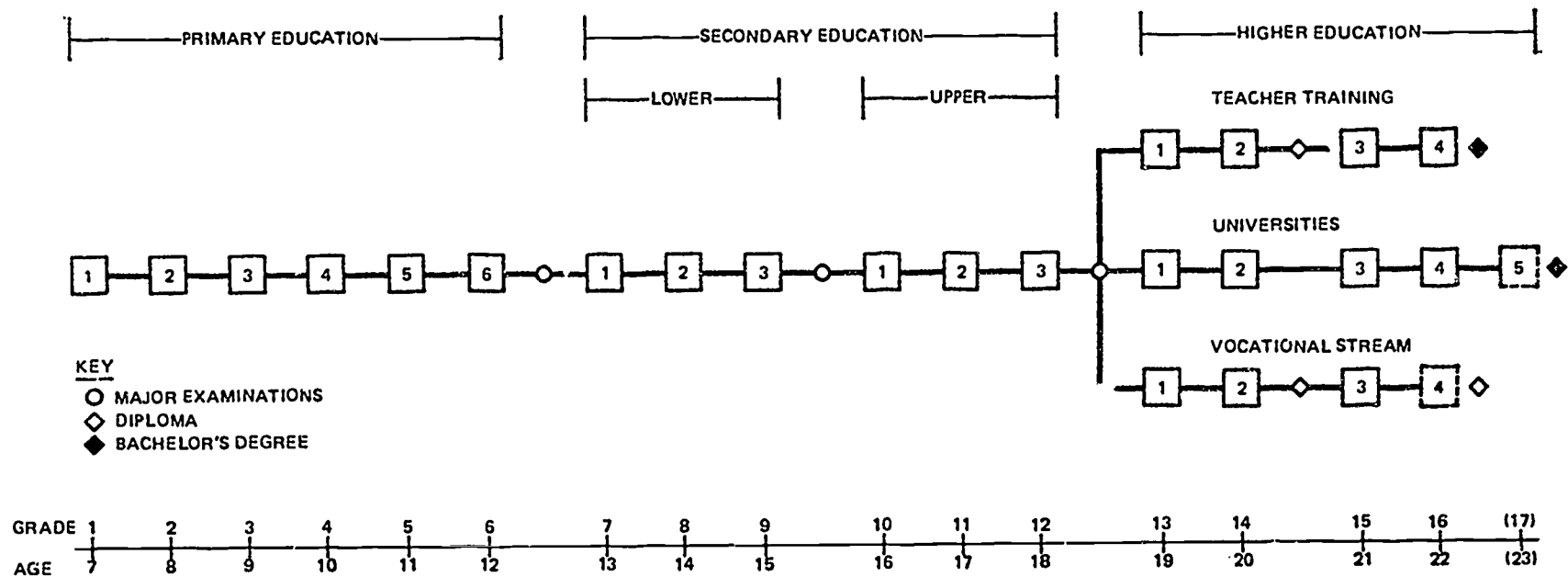
<u>Old System (pre-1978)</u>		<u>New System (from 1978)</u>	
<u>Level</u>	<u>No. of Grades</u>	<u>Level</u>	<u>No. of Grades</u>
Lower primary	4 (P1-P4)	Primary	6 (P1-P6)
Upper primary	3 (P5-P7)		
Lower second.	3 (MS1-MS3)	Lower second	3 (M1-M3)
Upper second.		Upper second	3 (M4-M6)
- academic	2 (MS4-MS5)		
- vocational	3 (MS4-MS6)		

#### Notes:

P = Abbreviation of Prathom (primary)

MS = Maw Saw, abbreviation of the words Mathayom Suksa  
(secondary education)

**FIGURE 1.1 - THAILAND**  
**STRUCTURE OF THE FORMAL EDUCATION SYSTEM**



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### 3. Educational Statistics

The census of 1937 reported an adult literacy rate of over 30 per cent, and by the mid-1950s the literacy rate had reached 50 per cent (Kasama, 1984). Primary enrollments had already reached 85 per cent of the 7-13 age group by 1969, and the last two decades have seen a rapid expansion of the education system. Enrollment trends over the last 25 years are shown in Appendix Table 1.3. The very rapid growth in tertiary enrollments in recent years is apparent in this Table.

TABLE 1.3

THAILAND: ENROLLMENT TRENDS 1961-1980

	<u>(Units)</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1983</u>
<u>Primary level</u>					
- No. of Students	(million)	3.938	5.635	7.392	7.272
- No. of Teachers	(million)	0.109	0.163	0.299	0.356
- Student/Teacher Ratio	(no.:1)	36	35	23	22
- Gross Enrollment Ratio	(%)	83	83	96	97
<u>Secondary Level</u>					
- No. of Students	(million)	0.311	0.695	1.920	2.192
- No. of Teachers	(million)	0.016	0.045	n.a.	n.a.
- Gross Enrollment Ratio	(%)	12	17	29	30
<u>Tertiary Level</u>					
- No. of Students	(million)	0.046	0.055	0.361	1.120
- No. of Staff	(million)	0.003	0.008	0.030	0.029
- Gross Enrollment Ratio	(%)	2	2	14	23

Source: UNESCO Statistical Yearbooks

4. Private education has historically been important in Thailand, particularly at upper secondary level. More recent years have seen a decline in the relative importance of the private sector at primary and secondary level. The proportion of the private sector in total enrollments at various levels is shown in Appendix Table 1.4.

TABLE 1.4

THAILAND: PARTICIPATION OF THE PRIVATE SECTOR IN EDUCATION  
(per cent of total)

<u>Levels</u>	<u>1975</u>	<u>1982</u>
Preprimary	40	42
Primary	11	8
Lower Secondary	33	15
Upper Secondary	38	30
Higher	10	20
Average	16	14

Source: World Bank

5. Public education is financed almost entirely by central Government. Public education expenditure as a proportion of GDP has risen from 2.4 per cent in 1966 to 3.8 per cent in 1984, and the educational budget as a proportion of total Government expenditure has risen from 15.8 to 20.5 per cent over the same period. In 1984, Thailand's education budget amounted to 39,406 million Baht (approximately US\$1,713 million). Of this amount, 57 per cent was spent on primary education, 16 per cent on secondary and 12 per cent on universities. Details are shown in Table 1.5.

TABLE 1.5

THAILAND: PUBLIC EXPENDITURE ON EDUCATION: 1966-1984

	<u>(Units)</u>	<u>1966</u>	<u>1971</u>	<u>1976</u>	<u>1981</u>	<u>1984</u>
<u>Education Budget</u>						
	(million Baht)	2,389	5,133	13,444	28,045	39,406
- as propn. of total budget	(%)	15.8	17.9	21.3	20.0	20.5
- as propn. of GDP	(%)	2.4	3.6	4.0	3.6	3.8
<u>Allocation of Education Budget</u>						
- primary	(%)	56.2	55.6	56.9	55.4	57.3
- secondary	(%)	11.8	12.3	12.3	16.3	16.2
- university	(%)	13.2	12.8	12.3	16.3	16.0
- vocational	(%)	6.4	6.8	4.6	6.5	6.9
- teacher training	(%)	4.3	5.8	4.0	2.4	2.3
- nonformal	(%)	0.4	0.9	1.2	1.6	1.8
- other	(%)	7.8	5.8	6.2	5.3	4.1
	(%)	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: Chuachan (1983); Sanohg (1984, Tables 3, 5); data supplied by Educational Policy and Planning Division, NEC, and Educational Planning Section, NESDB.

## APPENDIX II

### EDUCATIONAL DEVELOPMENT IN THAILAND:

#### THE ROLE OF WORLD BANK LENDING

##### DETAILS OF LENDING PROJECTS

#### General

1. From 1960 to 1984, a total of ten education projects were commenced in Thailand supported by foreign loans/credits totalling 4,774.2 million Baht (approximately US\$227 million). Details are shown in Table 2.1.

2. In addition, Thailand has received technical assistance grant aid from a number of countries including,

- the Federal Republic of Germany (development of vocational training and technical education at King Mongkut's Institute of Technology);
- Canada (agricultural research at the Asian Institute of Technology, Khan Kalu University, Kasetsart University, and elsewhere;)
- Australia (vocational training and research);
- Japan (development of telecommunications, agricultural extension and training, agricultural research).

#### Details of Bank-supported Projects

3. First Education Project - Loan 471-TH (1966). The first education project was supported by a Bank loan of US\$6.0 million. The primary objective of the first project was to improve the quality and to increase the output of selected trade, industrial and agricultural schools by upgrading instruction facilities in those schools. The project comprised the following components:

- (a) construction and renovation works at 14 upper secondary trade and industries schools, 9 upper secondary agricultural schools, 1 vocational training college, and 1 agricultural teacher training college;
- (b) equipment for 25 project institutions; and
- (c) Technical assistance in teacher training and curriculum development.

TABLE 2.1

THAILAND: LOANS AND CREDITS FOR EDUCATIONAL  
DEVELOPMENT: 1980-1984

Project	Duration	Source	Amount	
			(m.baht)	(US\$m.)
Comprehensive Secondary School Development Project	1980-72	CIDA	19	1.0
First Educational Project (Vocational Development)	1980-73	IBRD	120	6.0
		USAID	420	21.0
Second Education Project (University Development)	1972-80	IBRD	308	15.4
Third Education Project (Multipurpose)	1973-80	IDA	390	19.5
Development of Four Technical Schools	1974-80	ADB	128	6.3
Fourth Education Project (Multipurpose)	1976-84	IBRD	620	31.0
Fifth Education Project (Multipurpose)	1979-85	IDA	700	35.0
Education at Technical Level	1980-84	ADB	300	14.5
Sixth Education Project (Multipurpose)	1981-87	IBRD	1,725	75.0
Improving Colleges of Agriculture and Songkla Fishery College	1982-84	Denmark	44	1.9
		Loan Phase III		

Source: Data supplied by Central Project Unit, Office of Permanent Secretary, MOE; Educational Planning Section, NESDB.

Second Education Project - Loan 822-TH (1972)

4. The main objective of the second project was to assist in university training and research in agriculture and related fields. The project was estimated to have a total project cost of US\$28.3 million, of which US\$15.4 was to be financed by the Bank. The project comprised the following elements:

- (a) site development, construction, furniture and equipment for specialized teaching and research premises for seven faculties (Agriculture, Fisheries, Forestry, Veterinary Science, Engineering, Economics and Business Administration, Science and Arts);



- (b) technical assistance in curriculum development, university management, and project unit support.

Third Education Project - Credit 369-TH (1973)

5. The third Project was estimated to cost US\$39.0 million, and the credit amounted to US\$19.5 million. The objectives were stated as:

- (a) improving and extending elementary teacher training facilities in the provinces;
- (b) introducing a diversified program in existing rural secondary schools;
- (c) improving educational research and curriculum design; and
- (d) extending science programs and formulating a long-range development plan at the Prince of Songkla University in the south of Thailand.

6. The project components were as follows:

- (a) site development, construction, furniture and equipment for 7 new primary teacher training colleges, extensions to 21 existing rural secondary schools, and a National Curriculum Development Center; furniture and equipment for 11 existing rural secondary schools; and equipment for 3 primary teacher training colleges;
- (b) site development, construction, furniture and equipment for extensions to the Science Faculty of Prince of Songkla University; and
- (c) specialists' services and fellowships for the project institutions and assistance in strengthening the Project Implementation Unit of the Ministry of Education.

Fourth Education Project - Loan 1271-TH (1976)

7. The fourth project was financed in part by Loan 1271-TH. At the request of the Thai Government US\$5.6 million of the loan amount of US\$31.0 million was cancelled.

8. The objective of the Fourth Project was to assist the Government in developing its program of educational reform in two key areas:

- (a) the extension of diversified secondary education to provinces outside Bangkok; and
- (b) the establishment of a nationwide adult education system.

9. These objectives were to be fulfilled through the following components:

- (a) construction, furniture and equipment for 4 regional adult education centers, 24 provincial adult education centers, 50 diversified secondary schools and a Training and Maintenance Center; and
- (b) technical assistance including specialists' services and fellowships for the project institutions, with particular support for the establishment of an Adult Education Coordinating Unit.

Fifth Education Project - Credit 913-TH (1979)

10. The Fifth Project took up and extended the developments of the Fourth Project with three broad objectives:

- (a) to continue the program of diversified secondary education by (i) creating centralized workshop complexes (area vocational centres) and (ii) providing lower secondary schools in disadvantaged rural areas with practical facilities;
- (b) to equalize the quality of school education and expand the coverage of out-of-school education through educational radio by (i) strengthening the Center for Educational Technology (which was responsible for radio programs for the Ministry of Education) and (ii) establishing a second national radio network to be used for educational broadcasting; and
- (c) to improve Government management and planning by establishing a civil service training centre and a centre for the in-service training of educational administrators.

11. The project components were:

- (a) to continue diversification of secondary education by creating 12 centralized workshop complexes (area vocational centers) to provide practical instruction to students from nearby academic secondary schools and to provide 42 lower secondary schools in disadvantaged rural areas with practical facilities;

- (b) to equalize the quality of school education and expand the coverage of out-of-school education by strengthening the Center for Educational Technology and establishing a second national network for educational radio, including 11 transmitter stations; and
- (c) to improve Government management and planning by creating a Civil Service Training Center and a Center for Education Administrators and by implementing various educational sector studies including a comprehensive program of school location planning.

Sixth Education Project - Loan 2178-TH (1982)

12. The total project costs of the Sixth Project were estimated at US\$216.0 million, of which US\$75 million was to be financed by the Bank. The broad objectives were:

- (a) to improve lower secondary education performance in disadvantaged areas relating to access, relevance, quality and efficiency through new and renovated classrooms and equipment, and through improved teacher utilization; and
- (b) to strengthen education planning and management through improvements in central, regional and provincial planning in the Ministry of Education, the National Education commission, and the National Economic and Social Development Board.

13. The project comprised the following components:

- (a) facilities to improve approximately 480 relatively disadvantaged lower secondary schools including construction, equipment and furniture;
- (b) in-service staff training for about 3,720 teachers and administrators in content and teaching methods in selected practical subjects; some 3,160 non-teaching staff (including principals, librarians, school counsellors and community development officers) in their respective areas of responsibility and some 540 staff in maintenance and repair of equipment;
- (c) training in teaching and planning for the Division of Education Planning, departmental planning units, the Office of the National Primary Education Commission, the Central Procurement Unit, and the 71 planning units of the Ministry of Education, the Population and Manpower division of NESDB, and the NEC.

EDUCATIONAL DEVELOPMENT IN THAILAND:

THE ROLE OF WORLD BANK LENDING

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