IMAGES OF MALAYSIA

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Muhammad Ikmal Said & Johan Saravanamuttu
December 11, 1990

Introduction

Muhammad Ikmal Said and Johan Saravanamuttu

This book is a selection of the papers presented at the Malaysia Society[1] -- Malaysian Social Science Association Colloquium that was held in Penang between June 29 and July 3, 1987. This collaboration between the two associations arose out of Malaysia Society's desire to hold its tenth anniversary in Penang and the Malaysian Social Science Association's co-operation in providing the logistics and organizational machinery necessary for such an event. A total of 64 participants registered for the colloquium, a little more than half (35) of whom contributed papers on a wide array of issues. This unusually large number of papers provided both the Malaysia Society and the Malaysian Social Science Association a sufficient number of related papers from which they were to publish a volume each. The selection for the Malaysian volume was drawn from papers that dealt with agriculture, industry and population change, while the Australian volume was selected from those that addressed some aspects of Malaysian history and ethnic relations. However, for various reasons, the publication of the Australian volume could not be carried out. Three of the chapters in this volume are drawn from the proposed Australian publication.[2]

This addition has made the collection a little more dispersed than intended. This is nothing unusual for a book of this kind. Furthermore, we felt that all the revised papers should, given the circumstances, at least be published in one volume. Quite apart from their intrinsic value, the three articles compensate for the two papers which the proposed Malaysian volume "lost" for reasons best known to the authors. *Images of Malaysia* thus presents a variety of views on Malaysia's economy and politics.

The book is divided into three sections. The first section contains six articles that deal with different aspects of Malaysian agriculture. The next three in Section II underline the ethnic parameters that have defined Malaysian politics while the last two articles in Section III are about the electronics industry and Malaysia's 70-million population policy.

The articles by Robert Cramb and Glen Chandler provide an interesting

contrast with respect to the different ways by which the impact of integration of shifting cultivators into the wider economy could be analyzed. Cramb argues with strong supporting evidence that the Iban shifting cultivators of Batu Lintang and Nanga Tapih have responded very 'rationally' to the vagaries of the market since the turn of the century, planting and abandoning the cultivation of coffee, pepper and rubber with the rise and fall of prices, and adjusting the production of hill rice for subsistence accordingly. This is perhaps best illustrated by the shift to swamp rice (which offer higher yields and, therefore, some surplus for sale) from 'traditional' hill rice cultivation in areas quite far from their longhouses when the prices of pepper or rubber dropped, and back to hill rice cultivation when conditions improved. Likewise, the distribution of labour into the different economic activities also varies with price fluctuations in the market.

Such adjustments to the market go a long way to show that the amount of labour devoted to hill rice cultivation, which may be viewed as the central economic activity of the Iban 'traditional' economy, depends upon the general conditions of the market. Thus, the practice of tradition is, to a considerable extent, influenced by factors beyond the control of the respective communities. Such far-reaching changes acting upon the types of economic activities a particular community undertake cannot but bring about changes in the expenditure of labour on hill rice cultivation as well as the ways in which they reproduce themselves from one round of production to another.

Chandler's conclusion is quite the reverse, despite the direct physical presence of logging camps in her study area, that is, in the Keningau and Nabawan/Pensiangan districts in Sabah. This suprising argument runs counter to the findings of other studies that have looked at the impact of the timber industry upon native populations elsewhere (Hong, 1987). It is acknowledged that the shifting cultivators who live around the timber camps in the area have actually worked 'for a long while' in such camps and that logging threatens their lives, but these, Chandler argues, have not resulted in a sudden break with the cultivation of hill rice. This is because their employment in such camps have generally been over short periods only, as a result of which the traditional practice of shifting cultivation has not been affected adversely. Furthermore, there is, apart from the seasonal sale of labour, hardly any form of exchange between the camps and the neighbouring communities.

It is evident, therefore, that the impact of the timber industry is measured simply by the extent to which the Dusun and Murut are able to continue with shifting cultivation. And, in contrast to the kind of data (production yields, labour expenditure, etc.) Cramb adduces, Chandler relies more heavily upon reports about the temporary nature of labour employment in and the low density of exchange between the two parties.

Muhammad Ikmal's article on the changing forms of production in Malay-

sian agriculture looks similarly into the fate of small, though comparably much less 'traditional', household farms as they become increasingly integrated into the market. It is argued that small marginal multi-crop farms are particularly vulnerable to the strain of competition when pitted against more efficient producers and more remunerative forms of employment brought about by increased division of labour in the economy as a whole. This explains the rapid decline of small paddy and rubber farms within the last twenty years or so, leaving an alarming proportion of Malaysia's cultivated land idle, and slowing down the rate of growth in the agricultural sector. Both these trends have been of concern to the state because the manufacturing and service sectors in the urban areas have not, until then at least, grown fast enough to meet the increased demand for jobs. Furthermore, the large majority of the poverty-striken farmers are Malays, whose votes are, by virtue of the heavier weightage rural constituencies carry, crucial to the United Malay National Organization's (UMNO) or any other Malay-based political party's aspirations for power. The interplay of these factors have prompted the state to undertake a number of strategies to arrest the reproduction crisis of small household farms. These include the provision of subsidies and small loans and other services through a number of state agencies, consolidation and rehabilitation of small scattered farms and new settler land development organized by the state.

The increased role of the state in the reproduction of agricultural households is particularly evident as small household units become increasingly incapable of meeting the demands of the market. However, the contradiction, on the one hand, between state control over the conditions of production and, on the other, the settlers' contribution of labour and their control over the reproduction of labour continues. The state has also encouraged private capital to cultivate the idle lands left by smallholders. It is only a matter of time before such units of production seek to expand further into existing communities of small farms. Both these trends would obviously raise the problem of deciding upon the most appropriate form of production for Malaysia's agricultural households.

The subject of state policies toward rural development is discussed in the three following articles. Ng Gan Che's and Ng Ban Lian's appraisal of the Federal Land Development Authority's (FELDA) approach to land development brings to the fore some of the questions raised earlier by Muhammad Ikmal. The first of these refer to the increased control of its settlers through the 'share system', under which settlers would be allotted shares and not formal title over a piece of land. The second policy issue that is of considerable importance is the increasing corporatization of FELDA and the role of settlers in this process. This discussion puts FELDA in rather favourable light, although some caution about the importancee of fulfilling settlers' needs is also raised. FELDA settlements continually generate a considerable amount of wealth, as

a result of which questions about the development of a more integrated approach to spatial planning, including the development of towns, has to be devised. Finally, the authors also touch upon some of the main environmental issues and new directions in policy that need to be considered.

The following two articles by Mohd. Shukri Abdullah and Chamhuri Siwar and Nik Hashim Mustapha provide a discussion of state policies on rural development from a more general point of view. Mohd. Shukri's contribution argues that the state's approach to rural development is basically 'technocratic', generating development through growth rather than through structural reforms. This, he contends, is principally due to the fact that UMNO depends upon the influential landed elites in the rural areas to deliver the votes it needs. Any proposal for land reform would clearly jeopardize the support a party needs to gain power. Thus, the prospects for populist reforms for small peasant development within Malaysia's ethnically divisive economy does not appear to be bright, particularly if no similar measures are proposed for the more multi-ethnic plantation sector. On the other hand, the article by Chamhuri and Nik Hashim argues that the state's current emphasis upon integrated rural development has evolved from its past failures in dealing with poverty in the rural areas. The Integrated Agricultural Development Projects implemented in recent years have brought about increased yields, but poverty remains widespread. This is because the basic problem of small farm size has not been addressed. In addition, mechanization has displaced the poorer sections of the peasantry of income opportunities that have been otherwise available. At the same time, the price of paddy has remained the same and paddy yields have reached a plateau, and even declined in some years. It must be remembered also that small farms have to compete with the larger and more aggressive farms. Under these conditions, the future of small farms does not look very bright unless the non-agricultural sector can absorb excess labour from the countryside.

The politics of ethnicity, so well characterized in Malaysia's economic, political and cultural life, has remained in the backdrop up to this point. This is largely because the articles mentioned thus far are broadly concerned with the economy and the contest for influence within the peasant sector is predominantly between the main Malay political parties, UMNO and PAS.

The article by Alan Healy provides an interesting insight into the Colonial Office's perspective and approach to Malaya's ethnic problems and the direction it thought they should take in order for decolonization to be successfully carried out. Subsequent events showed how wrong this turned out to be. This is particularly evident in Healy's discussion of the Malayan Union proposal and how the Colonial Office's ideals for a 'non-communal' Malaya continued to impede a more realistic appraisal of developments in Malaya. The contributions by Khong Kim Hoong and Michael Leigh underline the same basic ethnic

parameters of conflict which were already evident during the period Healy covered; political parties have to think in ethnic terms in order to gain seats in parliament and the state legislative assemblies. Khong's analysis of Malaysia's General Elections in 1986 documents not only the spread of ethnic voting, but also the contemporary issues that augmented the established lines of loyalty, and how poorly-conceived attempts at fostering inter-ethnic co-operation preceding the elections dealt a hard blow to PAS particularly. The analysis of the 1987 Sarawak state elections by Leigh details how the different coalitions were welded together by money (timber) politics, ethnicity (the rise of Dayak nationalism and the Chinese reaction to Dayak nationalism) and Kuching-Kuala Lumpur relations.

The last two articles by Rajah Rasiah and by Wan Abdul Manan Muda are about the electronics industry and Malaysia's current population policy respectively. It is quite evident that these two articles stand on their own, for they deal with issues that are not covered by any of the earlier contributions. Rasiah's piece provides an interesting account of the recent changes in the electronics industry, and how they appear to defy some of the basic assumptions found in the literature about capitalist organization of the labour process. It is also argued that severe competition rather than increasing labour costs provided the main impetus for these changes. Wan Abdul Manan's critical analysis of Malaysia's 70-million policy emphasizes the adverse implications for the status of health, nutrition and the growing number of the aged population were such a drastic population attained. This is a particularly welcome contribution because it addresses some of the critical issues pertaining to the existing patterns of access to and nature of health care, the problem of malnutrition and ageing and how they would deteriorate further if the targeted increase in population -- envisioned by Malaysia's Prime Minister as a strategy to facilitate industrial development -- is not accompanied by any radical reform in the economy.

It is quite evident that although the papers selected for this book are fairly diverse, the problems they address represent problems that arise from the contradictions of the development of the capitalist economy. Thus, although the conditions of reproduction for small household farms in the remote longhouses, in the Malay villages and in FELDA settlements are very widely different, the changes they experience currently are generated basically by the vagaries and logic of the capitalist market. State policies too change; either to induce a more rapid and simultaneously a more specialized integration into the capitalist market or to reduce the adverse effects of the market upon the peasantry.

Quite obviously, the policies conceived are themselves the product of political calculations that are based upon the existing class structure. The rapidly increasing role of the state in advancing the necessary finances for the reproduction of the peasantry, particularly in the form of creating new settler

land development schemes and consolidating small peasant units into 'mini-estates', is ample testimony of the state's aversion to land reform. This, it was pointed out earlier, is because the state is still propped by landed interests. However, with the exception of the corporate plantation sector, the landed elite is by no means comparable, say, to their counterparts in Latin America, for they neither own large tracts of land nor is land concentrated in very few hands. The economically small landed elite would certainly transform their economic base once agriculture becomes less remunerative. As the magnitude of the idle land problem suggests, the decline of smallholding agriculture has already set in. It is now fairly common, particularly with more opportunities made available under the New Economic Policy, for the rural landed elite to venture into business. This explains partly the relative ease with which political leadership in an increasing number of rural constituencies have changed hands from the land-based elites to the urban intelligentsia. The decline of the landed elite's hold over the reins of power augurs the dawning of some structural change in agriculture as other classes (from the urban corporate sector) develop interests and influence in what goes on in the rural sector; what its final shape might be is still too early to predict.

The market is, of course, undiscriminating; it distributes wealth in the only way it knows how, that is, by allocating goods and services only to those who have the means to purchase them. This exacerbates existing inequalities, as a result of which economically disadvantaged groups can only hope to correct them by political means. Basic economic issues (employment, poverty, the distribution of wealth, the role of foreign and local investment, population policy) are thus expressed in highly charged political terms, particularly in situations where the social division oflabour is still distinguishable along ethnic lines. The ethnic divide becomes especially salient when there is less to be shared -- that is, whenever the economy faces a downturn. The immediate post-war years and the mid-1980s were both periods of economic uncertainty, and were commonly characterized by a highly polarized political situation. Therefore, periods of economic downturn represent those moments when the contradictions of unequal development take on a highly political form.

However, as the discussion on the electronics industry attests, periods of downturn also present opportunities for change. It is also in the wake of fostering Malaysia's industrial development that the government had thought of increasing its population, with the hope that the resulting expansion of the domestic market would bring about better prospects for her growth.

Thus, the changes experienced by the different sectors of the population are in one way or another related to the contradictions of the development of the economy as a whole. They underscore the urgency for observers of the Malaysian scene to come to grips with the historically specific political and economic tendencies that appear to shape the general directions of the economy and

society as a whole and how these, in turn, determine (and are subsequently determined by) the responses of the different segments of the population. Putting such a broad research theme on the agenda will only be a first step towards a better understanding of the relationship between the past and the present, between the micro and macro institutional processes, and the political and economic configurations of the different contending forces within the country. *Images of Malaysia* minimally opens discussion on a number of issues that are addressed in this broad research agenda.

Notes

1. A chapter of the Asian Studies Association of Australia.
2. We thank Dr. Gale Dixon of Monash University for suggesting the inclusion of these three articles in this volume.

Reference

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The Changing Agricultural Economy of the Saribas

R.A. Cramb

Iban agriculture, particularly the shifting cultivation of hill rice, has been the subject of considerable debate in Sarawak. Frequently, this debate has been conducted at a very general level, with no distinction being drawn between those communities which practised a pioneering system of land use, involving the felling of primary forest (sometimes in forest reserves), and those (the vast majority) which have long practised an established forest-fallow system, involving the repeated clearing of secondary forest. Further, the debate has suffered from a lack of micro-level data, forcing the participants to rely on aggregated statistics of doubtful accuracy or on their general impressions. The only substantial study of Iban agriculture has been Freeman's investigation of hill rice farming in the Baleh Region, conducted more than 35 years ago (Freeman, 1955). At that time the Baleh appears to have been a largely subsistence-oriented, pioneering area of low population density (from four to six persons per sq. km). Yet in the post-war period most Iban regions have experienced major forces for change, notably, a marked growth in population, the spread of commercial agriculture (particularly rubber and pepper farming), an increase in the provision of government services (particularly education). Hence Freeman's study cannot be considered typical of Iban agriculture today, and may not have been typical even in 1950.

This paper examines the changing nature of the Iban agricultural economy in the Saribas District of Sarawak (Fig. 1). The Saribas District was chosen because it is a long-settled region with moderately high population density (about 16 persons per sq.km.) and one in which traditional hill rice cultivation has been widely supplemented by rubber cultivation since around 1910 and pepper cultivation since around 1950 (Cramb, 1988). In addition, it is a region which from an early stage has experienced the "modernizing" effects of education.

At the same time, the Saribas District contains some important contrasts. Within the district there has long been a distinction between the more remote and economically depressed communities of the upper Saribas (the Ulu Layar

and Spak) and the more accessible, better educated and more prosperous communities of the middle Saribas (the Layar, lower Padeh, Paku, and lower Rimbas).[1] Hence a study of the Saribas offers an opportunity to explore something of the uneven nature of rural development in Sarawak.

This paper focuses on a case study of two longhouse communities in the Nanga Spak area of the Saribas -- Batu Lintang and Nanga Tapih (Fig. 1). Historically, Batu Lintang has been grouped with the more commercialized, prosperous and better educated communities of the Layar and Paku, while Nanga Tapih belongs to the Spak and Ulu Layar where commercial agriculture and modern education were slower to penetrate and the pressure of population on the land has been greater. Though not representing the extremes in this historical contrast, the experience of the two communities has been sufficiently different to throw some light on the processes involved.

Batu Lintang, located along the main Layar river, has a larger land base and better access to Betong, the administrative headquarters and principal market town of the Saribas district. The river journey from Batu Lintang to the Layar bridge takes under half an hour and from there , since the mid-sixties , there has been road access to Betong. In 1985 the Layar feeder road reached Batu Lintang, giving it direct road access. Nanga Tapih is located along the Sungai Spak, a tributary of the Layar. It has a smaller territory and is less accessible. The journey from Nanga Tapih to Batu Lintang takes half a day without an outboard engine and one or two hours with an engine, but low water in the Spak can make the journey extremely slow and laborious.

The two communities were studied intensively from April 1979 to July 1980. This involved monthly visits, each of a week's duration. The methods of data collection during this period included recording of work, income, and expenditure by every household (May 1979 to May 1980), periodic household interviews, group interviews , the use of key informants, field observations, and direct measurement of crop areas and yield. These data have been reported in Cramb ((1980, 1984). In addition, land use maps were compiled from ground observations and aerial photographs. This study was followed up with survey visits in September 1982, September 1983, and May 1985. On the last occasion a detailed re-survey was made of every household, particularly with regard to household composition and land and labour use.

The physical environment of the Nanga Spak area has been described by Sibat (1980). The soils are underlain by Cretaceous sediments, primarily red or light grey shales. The terrain consists of moderately steep to very steep low hills, dissected hills and mountains, and a ridge-and-valley complex. The elevation ranges from 30 m to 350 m a.s.l., with hill summits often more than 50 m above the associated valley floors. The soil themselves are mainly Red-Yellow Podzolic Soils of the Merit family. The average annual rainfall at Nanga Spak is 3,134 mm. On average the wettest month is December (443 mm) and the

driest month is July (124mm), but there is great variation from year to year. The natural vegetation of the area is Lowland Mixed Dipterocarp Forest. However, all but very small pockets of the original forest have been felled, giving rise to a patchwork of rice farms, rubber and pepper gardens, and various stages of secondary forest, which contains few of the dominant tree species found in primary forest.

Population and Settlement

Batu Lintang

According to oral traditions, the Batu Lintang community was founded in the second half of the 17th century by Ngadan, a famous Saribas pioneer, and has continued to occupy roughly the same territory since that time, though the longhouse site has been moved many times as the community progressively brought its land under cultivation. In the 1850s the longhouse was only a short distance from the present site. During Rentap's rebellion the community moved to Sadok Mountain for two years to "escape the Rajah's taxes." When Rentap was defeated in 1861, all but two of the Batu Lintang households returned to their original territory, building a 30-door longhouse which they occupied for eight years. From about 1870 until the Japanese Occupation they moved four times. Some households emigrated during this period, reducing the longhouse to 25 doors. Soon after the Occupation the community moved to its present site, which has been used for two successive longhouses, the first accommodating 28 households and the second, after some recent extensions, accommodating 32. The present longhouse ia s solid concrete structure built on the ground.

In 1980 the Batu Lintang community comprised 29 households occupying their own apartments in the longhouse and a Chinese shopkeeper who lived with his Iban wife in a detached dwelling close by, making 30 households in all with an average of 6.2 members. In the five years to 1985, three new households were formed and two households (including the shopkeeper) moved out, bringing the number of households to 31 with an average of 5.9 members. The room of one outmigrating household remained vacant.

The total resident population in 1980 was 185. By 1985 this had fallen slightly to 183. Batu Lintang's territory measures 13.2 sq.km., hence the population density in 1980 was 14 persons per sq.km, significantly lower than at Nanga Tapih and well within the supposed carrying capacity of shifting cultivation (Freeman 1955). The relative stability of the resident population over the five years to 1985 meant that the population density did not appreciably alter.

Education has had a profound effect on the demographic characteristics of the Batu Lintang community. In 1958 a primary school was opened within Batu

Lintang territory, with the result that almost all those children born at Batu Lintang since the war have received a basic education. This has enabled some to obtain employment with the government as administrators, clerks, teachers, and so on, and many others to obtain semi-skilled jobs in the non-farm sector. Of all children ever born to women resident at Batu Lintang in 1980 (excluding those children who were still engaged in schooling or were of pre-school age), about 30 per cent had long-term non-farm employment and hence were resident in other parts of Sarawak, in many cases in and around the oil town of Miri. If the pre-war generation is excluded the proportion with non-farm employment rises to 35 per cent. If they had not had access to primary schooling perhaps most of those with non-farm work would have remained at Batu Lintang as farmers, adding considerably to the population pressure on the land. As it is now they and their dependents not only support themselves independently of Batu Lintang's resource base but supplement the incomes of those remaining in the longhouse through regular remittances home.

Nanga Tapih

The Nanga Tapih community was formed early in the 20th century from two smaller groups, each of four households, which were off-shoots of nearby communities. The community successively occupied longhouses at Nitar, Taju, Letong, Nyumboh, and Bara, progressively moving down the Tapih stream towards Sungai Spak (Fig. 3), By 1945, when the community moved to its present site at Nanga Tapih, it had grown to 13 households. In 1980 the Nanga Tapih community comprised 18 households occupying their own apartments in the longhouse and (as at Batu Lintang) one Chinese trader who lived with his Iban wife in a nearby shop-house, making 19 households in all with an average of 5.8 members. In the five years to 1985, only one new household was formed and no household moved in or out, bringing the number of households to 20 with and average of 5.6 members.

The total resident population in 1980 was 110. By 1985 this had only risen to 111. Nanga Tapih's territory extends for 6.1 sq.km. Hence the population density in 1980 was 18 persons per sq.km., about 29 per cent higher than at Batu Lintang. The stabilization of the resident population meant that the population density did not change from 1980 to 1985.

Primary education came much later to Nanga Tapih than to Batu Lintang: no school was established within the Spak river until the Nanga Lawih school was opened in the mid-seventies. This affected the opportunities of the post-war generation to obtain permanent non-farm employment. Excluding pre-school and school-age children, only nine per cent of those ever born to women resident at Nanga Tapih in 1980 had non-farm employment (compared to 30 per cent for Batu Lintang). If the pre-war generation is excluded the figure is

still only ten percent (compared to 35 per cent for Batu Lintang). This factor helps to account for the higher population density at Nanga Tapih, a higher dependency ratio, and (as will be noted below) the considerably smaller contribution of remittances to household income.

History of Land Use

Batu Lintang

The founders of Batu Lintang were, of course, pioneer shifting cultivators. As with most of the Saribas communities, however, Batu Lintang had moved into the established phase of shifting cultivation by the early 19th century. The last household to fell primary forest on any scale did so around 1850 (though one "island" [pulau] of primary forest in the Lintang stream remained until 1948). Established shifting cultivation remains a major form of land use today.

The first cash crop was coffee, which was planted on a small scale during the boom years of the 1890's. Some of the more fertile land along the margins of the Layar was used for this purpose, the majority of the longhouse territory being unsuitable. When the coffee died, this land was planted with fruit trees, many of which are still standing.

Batu Lintang farmers began planting rubber around 1915, several years after the first Saribas planters. They obtained seed and seedlings from Gensurai (one of the earliest longhouses to take up rubber), from Chinese traders, and in some cases, directly from Kuching. The first planter, Empeni, put in two gardens of 600 and 700 tress respectively (a total of about 2.5 ha). Every household planted at least one garden, though the scale of planting varied considerably. By the 1920s rubber was firmly established. Most households had two or three share-tappers from other regions in residence. This was a time of considerable prosperity for the community. Nevertheless, most households still placed great importance on rice cultivation. During the 1930s depression Batu Lintang farmers continued to tap, though without the assistance of share-tappers. As rubber was their only source of cash, and rubber tapping could be done in the slack periods of the hill rice cycle, it was worthwhile to go on producing.

The Japanese Occupation brought a halt to rubber tapping, though some new planting took place in this period. Once again, the major emphasis was on hill rice production. Adequate reserves of fallow land existed to permit large farm clearings and reasonable yields. Hence most households had more than enough to eat and managed to sell rice to the Japanese, as well as to other longhouses and to Malays living downriver.

Batu Lintang farmers were well-placed to take advantage of the post-war rubber boom and so enjoyed another period of prosperity. The immediate

post-war period also saw an improvement in transport. Outboard engines became available and were first bought in around 1950 with the profits from rubber. The community shared a 22-horsepower engine costing $M1,800. Before this it required four hours' paddling to go downriver to Betong and one day (from 8 a.m. to 3 p.m.) to come back. With an outboard the trip down took only an hour or so. In addition to rubber, they began planting pepper in 1951. Every household planted from 30 to 50 pepper vines, the largest garden being around 150 vines. However by 1956, when pepper prices had fallen to a fraction of their 1951 level, the pepper gardens were abandoned and rubber resumed its place as the dominant cash crop. A number of households began planting pepper again around 1960 when prices briefly rallied, but it did not become a major crop until the 1970s.

In the 1960s, Batu Lintang, like other communities, was faced with a steadily declining rubber price and a growing population, with a consequent decline in the availability of fallow land for shifting cultivation. Informants state that the land was exhausted (tanah kusi) and the rice was not growing well.

Weeds were an increasing problem and both weedicide and fertilizer were unavailable. Consequently, starting around 1965, but particularly in the early 1970s, many households rented swamp rice land in the area around Betong and in some cases as far downriver as Beladin. Rents varied considerably, averaging about $M50 to $M60 per ha. Yields, however, were higher than from hill farms, consequently those renting swamp land had more than enough rice to eat and in some cases managed to sell rice. By 1975 virtually all Batu Lintang farmers abandoned wet rice farming and began to concentrate once again on semi-commercial hill farming -- with hill rice production supplying, most of their subsistence requirements, and pepper and rubber providing the major sources of cash income. This pattern of farming has continued until the present. Recently there has been some interest in cocoa and a number of households have planted small gardens. These, however, were not yet bearing in 1985. In 1984 the Layar feeder road reached Batu Lintang, making it possible to forego river transport altogether, thus further reducing transport costs and improving the return to commercial farming.

Nanga Tapih

The pioneers of the Spak river are not remembered locally. It appears the Iban groups who first opened up the area of farming subsequently moved on to other regions, leaving the secondary forest to be utilized by later arrivals. When the founders of Nanga Tapih moved onto the Sungai Tapih watershed the land was supporting very old secondary forest (pengerang); all but one or two pockets of primary forest had been felled. Hill rice farming was the only form of land use, so the community moved around their territory at regular

intervals to be close to the oldest available fallow vegetation. Though individual farm plots were large (perhaps three to four ha.), there was sufficient land to permit a fallow period of around 14 or 15 years. At that time regeneration of the forest was faster so that a fallow period of seven or eight years was considered sufficient for the land to recuperate, whereas now up to ten years is thought necessary. The community was able to produce a surplus of rice which they exchanged with itinerant Malay traders for the necessities not locally available.

When the founding households were still at Taju in the 1890s, they planted coffee like other Saribas communities. All households at Letong planted small rubber gardens in the 1910s, obtaining seed from Gensurai in the middle Layar. Extant Occupation Tickets issued in the 1930s put the size of rubber gardens at 200 to 400 trees, or less than a hectare. Hence there was never any influx of rubber tappers from other regions as at Batu Lintang. Throughout the pre-war period hill rice farming remained the major activity, with no reduction in the size of farms.

During the Japanese Occupation, when all efforts were directed to hill rice, the fallow vegetation was still up to 15 years old in Sungai Tapih Mit and the largest trees (Ficus spp.) were up to half a metre in diameter. Individual farms ranged from a minimum of two or three ha. up to five ha., perhaps twice the present size. As the community comprised 13 households at that time, the total cultivated area was probably about 14 ha. somewhat more than at present. A five ha. farm produced from 80 to 150 pasu (1,5000 to 2,900 kg). Though this represented yields not much higher than those obtained today (300 to 600 kg per ha.), total production was more than enough to meet local requirements, in some cases lasting up to years. Three households sold rice to the Japanese.

The growth of population in the post-war period, combined with a gradual increase in the minimum fallow period required for recuperation of the soil, led to a shortage of adequately fallowed land. As at Batu Lintang, informants say the secondary forest was too small and land was exhausted (*kusi*). This meant that both the total cultivated area and the area cultivated by each household had to be reduced, so that self-sufficiency was no longer attainable; they were only growing enough rice for six months of the year. Again, as at Batu Lintang, many households began renting swamp rice land from Iban and Malay farmers in the vicinity of Betong, but this practice started somewhat earlier at Nanga Tapih and was carried on for longer and by a larger proportion of households, suggesting greater pressure on the land. One household farmed downriver continuously from 1944 to 1959 and again from 1963 to 1976. Many other households began to follow suit from about 1965; by 1969 over half the community was farming downriver and, in 1972-3, almost 70 per cent. They built a subsidiary longhouse on borrowed land near Betong and rented Malay rice land nearby for M$40 to M$50 per farm. Farm size averaged about one ha.

and yields were from 1,500 to 2,000 kg per ha. Hence production was usually sufficient to meet subsistence requirements. The community had no other source of income during this period.

Some farmers at Nanga Tapih had begun planting pepper in the early 1950s. The yield was less than two kg. per vine, compared with present yields of three to four kg. per vine. When prices slumped in the late 1950s they abandoned pepper. A few households may have continued with pepper planting in the 1960s, but most did not take up the crop again until 1977, when all households ceased planting swamp rice and concentrated once again on hill farming. From this year there was a major planting effort, and by 1980 there were over 12,000 vines within the longhouse territory, representing an average of 670 vines per household. From 1981, with the falling price of pepper, there was a major withdrawal of labour from this enterprise, particularly for new planting and replanting. Nevertheless most gardens continued to be maintained and harvested.

In 1979 Nanga Tapih began an experimental community cocoa project with the help of the Department of Agriculture. However, the site chosen proved unsuitable and the seedlings did not survive. Most households tried planting on their own, inter-cropping the cocoa with pepper prior to phasing out the latter crop. This too was unsuccessful for a number of reasons -- the farmers did not master the required nursery techniques, the soil was mostly unsuitable for cocoa. Hence, growth was poor and variable. Finally, because the cocoa was planted in small gardens, it was impossible to control the squirrels which were the major pest. Though some cocoa was harvested and sold, most households have since cut down what trees they had.

The slump in pepper prices and the failure of cocoa to take the place of pepper induced many more men than usual to travel to Brunei where they could earn $20 to $30 per day as unskilled construction workers. In September 1982 married men from six households (four of them household heads) had left for Brunei and others were planning to go later. Those remaining behind were once again largely dependent on hill rice production.

The Batu Lintang Economy: 1980-85

An Overview

The pattern of land use at Batu Lintang in 1980 is shown in Fig. 2 and Table 1. The shifting cultivation cycle, including the 1979-80 hill rice farms and the various stages of secondary growth, accounted for 54 per cent of the total area. The ratio of fallow land to cropped land was 14:1. Rubber occupied 41 per cent of the total area, including both productive gardens and old, overgrown gardens, interspersed with fruit trees. Most of the rubber was concentrated

Table 1
Land Use At Batu Lintang, 1980

Land Use Category	Area (ha.)	Per Cent
Hill rice farms	46	3.5
Secondary growth	670	50.5
Rubber *	548	41.3
Pepper	6	0.5
Forest reserve**	31	2.3
Settlement	6	0.5
River	19	1.4
Total	1,326	100.0

* Including fruit trees and secondary growth.
** River reserve.

along the banks of the Layar, except for a block in the Gemia stream which was planted to secure the community's claim to disputed territory. Pepper gardens were scattered along various side-streams close to the main river and to the longhouse. Altogether they accounted for less than one per cent of the area. Forest reserve was mainly a narrow strip of land bordering the layar which included numerous fruit trees and illipenut trees planted over the years. In addition, there were many old longhouse sites (tembawai) scattered over the territory which supported small groves of fruit trees.

Table 2 shows the average allocation of household labour at Batu Lintang over the 12 months from mid-May 1979 to mid-May 1980. Hill rice farming absorbed the largest share at 274 work-days or 37 per cent. However pepper and rubber together accounted for 296 work-days or 40 per cent, meaning that labour was rather evenly distributed between subsistence and cash-earning farm activities. Another notable feature was that off-farm work accounted for eight cent of the total.

Table 3 shows the breakdown of average household income at Batu Lintang in 1979-80. Rice and inter-crops contributed 27 per cent of gross farm income, pepper contributed 29 per cent, and rubber contributed 23 per cent, with livestock and forest items adding smaller amounts. Hence there was an even balance among the various farm activities. Fifty eight per cent of gross farm income was in the form of cash and 42 per cent in kind. The largest expenses were for livestock feed (mainly cassava and maize grown as inter-crops with rice), fertilizer (mainly for pepper), and depreciation on the stock of hand

Table 2
Average Household Labour Use at Batu Lintang, 1979-80

Activity	Work-days	Per cent
Hill rice	274.0	36.8
Pepper	191.5	25.7
Rubber	104.5	14.0
Other farm work	11.0	1.5
Forest work	31.5	4.2
Off-farm work	59.0	7.9
Other work*	74.0	9.9
Total	745.5	100.0

* Not including domestic work.

tools, sprayers, baskets, and canoes which make up the farm household's equipment. Net farm income accounted for $M2,079, or 80 per cent of the total income of $M2,594. Wage employment contributed 15 per cent of total income, of which remittances from those working away from the longhouse accounted for ten per cent. Exactly half the households at Batu Lintang received remittances during the year, the amount ranging from $M90 to $M2,520. In a few cases, remittances accounted for the major part of household income.

The Hill Rice Enterprise

In the 1979-80 season, 27 of the 29 households at Batu Lintang planted hill rice. In total, there were 35 plots, eight of which were located in a single block in Sungai Rian, six in a block in Ulu Lintang, and the remainder scattered around the longhouse territory (Fig. 2). The farm area per household averaged 1.3 ha. and ranged from 0.4 to 3.1 ha. The total planted area was 36.3 ha. The average fallow period of the plots cleared in 1979-80 was 10.3 years, not including three plots cleared from disused rubber gardens which were up to 50 years' old. Table 4 shows that the fallow periods were clustered around the mean; in fact, more than a third of the plots from which the age of the secondary forest was ascertained had fallow periods of 9 or 10 years. This suggests a fairly stable crop-fallow rotation in which the fallow period would not be expected to alter greatly from year to year. The hill rice yield averaged 611 kg. per ha. and ranged from 300 to 1,250 kg. per ha. Total output averaged 822 kg. per household. Ten households, or 37 per cent of those planting rice, produced

Table 3
Average Household Income at Batu Lintang, 1979 - 80

Item	Cash ($)	Kind ($)	Inv. ($)	Total ($)
Gross farm income:				
Rice + inter-crops	25	673		698
Pepper	770			770
Rubber	604			604
Livestock	96	131		227
Forest items	34	300		334
Total	1,529	1,104		2,633
Farm expenses:				
Seed	1	16		17
Fertilizer	113			113
Agrochemicals	54			54
Feed etc.	14	196		210
Sundries	12			12
Wages	8			8
Depreciation on equipment			140	140
Total	202	212	140	554
Net farm income	1,327	892	-140	2,079
Off-farm income:				
Local wages	140			140
Remittances etc.	250			250
Other	125			125
Total	515			515
Total household income	1,842	892	-140	2,594

Note: Inputs and outputs valued at prices paid or received at the longhouse.

Table 4
Fallow Periods of Hill Rice Plots, Batu Lintang, 1979-80

Fallow period (years)	No. of plots	% of plots
1 - 4	–	–
5 - 9	15	42.8
10 - 14	11	31.4
15 - 19	1	2.9
20 - 24	2	5.7
Old rubber	3	8.6
n.a.	3	8.6
Total	35	100.0

Table 5
Production Data for Hill Rice Cultivation Batu Lintang, 1979-80 to 1984-85

Year	Total area cultivated (ha.)	Area per household (ha.)	Fallow period (years)	Average yield* (kg./ha)	Total output* (kg.)	Self suffic (%)
1979-80	36.3	1.3	10.3	611	22,214	78.9
1980-81	20.8	0.8	9.7	941	18,734	66.5
1981-82	23.4	0.9	10.2	1,022	22,358	79.4
1982-83	29.0	1.0	12.2	1,021	28,391	100.8
1983-84	29.0	1.0	12.1	1,199	32,393	115.1
1984-85	33.0	1.1	10.5	1,153	38,040	135.1
Average	28.6	1.1	10.8	991	27.022	96.0

*Kg of unhusked rice

enough to meet their own requirements , and a number of others came close to self-sufficiency. Aggregate output was 22,214 kg., which was about 79 per cent of estimated requirements.

Table 5 shows the pattern of hill rice production at Batu Lintang over the six seasons from 1979-80 to 1984-85. The area cultivated in 1979-80 was well above average for the period. In the following season the intensity of cultivation fell to just over half the 1979-80 level. This was due to a major gawai festival held late in 1980 to celebrate the completion of the new longhouse. The strategy adopted was to scale down the production of hill rice and spend more time tapping rubber to build up the cash reserves needed to stage a large festival of this kind. In subsequent years the intensity of cultivation has increased somewhat.

Table 5 confirms the earlier impression, based on an analysis of fallow periods in 1979-80, that the crop-fallow cycle has stabilized. The average fallow period remained around ten to 12 years during the six seasons, which is an adequate fallow period by local standards, and indicates that land shortage is not currently a problem. The availability of disused rubber plots for hill rice cultivation further eased the pressure of existing fallow land, particularly as it enabled the use of plots for two successive years, or twice in the space of three or four years.

Table 5 also indicates that both yield and total output were below average in 1979-80. Output, and hence the level of self-sufficiency, dropped in 1980-81 following the reduction in cultivated area. Subsequently, however, production

increased, the peak year being 1984-85, in which about 38,000 kg. of rice was produced. This is about 35 per cent more than aggregate requirements. On average the yield was about one tonne per hectare. Total production was about 27 tonnes, and the community was roughly self-sufficient in rice. This relatively high yield can be related to the small farm area per household, permitting more intensive crop maintenance.

The Pepper Enterprise

In the 1979-80 season, 28 out of the 29 households at Batu Lintang cultivated pepper. An inventory of pepper vines taken in 1980 found a total of 11,814 vines. The average holding was 422 vines, representing a planted area of about 0.2 ha. The size of holding ranged from under 200 to over 1,000 vines. About 61 per cent of the vines were mature or bearing, indicating that there had been a recent expansion of the planted area. Production of pepper in 1979-80, measured in the equivalent weight of black pepper, totalled 8,239 kg. Most of this (79 per cent) was actually sold as black pepper. The yield averaged 2.2 tonnes of black pepper per hectare or 1.1 kilogram per vine. This compares with an estimated average yield of 3.8 tonnes per hectare for Malaysia as a whole in 1987 (Chua and Wong 1981:36).

By 1985 the total number of pepper vines at Batu Lintang was 9,740, a reduction of 18 per cent from the 1980 figure. The proportion of mature vines had risen to 86 per cent, indicating that the rate of new planting was not sufficient to meet normal replacement requirements. Eighty three per cent of the immature vines had been planted through the Pepper Subsidy Scheme. Only 25 of the 31 households had pepper gardens, the average size being 400 vines.

Pepper production at Batu Lintang over the five years to 1984 is recorded in Table 6. Output continued to increase as the vines planted in the late 1970s

Table 6
Pepper Production at Batu Lintang, 1979/80 - 1983/84

Season	Total output (kg)*
1979-80	8,239
1980-81	9,369
1981-82	10,414
1982-83	8,331
1983-84	7,189
Average	8,708

* Equivalent weight of black pepper

came into production, and reached a peak of 10,414 kg. in 1981-82. Then the decline in prices, which lasted until mid-1983, began to affect output as the resources allocated to both establishment and maintenance were reduced and some gardens went out of production altogether. Even after prices recovered later in 1983, output continued to decline, and in 1983-84 was only 69 per cent of the peak level two years earlier.

The Rubber Enterprise

Rubber tapping was an important activity at Batu Lintang in 1979-80. Twenty six of the 30 households tapped rubber at some stage during the year, in all cases utilizing their own gardens. On average tapping was done on six days per month or 73 days per year, though one household averaged 13 days per month for an annual total of 154 days. Altogether, 12,327 kg. of unsmoked sheets were sold, averaging 474 kg. per house hold (excluding those not tapping). It is difficult to get a meaningful estimate of the yield per hectare as much of the rubber within the longhouse territory is old and untapped.

As Table 7 shows, there has been a marked decline in rubber output from Batu Lintang since 1981. By 1984 only about a third of households were tapping at all, and production had fallen to less than half its 1980-81 level. This was related to the steep price decline, from a peak of $M1.42 per kg in 1980 (the highest average annual price for two decades in nominal terms) to about $M0.86 per kg in 1982, and to the pressing need for cash in 1980 to finance the large gawai festival held at the longhouse in October of that year. Though prices have recovered somewhat from their 1982 low there has been no corresponding revival of interest in tapping, perhaps due to the increased profitability of pepper and cocoa.

Table 7
Rubber Output at Batu Lintang, 1980-84

Season	Total output (kg.)
1980	12,327
1981	12,877
1982	8,101
1983	7,738
1984	9,273
Average	10,063

The Nanga Tapih Economy: 1980-85

An Overview

The pattern of land use at Nanga Tapih in 1980 is shown in Fig. 3 and Table 8. Hill rice farms and secondary growth accounted for 66 per cent of the total area, compared with 54 per cent at Batu Lintang. The ratio of fallowed land to cropped land was 12:1. Rubber gardens, including both productive and unproductive stands, accounted for 26 per cent of the area, compared with 41 per cent at Batu Lintang. As at the latter place, rubber was concentrated along the main river, apart from one block planted to confirm the community's claim to land along a previously disputed border. However, in contrast with the pattern at Batu Lintang, pepper gardens at Nanga Tapih were concentrated in several blocks close to the longhouse, and accounted for 1.5 per cent of the total area. Forest reserves and fruit groves accounted for a further 5 per cent.

Table 8
Land Use at Nanga Tapih, 1980

Land Use Category	Area (ha)	Per cent
Hill rice farms	31	5.0
Secondary growth	378	61.2
Rubber*	161	26.0
Pepper	9	1.5
Forest reserve	6	1.0
River reserve	21	3.4
Former house sites	1	0.2
Settlements	1	0.2
River	9	1.5
Total	617	100.0

*Including fruit trees and secondary growth.

Table 9 shows the average allocation of household labour at Nanga Tapih in 1979-80. In this case pepper absorbed the largest share at 233.0 work-days or 35 percent, though rice remained important with 30 per cent of the total labour input. A notatable feature was that rubber accounted for only 24.0 work-days or four per cent, significantly lower than at Batu Lintang. Off-farm work was of more importance than at Batu Lintang, absorbing 77.5 work-days or 12 per cent.

Table 9
Average Household Labour Use Nanga Tapih, 1979-80

Activity	Work-days	Per cent
Hill rice	198.0	29.7
Pepper	233.0	35.0
Rubber	24.0	3.6
Other farm work	38.0	5.7
Forest work	42.0	6.3
Off-farm work	77.5	11.7
Other work	53.5	8.0
Total	666.0	100.0
Work-days/worker	206.5	

Table 10 shows the breakdown of average household income at Nanga Tapih in 1979-80. Hill rice and inter-crops contributed only 20 per cent of gross farm income while pepper contributed 61 per cent. In line with the low labour input to rubber, this enterprise contributed only five per cent. Thus, in contrast with Batu Lintang, there was a heavy dependence on pepper. Sixty eight per cent of gross farm income was in the form of cash, again significantly higher than at Batu Lintang. The largest expenses were fertilizer and agrochemicals (totaling $410, compared with only $167 at Batu Lintang), and livestock feed. Net farm income accounted for $2,174, or 80 per cent of the total income of $2,728. As at Batu Lintang, wage employment contributed 15 per cent of total income, but in this case remittances were less important; wages earned locally accounted for 11 per cent. Only four households at Nanga Tapih received remittances, in every case from men who were temporarily absent for several months during the year rather than from former household members who had permanent non-farm employment.

The Hill Rice Enterprise

In 1979-80 all 19 households at Nanga Tapih planted hill rice. The community farming block was in Sungai Jan, as shown in Fig. 3. In total there were 22 farm plots. The average farm area per household was 1.5 ha., somewhat higher than at Batu Lintang. The farm area ranged from 0.3 to 2.4 ha. but was clustered around the mean, with 68 per cent of households cultivating from 1.0

Table 10
Average Household Income at Nanga Tapih, 1980

Item	Cash ($)	Kind ($)	Inv ($)	Total ($)
Gross farm income:				
Rice + intercrops	16	583		599
Pepper	1,859	--		1,859
Rubber	149	--		149
Livestock	43	88		131
Forest items	24	300		324
Total	2,091	971		3,062
Farm expenses:				
Seed	5	17		22
Fertilizer	282			282
Agrochemicals	128			128
Feed etc.	39	230		269
Sundries	9			9
Wages	38			38
Depreciation On Equipment			140	140
Total	501	247	140	888
Net farm income	1590	724	-140	2,174
Off-farm income:				
Local wages	302			302
Remittance etc.	93			93
Other	159			159
Total	554			554
Total household i/c	2,144	724	-140	2,728

Note: Inputs and outputs valued at prices paid or received at the longhouse.

to 1.9 ha. The average age of the fallow vegetation cleared in 1979-80 was 13.5 years, compared with 10.0 years at Batu Lintang. This does not include two plots which were cleared from old rubber planted before the Japanese occupation. As table 11 indicates, however, the average fallow was inflated by the inclusion of nine plots which had been fallowed for 20 to 24 years. These were plots which had been given an extended rest during the 1960s and 1970s when most Tapih households were planting wet rice. Their cultivation in 1979-80, together with plots which had been fallowed for only four to ten years, indicated that the community was attempting to regularize its fallow cycle in Sungai Jan. It could be anticipated that the next time this farming block was used the age of the fallow vegetation would be more uniform and would probably average from eight to ten years. Extensive pest damage in 1979-80 resulted in an average yield of only 329 kilograms of unhusked rice per ha. and production per household averaged 468 kg., in both cases just over half the Batu Lintang figure. Total production for the community was 8,889 kilograms, or 48 per cent of estimated total requirements.

Table 11
Fallow Period of Hill Rice Plots Cleared , Nanga Tapih in 1979-80

Fallow period (years)	No. of plots	% of plots
1 - 4	2	9.1
5 - 9	6	27.3
10 - 14	3	13.6
15 - 19	--	--
20 - 24	9	40.9
Old rubber	2	9.1
Total	22	100.0

Table 12 indicates the overall pattern of hill rice cultivation at Nanga Tapih during the six seasons from, 1979-80 to 1984-85. The fall in pepper prices induced a greater intensity of cultivation, particularly in 1981-82 and 1982-83 when the total area cultivated was around 36 ha., the area per household around two hectares, and the area per person around 0.3 ha. This represented an increase of about a third on the corresponding figures for 1979-80. The 1983-84 season was closely similar to 1979-80 in the intensity of land use, but in 1984-85, the most recent season for which data are available, intensity rose again to close to its maximum for the period.

Table 12
Production Data for Hill Rice Cultivation at Nanga Tapih, 1979-80 to 1984-85

Year	Total area cultivated (ha)	Area per household (ha)	Fallow period (years)	Average yield* (kg/ha)	Total output (kg)	Self suffic. (%)
1979-80	27.0	1.5	13.5	329	8,889	48.4
1980-81	25.3	1.5	10.4	393	9,954	54.1
1981-82	36.5	1.9	9.5	333	12,156	66.1
1982-83	35.6	2.0	9.4	397	14,129	76.9
1983-84	28.0	1.6	8.4	477	13,360	72.7
1984-85	34.4	1.9	7.3	389	13,377	72.8
Average	31.1	1.7	9.8	386	11,978	65.2

*Kg. of unhusked rice

Table 12 bears out the comments made earlier concerning the reserves of fallow land. From an average fallow period of 13.5 years in 1979-80 there has been a steady decline to 7.3 years in 1984-85. The area of rubber cleared has not been great and consequently there has been no instance of farming kakah land, that is, clearing the same plot for a second successive year. The decline in fallow period indicates that the surplus fallow land available when the community resumed hill rice cultivation on a large scale in 1977 had all been utilized by 1984-85 and that the land situation was once again critical.

Table 12 also shows the total production on 1979-80 was well below average, though the yield was not atypical. Production reached a peak of over 14,000 kg. in 1982-83, when the intensity of land use was at its greatest, and this provided a level of self-sufficiency of about 77 per cent. On average the community produced about 12,000 kg. of rice and was 65 per cent self-sufficient.

As noted above, the annual cultivated area during the Japanese Occupation, when the community was self-sufficient in rice, was probably about 40 hectares. Hence, despite the post-war increase in population, the cultivated area has remained roughly constant or, if anything, declined. One reason for this has been to maintain an adequate fallow period overall, bearing in mind that what constitutes an adequate fallow may have been slowly increasing. Yields during the Occupation were between 300 and 600kg. per hectare, again not greatly different from the 1980s. However, an increase in the number of households has meant that the area cultivated per household has declined, from between two and five hectares in the Japanese period to under two hectares in the 1980s.

Hence production per household has fallen below subsistence level, not primarily because of shorter fallow periods and lower yields, but because of smaller farms. That is, total production has remained roughly the same but has had to be shared among more households.

The Pepper Enterprise

All 19 households at Nanga Tapih cultivated pepper in 1979-80. Altogether there were just over 12,000 vines, 67 per cent of which were bearing. This total was as large as at Batu Lintang, despite Nanga Tapih's smaller population. The average holding was 670 vines or 0.3 hectare per household, ranging from 189 to 1,132 vines. Pepper production totalled 10,558 kilogram in equivalent weight of black pepper. In fact, 65 per cent of the pepper sold was in the more highly processed white form, again contrasting with the practice at Batu Lintang where the less labor-intensive and lower priced black pepper was generally favoured. The average production per household was 587 kilogram, exactly twice the Batu Lintang average. Similarly, the yield was higher at 2.6 tonnes per ha, or 1.3 kilogram per vine, though still lower than the national average of 3.8 tonnes per hectare (Chua and Wong 1981).

By 1985 the total number of pepper vines at Nanga Tapih was 10,820, a reduction of 10 per cent from the 1980 figure. The proportion of mature vines had risen to 86 per cent, indicating that new planting was not meeting normal replacement requirements. Sixty-five percent of the immature vines had been planted through the Pepper Subsidy Scheme. Eighteen of the 20 households still had pepper gardens, the average size being 600 vines. Pepper production at Nanga Tapih over the five years to 1984 is recorded in Table 13. It can be seen that, in fact, 1979-80 was the peak year and thereafter production declined markedly. In 1982-83, when pepper prices reached their lowest, total output dropped to 6,526 kilograms, only 59 per cent of the 1979-80 level.

Table 13
Pepper Production, Nanga Tapih 1979/80 - 1983/84

Season	Total output (kg)*
1979-80	10,558
1980-81	6,863
1981-82	7,495
1982-83	6,256
1983-84	6,684
Average	7,571

* Equivalent weight of black pepper

The Rubber Enterprise

Compared with its importance at Batu Lintang, rubber tapping at Nanga Tapih was an unimportant activity in 1979-80. Fifteen of the 19 households tapped rubber during the year, but the frequency of tapping was low, with an average of only 20 days. Only one household (with three single women) tapped frequently recording 105 days for the year. A total of 1,960 kilograms of unsmoked sheets were sold, averaging 131 per household (excluding those not tapping). As Table 14 shows, rubber output increased in 1981, compensating somewhat for the drop in pepper production. By 1982, however, both pepper and rubber prices were at a long-term low and many of the potential rubber tappers had temporarily migrated to Brunei and elsewhere for wage work. Hence rubber output fell by half. Production increased slightly after 1982 but remained at a low level.

Table 14
Rubber Output at Nanga Tapih, 1980-84

Season	Total output (kg)
1980	1,960
1981	2,468
1982	1,231
1983	1,722
1984	2,175
Average	1,911

Summary and Conclusion

Iban farmers are sometimes said to be backward and unresponsive to changing circumstances. However, the preceding analysis makes clear that, at least in the Saribas, the Iban have been continuously adjusting to new opportunities and constraints in order to maintain and improve their economic conditions. Specifically, as the summary statistics in Table 15 illustrate, their mode of adjustment to the growth of population and the spread of a market economy has been the development of a diversified, semi-commercial agriculture, supplemented by off-farm work. Given the nature of their technical and economic environment, this has been a highly adaptive response.

Table 15
Summary Statistics for Batu Lintang and Nanga Tapih

	Batu Lintang	Nanga Tapih
Total population in 1985	183	111
Population density in 1985 (ppsk)	14	18
Off-farm migration of postwar generation (%)	35	10
Total land area (sq.km)	13.2	6.1
Proportion of land in 1980 under		
-- shifting cultivation (%)	54.0	66.3
-- rubber (%)	41.3	26.1
-- pepper (%)	0.5	1.5
Proportion of labour in 1980 allocated to		
-- shifting cultivation (%)	36.8	29.7
-- rubber (%)	14.0	3.6
-- peper (%)	25.7	35.0
Average hill rice area per household (ha)	1.1	1.7
Average fallow period for hill rice (yrs)	10.8	9.8
Average yield of hill rice (kg/ha)	991	386
Average output of hill rice per household (kg.)	916	648
Aggregate degree of rice self-sufficiency (%)	96.0	65.2
Average rubber output per household (kg)	314	103
Average pepper output per household (kg)	295	409
Average gross farm income in 1979-80 ($M)	2,633	3,062
Proportion of gross farm income from		
-- shifting cultivation (%)	26.5	19.6
-- rubber (%)	22.9	4.9
-- pepper (%)	29.2	60.7
Average remittances in 1979-80 ($M)	250	93
Average off-farm income in 1979-80 ($M)	515	554
Average household income in 1979-80 ($M)	2,594	2,728

Table 15 also shows that historically depressed farming communities such as Nanga Tapih have, at least in recent decades, been responding to changing circumstances in similar ways to communities like Batu Lintang, which in the past have been regarded as more progressive. In fact, though Nanga Tapih was chosen to represent the more remote and economically backward area of the Saribas, it appears on some indicators to be more developed than Batu Lintang. Nanga Tapih's economy is more specialized and commercialized, and both farm and total income per household are higher than at Batu Lintang.

However, these indicators need to be seen in a broader perspective. Further examination of Table 15 reveals that, at Batu Lintang, population pressure on the land is less, the productivity of hill rice cultivation is greater, and hence there is a higher degree of self-sufficiency in rice. In terms of cash income, there is a wider diversity of income sources, both internally (rubber as well as pepper, whereas Nanga Tapih has been highly dependent on pepper alone) and externally (remittances from those with permanent non-farm employment, whereas Nanga Tapih has had to rely on less remunerative wage migration). Hence, in the medium term, Batu Lintang's economy is more viable than Nanga Tapih's.

Batu Lintang's current viability can be traced to the historical advantage of a more accessible location and a large land base enabling it to accumulate more productive capital in the form of extensive areas planted to rubber. In addition, it had maintained a relatively favourable population density due to a higher rate of off-farm migration in the postwar period (largely attributable to its earlier access to primary education), giving it the added advantage of an additional source of income through remittances.

Hence, while it is true that Nanga Tapih has been rapidly overhauling Batu Lintang, mainly through the development of pepper cultivation (particularly since 1977), its initial disadvantages are still apparent. When the price of pepper falls to unprofitable levels, as it did in the early 1980s, Nanga Tapih farmers have little to fall back on. Their reserves of productive rubber are low, their capacity to expand hill rice cultivation is severely limited, and their off-farm sources of income are almost entirely restricted to casual wage work, either locally or in places such as Brunei. This off-farm work is a survival mechanism rather than a development strategy; it supports the worker but provides little or no surplus for farm investment while temporarily removing much of the labor which would undertake such investment. Nanga Tapih's restricted range of options is characteristic of many Iban communities in the upper Saribas and elsewhere.

In light of this analysis it is interesting to ask how the two communities themselves see their economic future. Batu Lintang and Nanga Tapih leaders were asked in 1985, as part of a free-ranging interview and discussion on the longhouse verandah, to express their views about four major strategies for

development: (1) smallholder crop development with assistance from the Department of Agriculture (through planting grants and extension advice); (2) *in situ* estate-type development administered by the Sarawak Land Consolidation and Rehabilitation Authority (SALCRA), exemplified by the nearby Paku-Layar cocoa scheme; (3) resettlement, associated with the Skrang scheme administered by the Sarawak Land Development Board (SLDB) or with the more recent example of the Batang Ai resettlement scheme; and (4) the as yet untested approach of the Land Custody and Development Authority (LCDA), in which it is proposed that landholders exchange their rights to land for shares in a large-scale commercial estate and are regrouped into centralized townships. What follows is a summary and paraphrase of the collective response given at each longhouse.

In Batu Lintang's case there was a more obvious sense of being satisfied with the *status quo*, subject to continued material assistance, and of being cautious about major change, especially if it involves the possible loss of control over the community's land.

> The way for us to progress is through smallholding (kebun) of pepper and rubber. This enables us to sell enough to meet our expenses. The Department of Agriculture helps us by providing fertilizer and other farm inputs. We must improve our land so we can hold onto it. What is the use of retaining our land if we do not improve it? We do not want to take part in any resettlement. The Batang Ai people have had to discard their own territory and have ended up with a much smaller area. They are worse off now. As for SALCRA schemes, such as the Paku-Layar cocoa scheme, we do not know whether they will gain or lose. There must be general agreement first before joining such a scheme. At present, some want to and others do not. We are not yet aware of LCDA's approach, but if it means that we lose control of our land we would be worse off.

In Nanga Tapih's case there was a more lively discussion reflecting strong feelings about recent economic difficulties and a degree of ambivalence about future options, though there was no doubt that some form of *in situ* development, whether small or large scale, was favoured.

> If we were not helped by the Department of Agriculture we would have to migrate elsewhere. Fertilizer and other inputs are truly beneficial. However, we need more assistance, particularly with pest control for pepper. We know how to plant and harvest pepper but need help for pest control. If the government gives fertilizer but not pesticides, we make a loss and the government makes a loss. If we were given $100 worth of fertilizer and $100 worth of agrochemicals (never mind cash subsidies) we would survive and would not have to consider large-scale

schemes. If supplies cannot be given free then they should be sold to us at half price; we will be willing to buy. But we must have cheap inputs. Tell that to those in Kuching and Kuala Lumpur. We do not want to migrate at all (though if we could have swamp rice land downriver and keep our land here we would be happy with that). As for SALCRA, this depends on general agreement. If the government wants to help us here on our own land, that is better than being resettled. Some of us want to give SALCRA a try. But we need a clear agreement. What is to be our share? If the scheme is not successful, who bears the cost and who claims the land? A disadvantage with SALCRA is that we have to get rid of our rubber and pepper gardens, but these are still useful to us. If the scheme is a failure we would have nothing to fall back on and would be worse off. This is what makes small-scale schemes (skim mit) seem more attractive.

These responses display a shrewd assessment of the possibilities and problems inherent both in the present arrangements and in the several development alternatives available. In practice, of course, large scale development schemes such as those managed by SLDB, SALCRA, or LCDA are usually concentrated in more favourable locations, so that communities such as Nanga Tapih which are most in need of an expanded range of options, and perhaps most willing to consider new alternatives, are least likely to be included, unless they are resettled -- an option which they wisely resist. The strategy most likely to spread the benefits of rural development to communities such as Nanga Tapih is one based on assistance for diversified smallholder farming, utilizing the already extensive network of the Department of Agriculture, backed by a suitable program of research (particularly into the neglected area of food production systems for the hill farming zone) a decentralized rural credit program and an accelerated program for the construction of rural feeder roads.

Notes

1. To illustrate the differential impact of population pressure, commercialization, and education on the economy of the upper Saribas and that of the middle Saribas it is worth quoting at length from a 1959 Saribas District report. Though the prejudices of the colonial district officer are apparent in this extract, and the distinctions he makes may be overdrawn, in its basic outlines it remains a valid account. According to the report: "The Iban of the Saribas do not form a homogenous community, on the contrary they are divided into two completely different and antipathetic groups -- the "Conservatives" of the Ulu Layar and the Spak and the "Progressives" of areas such as the Paku and the lower Padeh" (*Sarawak Gazette* 1959: 78). The "conservative" group is described as follows: "In the steep hills of the upper Layar and Spak... the population density approaches one door [household] to every forty acres. The soil is poor and exhausted and the only method of restoring its fertility -- known to the inhabitants -- is a very long bush fallow... Communications are, to say the least, poor. The rivers are not navigable. The economy is largely a subsistence one... The

standard of housing is deplorably low... The houses rarely last more than a few years so that an unduly large proportion of the people's time has to be devoted to collecting material and building houses... Quite a large proportion of the men wander off each year in search of work... In consequence there is a dearth of labour which prevents any major improvement in the local environment. The standard of living in the Spak and Ulu Layar is deplorably low and until such time as they can be moved to more fertile area or assisted in some other way this part of the Saribas will remain a black spot" (*Sarawak Gazette* 1959: 78,79). The account of the "progressive" group presents a striking contrast: "In the Paku, the Padeh, the Rimbas and around Betong there are large areas under rubber. These areas together produce some 2,000 tons of rubber each year, that is over 5 per cent of the rubber exported from Sarawak in 1958. The Sea Dayaks of the Paku... employ considerable numbers of Malays and Chinese rubber tappers and many own house property in the various bazaars. Some are absentee landlords whose income is derived form letting their land to Chinese and Malay share-farmers. A proportion are salaried workers in the public service or in the employ of commercial firms in Sarawak, North Borneo and Brunei. Many of the long-houses... are massive buildings, fittingly described by Dr. Edmund Leach as the "Plank Places of the Saribas" ...the standard of living is unquestionably higher... and the people appear to be healthier and better fed "(*Sarawak Gazette*, 1959:79).

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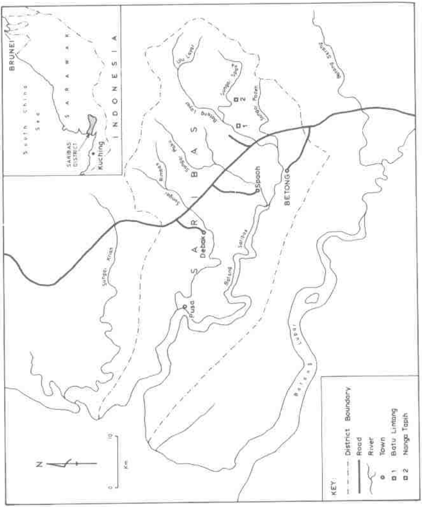
FIG.1: SARIBAS DISTRICT



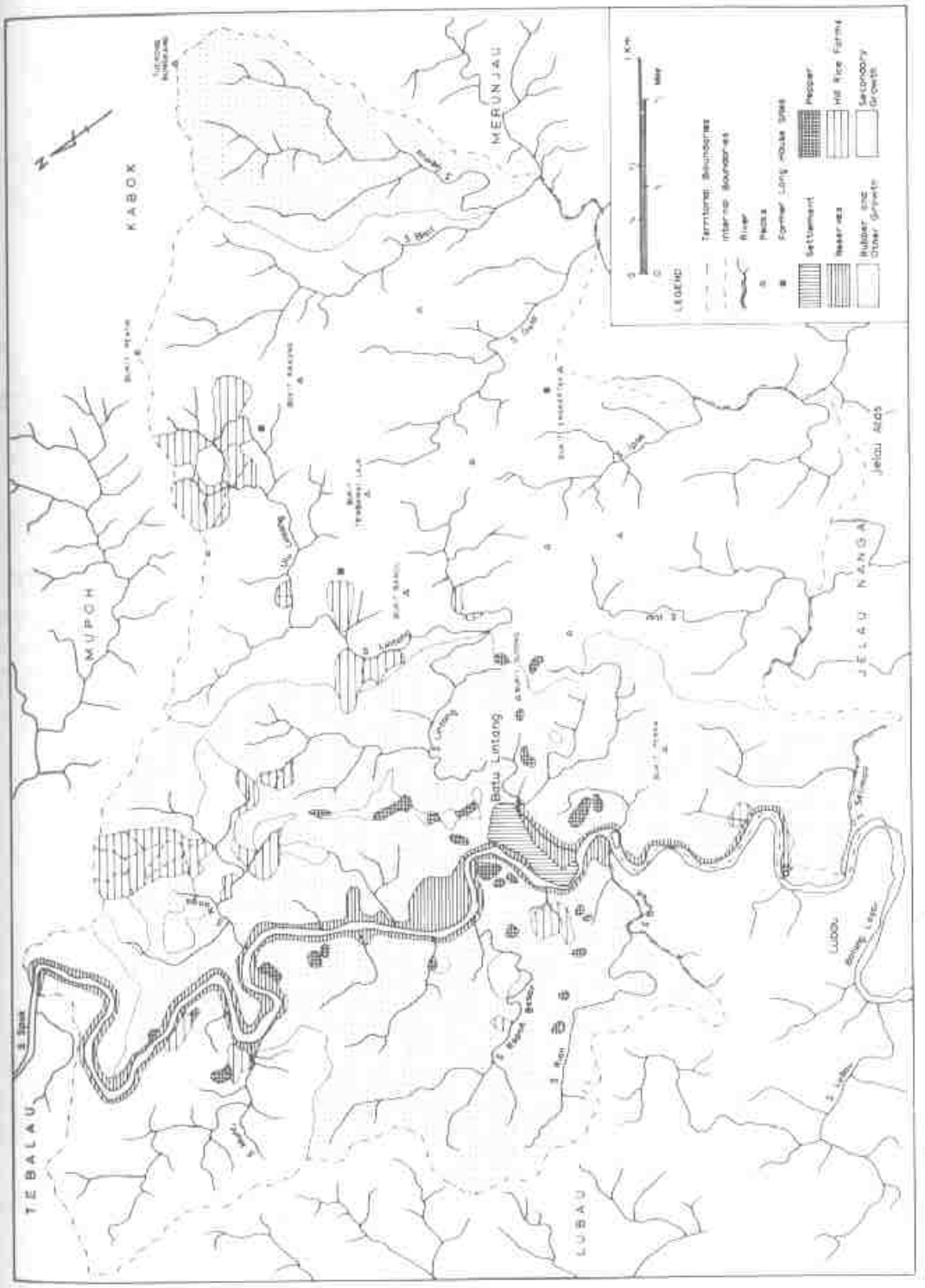
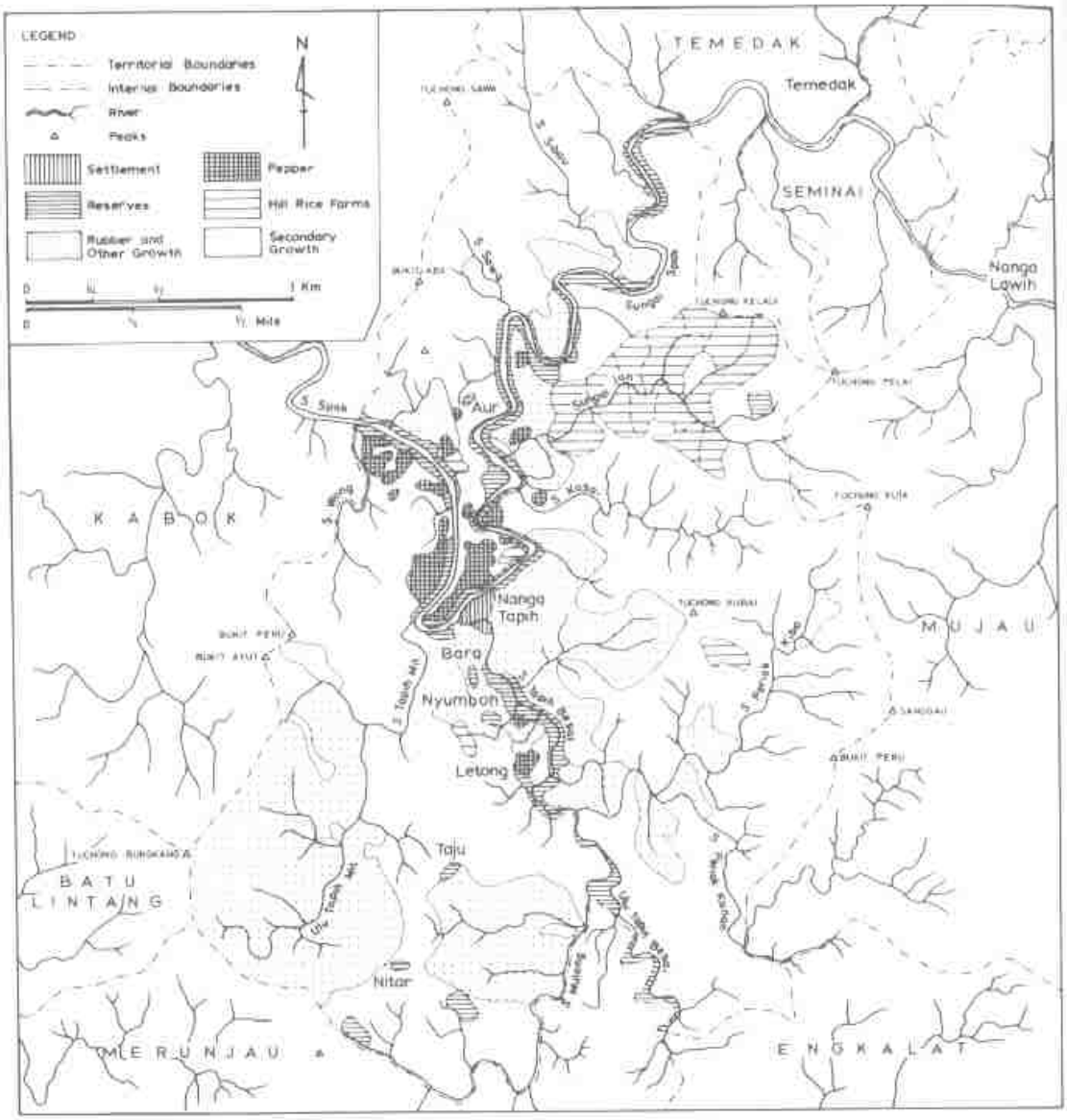


FIG. 2: BATU LINTANG LAND USE MAP

FIG. 3: NANGA TAPIH LAND USE MAP



Confronting Change: Interaction Between the Timber Industry and Villagers in the Interior of Sabah

Glen Chandler

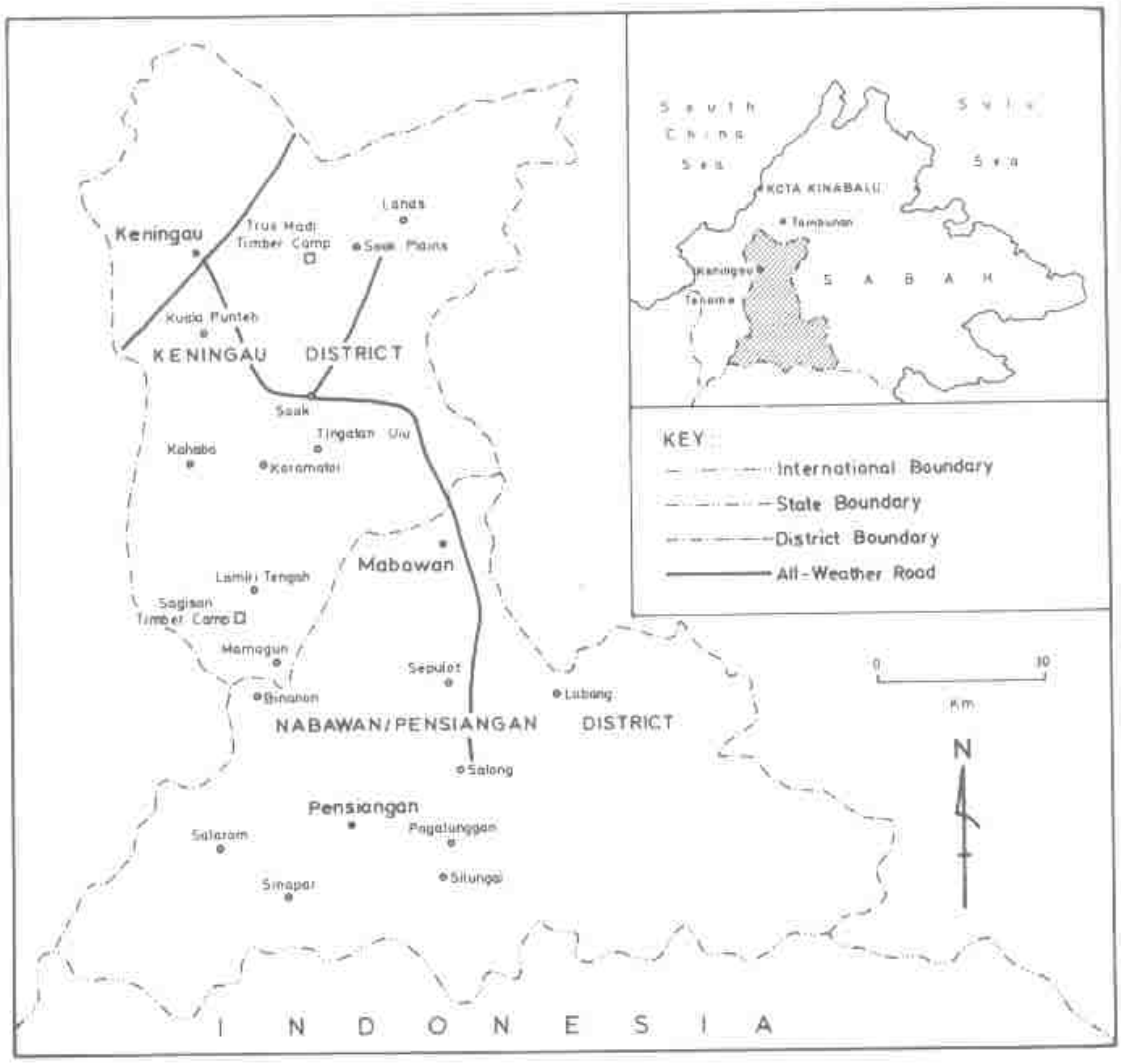
This paper explores the interaction between timber companies and those people living in the rural areas in the two districts of Keningau and Nabawan/ Pensiangan in the interior of Sabah (see Figure 1). I argue in that some respects the timber industry has had little impact on the traditional way of life of those people living in the interior. This is largely because the villagers have not taken advantages of some of the opportunities provided by the timber industry. There are good reasons for this, and these will be discussed in detail below. However, it cannot be said the timber industry had no impact at all; this paper explores both the positive and negative effects of this industry on villagers.

I shall firstly examine the employment opportunities in timber camps and the extent to which local people have taken advantage of these opportunities. Secondly, I will discuss the opportunities available to villagers to sell surplus agricultural produce to timber camps and the extent to which these income-earning opportunities were used. Thirdly, I shall focus on villagers' perceptions of the environmental damage caused by logging , its effects on their lives and the ways they have attempted to deal with the problem. And finally I shall examine the role of timber companies in providing much-needed roads and other facilities to once isolated villages.

This paper is based upon research conducted in the districts Keningau and Nabawan/Pensiangan from July 1985 to February 1986. During this time I was based in Keningau and travelled extensively throughout both districts. The information contained herein is derived from interviews with Forestry Department officials, staff from other government departments, timber company employees based in Keningau as well as those working in timber camps, and with village people living in the study area.

There are two indigenous groups living in this part of Sabah. Firstly there are the Dusuns (or inland Kadazans) and secondly the Muruts. The Dusun are concentrated in the fertile Sook Plains east of Keningau, having gradually moved south from the Tambunan area encouraged by increasing facilities for

FIG. 1: KENINGAU AND NABAWAN/PENSIANGAN DISTRICTS



irrigated rice cultivation in this area and the lack of room in the Tambunan valley to increase rice production (Burrough and Burrough, 1975:52). In this area some villagers are populated by both Murut and Dusun people. Muruts are the only indigenous group found in the southern part of Keningau districts and throughout Nabawan/Pensiangan district. One important feature of this area is the low population density, a factor which inhibits economic development and is responsible for a high per capita cost of providing basic facilities (such as health care) to the people of the interior. Keningau district has a population of 43,476 with an overall density of 13.1 per sq km and a rural density of 10.1 per sq km. In Nabawan/Pensiangan district the population is 8,288 with 1.3 people per sq km (Department of Statistics, 1980).

I have already mentioned that the timber industry has has little impact on the traditional way of life of villagers in the interior. In order to appreciate this point it is necessary to have some understanding of what that way of life is. Almost every rural family in these two districts relies on shifting cultivation to meet their daily food needs. There are some Dusun in the Sook Plains area who also practice wet-rice agriculture and several communities are involved in the production of cash crops as participants in one of the many government development schemes established in the area. However, almost invariably those people engaged in wet-rice cultivation and cash crop schemes also practice shifting cultivation in order to meet their daily rice requirements.

Shifting cultivation as practiced in Keningau and Nabawan/Pensiangan districts is similar to that found in other parts of Sabah and Sarawak (for example Hatch, 1982; Spencer, 1966; Freeman, 1955). The basic unit of production is the household, whether it be an extended family living under the one roof or a nuclear family. The amount of land cleared for planting, therefore, varies depending on (a) the size of the family whose basic food requirements are met from the field, (b) the ability of the women to maintain the crop, women being responsible for weeding, (c) the availability of the men to clear the land, and (d) the diligence of the family.

The work performed in shifting cultivation is divided along gender lines. The heavier duties of land clearing, felling and burning are performed by men, and the time-consuming task of weeding is the responsibility of the women. Men's labour is also required at critical periods of high labour demand, that is at planting and harvesting time. It can be seen, therefore that while women's labour is required throughout the cycle, men are free to engage in other employment between planting and harvesting.

Cassava plays and important part in the diet of shifting cultivators in the study area; some families never produce enough rice to meet their own needs and rely more heavily on cassava (which they either fry or boil for eating). Whereas the Dusun make most of their tapai (wine) from rice, the Muruts usually make theirs from cassava. In Nabawan/Pensiangan district, for

example, 20 per cent of rice production is converted to tapai whereas 70 per cent of total cassava productions is used for tapai (Duewel and Parthasarathy, 1972:26). Tapai is a feature of all social and ritual occasions: completing of planting, completing of harvesting, weddings, funerals, welcoming visitors as well as, in many cases, private consumption by the family group.

As opposed to other forms of agriculture, for example wet-rice cultivation, shifting cultivation in the Keningau and Nabawan/Pensiangan districts does not aim to produce a surplus for sale. This could be due to as much to the already high labour input required for shifting cultivation as to the lack of available markets for any surplus that may exist. The presence of timber camps and the development of periodic markets have provided an outlet for villagers to sell surplus but there is no evidence that people have adapted their shifting cultivation practices to take advantage of the opportunity to earn cash income through producing surplus in this way. Some villagers do produce a little surplus which they sell, but this is small and, as far as I could ascertain unplanned.

In addition to the practice of shifting cultivation the villagers also hunted wild pig and, in some areas, deer. The importance has declined in many parts of the study area as water pollution has affected both the size and quantity of fish in the rivers. However those rivers west and south of Pensiangan continued to yield large fish. Another source of food was the dooryard garden, a small fenced area near the house where vegetables (for example tomatoes, pumpkin, beans, corn and sweet potato) were grown for domestic consumption. While in some areas of Sabah these were common (for example Wiliams, 1965:74) in the study area they were less so. Although at least one household in every village I visited in Keningau district cultivated such a garden, the majority of people believed the amount of work involved was out of proportion to the benefits; all such gardens required fencing to protect them from chickens, domestic pigs and, in some villages, cows or buffaloes. In Nabawan/Pensiangan district there were many villages without even one dooryard garden. The Department of Agriculture is encouraging more people to cultivate dooryard gardens in order to (a) improve their nutrition and (b) enable them to learn more about sedentary agriculture.

In every rural village indigenous people have the opportunity to earn cash income. The forest has been a rich source of supply for the rural villagers who have been able to rely on collecting materials for their own consumption (for example, bamboo, rattan, timber, edible ferns) as well as to sell (for example, rattan, birds nests). If there is a market, for example a shopkeeper or teacher, occasionally a wild pig, or portion thereof, will be sold to earn cash. Furthermore, those villagers who do own buffalo or cows are able to sell these to earn income.

In a number of villagers live local people employed as labourers with the

Department of Public Works (J.K.R.), border scouts, and those paid by their District Officer to maintain village foot trails. All these people will, on retirement, be eligible for pensions. My research has indicated that these people continued to practice shifting cultivation, not only during their period of employment but into retirement as well. A very few villagers own shops, but for indigenous people this income is supplementary and they continue to practice shifting cultivation. School teachers are almost invariably from outside the immediate area in which they are teaching. These who are Murut or Dusun usually continue to practice shifting cultivation in their new village, principally because there is no efficient alternative to obtaining their daily rice requirements, these rarely being any surplus available locally. Indeed, those teachers unfamiliar with shifting cultivation, such as Muslim Malays, found it very difficult to purchase fresh foods, not only rice, but meat which was halal.

As mentioned above, the shifting cultivation cycle frees men for work outside the village. Indeed, the people in the villagers of Keningau and Nabawan/ Pensiangan districts have a long history of involvement in short-term wage labour away from home. Black (1983: 198) notes that in 1910

> The estates at Sapong and Melalap made extensive use of casuals, from Tambunan and Keningau and from the surrounding Murut areas.

A survey of the Muruts in Pensiangan area, conducted in 1971, revealed that many men from the villages near Pensiangan had worked on the Sapong rubber estate south of Tenom to build up a reserve of cash (Duewel and Parthasarathy, 1972: 36). In 1985 men from the villages in the Pensiangan area still worked on a short-term basis in the rubber estates at Sapong.[1]

Employment Opportunities in Timber Camps

In examining the relationship between the timber companies as employers and the local people as employees we can note the characteristics of that interaction and decide whether the traditional way of life has been affected.

The practice of working for a few months at a time was common when the advent of intensive logging in the interior brought employment opportunities closer to home. The timber companies have, however, been unable to attract large numbers of village men to the timber camps on a long-term basis. Every timber company visited during the fieldwork period referred to the difficulty in acquiring local labour. A typical comment was:

> We would like to employ locals because they would be cheaper (than having to pay fares for West Malaysians) but they are not interested.[2]

The timber companies claimed there was a shortage of labour and as a result have been instrumental in securing permanent residence status for many

immigrants in order to maintain an adequate workforce. Some companies employed a person, based in Kota Kinabalu, whose sole task was renewing visas for their immigrant workers and applying for permanent residence on behalf of those who had satisfied Immigration Department criteria.[3] Concern has been expressed in newspapers over the number of foreigners working in Malaysia and questions raised as to whether the labour shortage claimed by employers really existed (*Daily Express* 23.9.85). Every timber company in the study area employed large numbers of immigrants. Sagisan timber camp, for example, employed 40 per cent Indonesians, 40 per cent Filipinos, 10 per cent Chinese, with only 10 per cent local labour.[4] I witnessed similar ratios in other camps in the study area. Discussions with Murut and Dusun men in other villages throughout Keningau and Nabawan/Pensiangan districts revealed that they were reluctant to work for long periods with timber companies. I am confident that, as far as timber companies are concerned, there is a labour shortage in the study area.

Why were villagers reluctant to work in the camps? Some comments from villagers gave the impressions that the camps were not really interested in employing local people. For example, according to the village head no one in the village of Kuala Punteh worked for a timber company at the time of my visit:

> They know we are Murut and they do not ask us to work for them because Muruts area unreliable. For example if there is a wedding they will just take a few weeks off and go home.[5]

In some instances a timber company would receive applications for work from young men in villages near the camp and take on a few of those men because they

> do not want to create any ill feeling. We can also use those people to learn about the kampungs.[6]

However, comments were made that some of the Muruts always wanted to go home to the village on a Saturday and return on the Monday. As the timber companies worked a seven-day week in order to take advantage of any dry weather, the temporary loss of some of the workers was inconvenient.[7] I gained the impression that oftentimes the local workers could be more trouble than they were worth.

While the majority of village people only worked for periods up to a few months there were some who were prepared to work for extended periods of time in camps remote from their villages. For example, several men from Pagalunggan had, in 1986, been employed for periods ranging from one to two years.[8] While most villagers were reluctant to work for extended periods, all timber companies contacted referred to the few exceptional Murut and Dusun

in their employ who had been with them for years and had acquired the appropriate skills and attitudes toward work.

The local villagers employed in the timber industry were usually engaged in the least skilled and lowest paid jobs. This was probably largely the result of their inexperience compared to those who had been working in the industry for years. One timber camp manager had a policy of putting the indigenous workers in teams with other ethnic groups, usually headed by a Chinese, so they could follow the example of their workmates.[9] My observations at the DIMA timber camp at Trus Madi revealed that the most highly skilled jobs involving the use of expensive heavy machinery were in the hands of Peninsular Chinese. The least skilled work was done by the Dusun workers and novice immigrants. So long as the villagers in the study area continue to work only for short periods they will remain unskilled; the companies will be reluctant to spend time training them for more skilled work if they believe their term with the company will be brief.

Most villagers who worked for timber companies were employed in camps close to their home village. While a few preferred to be based at the camp and came home periodically for a few days, others stayed in the village. Of the twenty men (out of a village population of 212) from Lanas working for timber camps, two-third stayed in Lanas.[10] When a timber camp moved to a new concession or shifted camp in the concession far from the village of local workers it often meant the camp lost existing workers who were not prepared to move away from their village. In Binanon and Kahaba there were ex-timber workers who had stopped working for that reason.[11]

There was evidence, too, that at harvest and planting time men left the employ of the timber camps to return to the villages. In Limiri Tengah, for example, six men had stopped working for the local timber camp in order to help with the planting. At the time of the interview it was not known whether they would resume working for the company when the planting season was over.[12]

Shifting cultivation remains the means by which the village people in the study area meet their basic food requirements. By working for a few months for a timber company, village men would acquire sufficient cash income to enable them to purchase supplementary food needs (such as coffee, salt, sugar and biscuits), clothing, a watch and household items. The money they earned in timber camps also enabled young men to pay bride price.[13] The contributions expected of a Dusun or Murut man at marriage (and for the Murut after marriage as well) are considerable and it was common for some of the money needed to meet these obligations to be earned in wage labour.[14] Fines imposed by native courts were also financed by working in a timber camp or on a plantation.[15] Some men have been able to invest their earnings by purchasing a vehicle or a chainsaw, both of which are capable of providing

an income for the owner in future.

It is important to note that many of the village people in the interior, particularly Muruts, were averse to the idea of permanent wage labour; they were content with their existing way of life in the village.[16] This view was substantiated by Nolten *et al*. (1982: 27) who note:

> Murut people are not inclined to give up their shifting cultivation practices. These agricultural activities are not only satisfying their basic needs but are furthermore a way of living: the cultural and sociological habits will be very difficult to change

The manager of Koporasi Pembangunan Desa (Rural Development Corporation) in Keningau said of the Murut

> They do not think or earning extra income like town people do. Town people are always more tempted to have more and it is that temptation that makes them work harder. Self-motivation is very difficult.

Comments such as these reveal that the cultural values held by the Murut, and to a lesser extent the Dusun, are quite different to those necessary for permanent full-time wage labourers. Furthermore, many people in the study area said they believed that the quality of life in the village was superior to that offered in timber camps, or available to them as full-time, yet unskilled, members of a modern economy. They failed to see the point of working to earn money to buy what at present was available to them without any cost apart from their own labour.

Given that village people have for generations been working away from their homes in plantations or timber companies in short-term employment, the opportunities provided by the timber companies operating closer to home have not resulted in a sudden break with tradition. The local people have, for the most part, continued their practice of taking advantage of the opportunity to work for a few months at a time. In this way they have been able to earn the cash they require without sacrificing their traditional way of life based on shifting cultivation. At the same time, that system of agriculture has still had recourse to the labour input of its men for heavy work (clearing and burning) and at times when there is a higher demand for labour (planting and harvesting). The regular maintenance of the crop, being borne by the women, has not been effected by the periodic absence of some village men from time to time.

Buying and Selling Surplus Produce

There was amazingly little interaction between villagers and timber camps or their employees living in the vicinity of these villages with respect to the sale

or purchase of locally-produced agricultural produce or forest products.

Theoretically the locations of timber camps in rural areas, especially those near villages, provided the opportunity for the local people to sell surplus agricultural produce, fish, games, and domestic animals to the workers in the camps. While there were a few transactions between villagers and timber camp employees and were significant to the villagers, as far as the timber workers were concerned the amount of fresh foods available from local sources was small, intermittent and of little consequence.[17]

With respect to the purchase of food there were essentially two categories of workers in the timber camps. Firstly there were those whose contract included meals, people such as managerial staff and highly skilled labour (usually from Peninsular Malaysia). These men ate at the company canteen which employed one or more female cooks (depending on the size of the camp). Secondly, there was the bulk of workers who cooked for themselves. Young men in barracks pooled together to purchase and cook food and those with wives and families at the campsite ate in their own quarters. Visitors to the camps, such as truck drivers, and ordinary workers were able to eat at the canteen but paid for their meals. Forestry Department workers who visited a camp were guests of the company and did not pay for food.

All food eaten in the canteens was purchased by camp buyers who visited Keningau daily where fresh vegetables, grocery items (including a large quantity of tinned foods -- especially meat), cleaning materials and fresh poultry and meat were bought. Pork was the meat most frequently bought as it was a favourite of the Chinese who were the main ones who eat in the canteens.[18]

As the camps were off located beyond easy access to Keningau the buyers also had the responsibility for taking orders from the workers who did their own cooking. This was encouraged at Trus Madi as it ensured workers were available for work rather than shopping too often.[19] The existence of a buyer daily bringing fresh food into the camp meant workers were spared the inconvenience of travelling to purchase their own requirements. There was little incentive, then, to visit villages to buy fresh vegetables when their needs could be met from Keningau.

In addition, there were a few very large camps with a shop on the site, usually operated by the wife of one of the workers, which offered a variety of tinned foods, cigarettes and drinks. Some of these supplies were bought from Keningau direct and, where the camp was on a good road, were supplemented by goods purchased from trucks originating in Kota Kinabalu which sold their wares at wholesale prices direct to shopkeepers.

Those workers in camps close to Sook occasionally hitched a ride in a company vehicle to visit the weekly Sunday market. The thirty or so traders selling fruit and vegetables at this market customers from timber camps and the acacia plantation at nearby Karamatoi.

Some vegetables and meat was, however, purchased direct from villages. A camp located near a village would be visited occasionally by a villager with a few surplus fresh vegetables, such as corn. Only rarely did a villager offer rice to timber workers. If a villager went hunting for wild pig and needed extra cash he would, if it was convenient, approach some of the timber camp workers with portions of the carcase. Occasionally a chicken would be sold in the same way.[20]

Camp people commented that they would prefer to buy fresh foods from villages more often but there was seldom any available when they needed it and, as far as the canteens were concerned, never in sufficient quantities for bulk cooking.[21]

From the perspective of villagers the timber camps did provide an opportunity to sell surplus produce. However, their shifting cultivation fields seldom yielded surplus rice, cassava or corn. Many villagers grew insufficient quantities of vegetables to meet their own needs, let alone enough to sell to other people. Villages close to timber camps invariably suffered water pollution which dramatically reduced the numbers and sizes of fish available; an abundant source of food supply which could have been sold had disappeared.[22] Where villagers had grazing cows of buffalo these were rarely sold to timber camps to raise money as such animals (particularly buffalo) are necessary for special occasions such as weddings and funerals.

Although the opportunity existed for villagers to earn income through the sale of surplus vegetables or fresh meat while a timber camp was temporarily located close by, there appeared to be no attempt to produce extra for the market in order to earn additional cash. This could have been due to the amount of labour required to produce surplus vegetables or the uncertainty of how long a camp planned to stay in that location; some camps stayed as long as three years on a particular site, others moved after only a few months. Those villages close to timber camps seldom had ready access to alternative markets for surplus produce because their distance from Keningau, coupled with poor roads, meant transport costs could undermine any profits to be earned.

The existence of timber camps in the area, therefore, had little impact on the villagers in this respect, except to provide for some people the opportunity to earn small amounts of cash on an intermittent and, in the long term, temporary basis. The villagers, as far as I could ascertain, were not tempted to plant more rice or vegetables to sell to the companies, continuing only to produce sufficient to meet their own subsistence needs. This could be seen to make sound economic sense. They had no guaranteed market in the timber camps for their produce and no real alternative markets, They were, therefore, in no position to dictate price to potential customers with an alternative source of supply.

Coping with the Environmental Impact of Logging

The greatest degree of interaction between timber companies and rural people arose out of the concern on the part of villagers for what they perceived as damage to their environment caused by logging. The environmental impact of logging had had economic and social costs for the villagers in Keningau and Nabawan/Pensiangan districts and in both the short and long term threatened the traditional way of life.

Most of the environmental problems stem from bulldozing, particularly in respect of roadmaking. In order to efficiently extract timber it is necessary for timber companies to construct clearings for log handling, camp sites and roads. This entails bulldozing areas of forest and displacing tonnes of earth. The heavy tropical rains wash this soil into the watercourses causing the streams and rivers to become turbid. According to Burgess (1971:233-234), road-making

> is probably the greatest damaging factor in hill forest exploitation, and in practice it generally takes place ahead of felling to enable the fallers to get into the forest easily and also to give the road time to settle before hauling begins... little attempt is made to limit gradients or to plan the road location so that the maximum amount of timber is tapped with the minimum of earth work... Roads following the hill-side are frequently necessary in steep hill country to enable height to be gained gradually, but in country steeper than the natural angle of repose of the excavated earth (say about 30°) such road making will cause great damage to regeneration below the road by the movement of loose fill down the hill-side, and such spoil will eventually find its way into streams. In general loggers pay little attention to drainage on their roads, and the road is usually 'aylighted' to a width of one chain on either side by felling all trees and most undergrowth to enable the sun to dry out the surface. ...No attempt is made to keep the drainage water on the inside of the road (to prevent it from eroding the exposed outer face of the road and the hillside below) or to reduce its velocity by keeping road gradients down or by building check dams. The result is that erosion goes on during logging, and is repaired as necessary, but when the operation closes a vast number of eroding surfaces are left and erosion often continues on the inner side of logging roads for many years until ultimately whole sections of the road slip (1971:233-4).

My observations confirm that this description of road construction and its effects in West Malaysia applies also to the situation in the study area in Sabah. The resultant water pollution affects all villages downstream of the logging concession. The people in the villages of Keningau and Nabawan/Pensiangan

districts referred to the muddied waters of their rivers as "Milo", indicating that they resembled the colour of that brand of cocoa drink.

In addition to the silting that occurs through run-off the occasional oil spill also adds to the pollution of the rivers. Notices were displayed on canteen or office walls in timber camps warning workers about oil spillage (DIMA, Trus Madi; Sagisan, Mamagun). While oil spillage was rare, informants in three villages (Limiri Tengah, Tingalan Ulu and Binanon) on two different rivers, reported having experienced oil pollution.

The effect of this form of pollution on village people has been three-fold. Firstly, the water became unsuitable for drinking and an alternative water supply had to be provided. Secondly, in some areas the Health Department recommended that the villagers not bathe in the river. Finally, the effect on the fish pollution has been dramatic; the only fish to be found in most areas of Keningau district being very small and in minimal quantities.

Another environmental effect of the logging industry has been damage to the habitat of wildlife. Burgess notes that "there is no denying that logged forests seem to be conspicuously lacking in tame" (1971:236). To my knowledge no formal studies have been conducted in the study area to check the validity of this suggestion. In this connection I can only report that village people of this suggestion. In this connection I can only report that village people have commented that the number of wild pig in the forest had declined and they believe the timber industry to be responsible. If we accept this claim then we must recognize that the diet of both the Murut and Dusun in the study area, heavily dependent on hunted wild pig for protein, will be adversely affected.

Some villagers expressed resentment toward timber companies for spoiling their land through damage to the forest vegetation and fruit trees, and the removal of hardwoods. Discussions with a wide range of people revealed a conflict between the perceptions held of the forest by shifting cultivators and those who supported the timber industry. Timber companies and the government held that Sabah's timber belonged to the state, and the income earned from the timber industry would contribute to programs which would bring development to the people. The villagers, on the other hand, saw the removal of timber as a threat to their practice of shifting cultivation. It must be noted that while secondary forest was most commonly sued by shifting cultivators, sometimes primary forest was cleared. The damage to primary forest, therefore, undermined the potential of that forest as future shifting cultivation land. There were villagers who saw the government as wanting to get rich while they paid the price of development with their shifting cultivation under threat and a ruined water supply.

Although the government was not allowing villagers affected by logging to claim compensation for damage to forests which might be used for shifting cultivation, there was an attempt to provide an alternative water supply to those

people affected by polluted rivers. The most common solution to the problem of polluted river water was the provision of rainwater tanks to the villagers. In some cases the timber camps provided water tanks as an acknowledgment of responsibility.[23] Sagisan camp, however, provided tanks in some cases and discarded 44-gallon drums in others (Binanon, for example, received only drums). Some companies seemed to have a policy on issues as this, for example DIMA.[24] Other companies, for example Woodlands Timber,[25] left the responsibility for public relations in the hands of camp managers. As a result there was no uniform response to the problem of water pollution in the study area.

Where timber camps refused to provide water tanks to affected villagers the people were forced to approach the District Office which either then convinced the timber company to provide tanks or took over that responsibility itself. According to the Forestry Department, the water tanks cost approximately $M1,000 each and would last for five years if cared for. $M1,000 represents a considerable burden on the rural villagers in the study area and each family would anticipate having to replace its tank in five years at that cost. This amount of money is approximately that earned through the sale of one buffalo; for those families without a buffalo (that is, the majority) their dependence on tank water will mean having to undertake labouring work in the future in order to earn the money to replace that facility. No company would accept ongoing responsibility for the provision of a clean water supply; once they moved to a new concession all obligation ceased.

There was a variety of approaches taken by villagers claiming redress for environmental damage. For example a delegation of village elders would approach the timber camp manager with a request for compensation for general environmental damage to their water supply, the destruction of fruit trees, the removal of valuable rattan, the decline in the numbers of wild pig in the forest and the removal of trees. Compensation for environmental damage was usually in the form of donations of materials to construct a new school or meeting house, or the provision of a bulldozer to clear a soccer field or create a short access road linking the village with a timber road.[26] As far as I could ascertain all compensation for environmental damage was made to the village as a whole, rather than to individuals.

If a villager believed that a timber vehicle killed a buffalo, chicken or domestic pig, that villager would approach the manager of the camp on his own behalf to claim compensation. In such instances money was claimed. These requests for compensation were not always met by the timber company. Camp managers were frequently confronted with claimants who possessed no evidence that an animal had been killed or that a company vehicle was responsible and were consequently reluctant to pay. Often, too, the villagers were accused of requesting monetary compensation in excess of the value of the animal, for example $M100 for a chicken, when the market value was $M20.

In the villages of the study area antagonism felt toward the timber companies was often expressed in acts of sabotage. According to the Keningau manager of Woodlands Timber, every village caused trouble. The sabotage took many forms: barricades of debris were placed across a road to slow down traffic, slingshots were used to fire stones into windscreens, nails in wood were strategically placed in the roadway to puncture tyres and, more rarely, armed threats to timber company personnel were made. Occasionally, the sabotage was organised by a group of village head. At other times it was merely a disgruntled villager unhappy with the amount of compensation received for the death of a domestic animal.

Sabotage could be a productive form of protest. I was not able to gauge whether sabotage usually preceded negotiations for compensation or was the result of dissatisfaction with a decision. However, acts of aggression, or the fear of them, influenced timber camp managers to provide compensation to villages in or near their concessions.

Not all timber camps were located close to villages. In these instances the only environmental effects felt by vilalge were water pollution and some destruction to the forest habitat supporting wild pig. The distance between the camp and the villages not only meant there was almost no personal contact with the camp or its employees, but sabotage would be more time-consuming, remembering the people in the remote rural villages seldom had access to transport. Those companies with concessions remote from villages were not under the same pressure to provide compensation to villages affected by logging as their counterparts in other areas with camps close to settlements.

The environmental damage caused by the timber industry has the potential to disrupt the traditional way of life of villagers so affected. First, they have become dependent on tanks for their water supply, tanks which will be costly to replace. This means that in order to pay the replacement cost village men will be obliged to spend more time working away from the village than was previously necessary. Second, the turbidity of river water has affected the fish pollution and this loss, coupled with the perceived decline in the numbers of wild pig in the forests, will affect the protein intake of the villagers. This will mean malnutrition will become a more serious problem than it already is or that villagers will increasingly be forced to work outside the village to earn sufficient money to purchase waht has traditionally been freely available. In the longer term, there is the possibility that shifting cultivation will become less productive as the removal of trees from potential shifting cultivation land by timber companies effectively reduces the amount of nutrients available for burning, and means less logs necessary to prevent leaching of the soil between the time the land is cleared and new growth develops to help hold the soil together. As people begin to cultivate logged land they may experience soil loss and reduced fertility.

Timber Company Roads and Access for Villagers

In the preceding section I have raised the issue of the environmental degradation, particularly water pollution, caused by road construction and its impact on village [people. These roads do, however, serve a useful purpose for those villages located on, or close by, a timber company road. Whereas once part or all of the journey to Keningau, the nearest central place, had to be made on foot, the introduction of logging roads, together with public transport, has provide improved access to once isolated villages.

It must be recognized that whereas all villages were affected to some degree by road construction, only some received the direct benefit of a road. Furthermore, for those villages without public transport such roads were little more than glorified walking trails. In this context it is important to describe the public transport service as it existed in Keningau and Nabawan/Pensiangan districts. The vehicle, almost invariably a four-wheel drive (most commonly a Toyota Land Cruiser), was usually owned by an individual or a family, that family being village-based. The capital for this vehicle was frequently earned by working outside the village, as a timber or plantation worker. Each day, providing there were sufficient passengers wishing to make the journey, the vehicle would leave for Keningau and return home at an agreed time -- either late morning or early afternoon. The village people would use their time in Keningau to do some shopping (for example buying tobacco, sugar, coffee, biscuits), visit the outpatients clinic at the hospital, or meet friends. These vehicles were village-based because that was there custom lay. Apart from government employees, who had access to departmental vehicles, outsiders rarely visited villages. If the vehicles were based in Keningau it would have meant those drivers made two, rather than one, return trip each day. People living in villages that were not the home of a public transport vehicle would have to make special arrangements to travel to Keningau. This would usually mean someone walking to the nearest village where vehicle was based and making arrangements for the driver to serve their village on a particular day, ensuring that there were sufficient people to make trip profitable for the driver.

There was little interaction between villages and timber company workers in respect of transport. While timber company trucks regularly plied the roads the seemed never to take passengers. Conversations with timber camp employees led me to assume this was most likely because the journey was frequently hazardous due to the rough and slippery road and they did not want to be financially responsible for compensation in case of accident. Occasionally , though, a driver would purchase an item in Keningau on behalf of a village he had come to know. Senior staff from the camps regularly travelled to Keningau on business; however while they sometimes carried camp workers set for one or

two days leave, they seldom gave lifts to villagers. The only exceptions that seemed to occur were when a parent approached the company claiming that a child was very ill and needed to be taken to hospital.[27] To my knowledge these instances never occurred where a village had access to its own public transport.

It must be remembered that these roads were never surveyed and only roughly made and were therefore frequently subject to disintegration due to poor siting coupled with the effects or heavy tropical rains. Indeed, four-wheel drive vehicles were necessary in all weather. However, the onset of rain frequently made the roads impassable and vehicles were forced to wait at the roadside for an hour or more until conditions were safe enough to travel. My research indicated that the cost of transport in the interior was subject to two factor: (a) the distance to be travelled, and (b) the condition of the roads. Those people living in villages accessible only by poor roads usually paid twice the fare paid by those living an equal distance from Keningau but served by better roads.

My research indicated that villagers were anxious to have road access to Keningau. The reduced travelling time provided by public transport gave greater excess to the outside world. Furthermore, the provision of roads meant villages became more accessible to the services provided by government such as mobile health clinics and extension workers from the Department of Agriculture.

However, as these roads were built as temporary access roads they rapidly fall into disrepair once they are no longer required by the company. Unless the government, through the Department of Public Works, is willing to take over the maintenance of these roads, those villages which had access during the period of logging gradually became more isolated. While the timber roads deteriorated rapidly, being washed away or pitted with gullies, they did for a few years provide a very rough track for those drivers willing to risk axle and suspension damage. Maintenance costs for timber roads are high and for this reason the government is reluctant to keep timber roads are high and for this reason the government is reluctant to keep timber roads open unless they service large numbers of people or villages involved in cash crop projects.[28] As the Deputy Chief Minister for Sabah, Mark Koding, was quoted as saying

> It is not practical to build a road costing millions of ringgit to link two kampungs with only 15 families (*Daily Express*, January 20, 1986).

This point is also relevant when it comes to maintaining poorly constructed timber roads.

Timber companies pressured by villagers' demands for compensation and/or acts of sabotage occasionally received donations of building materials sufficient to construct a school or balai (meeting house). Another act of "good will"

on the part of one timber camp was to provide a bulldozer to clear a roadway from the village to a nearby timber road which would provide vehicular access for the residents wishing to travel to Keningau. However, very few villages benefited from such actions.

One timber camp manager suggested that timber companies did more to bring development to the people in the rural areas than the government did. His camp was providing materials to build school in the village of Mamagun. When I visited this village, lessons were being given in the shade of a clump of trees supplemented by an attap roof supported by a number of bamboo poles. Additionally, a roadway had been cleared to link the village with a timber road that would link with the government road to Keningau. Without the timber industry, he said, these people would still be without roads. With respect to the provision of roads he was, I believe, right.

To some extent most villages in the remote areas of Keningau district where logging has occurred have benefited, in the short term, from the construction of roads by timber companies. The same cannot be said of Nabawan, Pensiangan district where, as far as I could ascertain, most logging was carried out at the time my research in the relatively uninhabited parts of the region. The timber industry has been able, albeit most likely on a temporary basis, to provide a facility which, due to economic constraints, is beyond the means of the state government.

Conclusion

The timber industry has brought many financial benefits to the Sabah State Government,[29] but not without some costs to the people. This paper, by focussing on the interaction between the timber industry and residents in the areas where logging was occurring has been able to identify some of the advantages and disadvantages of the timber industry to the people.

The advantages of the timber industry for the villagers are, however, mainly short term. While the camps are functioning near their villages the people have the option of accepting employment opportunities provided by the industry without necessarily having to live away from home. However, except for small adjustments made by some camp managers, the employment is on the terms of the company. The conflict that exists between the demands of growing rice by the shifting cultivation system and those of the timber industry have meant village people working for timber companies remain, for the most part, unskilled and subsequently in the poorly paid jobs. Also, the responsibility for the regular maintenance of the rice crop lies with the women; this means men working for timber companies not close to home must leave their families to find work. It is reasonable, therefore, to expect that they will only work for limited periods to earn sufficient to meet their immediate needs before returning home to their

families in the villages. Once married, all village men have an obligation to play their part in the production of rice; this means that they must stop working for an employer, whether a timber company or plantation, in favour of contributing their labour to the production of rice at clearing and planting as as harvest time.

The existence of timber camps with their scores of workers in rural areas means that villagers can exploit the obvious demand for fresh foodstuffs. However, while there is evidence in the study area (for example Lee, 1961: Golingi and Ismail, 1986) that indigenous people with greater access to non-traditional life styles have adjusted their way of life, where feasible, to produce surplus or cash crops, those in the more remote areas, cut off from those values, continue to produce sufficient only to meet their own needs. It must be also be remembered that local villagers compete with the convenience of buying goods, through the camps, from Keningau, and cannot rely on a particular camp remaining in their vicinity for long periods.

The opportunities for employment and to sell surplus produce, even if taken up, were short-lived. The periodic moving camps to new parts of a concession, or to new concessions, had the effect of deterring villagers from remaining with a camp in a permanent basis and meant villages that may once have had a market for surplus could no longer sell to the workers. The timber industry, therefore, has not resulted in a change in lifestyle in respect of employment, or encouraged shifting cultivators to produce surplus.

Where villages have gained greater access to centres such as Keningau through the provision of roads the advantages can be longer term. However, as mentioned above, the Department of Public Works has not been able to take over the responsibility of maintaining all roads constructed by timber companies. Those villages with small populations or not involved in cash cropping must therefore experience a gradual decline in their accessibility as the roads deteriorate to become permanent impassable.

It is the environmental impact of logging that has had the greatest effect on the traditional lifestyle of village people. Rivers that provide clean drinking water and abundant fish no longer do so. The numbers of wild pig and deer in the forests have, according to villagers, declined. Additionally shifting cultivators see their system of agriculture, and therefore livelihood, under threat. The environmental impact of logging has meant villagers will be forced to participate more in order to earn the money necessary to endure the immediate costs of development.

The timber industry has played an important role in contributing to development funds for the people of Sabah. Will those people affected by the timber industry benefit from that income, or will their isolation put them beyond the reach of development programs in the foreseeable future? Are they carrying the full burden of the "price of development"?

Notes

1. Interviews at Sinapar, Salarom and Pagalunggan.
2. Interview with Keningau Manager of DIMA Timber Company.
3. Interview with Manager of Sagisan timber camp.
4. Interview with Manager of Sagisan timber camp.
5. Interview with village head, Kuala Puntch.
6. Interview with Manager of Sagisan timber camp.
7. Interview with Manager of Sagisan timber camp.
8. Interview with village elders at Pagalunggan.
9. Interview with the Manager of Sagisan timber camp.
10. Interview with village head, Lanas.
11. Interviews with village heads at Binanon and Kahaba.
12. Interview with ex-timber worker at Limiri Tengah.
13. The subject of bride price in Sabah as discussed in Woolley (1936:7-11); Appell (1965); Appell (1986).
14. Interviews with (a) Director, Institute of Development Studies, Kota Kinabalu, (b) ex-policeman at Pensiangan, (c) village elders atending a meeting at Lababng, and (d) primary school headmaster at Sepulot.
15. Interview with resident in Salung.
16. Interview with residents of Silungai.
17. Interview with Keningau Manager of DIMA Timber Company.
18. Discussions and observations at Trus Madi timber camp.
19. Interview with Keningau Manager of DIMA Timber Company.
20. Interview with ex-timber worker, Limiri Tengah.
21. Interview with Manager, Sagisan Timber Camp.
22. Interviews with villagers at Binanon and Limiri Tengah.
23. Interview with Manager of Sagisan timber camp.
24. Interview with Keningau Manager of DIMA.
25. Interview with Keningau Manager of Woodlands Timber.
26. Interview with the Manager of Sagisan timber camp.
27. Interview with Manager of Sagisan timber camp.
28. Interview with the Keningau Manager of the Forestry Department.
29. The importance of the timber industry in Sabah's economic growth is discussed in Gudgeon (1981) and information on the influential role played by the Sabah Foundation, financed largely by logging, is to be found in Hepburn (1979), *Asiaweek*, July 12, 1985:45, and William (1981).

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Capitalist Development and Changes in Forms of Production in Malaysian Agriculture

Muhammad Ikmal Said

The aim of this paper is to outline recent trends in Malaysian agriculture. The thrust of the discussion is to show that increased integration of Malaysian agriculture into the capitalist market has led to a temporary decline in the growth of agriculture. This temporary decline is caused partly by the decline (in area, particularly) of smallholdings. It is often argued that the small size of holdings is the most important single cause for the decline of agriculture (Ariffin, 1985; Burrows, 1980). However, Malaysia's peasant agriculture has long been characterized by very small farms. The fact that these characteristically small farms have only begun to decline rapidly on a massive scale only fairly recently suggests that the size of farms needs to be analyzed in relation to a more recent phenomenon. It is argued that the decline of smallholdings is due largely to the inability of small units of production to sustain and reproduce[1] the subsistence of its producers. In turn, this crisis of reproduction amongst operators of smallholdings is clearly related to the difficulties such small-sized and non-specialized units of production face under the threat of increased division of labour brought about by the increased integration of agriculture into the capitalist market.

It is emphasized in this paper that the decline of smallholdings also signifies the decline of the smallholders' household form of production. In other words, the decline of smallholdings is a decline not only of small units of production, but also of small units organized in the household form. This is partly due to the contradictions of inter-generational reproduction, which progressively splits land holdings into smaller shares for each emergent generation.

The marked decline of small household units of production is indicative of the declining competitiveness of such units of production, demonstrated very graphically by the increasing area of cultivated land being left idle, giving Malaysia the dubious distinction of being "perhaps the only developing country where good land is left idle".[2] It was estimated that a total of 890,000 hectares of agricultural land have been left uncultivated. This includes alienated lands that have not been cultivated for three consequtive years, as well as irrigated

lands that remain single-cropped only (Sahak, 1986). This is a large area indeed, for it forms about 22 per cent of the 4.1 million hectares of culitvated land in Peinsular Malaysia. Of this, 161,00 hectares were previously cultivated with paddy[3] and the remaining are comprised of land cultivated with other crops. The significance of the decline of small household units of production becomes even clearer when it is realized that the units replacing the smallholdings (either directly, by cultivating land left idle by smallholders, or indirectly, by ensuring their reproduction through strict industrial discipline) are comprised of large, state corporations and comparably large private capital. This is true even in the case of FELDA (Federal Land Development Authority), which replaces smallholdings indirectly by undertaking new land development projects operated by labour recruited along with their respective households, and organized fairly efficiently through industrial discipline. The reproduction of these household units is governed by the terms laid out by FELDA. For example, the heads of households can transfer ownership of their land to only one particular heir. The indivisibility of land under FELDA is now further controlled increasingly by the allocation of shares, instead of actual land, to the settler. The extra-household form in the organization of work is more clearly evident, as work is carried on a group basis (Halim, 1989).

Although the decline of both permanent -- (rubber, coconut, dusun) and temporary-crop (paddy particularly) smallholdings have been simultaneous, efforts at arresting their decline had focused largely upon rubber smallholders. The decline of paddy cultivation had been left unattended until recently, when the supply of land for new settlements appears to have decreased considerably and when large extra-household forms of production have developed within the paddy sector. The analysis below looks at the rehabilitation of paddy lands by these new extra-household forms of production within the context of the general development of agriculture as a whole.

Combined and Uneven Development in the Rice Sector

Increased public expenditure in the country's rice sector has been increasingly concentrated in the main rice-growing areas. Public expenditure for the construction of drainage and irrigation facilities during the first four five-year development plans (1956-75) amounted to about $700 million. Almost half of this total ($319 million or 46 per cent) was devoted to the Kemubu and Muda irrigation schemes, whose combined command area (129,764 hectares) forms about 25 per cent of the country's rice-growing area. In 1984/85, these two areas contributed about 56 per cent of Peninsular Malaysia's total rice production (Kementerian Pertanian, 1986).

This concentration of investment in the prime rice-growing areas has tended to further marginalize farmers in the backward rice-growing areas of

the central and southern states as well as the northwest regions of Kedah and the interior of Kelantan. For these farmers, rice cultivation is often a subsistence adjunct of either some other cash crop cultivation[4] or wage employment.[5] Their farms are characteristically very small. Compared to the Muda average farm size of 1.6 hectares, the average size of farms in the states of Johor, Negeri Sembilan, Melaka, and Pahang varies between 0.53 and 0.81 hectares. Increases in the price of farm inputs which accompanied the general development of the rice sector as a whole have resulted in lower returns for an already uneconomic activity. The importance of this point cannot be underestimated, for, in contrast to farmers in the favoured regions, marginal paddy farmers not only have to meet increased input costs with continually low yields but also have to forsake the price subsidies market-oriented farmers get.[6] Their non-specialization has put them in a grossly disadvantageous position *vis a vis* other increasingly specialized producers. They often do not have sufficient resources for production nor the infrastructural support (such as cheaper farm inputs, tractor services and competitive market outlets) to risk investment on a commercial scale. For example, the price of paddy obtained in the very advanced irrigated Muda area in 1977 averaged 0.46 sen per kilogram. On the other hand, the corresponding price of paddy in marginal rice-growing areas such as Johore, Melaka, Negeri Sembilan and Pahang varied between 0.38 and 0.41 sen per kilogram (Hashim, 1980:11). The combined influence of low yields and high cost of production has meant that the cost per kilogram in these areas is much higher than in the more advanced areas. In contrast to the Muda area's production cost of 0.22 sen per kilogram in 1977, the corresponding cost of production in marginal paddy-growing areas is a lot higher; the cost of production per kilogram in the non-Muda area of Kedah and Perlis was 0.40 sen in 1977. Other marginal areas such as Pahang, Negeri Sembilan, Melaka and Johor registered similarly high costs; 0.45, 0.43, 0.30 and 0.39 sen per kilogram respectively (Hashim, 1980:11).

These non-specialized producers are also victims of subsistence production, for the wage-rates they receive are often comparably lower than the rates for full-time labourers. It is indeed significant that "inspite of the availability of this [that is, off-farm] income, about 80 per cent of the households surveyed were still drawing incomes below the poverty-line income" (Malaysia, 1981:39). Haughton's findings (1987:3-9), drawn perhaps from a similar but wider universe (3,825 households) sampled by the Ministry Of Agriculture, also show a high incidence of poverty (60 per cent), even while farmers' dependence on paddy have decreased and their real incomes have actually increased.

The declining interest in paddy production implies lower investment in marginal paddy areas. As a result, the further development and increased division of labour in the better endowed areas have undoubtedly imposed a severe strain on the reproduction of rice farms in marginal areas. Under such

circumstances, marginal rice producers face a "reproduction squeeze" (where increasing production costs are not matched by corresponding prices and yields), where increased costs of production within the context of increased specialization and growth within the rice economy as a whole impel them to either exploit their own labour further,[7] subsidizing capital in the process by sparing it the responsibility and cost of production (Bernstein, 1977:65), or abandon rice cultivation for some other forms of employment.[8]

Table 1
Paddy Land Area (Hectares) in Peninsular Malaysia, Selected Years

Year	Wet Padi		Dry Paddy	Total
	Main Season	Off-Season		
1953/4	327,289	n.a.	15,066	342,355
1963/4	356,074	23,641	21,181	400,896
1973/4	371,120	217,030	9,109	597,259
1983/4	243,020	190,580	2,970	436,570

Source: Malaya (1955); Malaysia (1969; 1975; 1985)

The decline of paddy production for other forms of employment has been very rapid. Table 1 above shows this very clearly. The pattern of decline of paddy cultivation in Table 1 supports the proposition that increased specialization in the economy generally subjects the most marginal producers to abandon their cultivation of paddy for other cash crops or wage employment. This is evidenced by the remarkable phase-by-phase decline of the different types of crops, which corresponds broadly with the degree of commercialization and specialization. The decline first occured amongst dry paddy cultivators, the least commercialized and productive producers,[9] between the sixties and seventies. The decline of planted dry paddy area declined by more than half, from 21,181 hectares to 9,109 hectares between 1964 and 1974. The completion of the Kemubu and Muda irrigation schemes in the early seventies and the improvement of other favoured areas[10] since then has further augmented the decline of dry paddy to about 3,000 hectares by 1984.

The tremendous growth of the Malaysian economy in the seventies and early eighties also imposed a similar strain on single-crop wet paddy producers. Between 1974 and 1984, the area under main season wet paddy decreased very dramatically by 128,100 hectares, or about one-third of the area in 1974. The decline of main season wet paddy area is accounted largely by the states of Kelantan, Pahang, Perak and Trengganu. These four states accounted for 82,086 hectares or 64 per cent of the decline. It needs to be noted further that

the total decline of about 161,000 hectares of paddy land between 1974 and 1984 included 26,450 hectares of off-season wet paddy. This decline is probably largely accounted by relatively marginal areas whose producers have been increasingly attracted by the availability of better employment opportunities. This is a fairly plausible proposition for about 21,455 hectares or 81 per cent of the decline in off-season wet paddy area is accounted for by the more economically advanced states of Perak (14,519 ha.), Penang (4,581 ha.) and Selangor (2,355 ha.), where increased opportunities for alternative employment have provided a strong influence against their continued reproduction in paddy cultivation.

The Abandonment of Marginal Paddy Area

A large proportion of the abandoned marginal paddy lands have remained idle. Many of the village settlements that once dot the edges of these paddy-growing areas are now very sparsely populated, with a significant proportion of the population being too old to contemplate to move to new forms of employment. This is illustrated very vividly by a recent study of ten villages in the mukim of Seri Menanti in the district of Kuala Pilah in the state of Negeri Sembilan (Azizah, 1988). This study shows that a large proportion of the small paddy and rubber holdings have been abandoned. The former have been abandoned almost completely. The degeneration of the agricultural economy in Seri Menanti is borne out by the fact that only 14 per cent of the households are dependent solely on farming. The rapid decline of agriculture and rural residence for employment in new land schemes and urban areas is underscored by the fact that about 53 per cent of household heads in Seri Menanti were above 55 years old. This explains why about 48 per cent of the total number of household heads are economically inactive, and that a similar proportion (45 per cent) are dependent totally upon pensions and/or remittances.

Until recently, the decline of paddy cultivation has not been a matter of considerable concern to the state. This can be attributed to several reasons. First, it is government policy that marginal paddy producers convert to other more remunerative crops, while the burden of (paddy) production is shifted to the more productive primary paddy-growing areas (where increased public investment has been concentrated). Second, the state has had ample land for new land development.

However, the conversion of idle paddy land for other cash crop production does not appear to have taken place on a sufficient scale. Furthermore, land is no longer easily available for new development. Another important reason why the state became very concerned over the problem of idle lands in the early eighties is its sheer size. In addition, it was also at this juncture that the state realized that the agricultural sector was declining, which it attributes largely to

the dwindling of smallholdings.[11] Simultaneously, the industrial sector was also not expected to maintain its previous rates of growth, reshifting the burden of employment generation to the agricultural sector (Malaysia, 1984). Uneconomic-sized smallholdings, the ailing segment within agriculture, would be subject to land consolidation and organized farming under centralized management, while idle lands would be developed. This new approach adopted in the "National Agricultural Policy" is thus aimed at arresting the contradictions of the petty household form of production.

Meanwhile, the paddy sector has undergone several important changes. The most relevant for this discussion is the emergence of large capitalist units in the Muda area (Muhammad Ikmal, 1985). Their relevance to the rehabilitation of abandoned paddy farms lies not only in the demonstration that the belief in large paddy farms is well-founded, but also in the fact that many of these farmers own a fair number of farm machinery (tractors/combine harvesters), that could be put to greater use if they are able to expand. Many of these highly expensive combine harvesters are owned jointly by different households, indicating, therefore, that capital in the Muda paddy sector has begun, if only at a rudimentary level, to operate beyond the bounds of the household. A few of the operators of large farms have gone as far as Melaka and Kelantan to lease out their combine harvesters, while some others have indicated their desire to expand, on a syndicated basis, outside the Muda area, particularly in neighbouring Seberang Prai, where large tracts of paddy land have been abandoned.

Rehabilitation of Paddy Smallholdings

The state rehabilitates abandoned paddy lands in three ways. The first is by organizing production directly. This is done principally through FELCRA (The Federal Land Consolidation And Rehabilitation Authority). The second way is by organzing group-farming, carried out largely by the state-organized Farmers Associations.[12] Local Farmers Associations organize the rehabilitation of abandoned paddy lands on a group basis, where each member contributes capital and/or labour while farm operations are co-ordinated by the local committee. Even so, each farmer is fully responsible for land registered under their names. Local Farmers Associations are given a subsidy of $125 per acre for land preparation (ploughing) in rehabilitating such abandoned lands. The state assists further in the building of farm roads, canals and irrigation. Together, these different forms of subsidies adds up to about $450 per hectare.[13]

Finally, the state facilitates the rehabilitation of such lands by mediating (through the Lembaga Pertubuhan Peladang) between the owners of idle land and prospective "private" operators. The state's role is usually confined to identifying preferred areas and their land owners, so that their small holdings could be rented out as a single contiguous parcel to the prospective operators.

These individuals do not get the $125 subsidy for land preparation. Of the total 161,000 hectares of idle paddy land today, 125,000 hectares have been targeted for rehabilitation. They are to be divided equally between the local Farmers' Associations and private companies/individuals (*Utusan Malaysia*, December 2, 1986). Felera's role in rehabilitating paddy lands is expected to increase considerably.

By mid 1987, a total of six local Farmers' Associations have begun to rehabilitate about 795 hectares for the cultivation of paddy in Seberang Perai in the state of Penang.[14] They are joined by six private interests, who together operate a total of 553 hectares. Two of the latter operate 49 hectares, while the remaining four cultivate 81, 85, 87 and 202 hectares respectively.[15] What is most interesting about these private syndicates is that three of the five (cultivating a total of 332 hectares) are from the Muda area. It is highly likely that these three (and many more among those who applied recently) represent the kulaks of the Muda. The largest farm to-date (202 hectares) is operated by a private company from Alor Setar.[16] This is not the first time private individuals form syndicates to undertake large-scale paddy cultivation in marginal areas, as nine private corporations were reported to have already done so in Kelantan, Penang and Perak in 1985 (*Utusan Malaysia*, December 2, 1986).

Recent developments suggest that the state's efforts at arresting the decline of smallholding agriculture, paddy in this case, through group-farming (where individual participants are eventually responsible for their own plots) have not been successful. Recently, the Penang state government announced that about 400 hectares of land on which it had spent $1.8 million for rehabilitation for farmers have been leased out to syndicates of wealthy capitalist farmers, mostly from Kedah (*The Star*, February 20, 1989). This is probably because each individual farmer is entirely free to either co-operate (with the group's efforts) or otherwise, depending upon whether they have sufficient labour and capital and access to other forms of sources of income, and whether the size of their individual farms are large enough to warrant their close attention.[17]

Unfortunately, such freedom of choice subverts such forms of group enterprise. This is especially true in paddy cultivation, which relies upon a social orchestration of effort among owners/operators of neighbouring land lots.[18] Thus, in contrast to the Muda area, large capitalist farms in these marginal rice-growing areas have appeared only after petty producers have exhausted their resistance to market forces.

The lack of alternative employment opportunities in the Muda area is an important factor in explaining the persistence of the petty household form. It needs to be stressed, however, that their persistence should not be misconstrued as prosperity, for inspite of the large amount of subsidies, about two-fifths remain below the poverty line and a fairly considerable proportion probably depend upon credit for their reproduction (Muhammad Ikmal, 1988a,

1989). It must be added further that farmers in the Muda area are also organized increasingly on a group basis by MADA (Muda Agricultural Development Authority). By 1986, a total of 163 "Group Projects" (Projek Kelompok) involving 8,636 farmers in 10,787 hectares had been launched.[19] Although restricted largely to field management (water distribution, uniform planting), the importance of this new mode of organization cannot be underestimated. This is because this rationalization of smallholding production by the state is very recent (particularly after 1980), and coincides with the increased rationalization of the production process in the Muda as a whole, particularly with mechanization (with tractors and combine harvetsers) and development of large farms. Thus, the process of rationalization of smallholding production has taken root even in the most advanced paddy area. I must note also that the growth of these "Group Projects" coincide very strikingly with the numerous complaints made to me by operators of large farms about the "indiscipline" and "laziness" of petty producers in their field management, causing delays and increased costs.

Decline of Independent Smallholdings in the Rubber Sector

The extensive abandonment of paddy cultivation since the seventies is not an isolated phenomenon, for it forms an integral part of the process of decline of "independent" smallholding agriculture following increased division of labour, industrialization and state intervention.[20] It is not exactly clear which other crops are involved, but the indications suggest clearly that rubber smallholdings form a significant proportion of the remaining area that have been left idle (Kamal *et al*: 1981:89).[21] The study by Azizah (1988:142-143) cited earlier corroborates this.[22] Asmah's study (1987:497-498) of nine villages in the economically depressed district of Baling (Kedah), whose town centre was the site of Malaysia's largest peasant demonstration in 1974, similarly found that a considerable proportion (65 per cent) of rubber smallholdings were either old or left untapped. Like their counterparts in the paddy sector, a significant proportion of these smallholding agriculturists (particularly rubber smallholders) have found it increasingly difficult to reproduce their subsistence under the smallholding-household form.

This problem was already evident in the rubber smallholding sector in the fifties,[23] when the government's rubber replanting schemes fell short of their targets (Jackson, 1964:258). The main reason for this failure was due to "the fact that many smallholders cannot afford to replant the small plot of rubber which they own since this would deprive them of an immediate source of income during the five to seven year maturation period" (Jackson, 1964:260). Nonetheless, the total number and area under smallholdings continued to increase in the same period. However, this was largely due to the fragmentation of estates and development of block new plantings sponsored by the state. These two

sources of increase accounted for 80 per cent of the increase of rubber smallholdings between 1952 and 1961. Thus, individual new plantings constituted only 20 per cent of the increase (Jackson, 1964:262).

Table 2
Rubber Land Area (Hectares)
Under Estates and Smallholdings, Peninsular Malaysia

Year	Total	Estates	(%)	Small-holdings	(%)	Increase (%)
1953	1,508,647	821,500	(54.5)	687,147	(45.5)	
1961	1,607,551	784,027	(48.8)	823,524	(51.2)	20.0
1971	1,718,028	631,584	(36.8)	1,086,444	(63.2)	32.0
1981	1,695,600	479,000	(28.2)	1,216,600	(71.8)	12.0
1986	1,623,000	390,600	(24.1)	1,232,400	(75.9)	1.3

Source: Lee (1978:201).
Malaysia (1966, 1972, 1983, 1988).

It is evident from Table 2 above that, despite reports of increasing abandonment, smallholders' share of the total area under rubber has continued to increase right up to the present. This has led some to portray that rubber smallholding sector as actually thriving (Koh, 1984:20-22). There are at least two important reasons why there appears to be a contradictory development within the smallholding sector. First, as Table 2 shows, estates have declined, either because of a decline in interest in plantation agriculture or because of conversion to other crops (particularly to oil palm).[24] The second and more important reason for the increase in the number and area under smallholdings is the rapid development of state-sponsored smallholders.

By state-sponsored smallholders I mean smallholders who are resettled in new land development schemes under the auspices of the state. The state provides the initial expenditure for developing the land and all the necessary infrastructure, which is eventually repaid by the settlers on an instalment basis.[25] The large investment involved and the large amounts of profits churned from such land development projects require a continuous committment from the smallholders, necessitating stringent control over their conditions of reproduction. Quite obviously, the emergence and development of this new group of smallholders cannot be taken as a measure of the fate of independent smallholding agriculture. This is because they are a newly established strata of smallholders who have been established by the state, and would be reproduced under its control.

Table 3
State-Sponsored Samllholder Land Development Schemes, 1961-1985+

Federal Govt.	Total* 1961-70	1971-85	Total	Rubber** (Up To '85)
FELDA	120,716	535,305	656,021	188,446
FELCRA	--	81,810	81,810	59,017
RISDA	--	41,233	41,233	41,172
	120,716	658,348	779,064	288,635
State Govts.	22,419	313,662	335,081	n.a.
Total	143,135	972,010	1,115,145	288,635

+ Does not include Fringe Alienation, Youth and Controlled Alienation land schemes.

Source: * Malaysia (1981:270) ; Malaysia (1986b:344).
** Department Of Statistics (1988).

Altogether, more than one million hectares have been developed by the state for smallholders between 1961 and 1985. Most of these are accounted by oil palm; about 436,700 (63 per cent) of the 648,282 hectares developed by FELDA since its establishment were cultivated with oil palm. Although rubber lies a distant second, accounting for 188,446 hectares, or 27 per cent of the total land developed by FELDA (FELDA, 1987:11), it constitutes a fairly considerable area. As we can see from Table 3 above, the area covered by newly-established state-sponsored rubber smallholdings is about 288,635 hectares, or 26 per cent of the total even while no information is available regarding the area devoted to rubber by state government land development schemes. This already accounts for a little more than half (53 per cent) of the increase (545,253 hectares) in the rubber smallholding sector experienced between 1953 and 1986 (Table 2). The remaining increase is accounted largely by state assisted, but not financed, new land development projects, such as the Fringe Alienation and Controlled Alienation schemes.[26] This confirms the trend observed much earlier by Jackson (1964:261) that smallholders prefer new planting than to replanting.

This last point is underscored by the fact that the increase of rubber smallholdings has actually tapered off. As we can see in Table 2 above, rubber smallholdings increased by 20 per cent between 1953 and 1961, and by a further 30 per cent between 1961 and 1971. Since then, however, the increase has declined to about 12 per cent in the ten years between 1971 and 1981, and only one per cent in the five years between 1981 and 1986. This suggests very strongly the

declining interest in rubber smallholdings, particularly since the seventies. This conforms very closely to the decline of paddy cultivation, a large proportion of whose operators also cultivate rubber as a cash crop. It is evident, therefore, that the contradictory trend observed in the rubber smallholding sector is more apparent than real. For the decline of rubber smallholdings is concealed by the large increase in state-sponsored new land development schemes, which, due partly to the shortage of land, has also begun to decline since the eighties (see Table 4 below).

Table 4
New Land Development Schemes, Peninsular Malaysia, 1961-1985

Year	Total Land Developed (Ha.)
1961-65	218,446
1966-70	133,383
1971-75	323,596
1976-80	407,991
1981-85*	359,826
1986-90**	286,700

* Excl. Est. 57,744 ha. for East Malaysia
** Target (Incl. East Malaysia)
Source: Malaysia (1971, 1976, 1981, 1986)

The problem of replanting faced by rubber smallholders in the fifties has re-appeared in the seventies and eighties. Thus, as the Fourth Malaysia Plan reports (Malaysia, 1981:266), "The response of the replanting programme undertaken by the Rubber Industry Smahollders Development Authority (RISDA), however, was more from the large holdings despite the increase in the replanting grant from $2,223 to $2,964 per hectare for holdings of 4.1 hectares and below due to the reluctance of smallholders to replant for fear of losing their income. As a result, the rate of replanting by RISDA declined from 34,500 hectares per annum during 1971-75 to 21,500 hectares per annum replanted during 1976-80". This has necessitated the state to further increase the replanting grant to $5,434 per hectare for holdings below 4.1.

The decline of such an important economic and political community poses far-reaching consequences for any regime. The highly preferred course has been to integrate an increasing proportion of rubber smallholders into state-sponsored schemes which facilitate their reproduction by meeting some or all of their subsistence needs, quite obviously with varying degrees of control over them.

Rehabilitation Of Rubber Smallholdings

This change has taken two forms. In the first of these, the state intervenes indirectly, by imposing a cess on all rubber exported from the country. The fund so generated is then used to finance replanting of aged, less productive, trees. Initially, the replanting of rubber smallholdings faired poorly (Jackson, 1964). However, it appears to have taken a different turn with increasing state intervention. By 1986, a total of 633,407 hectares had been replanted. This forms about 51 per cent of the 1,232,400 hectares cultivated by the smallholding sector (Malaysia, 1988).[27] However, for reasons quite clearly related to poverty (in part contributed paradoxically by the extremely regressive cess structure),[28] the response from owners of holdings below 4.1 hectares has remained poor.

The state has embarked upon at least three corrective programs that intervene directly in the reproduction of independent smallholders. The three programs referred here are the Replanting Incentive Scheme (Skim Penggalak Tanam Semula, or SEPENTAS), "group-replanting", "mini-estates" and the land rehabilitation and reconsolidation projects. Under the SEPENTAS program, owners of smallholdings below four hectares are entitled to borrow interest-free loans ranging from $60 to $100 per month for their subsistence during the gestation period. For the group-replanting projects, FELCRA or RISDA facilitates the redevelopment of independent smallholder production on a group basis. For mini-estates and land rehabilitation and consolidation schemes, on the other hand, owners of neighbouring smallholdings surrender their usufructuary rights to FELCRA or RISDA, which then transforms these disparate lots into one productive unit under its charge. FELCRA and RISDA plans, finances, replants and organizes production of these mini-estates.[29]

The "mini-estate" concept "seeks to incorporate the basic elements of estate type management into smallholder farm development' (Yahil, 1984:143). Each mini-estate is no less than 40.5 hectares, implying, therefore, there are now numerous communities of smallholders who can group together to surrender their lands to RISDA or FELCRA for replanting on an estate basis. The main reason why RISDA (and FELCRA) now resort to the "mini-estates" concept is because there is "a substantial number of 'hard core' or difficult smallholders who, it feels, are incapable of managing their resources efficiently" (Yahil, 1984:143). What this actually means is that there is now an increasing necessity for the state to ensure the reproduction of holdings of the rubber smallholders who, because of "ill-health, labour shortage, lack of capital and so on" (RISDA, 1986:1) are incapable of doing so on their own. The cost of replanting and land development are paid by smallholders through deductions from profits made from the sale of the produce. As a result, these (predominantly) smallholder-landowners are freed by the state of the drudgery of small-scale commodity production (and their land), which has quite clearly failed to ensure their

reproduction. In the process, these independent smallholders are transformed into petty-rentiers who are free to pursue other forms of employment, the most immediate of which is wage-labour on their own, now socialized, lands centralized under a state agency. By 1985 a total of 59,000 and 36,000 hectares were transformed into mini-estates by FELCRA and RISDA respectively (Malaysia, 1986:346).[30]

As I have argued above, the state has also fostered the reproduction and development of smallholding agriculturists by undertaking new land development projects.[31] New land settlements developed by FELDA offer the clearest example of such schemes. Like their counterparts in FELCRA's and RISDA's mini-estate schemes, producers in FELDA (who gain restricted ownership over land eventually) have little say in the decision-making process.[32] This is because FELDA finances and organizes the whole infrastructure of the settler schemes. These land schemes are organized typically in units that are comprised of about 400 settlers cultivating 2,000 hectares. The average cost of resettling a household in a FELDA scheme has increased from $37,500 in 1980 to $53,000 in 1985 (Malaysia, 1986a:343). This includes the cost of infrastructure, management, agricultural development and housing. Settlers are required to pay back at 6.25 per cent interest within a period of 15 years. By the end of 1985, FELDA had under its direction 94,168 farming households in 254 new settlements, cultivating a total of 648,282 hectares (1.6 million acres) (FELDA, 1987). Of this 38,609 households (40 per cent) are in 129 rubber "smallholding plantations" that cultivate a total of 188,446 hectares. However, this strategy of strengthening smallholder production has a definite limit. A few FELDA settlements have had problems attracting settlers for they are too deep in the forests. The fact that FELDA intends to develop about one-third of its total target area for 1986-1990 in Sabah is indicative of this (*The Star*, April 22, 1987).

A more serious problem facing FELDA and its settlers today is their vulnerability to the vagaries of the market. Repayment of the costs advanced by FELDA hinges upon the price of the commodities. The long drop in rubber and palm oil prices recently raises once again the vulnerability of these producers' reproduction even under state direction. For unlike independent smallholders, FELDA settlers not only have to meet a fall in income but are also liable, in the event of failure to pay their loan instalments,[33] for the payment of arrears on the fairly large loans. This basic problem is further compounded when settlers contract new loans[34] and when FELDA tries to recover its settlers' loans by reducing the cash advances it pays for the produce sold by settlers. Consequently, repayment of the basic loan is extended beyond the 15-year period, after which settlers are confronted with a similar set of problems associated with replanting (Utusan Malaysia, November 15, 1986).[35]

They are also regimented to follow strict rules and regulations pertaining to

matters related to work and disposition of land ownership. FELDA schemes rest principally upon the indivisibility of land ownership, and, therefore, over the pattern of inter-generational reproduction of households. This explains why land ownership can be passed only to one heir (Halim, 1989). However, it was found that the organization of work based upon such formal ownership hindered efficient management. More important, such forms of ownership could still drag FELDA into the settler households' inter-generational reproduction problem, bringing to the fore the contradiction of relying upon households for work on a corporate basis. Alladin (1985), the General Manager of FELDA illustrates this very clearly:

> The FELDA administration has detected several crucial problems under both the 'Individual Ownership' and 'Group Ownership' systems. The management of plantation work cannot be carried optimally in order to ensure continuous plantation management. The quality of weeding, fertilizing, harvesting and pruning varies, and they are not as high as expected because effort and productivity differ between the settlers. The problems of plantation management become more complex when settlers age without any labour support among members of their respective households. Unoptimal yields affect adversely the income of settlers and their ability to repay the cost of development to FELDA. Replanting of the area would also be jeopardized when settlers cannot agree upon the type of crop to be cultivated, and when replanting should commence. A problem would also arise when death occurs and the settler's next-of-kin is not interested or is unable to carry out work in the plantation.

There are signs that show that FELDA schemes might become "idle plantations", and its villages might become traditional villages, along with the ensuing problems. Given the various problems and weaknesses found in the "Individual Ownership" and "Group Ownership" systems, the Government has decided that the system of 'Land Ownership' will be replaced by "Share Ownership".

With the introduction of the share-system recently, where a settler's stake is not over any actual piece of land but only over its equivalent value, FELDA separates completely the age-old association between cultivators and their actual control over land. Therefore, the state's resolution to the contradictions of reproduction of the petty household form has bordered on the capitalist form, where labour is detached completely from ownership and control over the means of production. However, this (that is, share system) ingenius way of retaining households without their problems of inter-generational reproduction might result in a more direct confrontation of interests between settlers and the state.

Meanwhile, 7,433 settlers (1,053 in five "group ownership" and 6,380 in 33 "individual ownership" schemes have been given their respective land titles (*Majutanah*, 6, 1988). However, settlers are unhappy over the continuous control over them by FELDA, particularly through replanting.[36] The only existing FELDA settlers association has also protested similarly, and demanded for real ownership rights. In addition, it has also called for increased participation, through a settlers co-operative, in the business opportunities and in the management of their schemes (Halim, 1989) . The National Association of Smallholders has also supported this by calling for the replacement of FELDA by a smallholders co-operative (*The Star*, August 10, 1987). Perhaps as a way of bowing to settlers' demands for individual land ownership while simultaneously obviating the prospect of increased agitation for the replacement of FELDA by a settlers' co-operative, the state has decided to grant individual ownership to settlers in all types of FELDA schemes (*Majutanah*, 6, 1988 ; *Utusan Malaysia*, March, 14, 1989). However, it remains to be seen if such grant of title would actually provide real individual ownership of land, for, as the Deputy Minister of Land And Regional Development has said, the title would have an explicit clause stipulating FELDA's role in administering such lands according to the agreement signed between settlers and FELDA. This, as Halim (1989) points out, continues to grant FELDA control over their lands.

These different programs have obviously contributed considerably in rejuvenating independent smallholder production. The degree of long-term success would certainly depend upon their ability to arrest the problems of inter-generational reproduction and reproduction squeeze of these smallholders. This seems to vary with the degree of control the state has over land and their operators. The more the state has control over land and the settler households, the more it is able to ensure continuous reproduction. This is borne out by the continuity of FELDA "smallholding plantations", and the failure of some of the more independent and voluntary group replanting/rehabilitation schemes. It was reported recently (*Berita Harian*, August 25, 1988) that 70 per cent of the land operated under FELCRA's group land rehabilitation schemes in the sub-district of Lenggong, Perak had been left idle. It is quite clear, therefore, that the corporate form holds a better future. However, the question, as the FELDA Settlers and National Smallholders associations have put it, is whether the corporate body should be that of the state or the settlers themselves, through a national and/or several local co-operatives.

Therefore, it may be concluded that the smallholding-household form of production in the rubber sector has been unable to meet the pressures of a market characterized increasingly by increased division of labour, and, therefore, new and more productive employment opportunities. As a result, the smallholding sector has declined considerably in the recent past. The alarmingly extensive abandonment of agricultural land and slow rate of replanting of

aged rubber trees, particularly amongst the poorest sections of the smallholding community, has triggered direct and indirect state intervention in the reproduction of the smallholding community, transforming them in the process into petty-rentiers and wage labourers (in the case of FELCRA and RISDA mini-estates) and contract farmer-labourers (in FELDA schemes). So far, however, direct state intervention in the reproduction of smallholders has focused largely upon the development of new land settlements cultivated with permanent crops under FELDA. The increasing shortage of land available for new development schemes has shifted some attention to land left uncultivated by its owners. This perhaps explains why replanting of aged crops and rehabilitation of idle lands have been accorded increased importance under the Fifth Malaysia Plan. Under the Fourth Malaysia Plan, *in situ* agricultural development programs accounted for about $2,589.44 million, or 36 per cent of total public development expenditure allocated for agriculture and rural development. The amount set aside for replanting and rehabilitation of idle lands during the same period amounted to about $902.56 million or 31.5 per cent of the total sum set aside for *in situ* development programs. The allocation for *in situ* agricultural development has been increased to $5,094.44 million under the Fifth Malaysia Plan (1986-90). This represents 43 per cent of total public expenditure for agricultural and rural development, about $3,196.9 million (63 per cent) of which would be devoted to replanting of aged crops and rehabilitation of idle land (Malaysia, 1986:371).

The other important factor that has diverted increased attention to replanting of aged crops and rehabilitation of idle lands is the alarmingly extensive and rapid decline of agriculture. The average annual growth rate in the agricultural sector has declined further, from 4.3 per cent between 1970-80 to 3.4 per cent between 1981-85. What was most alarming to the state was the fact that the annual growth rate of the agricultural sector between 1981-85 was only 1.4 per cent if growth of the palm oil industry is excluded (Malaysia, 1986:47). The maintenance of a certain level of growth in agriculture is felt necessary to not only maintain a certain level of income but also to ensure a continuous supply of raw materials and market to the manufacturing sector. Furthermore, the recent down-swing has impelled a downward revision of the targeted growth for the manufacturing sector, thereby shifting the burden of employment creation in the agricultural sector (Malaysia, 1984). The rehabilitation of abandoned land with food crops, particularly, is also expected to save the country's fast-dwindling foreign exchange, for which food imports constitute a fairly significant component ($3.1 billion in 1981).

Paradoxically, the state has opened its land and food industry wider to foreign interests. The National Land Code was amended in 1986 to allow the acquisition of agricultural land by foreign interests.[37] In addition, the Promotion of Investment Act, 1986 (which provides for pioneer status and tax

incentives) also covers investment in agriculture, including food crops, livestock, fish and prawn production. An Investment and Privatisation Advisory Services Unit (IPASU) -- a "one-stop agency" -- has also been established for this purpose. Although this new policy has yet to show results, it appears to confirm quite clearly that the state is enticing large, modern, and probably foreign-owned farms and enterprises to undertake agricultural production.

Conclusion

The entry of co-operatives and private syndicates into large-scale cultivation marks an important development in the development of the paddy sector. It implies that the development,that is, the process of expansion and contraction, of farms, particularly among those that have assumed a private corporate form, might no longer be constrained by the contradictions of the household form. When the unit of production is freed of its household form, the inter-generational reproduction of capital assumes a different dynamic. This is because the process of expansion is no longer constrained by the family developmental cycle nor by the system of inheritance.[38] Like corporations in the urban sector, these new units in the countryside would be able to retain their unity or even expand even while the partners' or shareholders' respective family units disintegrate and the shares are redistributed.

Although this new (corporate) form holds considerable promise for the rehabilitation of idle land as such, its benefits need to be assessed within the context of the development of the peasantry as a whole. Which of the two corporate forms (farmers' co-operatives vs. state and/or private corporations) should be emphasized and how each relates to the independent smallholding peasantry (particularly later, when these new forms venture beyond idle lands) needs has to be thought out carefully. The agenda is not just the development of a more productive and resilient form but, more important, the development of the very people whose household form of production is not able to cope with the pressures of the market.

Notes

1. "Reproduction refers to the renewal from one round of production to another of the social and technical elements of production and of the relations among them. Thus, if reproduction is to occur, the means of production must be renewed, and the social product distributed among those who labour and those who control the means of production in such a way that production may commence in its original form" (Friedmann, 1980:162). Bernstein (1977) terms this as the "reproduction squeeze".
2. Remark made by Ghafar Baba, Malaysia's Deputy Prime Minister (*The Star*, July 27, 1987).
3. About 107,000 hectares of this were left idle throughout the year (Sahak 1985).
4. A survey of 2,700 single-crop paddy farmers in Peninsular Malaysia found that about half of

their household income is derived from off-farm sources (Malaysia, 1981:39). Also see Haughton (1987:3). The extent of diversification for farmers in such marginal rice-growing areas appears to be contingent upon their ability to mobilize capital for commercial production in other crops. "Farmers with access to five or more acres of rubber land cultivate on average marginally less rice land and put somewhat less cash into rice production than those who work from 0 to four acres of rubber land..." (Kahn, 1981:555).

5. It is, of course, not necessary to argue that farmers who have abandoned their paddy lands temporarily (single-crop) or continuously did so because of their non-specialized nature. There are, I am sure, many instances where farmers abandoned their paddy lands because of 'technical' (irrigation, drainage) reasons (Tempelman, 1982 ; Mohd. Ariff And Nyanen Thiran, 1980). What is important to note, however, is their unwillingness to resume paddy cultivation even if there are plans to correct the technical problems. This unwillingness stems largely from social and economic reasons. These include low yields from paddy cultivation, fear of diseases and pests, whether neighbouring plots are cultivated and, most important, availability of employment opportunities in off-farm jobs (Tempelman, 1982). All these social and economic reasons, particularly the last, support my basic argument.
6. Farmers receive the paddy price subsidy only upon sale of their paddy. Farms in the backward rice-growing areas do not market most of their produce.
7. Kahn (1981:558) found that poor paddy farmers in Negeri Sembilan compensate their low cash inputs by the self-exploitation of household labour in order to achieve a certain level of consumption.
8. Ariffin Said (1985), then Deputy Chief Minister of the state of Kelantan, where even the irrigated Kemubu area is subject to widespread abandonment, summarized this situation very pointedly, "It is observed that efforts at increasing productivity in agriculture are not very successful, because the farms are small in size.... Such uneconomic-sized farms make agriculture unattractive to the younger generation. The labour force in the agricultural sector remains unchanged. The educated from among the younger generation migrate to the more attractive urban areas, and this results in labour shortage in various agricultural activities leaving behind a less productive ageing labour force to tend the minute-sized farms".
9. In 1973/4, average yield for dry paddy in Peninsular Malaysia amounted to about 1.5 tonnes per hectare, whereas the corresponding yield for main and off-seasons wet paddy were 2.9 tonnes and 3.0 tonnes respectively (Malaysia, 1975).
10. These include Tanjung Karang, Selangor, Krian-Sungai Manik, Seberang Prai, Kemasin-Semarak, Kelantan, Endau-Rompin and Seberang Perak, all of which are under the Integrated Agricultural Development Programme. The Minister Of Agriculture announced in 1985 that paddy cultivation under the Fifth Malaysia Plan would be concentrated in these nine areas (including Kemubu and the Muda areas). For this reason, infrastructural and agricultural supporting services would be increased further in these areas (*New Sunday Times*, July 28, 1985).
11. "Currently, the sector, particularly the small-farm sub-sector, is faced with several constraints, some of which are structural in nature. These include the existence of uneconomic-sized holdings, low-return crop, traditional methods of production, restrictive conditions with regard to cropping patterns and inadequate access to assistance and support services. The interplay of these constraints has resulted in the low level of productivity... [and] the high incidence of poverty among farmers". As a result, agriculture has become very unattractive. This has, in turn, led to an incessant outflow of labour into the urban economy, causing in its wake an acute labour shortage in the agricultural sector. "This shortage has led to the underutilization and abandonment of alienated cultivable land and the consequent decline in agricultural output" (Malaysia, 1984).
12. Two other government departments (Department of Agriculture and the Malaysian Agricultural Research And Development Insitute, MARDI) that have joined the fray, but on a

smaller scale, are cultivating mainly fruit crops and oil palm mainly.

13. This is estimated on the basis that about $1.8 million was said to have been spent on 400 hectares. See discussion below.
14. The respective areas brought into cultivation by these six local Farmers' Associations are 20, 58, 86, 102, 223 and 306 hectares. The total area administered by these Local Farmers Associations is actually made up of several group projects scattered over different localities under their jurisdiction. For example, the Penaga Local Farmers Association had under its charge a total of 86 hectares. This total is comprised of five distinct localities with 16, 40, 10, 8 and 12 hectares respectively. The Department Of Agriculture (443 hectares in six localities), Felcra (112 hectares in four localities; another 479 hectares have been identified) and MARDI (137 hectares in two localities) also have their respective rehabilitation projects in the same region. However, they are much more inclined to grow other crops. Personal communication with Azmi Isa, an officer with the Lembaga Pertubuhan Peladang, July 7, 1987.
15. In comparison, the largest known farm in the Muda is about 54.7 hectares.
16. The data presented here was provided by the Lembaga Pertubuhan Peladang in Penang.
17. Most of the paddy farms in the Seberang Perai Utara region are extremely small. Fifty-one per cent of the farms operated by members of the Pertubuhan Peladang Kawasan (or PPK, Local Farmers Association) in this area are below one hectare, and another 42 per cent are between one and three hectares (PPK Kawasan Dua, 1986).
18. Individual farmers cannot plant their fields at any time. For uneven ripening would expose the crop to pests. Thus, no diligent farmer would plant paddy when his neighbours have abandoned their plots of land. Inundation of fields in irrigated areas also depend upon the free passage of water from one plot to another.
19. This data is from an unpublished (and undated) cyclo-styled document produced by MADA entitled "Projek Kelompok Di Kawasan Perairan Muda".
20. "Independent" smallholding agriculturists are individually organized petty commodity producers.
21. Strangely, all the papers that were available to me at the time of writing merely document the approximate area of paddy land abandoned. The corresponding area for other crops were conspicuously absent.
22. "Rubber land is no longer productive; in many cases the trees are old and need replanting, and even if the trees are young, there is no labour in the village to work the plot".
23. An estimated two-thirds of the smallholding acreage was over 30 years old.
24. The area under oil palm increased from 11 per cent (311,161 out of 2,813,575 hectares) of the total area under principal crops in 1971 to 30 per cent (1,144,000 out of 3,782,000 hectares) in 1984. Meanwhile, rubber as a proportion of all crops fell from 60 to 45 per cent during the same period (Malaysia, 1973, 1986).
25. FELDA settlers pay the instalment over a period of 15 years. The average cost of settling a farmer amounted to $58,657, 63 per cent of which is for the cost of agricultural development, 6 per cent for his house and house lot, 21 per cent for infrastructure and 10 per cent for management (Aladdin, 1988).
26. These two schemes amounted to about 112,299 hectares between 1961 and 1970, with rubber probably constituting the predominant crop.
27. Based on its registration of rubber smallholders RISDA estimated that about 72 per cent of the area under smallholdings have been replanted by 1979 (Mohd. Dini, 1981).
28. The (export) tax burden forms about 63.5 per cent of the smallholders' income. The amount collected as replanting cess is also more than the actual grant received. It is estimated that the present value terms of the amount smallholders pay in a 25-year period as replanting cess is about $1,265 per hectare. However, the correponding amount they receive as replanting grant is only about $793 per hectare (Mohd. Haflah, 1985:12).

29. There was at least one instance when RISDA did more than just develop smallholders' land. This involved the take-over of a smallholders' co-operative's land developed by RISDA. The government set aside 44,534 hectares for development by the Smallholders Estate Co-operative in 1970. Subsequently, RISDA agreed to help develop the land with the Co-operative's funds. It was also agreed that the administration of the land was to be transfered to the Co-operative. "However, Risda changed the names of the land grants to its own without notifying the co-operative. Only the grants of three pieces of land totalling 10,000 acres (4,048ha) remained in the co-operative's name" (*The Star*, April 22, 1987).
30. It appears that the 44,500 hectares RISDA operates on behalf of a smallholder's co-operative described above is not included in this figure.
31. This is also because land-owning participants of these schemes do not dispose off their lands to those who remain behind (Malaysia, 1984).
32. Most of these settlers were peasants who previously were their own masters. 'Now he must face a day with set hours and a timetable and if he is to get paid, a set requirement of work' (MacAndrews, 1977:82).
33. FELDA settlers paid eighty-six per cent of the scheduled instalments for 1984. Their corresponding repayment fell to about 73 per cent in 1985 (FELDA, 1987:19).
34. FELDA gave out about $7 million aid a month in the form of food items made available in FELDA stores (*The Star*, Aug. 27, 1987).
35. This article highlights the slow repayment by settlers in FELDA Lasah (Perak). Only 12 of the 387 settlers in this particular scheme have settled their loans with FELDA even though the 15-year repayment period has passed.
36. A settler in the FELDA Sendayan scheme said, "Those of us who joined the scheme were given the idea that after paying off our debts to Felda, the land we worked on will be ours.... Now after paying off the debts and getting our land-titles, Felda wants us to sign away our land and to go into debt again'. He claims that many settlers had already replanted their land on their own (*The Star*, August 10, 1987).
37. "While the amendments to the National Land Code favour the corporate entrepreneurs and foreign investors, who are now allowed to acquire agricultural land, certain categories of farmers like smallholders and estate labourers have had difficulty obtaining economic-sized farm holdings". It was claimed that about 40,000 hectares have been gazetted for plantations (Choong, 1987).
38. I have discussed elsewhere (Muhammad Ikmal Said, 1985; 1988b) the contradictions of extended reproduction confronted by capital organized within the household form.

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FELDA Land Development in Malaysia: Readjustments in Policies and Strategies

Ng Gan Che and Ng Ban Lian

Resource allocation plans for attaining the objectives of agricultural development and raising the level of rural well-being may be concentrated in three main areas, namely: a) increasing the efficiency and intensity of cultivation on land already in production through the application of better technology and management, b) major overhaul of existing agricultural lands and systems through the construction of large-scale engineering projects for irrigation, drainage and flood control, and c) the development of new lands.

The opening of land settlement schemes of one kind or another has been a consistent feature in the development programme of Third World countries for the last fifty years (Dunham, 1982). A variety of models of land settlement have been adopted by countries throughout the tropics such as in South America, tropical Africa and parts of Southeast Asia -- where large tracts of virgin land are being cleared for agricultural production and population settlement. These models range from the fully integrated schemes (with near complete government assistance for the settlers) to the government-assisted or spontaneous settlement schemes, whereby only the barest minimum of tools and materials are provided for the pioneer settlers.[1]

The arguments in favour of land development are plentiful. The transfer of population to new lands is seen as a favourable solution to existing problems in the traditionally populated urban and farming districts. These problems include "...the need to increase the country's food production, to alleviate the mounting pressure on available land, and to defuse potentially serious political problems resulting from the existing agrarian structure, poverty, rising landlessness and unemployment" (Dunham, 1982:43).

Another argument favouring land development is that virgin land represents a potentially vast resource for the development of a profitable farming system adapted to the needs of particular countries. With the establishment of infrastructural facilities in undeveloped areas, capital, labour and entrepreneurs can be expected to follow suit, whether on an individual, corporate or government basis (Nelson, 1973). These resource frontiers offer opportunities

for large-scale cultivation of crops for local consumption and foreign markets; for the exploitation of mineral and timber resources; for the development of integrated forest projects and agricultural processing industries; as well as for the construction of urban-industrial complexes. Eventually, it is anticipated that the proper regulation of land development procedures would contribute towards a more equitable distribution of income and employment opportunities and more rational use of natural resources, besides promoting a more balanced regional economic structure.

Despite such immense possibilities, the track record and experience of land development in many countries have been mixed.[2] Among some of the reasons for stagnation and failure are: the high costs of opening up new lands compared to other strategies that concentrate on improving existing cultivated areas, low rates of return on the capital invested, disappointingly low outputs, high costs of administration that tend to be top-heavy, internal social problems, soil erosion and environmental degradation (Dunham, 1982:43). Environmental issues often receive very little attention from development planners and government authorities, both of whom are keen to see the material success and performance of land development projects in terms of output and numbers settled. However, large-scale land opening is associated with massive clearance of forest cover; replacement of the natural vegetation by mono-cropping; the use of heavy machinery; application of huge quantities of chemicals such as fertilizers, insecticides and herbicides and the discharge of effluents from processing plants. It is therefore inevitable that the land settlement schemes would be beset with environmental problems such as land degradation and pollution.

As such it is not surprising that a more enlightened approach towards land development calls for "...a thorough understanding of the dynamic nature of the ecological system the interrelationships and balance among such factors as soil, hydrology, vegetation, wildlife and climate "(Nelson, 1973:42). The forest should not be regarded as a wasting asset but its value and fertility should be conserved for long term agricultural use and as a potential source of industrial raw materials as well as to create an environment for sustained human settlement. The concept of ecodevelopment serves towards this end (Riddell, 1981).[3]

Because of the multitude of factors involved, government or private agencies cannot afford to plan for land development on a piecemeal basis or to offer solutions that are of an ad hoc nature. In order to realise the social and economic goals of such costly projects, the authorities should pay attention to the following: a rational policy formulation pertaining to the benefits and trade-offs of land settlement; carefully designed strategies of land development taking into account social, economic and environmental factors; and the adoption of appraisal techniques and systematic analyses of on-going projects serving as indicators for alterations to policies and procedures.

This paper examines the development pattern achievements of land settlement schemes undertaken by the Federal Land Development Authority (Felda) of Malaysia as a case study in light of the above issues. Felda's achievements over thirty years have been impressive and at this juncture it is opportune to evaluate its future directions in terms of policies and strategies with a view to sustaining the benefits of land settlement.

Achievements in Land Settlement

The large-scale opening of new lands for development and settlement in Malaysia was undertaken by Felda which was first set up as an independent statutory corporation in 1956. Before this major effort was launched, land alienation and agricultural settlement had occurred on a small-scale, individual basis. However, a more systematic approach to land development was required just after the Japanese Occupation (1941-1945) and the Communist Insurgency (1948-1957) when normal land alienation had almost ceased, and there was even a contraction of agricultural land due to regrouping of the rural population into new villages (see, for example, Humphrey, 1971). By 1956, there were some 200,000 land applications awaiting in land offices. The traditional agricultural areas in the west and east coast plains of the peninsular as well as the towns were over-crowded, and unemployment and underemployment were rife. Hence, large-scale land development was adopted by the newly-independent government as part of the national concern to reduce landlessness, to raise the income of the rural poor through new and better agricultural opportunities, and to create modern and progressive communities with improved amenities and a higher standard of living.[4]

Malaysia possesses some advantages seldom found in many other tropical countries which have embarked on land development projects. The first advantage is the existence of large tracts of crown land available for development by state governments. Many of these new areas are accessible for initial development from the existing road systems. The second advantage is political patronage and the adoption of a national development policy devoted to land settlement, coupled with a centralised administration that is able to co-ordinate all aspects of land development. In addition, popular crops, such as rubber and oil palm, are cultivated by smallholders and estates and fetch prices good enough to sustain a settler family with a three-and-a-half hectare plot of land. Finally, no revolution in traditional farming attitudes is necessary for the pioneers as they posses the universal acceptance of, and, wish for, individual land ownership.

The development patterns and trends of Felda schemes have been well-documented (see, for example, Bahrin and Perera, 1977; Bahrin, Perera and Lim, 1978; MacAndrews, 1977; Ng, 1984). This section provides a brief

summary of the achievements of Felda up to 1985. Table 1 shows the total area (in ha.) developed as well as the number of families settled in each of the country's five-year development plan periods. From a modest start of ten schemes covering a total of 4,901 ha. catering for 791 families in 1959, the figures increased to 18,053 ha. and 1,294 families by 1965, an increase of 268 per cent and 63 per cent respectively.[5] Up to the end of the Third Malaysia Plan period (1976-1980), the rate of land opening and settlement continued to show tremendous improvement. From the 1980's onwards, the additions to land development targets have remained fairly constant, or increased slightly. This is perhaps due to the imminent exhaustion of the land stock as well as to the limits placed on government funding.

The geographical location and distribution of schemes and Felda institutions are shown in Figure 1, while the number of schemes and the types of crops grown are summarised in Table 2 and Table 3. Table 4 provides a more detailed breakdown of the location of schemes by state as well as crop acreage and area occupied by village sites.

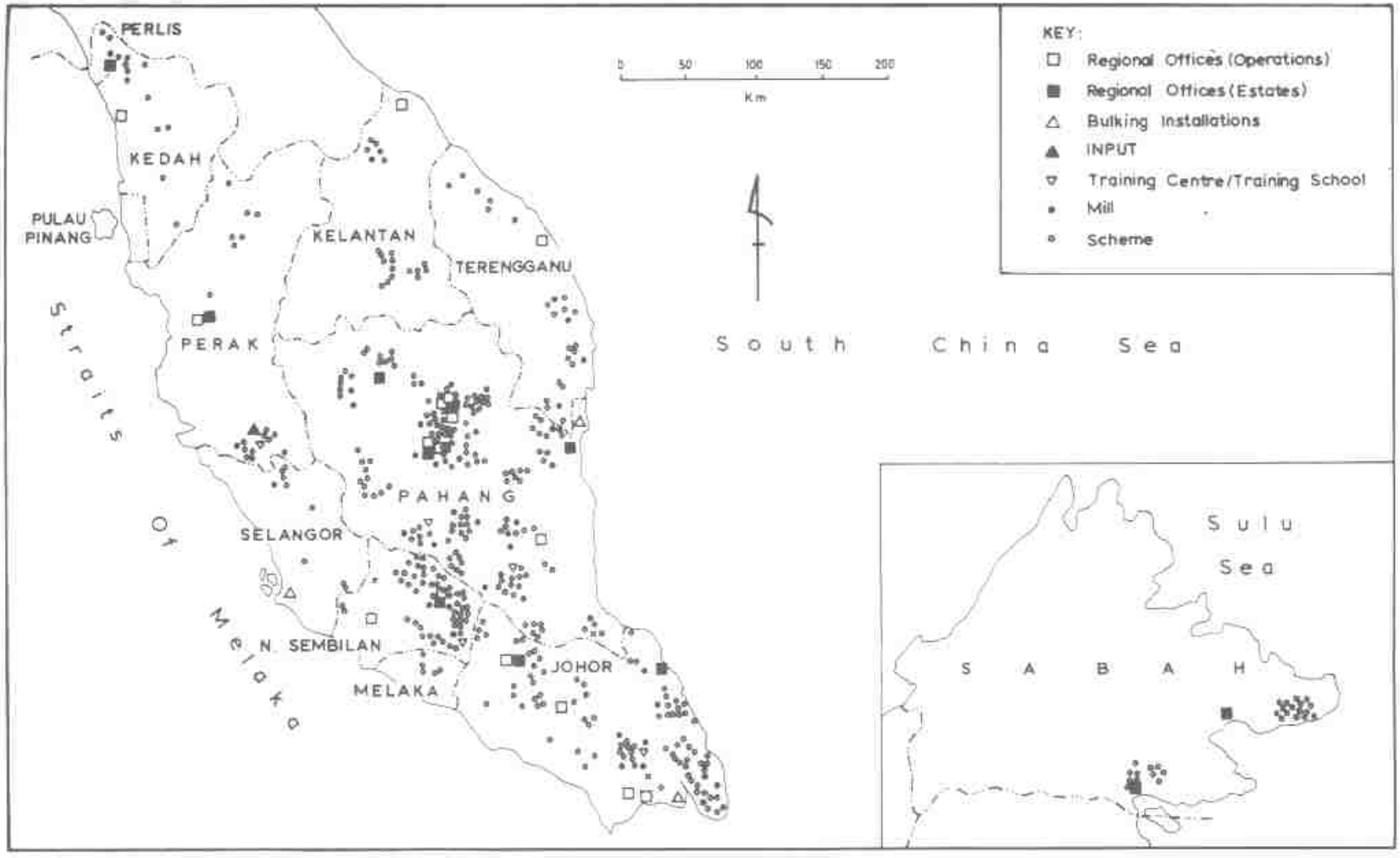
Table 1
Land Development and Number of Families Settled 1959-1985

	Land Development (achieved)		Settler Emplacement (achieved)	
Malaysia Plan	Hectares	% increase	No. of families	increased
1959 and earlier	4,901	--	791	--
1960-1965[1]	18,053	268.3	1,294	63.6
First (1966-1970)	72,459	301.4	11,865	816.9
Second (1971-1975)	170,171	135.4	13,779	16.1
Third (1976-1980)	212,859	25.3	29,566	114.6
Fourth (1981-1985)	168,028	-21.2	30,284	2.4
Fifth (1986-1990)[2]	175,500	4.4	--	--
TOTAL	646,471[3]		87,579	

Note: [1]Second Malaya Plan Period
[2]Targeted
[3]Excluding Period 1986-1990

Source: Adopted From Mac Andrews (1978:46); Felda (1985:9, 12).

FIG. 1: LOCATION OF FELDA PROJECTS IN PENINSULAR MALAYSIA AND SABAH



SOURCE : FELDA ANNUAL REPORT 1975

Table 2
Number of Families Settled by State, 1985

State	No. of Schemes	Settler Families	%
Pahang	98	37,982	40.3
Johore	56	21,512	22.8
N. Sembilan	39	14,932	15.9
Trengganu	19	5,875	6.2
Perak	11	4,403	4.7
Kedah	10	2,948	3.1
Selangor	4	2,142	2.3
Kelantan	7	2,028	2.2
Melaka	5	1,328	1.4
Perlis	3	840	0.9
Sabah	2	178	0.2
TOTAL	254	94,168	100.0

Source: Felda (1987).

Table 3
Number of Families Settled by Crop, 1985

Crop	No. of Schemes	Scheme With Settlers	Settler Families	%
Oil Palm	240	143	55,649	59.1
Rubber	129	110	38,069	40.4
Sugarcane	2	1	450	0.5
Cocoa	14	--	--	--
TOTAL	385	254	94,168	100.0

Source: Felda (1987).

Table 4
Area Developed by State and Crop as at December 31, 1985

State	No. of Schemes	Oil Palm	Rubber	Cocoa	Sugar Cane	Total	Town/ Village	Total	%
Pahang	151	204,962	49,458	8,416	--	262,836	18,368	281,204	40.7
Johore	74	96,858	27,652	3,480	--	127.990	8,876	136,866	19.8
N. Sembilan	51	21,733	68,588	--	--	90,321	5,809	96,130	13.9
Trengganu	22	32,476	5,660	--	--	38,136	1,950	40,086	5.8
Sabah	25	29,998	12,324	6,109	--	36,107	1,883	37,990	5.5
Perak	18	17,992	1,324	--	--	30,316	1,900	32,216	4.6
Kelantan	18	23,714	2,499	--	--	26,213	1,744	27,957	4.1
Kedah	11	283	12,051	--	1,123	13,457	783	14,240	2.1
Selangor	7	8,578	3,483	--	--	12,061	995	13,056	1.9
Perlis	3	--	1,985	--	3,995	5,980	308	6,288	0.9
Melaka	5	119	4,746	--	--	4,865	324	5,189	0.7
TOTAL	385	436,713	188,446	18,005	5,118	648,282	42,940	691,222	100.0
%		63.2	27.3	2.06	0.7	93.8	6.2	100.0	

Source: Felda (1987)

From Table 2, it can be seen that the state of Pahang, with the largest land stock in Peninsular Malaysia, is the location for 151 (39 per cent) of the 385 schemes in the country, besides accounting for 40 per cent of the total area developed. This is followed by Johor and Negeri Sembilan with 74 schemes respectively. Where crop distribution is concerned, oil palm has overtaken rubber as the most important crop, making up 67 per cent of the agricultural area compared to 29 per cent for rubber. The new crops under experiment, cocoa and sugarcane, account for less than four per cent of the total crop area.

During the Fifth Malaysia Plan period (1986-1990), new land development that would be undertaken by Felda amounts to 175,500 ha., an increase of only 8.6 per cent over the targeted acreage of the Fourth Malaysia Plan period (1980-1985). Pahang will account for 36.3 per cent of this new target, Sabah 33.2 per cent, Johor 12.9 per cent, Kelantan 7.0 per cent and Perak 5 per cent (Malaysia 1986:320). This suggests quite clearly that the land stock in Peninsular Malaysia is fast diminishing and Sabah may be the focus of land development in the future.

On the whole, the socio-economic achievements of Felda are significant. As a corporate power, Felda's investments amounted to $288,042,301 in 1985. These were comprised of investments in companies (57 per cent of total value), Felda corporations (32.6 per cent), joint-venture (8.9 per cent) and Felda Investment Cooperatives (0.8 per cent) (*Felda Annual Report*, 1985). At the farm level, the targeted mean monthly income per family of at least $300-350

Table 5
Settlers' Net Monthly Income on Rubber and Oil Palm Schemes, 1984 and 1985

Lot Size Hectares (acres)	Oil Palm Schemes ($) 1984	1985	Rubber Schemes ($) 1984	1985
2.4 (6)	-	-	460	366
2.8 (7)	-	-	456	371
3.2 (8)	-	-	529	423
4.4 (10)	1,202	885	493	429
4.9 (12)	1,401	764	1,183	1,010
5.7 (14)	1,720	1,203	--	--
AVERAGE $	1,231	889	505	421

Source : Felda (1987:19).

has been achieved. Table 5 compares the net income levels in oil palm and rubber schemes by lot size for 1985 and 1986. Oil palm schemes bring in a consistently higher income compared to rubber. However, it must be noted that such aggregated figures do not reveal the various factors involved in calculating settlers' net incomes. For example, the gross income is derived from the labour input and productivity of the plots while the net income is calculated after deductions for different types of loan repayment.[6] Furthermore, settlers' incomes are not only subjected to variations in productivity but also to fluctuations in world prices for such commodities. For instance, as shown in Table 5, the average net income obtained in 1985 for oil palm has dropped by 27.8 per cent from $1,231 (1984) to $889, while that of rubber declined from $505 to $421.

Apart from the objectives of raising farmers' income in the fare of the vagaries of world commodity prices, Felda settlements are planned to foster the development of viable farming communities; to promote social cohesiveness amongst the settlers; and to raise the standard of living through better infrastructural facilities such as the provision of piped water and electricity, village schools, health centres, community halls and shops. Although appointed administrative staff see to the day-to-day running of the schemes, feedback from the settler community is channelled through Scheme Development Communities consisting of representatives elected by the settlers. (MacAndrews, 1977). Finally, in some of the schemes, various vocational training courses and subsidiary farm activities such as market-gardening and animal husbandry are carried out in order to raise farmers' income and productivity.[7]

To date Felda has counted more successes than short-comings. As mentioned at the beginning of the paper, the initial advantages enjoyed by Felda paved the way for easier implementation in contrast to the serious problems of desertion and scheme abandonment experienced in neighbouring countries.[8] However, the time is also ripe for Felda to review its efforts for the future. What have been the changes in directions, policies and strategies, if any? Is the national economy able to sustain the heavy investments and costs involved in settling each family, estimated at over MR$30,000 per family? (Blair, 1979). In what ways would the Felda model serve as a long term measure for promoting agricultural development for fulfilling the rising aspirations of settlers? To what extent are the objectives of developing a self-reliant, close-knit farming community achieved? Is the Felda economy able to cope with fluctuations in world demand and declining commodity prices? Less perceptible, but no less important is the question of environmental changes resulting from such large-scale deforestation and substitution of the natural forest cover with mono-cropping, especially on adverse topography and marginal soils.

Detailed case studies and evaluation procedures are required to monitor the various issues raised. The objectives of this discussion are more modest as

it will be concerned only with some of the potential and actual problems encountered and the readjustments (not necessarily solutions) required for policy revision and changes in strategies.

New Directions in Felda Policies and Strategies

It cannot be denied that part of the drawing power of Felda schemes is the prospect of owning land. By 1985, a total of 10,243 settlers had fully discharged their loan obligations, and of these, 2,959 settlers have received their land titles from the respective state governments.

However, in early 1985, Felda launched the share system as a new settlement policy (*New Straits Times*, November 4, 1984; April 6, 1985). Under this new system, settlers would not be issued land titles upon completion of loan repayment as had been the practice. Instead, settlers would each be allotted share units, bonuses and dividends from profits obtained through the sale of agricultural produce from the schemes. In addition, settlers would be paid wages for work done. On the part of the Felda, the scheme would be administered like private plantations with improved management and a new division within Felda has been set up to administer and to implement the share system. In fact, all future projects would operate under this system and existing schemes may also opt for it.

One of the main aims of the share system is to increase productivity and to solve the problems of idle land. There is less emphasis on land ownership per se as compared to the emphasis placed on productive efforts. More settlers could be emplaced in the schemes as population numbers need not be strictly determined by the total land area available in the scheme. This would increase the threshold population and, therefore, purchasing power.

Another obvious advantage of the share system is the flexibility of ownership of shares which can be transferred, bequeathed or mortgaged after fifteen years of loan repayment. Beneficiaries can surrender their inheritance for money, and this flexibility will allow for greater mobility amongst siblings. The share system should also increase the level of motivation and co-operative efforts on a scheme basis as income earned takes the form of dividends paid according to the scheme's overall performance. This contrasts markedly with the previous system whereby settlers' incomes were determined by the profitability of individual holdings in the case of rubber schemes, and that of the 'block' area in the case of oil palm schemes. Under the share system, however, the scheme co-operative ultimately owns the land on a collective basis while Felda would be appointed as the management agent.

In theory the share system should contribute towards better work organization and co-ordination in the allocation of tasks since the settlers could be rotated around the different jobs required and be assigned to work in different

parts of the scheme area. The system would also reduce inequalities in the income-earning potential of individual settlers caused by variations in physical accessibility, soil quality or topography. Furthermore, the sharing of profits from a common pool would iron out income irregularities due to seasonal changes in productivity or due to price fluctuations.

In the final analysis, it is inevitable besides being timely that the share system is being implemented. The capital requirements of land development would keep on increasing while the land stock would be diminishing. In essense, Felda schemes resemble a large plantation economy which has to remain very competitive and efficient in raising productivity and reducing the overall cost per unit of land developed. This is to overcome the inherent disadvantages of mono-cropping and heavy dependence on the world market system. At the scheme level, operations have to be streamlined. For example, the organization and supervision of the settlers' work routines would be harder to coordinate as the settlers get older, while the question of re-financing and manpower availability would also emerge during replanting.

The share system is aimed at overcoming some of these problems for settlers could leave the schemes by selling out. This greater mobility and flexibility would also facilitate well-motivated new entrants to the existing schemes who could be instilled with a greater sense of professionalism in their tasks as well as being more receptive to the stringent economic practices demanded of modern plantation productive systems. For this to happen, highly skilled management and supervision are required at all levels of the administrative hierarchy while a well-thought out incentive bonus system should bring out the best in the settlers.

When the share system was first mooted, the reactions of the settlers were mixed. The system appears to contradict the very objectives of creating a progressive and self-reliant community that Felda has set out to achieve. It was feared that settlers would be perceived a labourers in sharp contrast to the traditional importance given to land ownership.[10] It would also be difficult to motivate the settlers towards group profit given that studies have shown individual incentive and diligence are difficult to promote even in the existing block system of twenty members each (Ng, 1984). Furthermore, would the share system be abused so that eventually, inequality of income would arise from the concentration of share ownership and wealth that does not commensurate with efforts expended? Since the share system has only been instituted recently, the full effects of the system have yet to be seen. At the end of 1985, a total of 145 newly-developed schemes (inclusive of 25 schemes in Sabah) have been placed under the new system, out of which only 19 have received a total of 2,899 settler families. As such it is also difficult to gauge the actual responses of the settlers to the new system although through interviews, they have expressed certain reservations as mentioned earlier in this section.

Management and Organisation:
From a Loan to a National Corporation

The organizational structure and processes within Felda have undergone dramatic changes over the last thirty years. From its initial function as a loans board in 1956, Felda's activities now include companies, joint ventures and investment co-operatives with a total value of MR$288,042,301 (*Felda Annual Report*, 1985). Felda corporations are engaged in the various fields of trading, marketing, latex handling, transport, milling, security services, agricultural services, construction, rubber and palm kernel production and palm oil refining. Furthermore, Felda joint-ventures include sugar refining, bulk cargo handling and the manufacture of fertilizer, palm oil and cocoa products. These marketing and processing activities are important for increasing value-added and in order to take advantage of economies of scale in supply and demand.

In addition to the above activities, opportunities also exist for the establishment of international networks in marketing while on the home front, agro-industrial linkages could be fostered at the regional and national levels through a more systematic articulation of the spatial economy.[11] Felda corporations are also a valuable training ground for professional staff. While the total number of employees actually involved in Felda schemes, regional and head offices and training institutes was 7,876 persons in 1985, the total number employed by Felda corporations and joint-venture companies amounted to 13,732 persons (*ibid*).

It appears that the structural expansion of Felda into the corporate arena is inevitable. As the total acreage expanded and the number of schemes multiplied, it became more imperative for Felda to enlarge its administrative machinery. For example, an estates management section has been included to look after the share system. This is to enable Felda to coordinate all aspects of land development as well as to facilitate the development of more diversified downstream processing activities. In fact, Felda has taken on the semblance of a large, integrated plantation economy, and like the rest of the private sector, it has to compete effectively through greater efficiency in order to be more resilient against world market fluctuations.

For Felda to take advantage of its vast physical and human resources, there is the need for a clearer definition of corporate goals and strategies with opportunities for feedback and re-evaluation. The potential for Felda organization to create employment and to improve the level of skills of its professional, semi-professional and technical staff is tremendous.[12] Felda could also become one of the leaders in research and development with an experimental research station located at Sungai Tekam and through its training institute at Trolak. These two centers are actively undertaking agricultural and social science research respectively.

Nevertheless, even while Felda pursues its corporate interests, the position of the individual settlers should be protected. As mentioned earlier, the share system is advantageous in providing incentives through the bonus and point systems and settlers need not feel that their roles are being reduced to that of corvee labourers. On the contrary, their stakes and opportunities for upward mobility in the Felda corporations could be enhanced through a greater bargaining ability at the scheme levels. On its part, Felda should not lose sight of its original role in promoting rural development, and there is a need to counter the tendency of bureaucratic concentration and top-down management through a more efficient and articulate system of inter-departmental communication. For example, an immedaite task would be to increase the effectiveness of lower-rung administration beginning with the scheme development committees.

Articulation of the Space Economy:
Felda as a Force in Regional Development

Spatial planning has become increasingly popular in most developing countries in order to overcome the problems of regional concentration and over-urbanization. In the context of rural development, two planning concepts may be posited. The first refers to the growth centre approach whereby more viable settlements in the rural regions are injected with development funds to serve as the regional foci for the location of commercial, service and industrial activities (Kuklinski, 1972). Closely connected to the growth center approach is the concept of functional economic areas whereby a particular region develops its resource potentials and workforce to the fullest, forming a creative, well-integrated and ecologically balanced entity (Johnson, 1970:419).

The second approach in spatial planning which is also appropriate in the Felda context is that of the acropolis or city-in-the-fields (Friedman and Douglass, 1975). According to this approach, viable communities in the countryside should be organized into a larger socio-economic and political space (agropolitan districts) focussed on a town centre. Following this, labour within this district should then be utilized more effectively through intensified development of the natural resource base. In this way, multiplier effects could be generated by ensuring the reinvestment of local savings and increasing the consumption expenditure in each district, thus preventing regional leakages and discouraging rural-urban drifts.

Both the growth center and agropolitan approaches are relevant to the spatial organization of Felda settlements within as well as between the schemes and the regional and national networks. In fact, one of the shortcomings of the development of village settlements is the lack of co-ordination and articulation throughout the entire Felda settlement system. This is perhaps the result of the

staggered nature of land opening and the need to overcome various bureaucratic problems. Moreover, at the scheme level, Felda's original intention of establishing viable farming communities in planned village sites was conceived in fairly narrow terms. Each village would consist of about 400 households with a village service area and a few shops to cater for the daily consumption needs of the residents. Such 'isolated' models proved to be inadequate since the role of Felda settlements in 'urbanizing' the rural areas affect the space economy as the scale of land settlement increases. For example, the economic boundaries of the settlements are expected to widen as the settler population grows: as crop production and non-farm activities enhance the income generation capacity of the schemes; and as the consumption needs of the settler families broaden.

Apart from catering for the consumption needs of the settlers, spatial linkages between Felda schemes and the regional and national economies would be further articulated at the more micro-level through the flow of goods and services engendered by Felda's corporations. For example, Felda may choose to locate the secondary processing activities in some of the scheme centers. Hence, a possible total of 385 villages (equivalent to the number of schemes developed) could provide the framework for the design of a well-integrated system of centres and sub-centres as part of a decentralized urbanization strategy to bring about more balanced spatial development (Brutkus, 1973)

What, then, are the strengths and weaknesses of the Felda settlement system? To begin with, the threshold population of each settlement is too small to encourage the expansion of commercial activities. Despite the availability of loans, the early settlers are too preoccupied with planting activities to develop their entreprenеurial spirit in business pursuits. Moreover, since business opportunities are considered to be the prerogative of the settlers themselves, this might have restricted outside artisans or merchants from establishing their trades in the scheme areas, hence retarding the inflow of investments and the diffusion of innovations.

The lack of commercial and retail development in the schemes proved to be a gain for the more enterprising shopkeepers in towns neighbouring the schemes. It has been noted that settlers frequent these towns for most of their major shopping needs and it is estimated that such regional leakages amounted to $20-$25 million per month. In the Jengka Triangle, for example, the annual regional leakage is about one billion dollars (*New Straits Times*, March 31, 1984; July 5, 1985)

Another problem pertaining spatial integration is related to the potentials available for developing non-farm activities in the village settlements. Some of the experimental projects carried out in the schemes include goat and fish rearing, market gardening and handicraft industries. But success is limited by the lack of skills, supervision or marketing facilities as well as settler motiva-

tion. This problem could perhaps be overcome by the share system which may allow the entry of a more diversified population of non-farmers and entrepreneurs into the schemes. At the same time, the threshold population may also be enhanced through more intensive land use and higher population densities.

Felda is aware of the need to revise the concept of urban development within its project areas. As a first step, twenty-five existing settlements, throughout the peninsula have been identified as growth centers (*New Straits Times*, August 13, 1985). These regional growth centers would have upgraded urban designs and infrastructural amenities and would be linked to the rest of the national urban system and state capitals. The economic set-up of these centers would not be limited to retail and commercial activities and they would act as the foci for the location of Felda's off-farm investments in manufacturing and processing. In this way, multiplier effects could be further generated and cumulative causation would set in (Myrdal, 1972).

Environmental Conservation

Felda has paid little attention to the need to harmonize land development with environmental conservation. Environmental planning must be built into the Felda model eventually. Facilities for environmental research already exist in the Felda Research Station in Sungai Tekam. For example, hydrological changes, rainfall regimes and stream flows are constantly monitored in relation to the determination of water stress in soils which would affect the yield of oil palms.[13] A long-term programme for judicious land use management based on an integrated ecosystem approach cannot be avoided. Such a programme would require more time and money for the proper survey of terrain concerning crop suitability and infrastructural construction. For example, a more discriminatory approach in land-clearing would mean that timber species of various qualities should be recovered at a more optimal level and that pockets of land unsuitable for clearance should be left intact as natural forest zones.

The conservation of land quality is important because more marginal land would be brought under cultivation as the country's land stock diminishes progressively. The standard of living and income of the settlers should not be jeopardized particularly in light of a population increase under conditions of land shortage. Hence, Felda should incorporate more specific policies and strategies on environmental conservation in project development for the present and for the future. In this regard, the concept of ecodevelopment has special relevance (Riddell, 1981).

Like most development concepts, 'ecodevelopment' is connotative. Basically it is a 'best-fit' attempt to optimize the balance between population

numbers, locally available resources and culturally desired lifestyles. A fuller utilization of both physical and human resources from the viewpoint of ecodevelopment may be applied to the delineation of land schemes in terms of eco-zones.[14] Within each eco-zone, the cultural harmony and ecological balance between people and land would be safeguarded through a rational management of available resources; by minimizing negative environmental effects and by the application of appropriate technology for achieving these goals (Riddell, 1981:91). In a typical Felda scheme, for example, the settlers could be taught agronomic techniques suited to local variations in soil and terrain -- such as in the more swampy or hilly areas. Marginal lands within the scheme could be left in their natural state to serve as buffer zones around the headwaters of streams, and tributaries could be utilised as recreation sites. The forest environment and wildlife may also appeal to nature lovers. These areas could be exploited for their tourist potential. Despite the inherent harshness of 'pioneering', the natural beauty of the scheme environment should be preserved in the design and construction of village sites.

There is no doubt that Felda's development programmes, especially the socio-economic component, have incorporated aspects of ecodevelopment concepts and principles, intentionally or by coincidence. However, attempts at the reconciliation of economic values and ecological virtues should be carried out on a more comprehensive and systematic basis and built into project planning rather than be treated on an ad hoc basis.

Conclusion

Felda is at the juncture where policies and programmes may be reviewed to take into consideration experience gathered from the past. This paper examined the various issues involved in the implementation of the share system: the continued expansion of Felda's activities as a major corporation and the need for spatial planning and environmental awareness. There is no doubt that individual micro-level studies are required to investigate further the effectiveness of such changing policies and strategies. But in broader terms, the approach to future land development has to be based on the all encompassing concept of environmental conservation while specific projects for policy implementation should interrelate the various components of man-land interaction. The rate of land opening will have to be slowed down inevitably. This could be compensated by consolidating existing projects such as increasing the intensity of land use as well as enhancing the absorptive capacity of the schemes in employment creation through more diversified activities. As an instrument in regional development policy, the spatial economy of Felda schemes may be better integrated by means of a more rationalized urban development strategy and through the reduction of rural-urban differences.

Notes

1. Refer to MacAndrews' definition (1978) of terminologies in land settlement. In this paper, land development implies the opening of new and previously uncultivated land. Land development schemes refer to the projects or settlements opened up in new undeveloped areas for agriculture and other related activities. This usually involved the transfer of individuals or families to the new localities as pioneers. The term land settlement refers to both of the above, that is, land development and the transfer of population.
2. The relative successes and failures of land development projects have been well documentated. See, for example, Chambers (1969); IBRD (1978); and Nelson (1973).
3. Ecodevelopment is concerned with growth and progress seen in the context of resource conservation and environmental protection. Its principles include the eradication of poverty, the elimination of disease, the provision of socially gainful employment, and the pursuit of self-reliance (Riddell, 1981:111-113).
   As a very small start, one of the land settlement schemes in the southeast Kalimantan region of the Indonesian archipelago has embarked on an integrated development philosophy, combining animal husbandry, fish rearing, cash and food crop cultivation, charcoal and furniture-making. *Far Eastern Economic Review*. February 7, 1985.
4. An example of the set-up of a settlement scheme is the 'Felda model'. A standard Felda scheme covers not less than 1,600 ha. and should not be located too far from existing roads. It can take in about 400 settler families and another fifty families for the village services. This was calculated to be the optimum size for the centralized village community for high calibre management. In the beginning, each settler was allotted four to five hectares of land, mainly rubber, while he and his family live in the village area, each with 0.6 ha. of land for the house, vegetable garden and poultry. The argument for a compact village is that social infrastructure and amenities may be provided more economically. It must be pointed out that the size, composition, types of crops, etc. in Felda schemes have varied as the programme progressed. See, for example, Bahrin and Perera (1977).
5. From the table, it is noted that the increase in the number of families settled and the increase in total acreage of the various plan periods do not correspond. This is due to the time lapse in moving settlers into the newly developed schemes. Settlers are usually moved into the schemes three to four years after land opening and crop undertaken by outside contractors.
6. A household income survey is reported in Blair and Mohd. Nor (1978). Settlers' income varies widely between and within schemes. For example, average income during the initial years could be even less than MR$100 per month (Bahrin, Perera and Lim, 1978; Ng, 1984).
7. It must be pointed out that in such large-scale and widespread operations, the success rate and problems encountered vary greatly among schemes. Visitors are often introduced to 'model schemes', but in reality, it cannot be denied that there are other schemes which show more signs of failure and disappointment rather than success. These are schemes which do not have piped water or electricity for individual households, which are located on marginal soils and/or severe topography with consequent poor crop development, poor infrastructure and undeveloped commercial and social amenities. Some of the older schemes also encounter problems of unemployment and underemployment of the second generation settlers and out-migration. It is not the intention of this paper to delve into such problems nor are such problems clearly documented in official reports. The negative side of Felda schemes is often highlighted in newspaper and magazine articles and better documented in micro-level studies of individual schemes (See for example, Ng, 1984).
8. See for example, the less successful stories in Sri Lanka (Dunham, 1982; Swan, 1983) and in Indonesia (Hardjono, 1983).
9. In many of the present schemes, older settlers often hire wage labour to do the jobs for

them, especially in the more difficult harvesting tasks. Such ad hoc arrangements could affect the overall productivity and co-ordination of the scheme's work schedules while the quality of hired labour may also be uncertain. However, it cannot be denied that casual labour is one way by which new settlers may earn extra income, but would it be at the expense of their contribution to their own plots?

10. In fact in an earlier study of the Felda model (Lim, 1976), it was suggested that settlers be paid only wages for their efforts, the rationale being a) to counter the effects of non-discipline among the settlers so that the enforcement of agricultural practices on individual holdings could be easier b) to reduce variations in income due to differences in land quality, and c) to promote greater uniformity in agronomic practices.
11. In fact, the original intention of land ownership for the settlers cannot be equated with the concept of proprietary ownership. This is because settlers do not have much choice as to the type of crops cultivated or the organization of farm activities. The share system would further deviate from these original intentions and would perhaps move towards the 'modernisation' of production and land operations on a plantation basis.
12. This will be elaborated upon in the next section.
13. For example, preference have been given to the recruitment and training of second generation Felda settlers. It has provided training facilities to students of local universities as well as employment.
14. Ng (1984) examined soil changes brought about by land development. Soil samples were collected from soil catenae located in five stages of land development in the Jengka Triangle of Pahang, ranging from virgin forest to schemes with fifteen-year old palms. This sampling method is a surrogate for longitudinal studies of soil changes in relation to physical and chemical properties. It was found that there was a dramatic decline of organic matter and loss of soil structure immediately after land clearance. However, a partial recovery of these properties occurred as the palms matured. Recovery was aided by the proper application of fertilisers, selective weeding and cultivation of cover crops. However, the actual correlation between soil changes and yields have to be established through a more detailed field sampling.
15. Eco-zones are derived from a land classification system based upon the recognition of spatial variations in physical characteristics and in plant and animal communities within a given land system. By definition, therefore, each eco-zone has specific resources which may be utilized differently to obtain maximum output.

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Reform within the Structure: Analysing Rural Development Strategy in Malaysia

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Irrespective of political systems, state intervention in the economic development of Third World countries is ever increasing. Such intervention may either reinforce the general pattern of development inherited from the colonial past, or redirect it towards alternative paths. I shall focus upon the former and examine the problems faced by the state in bringing about socio-economic change in the rural areas in Malaysia.

In particular, I will examine the constraints imposed by the complex ethnic situation the state confronts in affecting such changes. The discussion below hopes to shed light upon the state's development strategy and its ability to manoeuvre under such conditions.

I will argue that the focus of Malaysia's rural development strategies have been technocratic in nature, generating development through incremental rather than structural reforms. These reforms are based upon the assumption that economic backwardness is due to the lack of modern amenities, inputs and infrastructure. Therefore, development may be attained through the provision of administrative, logistic, monetary and technological inputs, without necessitating any radical structural change. It was assumed further that optimal utilization of modern technological inputs was dependent upon a change in attitude among the rural population.

The discussion begins with an overview of the political context of state intervention in rural development. It is followed by a description of the development strategy, as well as an analysis of the limited reforms, that is "reforms within the structure" engineered by the state since independence. The final part of the discussion examines the implications of engineering development under severe constraints posed by the acute ethnic situation.

State Intervention in Rural Development after Independence

The period between 1948, when the Federation of Malaya was formed,[1] and 1957, when independence was attained was crucial in influencing the political and economic development of post-independent Malaysia.

In view of the relative economic backwardness of the Malays, it was generally agreed by British-backed leaders of the different ethnic communities that some form of economic concession to the Malays was of utmost importance before a solution pertaining to the citizenship status of the non-Malays could be found. This consensus, commonly referred as the "Merdeka Bargain" or "1957 Bargain", was later included in the final draft of the Malayan Constitution which made explicit the necessity to safeguard the 'special position of the Malays' and the 'legitimate interests of other communities'. The former constitutionalized past measures of assisting the Malays through employment quotas in public services, scholarships, business permits and licenses and the reservation of certain lands for exclusive use by the Malays.[2] However, the latter meant that the 'special rights' enjoyed by the Malays cannot be used to deprive or infringe upon the economic and other rights of non-Malays.

In a sense, no particular Malayan ethnic group emerged as the true winner of the 'bargain' except Chinese and foreign capital, as the protection of the 'legitimate interests of the non-Malays' guaranteed state non-encroachment into their economic activities. This meant that the predominantly free enterprise character of the economy, and hence the interests of foreign capital and the basic economic structure inherited from the colonial past, would be preserved. The scope of rural development strategy then had to be defined within this limit, setting the parameters for future development policy. Thus, programmes devised to assist the largely rural Malay community could be realised only within the existing economic structure, that is, within the colonial-capitalist framework. The concrete manifestation of such restrictions is evident in the early rural development policies.

The triumph of the UMMO-dominated Alliance Party in the first and subsequent General Elections, impelled the state to launch rural development programmes that catered for the rural Malays, the strategic group upon whom UMNO depends for its strength.

The earlier development programmes implemented adhered strictly to the spirit of the political bargain. The general idea was essentially one of directing resources to the rural areas by providing physical and infrastructural, and social and economic amenities, agricultural inputs and other forms of assistance, leadership training, extension programmes and the like. It was a policy, as Beaglehole (1969:221) notes of the Rural Industrial Development Authority (RIDA), that could be easily presented in terms acceptable to all communities.[3] This was also true for the opening of land for development and resettlement,[4] the lauching of community development programmes following the creation of a Ministry of Rural Development[5] and the provision of aid for rubber replanting[6] and rice irrigation.[7] Snodgrass (1980:48) is quite right in stating that "rural development had the enormous advantage that it could benefit the Malay mass without directly challenging urban Chinese interests" (1980:48). This is

because any restructuring of the rural economy -- which entailed the abolition of the predominantly Chinese middlemen -- could be interpreted as an attack upon Chinese "legitimate rights", The "Aziz Ishak case" clearly corroborated this possibility.

In 1971, the New Economic Policy (NEP) was introduced with the launching of the Second Malaysia Plan (2MP). Its twin objectives are "poverty eradication" and "social-economic restructuring", to be implemented in the context of rapid economic growth. Since poverty has been identified as essentially rural, and, therefore, a predominantly, Malay phenomenon, rural development was given the major role of eradicating "poverty" under the NEP. This is because UMNO, the leading ruling coalition party, depends mainly upon the rural Malay vote. Thus, the period beginning in the early 1970s illustrates another attempt by the state to reinforce and widen the scope of its intervention in rural development. In addition to increased allocation for rural development projects, the period also witnessed a proliferation of development agencies geared towards assisting the rural (read Malay) population in securing a fairer share of economic growth.

Although the state's policy of eradicating poverty was supposed to be "irrespective of race", the failure of past strategies to narrow the disparity between the different communities has tinged the NEP with an ethnic bias. As one writer correctly points out, the NEP was in effect a restatement of the "Merdeka Bargain", placing emphasis upon Malay economic advancement *vis-a-vis* the non-Malays (Mauzy, 1976:139). Yet the Second Malaysia Plan stated clearly that the NEP was to "ensure that no particular group will experience any loss or feel any sense of deprivation" (Malaysia, 1971:1). This implies that national development policy is supposed to abide by the spirit of the "bargain" as well as the objective of "national unity" as determined in the Outline Perspective Plan (1971-1990).[9]

The Technocratic Approach to Rural Development: "Reform Within the Structure"

In a booklet entitled "Every Inch of Land" dated 1971, the then Prime Minister, Tun Razak summed up the scope of rural development in Malaysia as follows:

> ".... to provide our landless farmers with the land that they so urgently require and more important to give them a feeling of ownership. Besides that, Government will continue to provide the existing farmers with irrigational and other facilities to enable them to improve productivity of their land to enable double-cropping. Also existing holdings may not have been exploited systematically and in a way that could produce

optimum increase. It is therefore necessary that they should be rehabilitated and consolidated so that the owners could obtain better and higher income" (Tun Razak, 1971:3)

In a nutshell, the statement summarized the three major components of rural development strategy in Malaysia, namely a land development strategy providing land to landless farmers and those with uneconomic holdings; irrigation, especially in the paddy sector, paving the way for the adoption of the "Green Revolution" package; and the rubber modernization strategy aimed at rejuvenating existing rubber holdings for higher farm productivity. For analytical purposes, the broad picture of rural development described above can be divided into two major strategies -- land and regional development, and *in-situ* integrated rural development. A brief survey of the situation in the paddy and rubber smallholding sectors illustrate this point clearly.

The Paddy Sector

The Third Malaysia Plan (3MP) is quite categorical in identifying land as one of the major factors linked to poverty in the paddy and rubber smallholding sectors. As to the former, it states for instance that:

"About 55% of all holdings were less than three acres; 80% were less than five acres. In comparison, an owner-operated double-cropped holding of about three acres is needed if a poverty line income is to be earned." (1976:164)[10]

For single-croppers, a larger farm size would be needed if they were to obtain an income above the poverty line. A study by the World Bank estimates that, with no outside income, farmers in single-cropping areas require about six to seven acres to obtain the poverty line income [PLI].[11] However, about 90 per cent of all single-cropped paddy farmers have holdings smaller than 6.5 acres. Even if a larger portion of their income was derived from non-paddy sources, it was estimated that they still needed at least about three acres to obtain the PLI. However, the average paddy farm size of single-croppers was only 1.7 acres, which was clearly too small to ensure an adequate income (World Bank, 1980 :42-43; cf. Haughton, 1983:180).[12] This explains the relative high incidence of poverty among single-crop farmers in Malaysia. In 1970, nine out of ten single-croppers were poor as compared to seven for double-crop operators (Malaysia, 1976:165).

Double-cropping has spread to an increasingly larger proportion of the paddy farming area in Malaysia. Nevertheless, even if we assume that irrigation facilities have reached most farmers, the constraint of farm size would have minimized the benefits of cropping to a very low level; more than half of

paddy farmers still operate farms below three acres (Selvadurai, 1972: 36), that is, the minimum size required to obtain a PLI. The average paddy farm size in Malaysia in 1960 was 3.1 acres, although this varies from state to state.

The average figures, however, conceal the actual distribution of farms. Take the Muda region for instance. Although the average farm size is four relong, nearly half (46.7 per cent) of all the farms are under three relong covering less than a fifth (17 per cent) of the total area. The region also has extremely small farms; one fifth (20.8 per cent) of farms is less than 1.5 acres, occupying a mere 4.2 per cent of the total area. On the other hand, a small percentage of relatively large farms control a more than proportionate area (Gibbons et al. 1981:98).

The problem facing the small farmers varies with tenurial status. Pure tenants, for instance, have to part a portion of their income for the payment of rent. Therefore, poverty is more pronounced among tenants than owners or owner-tenants. In 1970, about 70 per cent of owners and 84 per cent of tenants who double-crop and 94 per cent of owners and 99 per cent of tenants who single-crop were poor (Malaysia, 1976 : 165). On the whole, a quarter of the paddy farms is being operated by pure-tenants, with another quarter rented out to farmers seeking to enlarge the small farms they own. The rest are owner-operated (Gibbons, 1981; Selvadurai, 1972; Sukur *et al.* 1983; Taylor, 1981). Therefore, this means that the minimum farm size required to secure incomes beyond the poverty line varies with tenurial status.

The Rubber Smallholding Sector

As for the rubber smallholding sector, the Third Malaysia Plan notes:

> Apart from low yields, inadequate-sized holdings was a major factor accounting for poverty in the sector. About 50% of all holdings were smaller than 4-5 acres in size -- the acreage of a high yielding holding needed for a family to rise above the poverty line (1976:164).[13]

Among the rubber smallholders, the Malays have the smallest mean farm size. Their average farm size is 5.2 acres as compared to 8.9 acres among the Chinese. More than half, that is six out of ten, comprising 43,000 smallholders, operate farms below the average size of five acres, covering an area of less than a third of all farms. Thus, even though more than three-quarters of farms belong to Malay smallholders, in terms of acreage they cover less than two-thirds of all farms. Chinese smallholders have a larger average farm size and enjoy a higher proportion of larger farms, with only less than a third operating farms below five acres. In contrast, a smaller percentage of the Malays, that is only about 15 per cent, operate farms of ten acres and above (RISDA, 1982:46).

Unlike the paddy sector, the proportion of farms rented out is much smaller in the rubber smallholding sector. Some 76 per cent of the Malay and 68 per cent of the Chinese smallholders are owner-operated, with 21 per cent and 30 per cent respectively rented out to others (RISDA, 1982:30).

In general, the picture presented above shows that a large proportion of farmers in both the paddy and rubber smallholding sectors do not have farms of sufficient size to ensure them an income above the poverty line. Thus, it would not be wrong to stress that the problems of uneconomic-sized holdings per se contributed significantly to the persistence of poverty in the peasant rubber and paddy sectors in Malaysia.

The twin factors of uneconomic holdings and the unequal size distribution of farms have imposed constraints upon poverty reduction strategies. As for land development programmes, notably that of FELDA's primary scheme,[14] the source of its limitation lies in its very success. Even though settlers have enjoyed high incomes, the high financial cost of settling a farmer and his family and the shortage of land have prevented it from reaching a larger proportion of the rural poor. Nevertheless land development, in its various forms remains one of the main instruments of rural development strategy in Malaysia. Indeed land development is considered as the prime example of "reform" measures implemented in Malaysia.

The basic development philosophy has been technocratic in nature. It is premised on the notion that the problems of poverty and inequality in the rural areas could be overcome by providing technological, administrative and monetary assistance. It leaves aside the possibility of structural change in the rural areas.[15] The introduction of modern irrigation facilities and agricultural technical packages in the paddy sector, the promotion of new rubber clones and seedlings that go along with rubber replanting programmes, as well as the launching of various "value-orientation" campaigns, are but a few of the main examples of the technological option pursued by the state.

The diffusion of these packages has been associated with the emergence of numerous administrative organs in the form of crop- and function-related development agencies, and a chain of hierarchical organizations to ensure the efficient utilization of the new technological packages. This was strengthened by direct pecuniary measures offered as incentives for the widespread adoption of modern production techniques. Ultimately, the function of the state is reduced to being logistical in nature, preoccupying itself simply with the introduction, promotion and distribution of technological packages.

However, the means employed by the state in approaching rural development does not fully comply with the diagnosis proposed in its development plan documents. Although the underlying cause explicitly identified is structural in nature, the method employed in overcoming them is technocratic. It has focused less upon the causes, than upon the symptoms. The problems in the

peasant rubber sector clearly demonstrate this. Instead of focusing upon the problems of small farm size as a way of overcoming the lack of participation in replanting, the priority has been upon increasing the replanting grants. Likewise, in the paddy sector, the stress has been towards intensifying modern inputs and sudsidies in generating higher incomes among the farmers rather than increase their farm size. The implementation of such technocratic anti-poverty strategies could still be improved. For example, it is assumed that a larger proportion of the poor would benefit by intentsifying development activities in the backward areas. However, the state development agencies[16] have yet to identify some of the more important poverty groups. There are agencies representing the paddy farmers, rubber smallholders or the fishermen, but none of these agencies cater for the interests of the landless or near-landless, whose main preoccupations have been less oriented toward commercial production than toward subsistence production and the sale of wage-labour. It is taken for granted that these people would benefit from increasing development activities, particularly as employment opportunities for wage-labour expand.

Thus, despite the importance attached to poverty-reduction programmes and the emergence of a variety of rural development agencies beginning in the early 1970s, no single state development agency was given the direct responsibility for identifying, planning and co-ordinating poverty-related programmes for this target group (Gibbons, 1984:27).[17] In other words, the approach follows closely the basic pattern of the "trickle-down" strategy, which assumes that as long as existing development programmes are effectively executed, the benefits would flow to all classes of the population in the receiving areas or regions, including the poor and the very poor. Thus, as Corner puts it (1983:51), it is quite ironic that the NEP, which actually is a frank admission of the shortcomings and inadequacies of the "trickle-down strategy", continues to employ basically similar approaches with respect to the eradication of poverty. Although important, the provision of a better rural infrastructure and other basic amenities is only a necessary but not a sufficient condition for eliminating rural poverty.

Instead of confronting development problems and attacking the structural causes of rural poverty and inequality directly, the state prefers a more simplistic alternative, leaving the pattern of land ownership unchanged while concentrating on manoeuvring within the existing structure via technological, administrative and pecuniary means. Scott labels this as a "soft option" (1985:54), noting the absence of any attempt to restructure either the basic pattern of property relations or the rights attached to them. In this respect, the redistribution of paddy and rubber holdings for instance, has never been actively considered,[18] although the state admits openly that inequities in both sectors are founded upon unequal access to productive land.

Let us now examine briefly the "internal reforms" carried out by the state. For the purpose of discussion, we can identify five types of limited reform measures. These are:

(i) Land Colonization: Type I -- Primary Land Scheme

Land colonization has been the most important reform measure undertaken by the state as land development constitutes the core of Malaysian rural and regional development programmes. Essentially, this involves the clearing of virgin jungle into viable land development and settlement schemes. Since its inception, the main objective is to overcome the problems of land shortages by providing the landless and near-landless with enough land, infrastructure and amenities in order to ensure their meaningful participation in the economy. Thus, right from the start, no steps were taken to rearrange structurally the *in-situ* land ownership patterns at the local level. Instead the landless and near-landless were transferred to newly-opened land development and settlement schemes.

(ii) Land Colonization: Type II -- Supplementary Land Scheme

As noted earlier, the peasant sector is marked by the predominance of holdings that are too small to secure income levels above the poverty line. Such small holdings are integrated into land schemes that allow small farmers to acquire additional holdings from state-owned lands that are developed at the village fringes.

(iii) Land Consolidation and Village Redevelopment -- The FELCRA In-Situ Development Model

Although land consolidation programmes began only toward the end of the 1970s, they have since gained considerable support for expansion from the state (FELCRA, 1984; Malaysia, 1981, 1986). By 1980, FELCRA had pioneered three such projects at Teratak Batu (Kelantan), Ulu Berang (Trengganu) and Kampung Kok, (Langkawi, Kedah). The FELCRA *in-situ* model or the "Traditional Village Development Programme" is one of the most intensive forms of fringe development projects undertaken by the state.

Development activities are not limited only to state-owned land at the village fringes but also within the established village boundaries. This involves the physical restructuring of established or "traditional" villages by relocating otherwise scattered or dispersed settlements, together with the provision of adequate social and economic infrastructures.

(iv) Collective Management -- The RISDA Model

Essentially this involves the RISDA Mini-Estate and the Block New Planting (BNP) programmes in the rubber smallholding sector. The former involves collective management of the rubber replanting activities on behalf of smallholders in overcoming the problems of labour shortages and uneconomic holdings, while the latter is partly an attempt to boost the income of peasants with uneconomic rubber farms by encouraging their participation in the BNP programmes on State land.

(v) Rent Control Legislation in the Paddy Sector

In its effort to overcome the problem of insecure tenancy in the paddy sector, the state initiated the Paddy Cultivators (Control of Rent and Security of Tenure) Act, 1967. It was aimed at controlling the level and system of paddy rents as well as to oversee the tenant-landlord relationship for tenurial security (Malaysia, 1967; Salmiah, 1975; Sentfleben, 1978). These constitute the main reforms engineered by the state in order to overcome the structural defects in the rural areas. They are mainly marginal changes as they are carried out within the established economic and political power structure in the rural areas. The reasons for this shall be examined below.

The Politics of Land Distribution

The pressing question that has to considered here is: assuming that basic agrarian reforms in Malaysia, particularly in prime agricultural regions such as in the Muda, Tanjung Karang, Kemubu and Seberang Perak areas could be justified both on efficiency and equity grounds, what are the political conditions that might make possible their continued enforcement? To start with, it is important to understand the forces at work at the local level, as land relations tend to be linked to political power. Take the case of the paddy sector for instance. The governing political elites depend upon considerable support from the Malay electorate in the rural areas. They have to ensure that rural development policy does not alienate that support. Thus, it is not possible for the state to pursue "hard options" because the dominant political party -- UMNO -- depends upon influential large farmers and landlords -- classes that would lose most if a land reform strategy is carried out. However, even though recent trends show that some of the key figures in the rural areas have now turned to business (Shamsul, 1986), their attachment to land ownership has remained intact. After all, the majority of their immediate supporters still depend upon land and land-related activities for their main sources of livelihood. Although there is now an increasing tendency for members of the urban intelligentsia and

business circles to wrest control of leadership in the rural areas, these people require and are continually dependent upon strong support from their rural counterparts in maintaining that leadership position.

In this respect, any radical departure from existing policies pertaining to land tenure would have an adverse effect upon the structure of established political alignments. Thus, the state is unlikely to make such an attempt, as UMNO's position is quite dominant locally. As an indication of UMNO dominance at the local level, villages known to harbour dissenting political opinions and villagers sympathetic to the Pan Malaysian Islamic Party (PAS), the opposition political party, have been discriminated against in the distribution of state assistance (Gibbons *et al.*, 1979; Kalshoven *et a.l*, 1984; Scott, 1985; Shamsul, 1986). Mansor's study (1978) of the "paddy land elites"[19] in the Muda region shows further that large paddy landowners occupy an influential position in the decision-making process at the state level. Therefore, they are well-placed to ignore or suppress any inclination towards redistributive strategies that would ultimately threaten their own economic position. The local-level organisations like the Farmers' Associations and the Village Rural Development Committees are also dominated by these groups (Kalshoven *et al.*, 1984; Shamsul, 1986).

However, even assuming that land reforms could be implemented in certain agricultural regions, it is doubtful if such a measure could be sustained effectively for a long period if it is limited to the peasant sector only. The affected parties from the landed groups in the two contending parties can be expected to unite and mobilize their power and influence to frustrate such efforts. In the event that they fail to garner enough support in pressing their demand, they could still fight on the grounds that either all sectors -- peasant and plantation -- be subjected to reforms or none at all. In restricting a radical reform strategy merely within the Malay-dominated peasant sector would, in a volatile ethnic situation, definitely expose UMNO to accusations that it is sacrificing Malay interests. This criticism would be particularly persuasive if economic sectors dominated by foreign and non-Malay interests are not subjected similarly to radical reforms. In fact, it is more popular politically, and easily justified economically (at the national level), if reform measures incorporate big estates, foreign-owned and foreign-controlled plantations as well. Given the vast area involved, a convincing case could be made for the nationalization of foreign-owned plantations (with or without concomitant reforms in the peasant sector) for redistributive purposes.

In 1974, there were approximately 1.43 million acres of rubber and 0.75 million acres of oil palm estate land. A large proportion of the rubber and oil palm estates, some 71 per cent (1.56 million acres), were owned by 40 large companies, five of which owned about 41 per cent of these estate lands amounting to 888,218 acres. If one were to put this figure in perspective, these five

largest plantation groups and companies owned cropland equivalent to about three-quarters of the land opened by FELDA between 1956 and 1980. By FELDA's standards it could have settled a total of 47,450 farming households. This does not include another 42,000 acres under the control of these plantation groups.

However, in pursuing the problems of agrarian reform, one should realise the complexities associated with the rules and regulations governing land ownership in Malaysia, as well the impending political implications of such actions.

A large proportion of productive agricultural land in the country, such as rubber and oil-palm estates, are either foreign or jointly-owned by international and local capital, and concentrated in a very few large companies through interlocking directorship, management, and secretarial arrangements, and through these arrangements control key economic sectors like tin and manufacturing industries as well (Puthuchearry, 1960; Tan Tat Wai, 1982). The nationalization of these estates would put the Malaysian economy in a fragile position should the affected companies, in conjunction with multinational corporations in other key economic sectors with whom they have a stake, react aggressively to safeguard their interests. Excessive capital, trade, financial and technical dependence is a great source of instability to the Malaysian economy. Fundamental reform, especially those involving foreign interests, is a difficult option, calling for hard political decisions and popular support for their implementation, since such moves would threaten the security enjoyed by international capital in Malaysia.[20] Malaysia's export-oriented economy would thus weaken the Malaysian economy.

However, the relationship between foreign investment and land reform in Third World countries in general is not as simple as that, for one could argue that in order to attract foreign capital, changes in land regulations benefiting the latter could also be possible. But in the case of Peninsula Malaysia, such an argument does not hold for at least two reasons. First, the remaining uncleared cultivable land is mainly reserved for state land development activities. Second, there is a larger scope for major agribusiness to invest in agricultural processing than in direct production activities.

In addition, land reform measures would, after all, run counter to the declared policy of the NEP which professes to "restructure society" on the basis of economic expansion, not by impinging upon any dominant interest. In 1971, when the state began to intervene directly in the corporate sector,[21] international capital seemingly came under heavy pressure. This is because the NEP envisaged the reduction of foreign ownership of the corporate economy from 70 to 30 per cent, so that Malay ownership of the corporate sector could be increased from 1 to 30 per cent, and non-Malay ownership from 22 to 40 per cent by 1990. Thus, in fact the scheme is not at all antagonistic to international

capital as the NEP does not envisage any absolute decline in foreign-owned assets (Jomo, 1981:16).

An additional administrative and juridical complication lies in the fact that control over land is under the separate jurisdiction of the 13 Malaysian States. Matters relating to changes of the existing rules and regulations, let alone basic agrarian reforms, will have to be discussed and sealed by the respective State Legislative Assemblies. For that reason, one cannot really visualize the emergence of a uniform set of rules and regulations pertaining to basic land reform laws across the country.

It should also be mentioned that during the last 30 years since Merdeka, property rights guaranteed under Article 13 of the Malaysian Constitution[22] have seen little litigation and have not been the subject of constitutional amendment (Harding, 1986:59). Similarly, the Land Acquisition Act which enables the state to appropriate land owned by foreigners without a market-rate compensation, has also not been the subject of serious discussion, except from some pressure emanating outside the main political parties. Sentfleben (1978:163) argues that such pressure is unlikely to gain state legislative or judicial backing since land can only be appropriated if adequate compensation is paid. But in view of the large areas involved, it is doubtful if the state could afford to pay large sums of money. Furthermore, the state earns considerable revenue especially from large commercial production such as the plantations. Thus, this would not only reduce its land-based revenue, but also deprive its foreign exchange resources.

But more critical to that, and in line with the overall development philosophy of the country, unnecessary state encroachment into the private sector would discredit its liberal foreign investment policy. Any consideration of fundamental reform along nationalistic lines must take into account the potential political and economic consequences to the country. Thus, the state has to live with the resultant contradiction inherited from the colonial economy, and given the existing economic and political system, one has to effectively rule out any step that might engender a long-term crisis detrimental to economic growth and the free-enterprise economy of Peninsula Malaysia.

Conclusion

Colonialism transformed the Malaysian economy into two important aspects. First, it paved the way for the establishment of a basically capitalist economy locating it within the world economic system. Second, a substantial influx of foreign labour has transformed Malaysia into a multi-ethnic society. Both these factors dictate the pattern of economic development in the post-colonial era, so that development strategy formulated by the state has been technocratic in nature. Reform measures have been carried only if they do not

threaten the freedom enjoyed by capital, or infringe upon the legitimate economic interests of the different ethnic groups. These define the internal constraints, thus marking out the limits of state intervention in the development of post-colonial Malaysia.

The technocratic style of development is not entirely unsuccessful. While income inequality continues to widen, there have been modest gains in poverty reduction. The latter has been mainly a function of direct state support in the form of guaranteed minimum prices and cash and input subsidies. In the rubber sector, the increase in income enjoyed by smallholders is contingent upon rubber prices in the international commodity markets and is, therefore, beyond the control of the state.

Thus, in both cases, poverty reduction cannot be sustained over a long period of time for it is a function of two important factors: namely, costly state support and higher rubber prices (Shukri Abdullah, 1986). As for land development, the large proportion of the resources allocated have not had a much larger impact upon rural poverty. Thus, there are several major weaknesses in the technocratic approach to Malaysia's rural development programmes. Such weaknesses have restricted state largesse from reaching the larger spectrum of the rural population. The major thrust of the poverty reduction programmes still shy away from the main causes identified by the state itself in the development plan documents -- namely the limitation imposed by farm size. The uneven distribution of development benefits of the agricultural modernization programmes have also widened income inequality further.

In the context of a basically capitalist economy, the thrust of the problem lies in the fact that it is simply difficult and costly for the state to uplift the poor while depending upon those endowed with capital to generate growth. This may be indicated by the considerable amount of state funds that have been allocated to develop the rural areas. Yet, the problems of rural poverty and inequality have not been resolved satisfactorily. Inevitably, as has been deliberated in the paper, we have to seek the explanation for this impasse in the limited options available to the state within the context of the existing economic system, that is, the wider forces -- economic and political -- shaping development policies. The existing economic and political structures are here to stay. Therefore, the practical alternative is to devise policies and strategies within the prevailing structure much more effectively. Thus, although corrective internal reforms and the technocratic style of development have their limits, the alternative for "deep structural changes" is borne with complex economic and political uncertainties.

Notes

1. The Federation of Malaya agreement was the result of a series of discussions held between Malay political leaders and the British after the Malayan Union Proposal was shelved.

Under the agreement, the position of Malay rulers as constitutional monarchs was ensured.

2. Article 153 of the Constitution referred to this as "Hak-Hak Istimewa Orang Melayu" (Special Rights of the Malays). See Lim Mah Hui (1985), Means (1972), and Ratnam (1965).
3. The formation of RIDA was partly an immediate response to demands made by Malays who became increasingly impatient with the apology provided by the British that the non-development of the Malay community was due to lack of resources as it was required to finance the 'Emergency', especially for resettling the Chinese communities from the jungle fringes to new villages. The popular Malay opinions echoed in the press and speeches by Malays councillors and politicians all accused the British of discriminating against the kampungs and the Malays "whose loyalty was never in question". See for instance Beaglehole, (1969), Rudner, (1972).
4. In 1956 a Federal Land Development Agency (FELDA) was established with the aim of resettling the rural poor, especially the Malays into frontier land.
5. The Ministry was established in 1959. In its earlier phase, the focus had been on the provision of the basic physical amenities. Tun Razak, the then Deputy Prime Minister and the first Minister of Rural Development also created an extensive rural development machinery labelled as the "Operations Room Technique" at the national, state, district, and local levels to ensure the smooth and effective implementation of the community development programmes.
6. Following the recommendation of the Mudie Report, a specific fund financed by the rubber export taxes was established to subsidize rubber replanting beginning in the mid-1950s.
7. During the colonial period, rice policy was circumscribed by the desire of the British to strike a "right balance" between increasing local food production and importing rice from abroad. Double-cropping was only seriously considered in the early 1950s following the 1952 Rice Production Committee report. However, up to the mid-sixties, there was only sporadic and small-scale introduction of off-season crops, often concentrated in areas already served by the Department of Irrigation and Drainage.
8. Aziz Ishak was the first Agriculture Minister of Malaya. In contrast to the prevailing idee fixee about Malay backwardness, he argued that the real threat facing the rural Malays were from national and international capitalists. Aziz proposed the establishment of cooperatives for the control of rice marketing from Chinese middlemen, thus ensuring fair prices to rural Malay producers. At the same time he wanted to ban big fishing operations by Singaporean towkays on the Malayan East Coast, and to set up a urea fertilizer and a paper plant. Under pressure from the MCA, the Malayan cabinet rejected his proposal with the argument that these would threaten the economic rights of the Chinese involved in the operations. Following an attempt to transfer him to the Health Ministry, Aziz later resigned. See Aziz Ishak (1977); Von Vorys, (1975).
9. The OPP lists out long-term targets designed to help restructure the ethnic composition of employment and wealth ownership.
10. In comparing with other crops, the World bank notes that even with no other income sources, "...less than 2 acres of tobacco or fish would be needed to reach the poverty line, less than 1.5 acres of cabbage, potatoes, or tomatoes, and less than 1 acre of chillies, coffee or pepper. Thus it appears that given the relative prices in 1977, farmers with very small holdings would have done better to cultivate only one of a number of alternatives to paddy or to cultivate paddy in combination with some other crops" (1980:43).
11. The official estimation of poverty in Malaysia is usually based on a 'poverty line income' (PLI) defined in absolute terms, calculated as a cut-off point demarcating the poor and the non-poor. The 3MP states: "The fact of poverty.... is seen in deficiencies in absolute standards of living in terms of caloric intake and nutrition levels, clothing, sanitation, health, education and other social-economic variables. As these deficiencies are reflected to a large extent in income levels, poverty in this country has been measured by comparing absolute

levels of household income with the income required for minimum subsistence or what may be termed a poverty line income. This income takes into account of minimum nutritional and other non-food requirements of each household to sustain a decent standard of living." (Malaysia, 1976:160) Thus the PLI, defined relative to that is considered sufficient to cover the required material needs of an average family.

12. In a study covering 1.3 percent of all single-crop rice growers, Haughton finds that only 15 per cent of their income sources were derived from paddy. The rest were: 27 per cent from other farming activities; 47 per cent from off-farm sources and 11 per cent in the form of unearned income (rent and remittances). Even though their average farm sizes were four acres, only 1.7 acres were devoted to paddy. Thus Haughton remarks that these people are better classified as "mixed farmers" than rice single-croppers. (Haughton, 1983:108).
13. In one study, the World Bank notes that if it is assumed that about 30 per cent of family income comes from sources other than rubber; then the required acreage of high-yield rubber would be 3.5 acres (1980:26).
14. For analytical purposes, land development in Malaysia can be divided into three categories – "primary", "supplementary", and "wage labour" schemes. Primary land schemes consisting of the FELDA's, FELCRA's Youth, State Youth, and KSLDA schemes, refer to 'self-sufficient' land development and settlement schemes. It is 'self-sufficient' in the sense that settlers' welfare hinged mainly upon the development activities emanating from within the scheme itself. The scheme not only provides production activities contributing to a major slice of settlers' income, but also the basic physical infrastructure and other social facilities like education, health and community services. However, for various administrative and economic reasons, the performance of some of these schemes in terms of their 'self-sufficiency' status varies widely. In contrast, supplementary schemes are those meant to provide additional or supplementary income to participants residing in the nearby villages.
15. This resembles what Honadle and Others (1985) call a "technical fix" approach viewing development mainly as a technical problem, promoting "the idea that the solutions are known but not applied due to bureaucratic ineptitute and political shortsightedness".
16. One could divide the type of development agencies into crop- and fuctional-based. These agencies, including marketing (FAMA, LPN, MARDEC) and credit (BPM, MARA) agencies mainly cater for peasants engaged in production, and not those in the labouring activities.
17. An exception to this is the "Projek Ikhtiar", currently being tried in Selangor and Pulau Pinang, working in close co-operation with the State governments and financed by the Yayasan Pembangunan Ekonomi Islam. The success of such a project might impel the state to establish poverty-specific development agencies in the future.
18. Until now, the only reform measure that had ever been undertaken was the Bertam Paddy Land Redistribution Scheme carried out in 1959, involving some 5,595 acres. The participants included 984 Malays and 452 Chinese members of local co-operative societies affiliated to the Province Wellesly Co-operative Banking Union. The land belonging to the Bertam Estate Company was redistributed, only to former tenants to the Company at the time of redistribution who became full owners upon completion of payment. Thus, this was a case of land redistribution involving a single owner, that is, the said Company. See Foong Kin (1983) and Fujimoto (1980).
19. It would be incorrect to assume that the majority of large Malay farmers are mainly UMNO party members or supporters. In one study, Mansor (1978) shows that at least 45 per cent of what he calls "paddy land elites", that is, those owning 30 acres or more of the paddy land belonged to members of the opposition party – PAS.
20. See for instance Khor Kok Peng (1983).
21. The Second Malaysia Plan states: "The government will participate more actively in the establishment and operation of a wide range of productive enterprise. This will be done

through wholly- or partly-owned enterprises and joint-ventures with the private sector. Direct participation by the government in commercial and industrial undertakings represents a significant departure from past practices. The neccessity for such efforts by the government arises particularly from the aims of establishing new industrial activities in selected new growth areas and creating a Malay commercial and industrial community" (Malaysia, 1971:7).

22. Article 13 which contains all the property rights under the Malaysian Constitution, can be stated briefly as follows: (a) No person shall be deprived of property save in accordance with law, and (b) No law shall provide for compulsory acquisition or use of property without adequate compensation. See Harding (1976).

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The Impact of Rural Development Programmes in Malaysia with Special Reference to the Integrated Area Development Programme (IADP)

Chamhuri Siwar and Nik Hashim Mustapha

The World Bank (1975b) defines poverty as "a strategy designed to improve the economic and social life of a specific group of people -- the rural poor. It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas". Clearly, rural development is concerned with the eradication of poverty. The World Bank estimates that there are approximately 750 million poor households in the developing countries, of which 85 per cent are in absolute poverty, defined as those with per capita incomes of US$50 or less, while per capita income of the remaining 15 per cent is less than one-third of the national average.

Typically, rural development programmes and policies are designed to increase incomes and productivity of the rural poor. Various programmes such as land development, integrated rural development, modernization of the agricultural sector and industrialization have been implemented to raise rural incomes. In addition, approaches to rural development encompass provision of basic services such as health, education, electricity and water supply, improved food supply and nutrition. All these are directly designed to improve the physical well-being, the quality of life, and indirectly enhance the productivity of the rural poor.

Rural development programmes and policies extend beyond any particular sector. However, traditionally many rural development programmes consist of agricultural development programmes since between 80-90 per cent of the poor reside in the agricultural sector and are engaged in agriculture-related employment. Hence, projects designed to improve agricultural productivity and output form a major component of rural development programmes. However, since problems of low productivity and structural constraints often inhibit the modernization of agriculture and contribute to the persistence of rural poverty, rural development strategy has incorporated programmes of rural industrialization, non-farm employment and sponsored rural-outmigration to lessen the burden of the agricultural sector with the hope of increasing agricultural productivity and incomes. It is hoped that increased integration of the

rural sector and the national economy following these changes would reduce the incidence of poverty.

This paper reviews rural development programmes and policies in Malaysia since independence and attempts to make an impact assessment of selected rural development programmes. Although these programmes have been generally successful, the problems of rural poverty and unequal distribution of income and wealth still persist and form a dent in an otherwise successful rural development strategy. The features and problems of the rural sector and the prospects, as well as the direction, of future rural development policies are also discussed.

Features and Problems of the Rural Sector

The rural sector of Malaysia comprises mainly the smallholder agricultural sector including rubber, coconut and oil palm smallholders, paddy farmers, fishermen, mixed-farmers and estate workers. Although the rural sector includes "other industries", the agricultural component forms about 80 per cent of the rural sector. Hence, the agricultural sector's contribution could be used as an appropriate proxy for the contribution of the rural sector to the economy.

With increased industrialization the agricultural sector's contribution to the country's gross domestic product (GDP) declined from 31.5 per cent in 1965 to 20.3 per cent in 1985, while its contribution to employment declined from 51.2 per cent in 1965 to 35.7 per cent in 1985 (Table 1). The proportion of rural to total population simultaneously declined from 73.5 per cent in 1957 to 64.8 per cent in 1980 (Table 2).

Table 1
Percentage Share of the Agricultural Sector's Contribution to GDP and Employment

Year	GDP	Employment
1965	31.5	51.2
1970	30.8	53.5
1975	27.7	47.6
1980	22.7	39.7
1985	20.3	35.7
1990*	18.1	30.1

Note: * Projected
Source: Various Five Year Plans

Table 2
Distribution of Rural Urban Population, 1957, 1970, 1980 ('000)

	1957	1970	1980
Urban	1,666.9 (26.5)	2,530.4 (28.7)	4,492.4 (34.2)
Rural	4,611.8 (73.5)	6,279.9 (71.3)	8,643.7 (65.8)
Total	6,278.7 (100.0)	8,810.0 (100.0)	13,136.1 (100.0)

Source: Malaysia (1957, 1970, 1980)

The major problem facing the rural sector is the persistence of poverty and its attendant problems of low productivity, unemployment of labour and resources, and rural-urban income disparity. The magnitude of the poverty problem could be assessed from the number of poor households and the incidence of poverty in the rural sector. Although, the overall incidence of poverty has declined from 59 per cent in 1970 to 25 per cent 1985, poverty among specific target groups, especially paddy farmers, rubber and coconut smallholders and fishermen remained high, between 28-58 per cent (Table 3).

The major factors explaining the persistence of poverty among others are labour displacement, inadequate diversification of income sources and rising cost of inputs and cost of living.

Rural Development Policies and Strategies

The evolution of rural development policies in Malaysia stems from the varied problems of rural poverty, low productivity, low incomes, lack of proper and adequate rural infrastructure and rural-urban disparity. Colonial development policy had an urban and export bias. As a result, the traditional peasant sector was neglected. It was for this reason that Malaysia's early post-independence rural development policies enunciated in the First Malaya Plan (1956-60) were criticized for lacking in direction and showing an "absence of a definite agricultural development programme" (Rudner, 1975, p. 80). Rudner further adds that:

> "Although agriculture (and rural development) carried a nominal first priority in the First-Year Plan (1956-1960), plan policy laid strong emphasis on the more advanced, urban sectors while trusting in backwash effects to convey development into the rural economy".

Ungku Aziz, a prominent economist, criticized the persistent disregard for impoverished, land hungry subsistence cultivators in policy formulations

Table 3

Peninsular Malaysia: Incidence of Poverty in the Rural Sector 1970, 1976 and 1984

Stratum	1970 Total Households ('000)	1970 Total Poor Households ('000)	1970 Incidence of Poverty (%)	1976 Total Households ('000)	1976 Total poor Households ('000)	1976 Incidence of Poverty (%)	1984 Total Households ('000)	1984 Total Poor Households ('000)	1984 Incidence of Poverty (%)
RURAL	1,203.4	705.9	58.7	1,400.8	669.6	47.8	1,629.4	402.0	24.7
Rubber Smallholders	350.0	226.4	64.7	126.7	73.8	58.2	155.2	67.3	43.4
Padi Farmers	140.0	123.4	88.1	187.9	150.9	80.3	116.6	67.3	57.7
Estate Workers	148.4	59.4	40.0	–	–				
Fishermen	38.4	28.1	73.2	28.0	17.6	62.7	34.3	9.5	27.7
Coconut Smallholders	32.0	16.9	52.8	19.3	12.4	64.0	14.2	6.6	46.9
Other Agriculture	144.1	128.2	89.0	528.4	274.4	52.1	464.2	158.8	10.0
Other Industries	350.5	123.5	35.2	510.5	139.5	27.3	763.6	76.5	10.0

Source: Malaysia (1986)

(Rudner, 1975:80). Aziz (1964:1969) emphasized the need for institutional reform so that the fundamental obstacles to rural development and poverty eradication could be removed. By the end of the First Malaya Plan, it became clear that the government "had failed to prevent the continued decline of Malay (rural) fortunes" (Rudner, 1975:80) and there was a general unhapiness amongst leaders of the Government ruling party (UMNO) regarding the lack of institutional reform to spearhead effective rural development.

For the period 1950-1960, the responsibility for development planning vested with the colonial bureaucracy, whose interests was mainly to safeguard the important economic sectors (plantation and mining) which contributed considerably to the sterling reserves. Thus, priority was given to the development of physical infrastructure like the building of roads, railway and port facilities, telecommunications and power, which were mainly located in urban areas. Development programmes in both the Draft Development Plan (DDP, 1950-55) and the First Five Year Plan (FFYP, 1956-60) laid emphasis on the more advanced economic sectors. Expenditures for the rural sector were mainly channelled towards rural infrastructural programmes such as for drainage and irrigation for agricultural production (Shukri, 1986:97-99).

The Second Malaya Plan (1961-65) saw a more serious commitment towards rural development, especially in terms of public expenditure in agricultural and rural development which increased more than three times from M$45 million during the First Malaya Plan to M$150 million during the Second Malaya Plan period. Even so, rural development strategy continued to stress the infrastructural approach, which laid strong emphasis on the development of social amenities and economic infrastructure (Stephen Chee, 1975).

The Second Malaya Plan also incorporated a National Rural Development Plan which was aimed at reorganizing and mobilizing institutions and efforts towards modernizing and developing the rural sector. Administrative structures and institutions such as the National Rural Development Council and Rural Development Executive Committee were set up to frame and supervise the implementation of rural development programmes. The Ministry of Rural Development formed the apex as it co-ordinated the activities of all agencies related to rural development. At the district or local level, the District Rural Development projects, known as the Rural Economic Development 'RED Book' Plan, were located in the District Operations Rooms which recorded the progress of the projects.

The infrastructural approach envisaged a more integrated rural economy once rural employment, productitvity and incomes increased. The provision of social and economic infrastructure (like roads, drainage and irrigation facilities, basic amenities like electricity, water, school, health, community and religious centres, etc.) and the creation of functional rural institutions to meet the credit, production and marketing needs of the rural population was

expected to generate rural employment besides raising productivity and incomes.

However, it was clear that the provision of basic socio-economic amenities and infrastructures had only touched marginally the problems of rural poverty and underemployment. The envisaged impact of the development of such infrastructures upon the rural poor was too slow. Rural poverty, low productivity and underemployment continued to remain serious despite the increase in the development expenditure for rural development.

The main factor contributing to rural poverty was the existence of a considerable number of cultivators who relied on small, uneconomic and often fragmented holdings. These cultivators often enjoyed only a small fraction of their product, since a significant porportion were either tenants or sharecroppers (Fisk, 1963:175).

To arrest the vicious cycle of poverty a more effective measure was needed to absorb the underemployed population and the increased population in the rural work-force away from existing and overcrowded rural areas. It was in light of this view that such large and expensive land development schemes under the Federal Land Development Authority (FELDA) were begun during the Second Malaya Plan. It has since become an important catalyst for rapid rural development. Such land development programmes form a part of the infrastructural approach to rural development. But unlike the provision of other forms of social amenities, the development of such settler plantations had a direct impact upon poverty eradication for it raised the socio-economic well-being of the rural population.

By absorbing part of the rural population into land development schemes, more productive employment opportunities were created. The reduction of population pressure on land in existing villages brought about increased land and labour productivity. Large land development programmes remain as one of the more successful forms of rural development strategies. The government's confidence of its success is illustrated by the large public expenditure allocated for new land development. However, this strategy is often criticized for being too costly. It also has a low absorptive capacity leaving many of the rural poor unaffected by its success.

Rural industrialization is another component of the development strategy proposed in the Second Malaya Plan to increase employment opportunities, productivity and incomes of the rural population. The origin of this strategy can be traced to the formation of RIDA (Rural Industrial Development Authority), formed in 1956, which was aimed at improving the well-being of the rural communities through the setting up of rural or cottage industries. Subsequently RIDA was expanded into MARA (Majlis Amanah Rakyat) whose role includes the provision of training and educational facilities mainly to rural indigenous communities in order to increase their involvement in the

urban industrial sector. This strategy was later given greater emphasis in the New Economic Policy (NEP), implemented at the beginning of the Second Malaysia Plan.

Poverty is predominanty a rural phenomenon. For this reason, a greater portion of the poverty eradication programmes is biased towards the agricultural and rural sector. Such programmes include extensive irrigation, land development, replanting and integrated rural development (IRD) schemes. These programmes are productivity-income increasing in nature, aimed at uplifting the socio-economic status of the rural poor (Galenson 1980:223; Zulkifly, 1982:227)

The Origins of IRD

The various infrastructural and productivity-oriented strategies for redressing rural poverty, unemployment, low productivity and low incomes in the 1950's and 1960's failed. By 1970, it became clear that rural poverty remained a serious problem. The incidence was highest among paddy farmers (88.1 percent) and coconut smallholders (52.8 per cent). The high incidence of rural poverty came as a surprise to many, including the country's leaders, policy makers and implementors. Some studies linked the high incidence of poverty to the failure of the country's development strategy to check the disequalizing tendencies of inter-sectoral and rural-urban income differentials (Lee 1976, 1977). Although Malaysia experienced a growth rate of between six to seven per cent for a sustained period, absolute and relative poverty between 1957 and 1970 worsened (Peacock, 1979; Anand, 1973; Lim, 1974; Ragayah and Ishak, 1978).

The high incidence of poverty in the rural sector meant that the benefits of development did not trickle down to the poorest sections of the rural population. Although technically sound, past rural development strategies were not comprehensive enough and lacked co-ordination in their implementation. It was under these circumstances that the Government introduced the New Economic Policy (NEP) in the early seventies, which gives special emphasis on eradicating poverty and the restructuring of society.

The various rural development programmes resulted in the creation of rural development institutions such as RIDA (Rural Industrial Development Authority), FAMA (Federal Agricultural Marketing Authority), BPM (Agricultural Bank of Malaysia), Felda (Federal Land Development Authority), FELCRA (Federal Land Consolidation and Rehabilitation Authority), MADA (Muda Agricultural Development Authority), KADA (Kemubu Agricultural Development Authority), FOA (Farmer's Organization Authority), etc.. These institutions serve the rural and agricultural sector in different capacities. While a much larger allocation had been set aside for rural develop-

ment, much of it was actually expended on institution building and on the bureaucracy (Ness, 1967) involved in the implementation of rural development programmes. This is quite apart from the inefficiencies in the use of human and financial resources arising from the duplication of functions of the various institutions.

To attain its desired impact, it was felt by planners that a more integrated approach to rural development programmes was needed. Rural poverty is concentrated in some identifiable areas or regions of the country. Therefore, it was felt that rural development programmes could be expected to achieve greater impact if they were targeted to certain areas or target groups. In these "areas" or "regions" an integrated "package" of programmes were to be implemented and co-ordinated to achieve better results.

Basically, the Integrated Rural Development (IRD) strategy is designed to attack the causes of rural poverty in an integrated and comprehensive manner. It is aimed at extending the benefits of development to the poorest among those who seek livelihood in the rural areas. This strategy focuses upon a more integrated and comprehensive programme of agricultural, socio-economic and institutional development. Basic physical and economic infrastructures and social amenities such as irrigation and drainage, rural roads, health, schools, water and rural electrification and agricultural-supporting services such as credit, marketing, input supplies, research and extension are provided in a co-ordinated and integrated manner by various development agencies. To obtain economies of scale IRD plans are multi-disciplinary and multi-sectoral in nature, involving agricultural, agro-based and rural industries and service activities covering a large planning region. In addition, farmers are mobilized through participation in Farmers' Organizations and interaction with project implementors through discussion and extension. In implementating the IRD strategy the technical, economic and social aspects of the programmes are linked and reinforced and implemented in stages to generate changes in the institutional and value systems for the betterment of the socio-economic well-being of the rural population (Living, 1981; Ruttan, 1975; Samonte, 1979; Azad, 1978).

In the early seventies the IRD approach was originally considered as part of a rural development strategy. The concept of "area development" (Mohd. Jamil, 1972), which became the basis for a regional and integrated agricultural development programme (IADP), emphasized a two-pronged attack on rural and agricultural development. The first prong called for an integrated and concentrated effort for rapid rural and agricultural development to meet the needs of areas or regions that were ready for take-off. The second prong called for a continuous programme directed towards preparing other areas or regions for accelerated rural and agricultural development.

The strategy of area development was justified on the grounds that fo-

cussing rural and agricultural programmes upon selected or targeted areas would produce a more rapid and greater impact. The concept of area development is incorporated in the NEP as a way of combating poverty and restructuring the country's ethnic-occupational distinctions as well. More specifically, this strategy is aimed at:

(i) encouraging the modernization of the rural sector through the adoption of modern techniques of production
(ii) providing agricultural support services such as extension, credit and improved marketing arrangements
(iii) modernization of the rural sector through direct and indirect participation of the farming community in the establishment and running of rural industries and commercial enterprises and the expansion of urban services in the rural areas.

The concept of 'area development' formed the basis for regional and integrated agricultural development projects (IADP), both of which are aimed at redressing economic and structural imbalances between regions, slowing down rural-urban migration and promoting agricultural and industrial development. Integrated Rural Development planning is exercised and co-ordinated by regional and land development agencies such as FELDA, South Kelantan Development Authority (KESEDAR), Terengganu Tengah Authority (DARA) and Johor Tenggara Development Authority (KEJORA).

A comprehensive or integrated programme normally forms the basis for a regional development strategy. Under this strategy, basic economic infrastructures and social amenities such as settler houses, rural roads, health, religious and community centers, schools, water and electricity supply, and various agricultural support services are also provided (Johari Mat, 1983).

The agricultural component of the IRD is the IADP. The IADP is designed to revitalize and rehabilitate *in-situ* or existing agricultural areas that are faced with problems of poverty and low productivity. An integrated package of infrastructures, services, inputs and technology are provided and co-ordinated through institutional development specific to the IADP (Wan, 1985).

Most IADPs are based pedominantly upon rice cultivation. Examples of such IADPs are MADA, KADA, Besut, North-West Selangor, Krian-Sungai Manik, Kemasin-Semarak, Trans-Perak and Balik Pulau-Seberang Prai. In these IADPs the major objective is to increase productivity and incomes through the provision of improved irrigation and drainage facilities, complementary inputs (pesticides and weedicides) and other agricultural support services such as extension, credit, marketing and subsidies. In multi-crop IADPs, the replanting of rubber, coconut, pineapple or rehabilitation through diversification forms the major objective. Examples of such IADPs are the West Johore I and II, the West Pahang, Malacca and Negeri Sembilan Timur.

In Malaysia, agricultural development forms the core of rural development programmes. This is inevitable as about 80 per cent of the rural population are involved in agriculture-related activities. However, unlike specifically agricultural development programmes, integrated rural development programmes are wider and more holistic in scope. Thus, as Fredericks and Nair (1982:56) observe "[t]here has been a gradual transition from agricultural development to rural development where agricultural development relates to genetic, technical and managerial manipulation to increase and optimise productivity and aggregate agricultural output, rural development covers a wider geographical sector, involves the non-agricultural sector and most significantly postulates improvements in the quality of life".

The broadening of the scope of rural development in Malaysia may be observed from its multi-faceted rural development programmes. The first Malaysia Plan (1966-70) period laid emphasis upon the provision of rural infrastructure and agricultural support services and the correction of institutional deficiencies in land tenure, credit, processing and marketing to ensure adequate producer returns and access at reasonable cost to factors of production (Malaysia, 1966:105-106). Institutional improvements in key sectors of the rural economy along with output and productivity oriented programmes and the redressal of rural-urban imbalances formed the core of IRD programmes in this period. Output growth rather than maximization of incomes formed the main thrust of the IRD programmes.

The bloody ethnic riots of May 1969 signalled rudely to the policy makers that poverty and rural-urban imbalances were still pervasive despite massive government investments in the rural sector. The ethnic riots emphatically pointed out the significance of the fact that these imbalances were coterminous with ethnic origin. The state responded almost immediately by enunciating the NEP in 1970, which spelt out boldly the twin objectives of poverty eradication and restructuring the ethnic-occupational order. An Outline Perspective Plan (1970-1990), extending up to the Fifth Malaysia Plan (1985-90), set the poverty reduction and equity share and participation targets. Rural poverty was targeted to be reduced to about 21.6 per cent and the bumiputera community's (indigenous communities) share in equity participation would be increased to at least 30 per cent of the national total.

The impact of these changes upon rural agricultural development policy was that income maximization, rural poverty eradication and equity objectives were spelt out more clearly in rural and agricultural development programmes. For example, the recent National Agricultural Policy (NAP) defines income maximization from agricultural production as its primary objective. Programmes aimed at improving rural socio-economic well-being are seen as a means of preparing some rural bumiputera for inter-sectoral mobility and making interim improvements in the lives and incomes of those who will continue to

remain in the rural areas following such structural changes (Snodgrass, 1980:169).

A summary of strategies and programmes that fall under the IRD is given in Table 4. In Malaysia, the core of the IRD strategy lies in 'area development' or *in situ* development, which come in the form of IADPs, regional and land development and land consolidation and rehabilitation schemes as well. Agricultural support services are provided along functional forms of extension, research, credit, processing and marketing. Input and price subsidies are also provided to help reduce costs of production and also to supplement farmers' incomes. These support services are expected to remove some of the institutional defects related to tenure, credit and marketing. For smallholders and traditional farmers, assistance in the form of replanting grants and subsidies are provided for rubber, pineapple and coconut. In the case of less profitable crops, crop diversification and multi-cropping strategies are encouraged.

In addition, a strategy of rural industrialization[3] is also incorporated in rural development as a means of employment creation and also to supplement rural incomes. Agricultural resource-based and handicraft industries have been identified for such development.

Social development programmes complement the agricultural and rural industrialization strategies in improving the socio-economic well-being of the rural population. These programmes include the provision of social amenities, social and community development programmes and the rehabilitation of traditional villages.

Impact of IADP

The following analysis of the IRD programmes focuses upon the IADPs, the single most important component of the IRD. While there has been some success, there are also shortfalls and constraints. Presently there are 18 on-going IADPs with at least one in each of the 13 states. By the end of 1985, six IADPs had been completed, 12 IADPs in various stages of implementation and another nine in the planning stage. A recently completed study (Sukor, *et al.*, 1983) provided an assessment on the strategy, impact and future development of IADPs. A summary of the main findings listed below provides a rather dismal picture of the performance of the IADPs in meeting its stated objectives.

(i) Although the IADPs had considerable impact upon poverty reduction, a sizeable number and proportion of agricultural households remained below the rural poverty line in 1982. The prospects of further substantial reduction of poverty among these 'hand-core' poor by 1990 are not good. Most of the 12 IADPs currently being implemented are likely to have the same result.

(ii) There is still considerable room for improvement in meeting the basic

Table 4
Summary of IRD Strategies and Programmes in Malaysia

Strategy	Brief Description/Objectives of Programmes
1. Area Development	
1.1 Agricultural Development	Implemented as IADPs based on concept of *in-situ* development to improve productivity and incomes of farmers. Package of physical and economic infrastructures, social amenities, technology, inputs and agricultural support services provided.
1.2 Regional and Land Development	Large scale regional and land development projects involving re-settlement of landless or marginal farmers in land schemes. Package of physical, economic and social infrastructures and amenities provided.
1.3 Land Consolidation	Consolidation and rehabilitation of uneconomic holdings in existing agricultural and rural areas to improve productivity and incomes of farmers.
2. Agricultural Support Services and Subsidies	The provision of institutional and agricultural support services such as extention, training, input and price subsidies, research, marketing etc., to reduce actual costs of production and increase efficiency in production.
3. Assisting Smallholder and Traditional Farmers	The provision of assisstance and funds for replanting rubber, pineapple and coconut, and also crop diversification and multi-cropping strategy for smallholders and traditional farmers.
4. Rural Industrialization	Expansion of agricultural resource-based industries and also rural handicrafts to create employment and supplement rural incomes.
5. Social Development	
5.1 Social Amenities	The provision of basic social amenities like education, health, water and electricity supplies, community and religious facilities.
5.2 Rural Industrialization	Community development programmes and amenities to instill positive values and self help among rural households and youths.
6. Applied Food and Nutrition Programme	To provide better food and nutrition among rural households for better health. To encourage local food production and self help among rural communities.
7. Rehabilitation of Traditional Villages	To uplift the socio-economic well-being of households in traditional villages by the provision of basic socio-economic infrastructure and amenities.

needs of the IADP target population for nutrition, health, toilet facilities, piped water supply and electricity.

(iii) The economic impact in terms of the spread of new and more productive technology and increased yields, production, employment and average farmer real income has been substantial. However, there is still room for the improvement in the yields of paddy and tree crops, the substitution of higher value crops and in the agricultural sector's capacity to absorb more labour.

(iv) The impact of the IADPs on the restructuring objective of the NEP has been insignificant. This is not surprising as this was not the primary objective of the IADPs. However, even the Farmers Organizations, seen as the main vehicle for restructuring society through the promotion of agri-business, has achieved very little in this regard.

(v) Farmers' participation in most IADPs appear to be essentially passive, confined to acceptance of new technology and receipt of government subsidies. Thus, the IADP strategy for promoting farmer participation and self-reliance has made farmers more dependent upon government assistance.

Poverty remains a serious problem even among agricultural households in the completed IADPs. For example, the incidence of poverty in the Muda region, one of the earliest and more successful IADPs, was 63 and 69 per cent for Perlis and Kedah respectively. In the remaining completed IADPs the incidence of poverty remained high, 70 per cent in North Kelantan, 74 per cent in Kemubu, 70 per cent in Besut, 64 per cent in Northwest Selangor and 46 per cent in West Johore (Table 5). The data on poverty reveal that a higher proportion of agricultural households in the predominantly paddy-based IADPS remained poor. This is evident in the case of the Muda, Kemubu, North Kelantan, Besut and Northwest Selangor areas. According to Sukor *et al.* (1983) the major factors explaining the higher incidence of poverty in most IADPs are:

(i) uneconomic farm size and tenancy
(ii) population growth
(iii) stagnant yields
(iv) labour displacement from paddy cultivation
(v) inadequate attention to other crops
(vi) insufficient employment opportunities outside agriculture
(vii) rising cost of living

Uneconomic farm size has long been realized as the major cause of poverty among rural households. In the IADPs, "a large proportion of farms simply are too small to produce household incomes above the poverty line" (Sukor, *et. al*, 1983:48). The percentage of farms under 1.2 hectares were 68 percent, 30

Table 5
Incidence of Poverty Among Agricultural Households in Integrated Agricultural Development Projects (IADPs) Peninsular Malaysia, 1980.

Region	Estimated Agricultural Land ('000 hectares)	Estimated Agricultural Population ('000)	Estimated Agricultural Households ('000)	Incidence of Poverty (%)	Average Farm Size Monocrop (hectares)	Average Farm Size Mixed (hectares)
Northern Region						
Perlis	47.0	29.8	8.9	56.7	1.7	2.1
Perlis (Muda I & II)	96.0	57.1	13.1	62.7	1.3	2.7
Kedah (Muda I & II)		267.8	53.3	68.6	1.5	3.3
Kedah Valley	379.0	390.6	84.4	72.2	1.7	2.5
Penang & Seberang Prai	64.9	101.7	21.5	67.5	1.6	2.2
Krian – Sungai Manik	44.0	123.6	25.6	74.6	1.3	1.9
Trans Perak	17.6	54.1	11.2	65.9	2.0	1.6
Perak Utara	233.7	56.3	12.4	70.8	2.1	2.8
Tumbuh Block	23.2	33.0	9.2	70.6	1.2	1.3
Sub Total	905.4	1114.0	239.6			
%	36.0	44.5	43.0			
Central Region						
North-West Selangor	100.1	130.9	24.0	63.2	1.7	3.0
Negeri Sembilan Timur	88.1	130.7	21.3	44.8	2.2	2.0
Malacca IADP	123.8	135.2	36.5	43.6	2.0	1.9
Sub Total	312.4	396.8	81.8			
%	12.4	15.8	14.7			
Eastern Region						
Rompin-Endau	4.0	6.3	1.4	59.8	1.3	2.1
Pahang Barat	729.0	103.4	20.8	54.4	3.0	3.9
Besut	5.1	27.6	7.2	70.0	1.0	2.3
Ketara	78.5	78.8	19.4	64.9	1.3	2.1
Kelantan Utara	192.8	175.2	45.9	70.0	1.2	2.1
KADA I	32.0	85.0	21.9	77.4	0.6	1.2
KADA II		137.7	36.9	77.7	0.6	1.2
Kemasin	50.7	52.8	13.8	79.9	0.7	1.4
Sub Total	1092.1	666.8	167.3			
%	43.3	26.6	30.0			
Southern Region						
Johore Barat I	78.9	135.4	27.1	46.3	3.9	5.6
Johore Barat II	128.2	192.8	40.1	57.0	3.1	3.4
Sub Total	207.1	328.2	67.2			
%	8.2	13.1	12.1			
Peninsular Malaysia						
Total	2517.1	2505.8	555.9			
(%)	100.0	100.0	100.0			

Source: Adapted from Sukor Kassim, *et. al.* (1983).

percent and 42 percent for Kemubu, Muda and Besut respectively. It is unlikely that even the most advanced technology would be able to increase the production possibilities and the incomes of producers cultivating such small farms beyond the poverty line. The farm size distribution, after completion of the respective IADPs, has either remained the same or has worsened.

The problem of uneconomic farm size becomes even worse when such small farms are rented rather than owned. The proportion of tenant-operated farms has decreased over time due to owners taking back the land to operate themselves. While this represents a positive trend in terms of farm-size enlargement, "the displaced tenants can in a way, be seen as victims of development" (Sukor, *et. al*, 1983:49).

The majority of the 'hard-core' poverty households are in the small farms category. A recent World Bank (1981) report concluded that these "small farms, whether owner operated or tenanted... represent an intractable poverty problem... one which neither current policy or institutional arrangement is likely to affect".

The farm size and tenancy problems are aggravated by relatively high population growth rates in the IADPS. This would increase further the population pressure on land, other things remaining constant. This means that the relatively fixed paddy area now has to support more agricultural households. In addition, most farmers are subject to partible land inheritance. This together with population increase has contributed to the increase in the proportion of small farms.

Stagnant yields have also contributed to the persistence of poverty in the IADPs. Despite the massive use of Green Revolution technology, high-yielding crop varieties and agrochemical inputs, paddy yields in the major IADP areas have stagnated at around 3.0 tonnes per hectare. The performance of the Muda region is slightly better with an average yield of around 4.0 tonnes per hectare. The yields in Kemubu and Besut are still relatively low considering the adequate irrigation facilities and support services that have been provided. With a potential of between five and six tonnes per hectare, there exists a yield gap of between 40-50 percent, which could be further improved by better cultural and management practices, water and pest control, adaptive research and extension services.

While mechanization may be justified to offset problems of seasonal labour shortages, labour displacement, especially among the landless and small farm households, has aggravated the poverty problem in the paddy-based IADPs. The spread of the use of tractors, combine harvesters and direct seeding technology has displaced a large portion of hired labour used in paddy cultivation. The lack of alternative employment opportunities outside the agricultural sector and the 32 per cent increase in the CPI between 1976 and 1980 have compounded further the misery of the hard-core poor households.

The Muda Area

In order to investigate further into the impact of the IADPs it is perhaps useful to look at one of the completed projects. We have chosen to highlight the Muda Irrigation scheme, one of the earliest and most successful IADP projects.

Despite its much heralded success, poverty remains a serious problem in the Muda region. The incidence of poverty was about 32 per cent in 1975 (Jegatheesan, 1977), but later increased to 68 per cent (Sukor, *et. al.*, 1983) between 1975-82 and declined thereafter to 46.2 per cent (Gibbons, 1984).

Comparing household incomes across various tenure and farm size categories for 1966, 1974 and 1979, a World Bank (1981) study concluded that [see Table 6(a) and 6(b)]:

(i) from 1966 to 1974, the first stage of double-cropping household incomes for all categories improved in both nominal and real terms. Relative income distribution between large and small farms, however, worsened appreciably.

(ii) from 1974 to 1979, the second stage of Muda's Green Revolution, nominal incomes declined for all farm categories. Real incomes declined even more dramatically, eliminating most or all of the earlier gains for small farmers and tenants. Income distribution remained largely unchanged.

(iii) the recent government policy decision to completely subsidize the cost of fertilizer and to raise the farm-gate paddy price by 33 per cent would raise incomes substantially for all farm categories. These policies would more than restore the income losses of 1974-1979 but at a cost of an even more skewed income distribution within the farm population.

The first phase (1966-1974) witnessed a simultaneous rise in nominal and real incomes for all categories of farmers. The increase in yields and cropping intensity following the adoption of the Green Revolution technology and double-cropping contributed to increased production and incomes. Owner-tenants experienced the largest increase in real incomes; as high as 137 per cent over the period. They are followed by owner-operators (89 per cent) and tenants (72 per cent). Among the small farm categories, small tenants experienced the least gain, as their real incomes increased only by 32 per cent, compared to small-owners who gained 51 percent over the period.

The second phase (1974-1979) saw the decline of both nominal and real incomes for farmers in all farm-size categories. This was due, firstly to the levelling-off of yields which remained relatively stagnant over the period after it increased significantly in the first phase. Secondly, paddy prices remained constant between 1974-1980, after an increase of over 80 per cent in the support price between 1972-1974. Thirdly, the steady increase in input costs and a 22

Table 6(a)
Farm Income Comparions for Different Tenants
and Farm Size Categories

	Small Farms					
	Average	Small	Owner	Average	Small	Owner
Year	1966	1974	1979	1966	1974	1979
Average Paddy Area (acres)	1.78	1.42	1.42	1.78	1.42	1.42
Average Family Size	4.94	4.94	4.94	4.94	4.94	4.94
Gross Paddy Income	643	2,072	2,141	643	2,072	2,141
Production Costs	98	694	853	161	1,048	1,344
Net Paddy Income	545	1,378	1,288	482	1,024	797
Other Income	476	831	809	476	831	809
Total Net Annual Income	1,021	2,209	2,097	958	1,855	1,606
Real Income: 1974, 1979 Figure Corrected for Changes in Consumer Price Index (1966 Based)	1,021	1,539	1,196	958	1,293	916
Real $ Gain Over 1966		518	175		335	(42)
Percentage Gain Over 1966 (Real $)		51	17		35	(4)
Monthly Net Income per Household (Nominal Dollars)	85	184	175	80	155	134
Official Poverty Line Index Rural M$ per month per household	148	215	267	148	215	267

Source: World Bank (1981)

Table 6(b)

Income Comparisons for Different Tenants and Farm Size Categories In Muda

	Average Tenant			Average Owner Operator			Average Owner/Tenant		
Year	1966	1974	1979	1966	1974	1979	1966	1974	1979
Average Paddy Area (acres)	3.76	3.69	3.69	3.55	3.20	3.20	6.11	6.60	6.60
Average Family Size	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58
Gross Paddy Income	1,365	5,384	5,564	1,289	4,670	4,926	2,219	9,631	9,952
Production Costs	583	2,837	3,603	296	1,660	2,018	570	4,246	5,306
Net Paddy Income	982	2,547	1,961	1,020	3,110	2,808	1,649	5,385	4,646
Other Income	426	922	956	359	722	740	237	1,020	1,155
Total Net Annual Income	1,408	3,469	2,917	1,379	3,732	3,548	1,886	6,405	5,801
Real Income: 1974, 1979 Figure Corrected for Changes in Consumer Price Index (1966 Based)	1,408	2,417	1,664	1,379	2,601	2,023	1,886	4,463	3,309
Real $ Gain Over 1966		1,009	256		1,222	664		2,577	1,423
Percentage Gain Over 1966 (Real $)		72	18		89	47		137	75
Monthly Net Income per Household (Nominal Dollars)	117	289	243	115	311	296	157	534	483
Official Poverty Line Index Rural M$ per month per household	148	215	267	148	215	267	148	215	267

Source: World Bank (1981)

per cent increase in the CPI over the period have practically eroded away earlier gains in real incomes for all categories of farmers.

The worst hit was the small-tenant whose real incomes in 1979 was actually four per cent lower than that of 1966. The average tenants' real income in 1979 was only 10 per cent more than the 1966 level, but compared with their gain in 1974 there was a 54 percentage point loss in their real income. Similarly, the small owners' income in 1979 was only 17 per cent more than their 1966 level, but there was a reduction of 34 percentage points from the 1974 real income gain. Although owner-tenants gained 75 per cent more than their 1966 income level, they, in fact, experienced a loss of 52 percentage points from their 1974 real incomes level. The owner-operator's gain from their 1966 income level was 47 per cent, but this represented a 42 percentage point loss from the 1974 real in come gain.

The substantial loss in real incomes created discontent and culminated in a protest rally by a least 6,000 Muda paddy farmers in January 1980. The government's response was to immediately implement the fertilizer and price subsidy scheme. The fertilizer subsidy, designed to reduce input costs, provides free fertilizer to all categories of farmers. But, as with all other subsidy programmes, it is the larger farmers who tend to gain more from the scheme. The price subsidy scheme resulted in a 33 per cent increase in the price support of paddy. As the price subsidy is given on the amount of paddy sold at the market, larger farmers tend to benefit more as they possess a larger market surplus.

The two subsidy schemes increased the incomes of all tenure and size categories. As was expected, the operators of relatively large farms gained more than the smaller ones. In 1979 the gain in income over the 1974 income level ranged between six per cent for the small-tenants to 21 per cent for the owner-tenant category. The small owner operator gained seven per cent, while the average tenant and owner-operator both gained 17 per cent.

The fertilizer and price subsidy schemes contributed to the reduction in the incidence of poverty among paddy farmers (Chamhuri, 1985). However, these gains were only temporary, as they have been surpassed by the combined effect of inflation and the rise in other production costs, such as rent and labour wages. As a result, poverty has remained high in the Muda region, that is, at 46.2 per cent in 1982, half of whom earned less than M$40 per capita per month (Gibbons, 1984).

The equity or distribution impact of the Muda project has also been less favourable. A World Bank (1975) study observed that the increase in income experienced earlier "has not been evenly distributed across the already unequal pattern of income distribution and has, therefore, served to worsen that distribution". This conclusion was emphasized again in another World Bank (1981) study which stated that, "The nearly exclusive emphasis on raising income... through increased rice production, has itself considerably aggravated the pre-

vious, income inequalities in Muda. Tenancy legistation remains unenforced and neither tenants nor the numerous classes of small owner operator have shared appreciably in the benefits of double-cropping".

During the first phase (1966-1974) of its implementation, the relative income distribution between large and small farms in the Muda area worsened. This could be gauged by the relative gains in income achieved by the large and small farmers. The small tenant and owners experienced a modest real income gain of 35 per cent and 51 per cent respectively, compared to the gains made by the average owner-tenant (137 per cent), average tenant (72 per cent) and owner-operator (89 per cent). Double-cropping during the first phase increased real incomes, but it simultaneously increased the inequality of its distribution as well.

The second stage (1974-1979) saw the decline in both nominal and real incomes, eliminating most or all of the earlier gains for small farmers and tenants. The small tenants suffered most with their real income dropping below the 1966 level. The small owners' gain during the period was reduced to only 17 per cent of the 1966 level.

The fertilizer and price subsidy schemes, introduced in 1980, benefitted the larger farmers in terms of the value of fertilizer and price subsidies received. This is expected to cause an even more skewed income distribution within the farm population. The small owners and tenants gained an increase of 38 per cent and 49 per cent respectively in real incomes compared to the higher gains experienced by tenants (70 per cent), owner-operators (50 per cent) and owner-tenants (63 percent).

The net income of small tenants as a per cent of the income of the average tenant dropped, even with the introduction of the subsidy schemes, from 68 per cent in 1966 to 48 per cent in 1979. The small tenants' income position with respect to owner-tenants dropped from 52 per cent to 25 per cent between 1966 to 1979. Similarly, the income position of the small owners with respect to owner-operators dropped from 74 per cent to 54 per cent, while their income position with respect to the owner-tenants dropped from 54 per cent to 34 per cent.

The unequal distribution of income is largely due to the unequal distribution of assets, especially land. The Gini Ratio for farm size distribution declined slightly from 0.396 in 1955 to 0.354-0.360 in 1966-1973, but increased increased to 0.445 in 1975/75, suggesting the trend towards greater inequality in farm size distribution (Gibbons D.S., *et. al*, 1981). The trend towards increasing inequality in farm size distribution was mainly due to the increasing proportion of large farms acquiring a larger proportion of the land and an increasing proportion of of small farms continue to operate a fairly static land area. This trend was especially noticable between 1972/73 to 1975/76, when the proportion of large farms increased from 12 to 15 per cent, and the land

area under their cultivation increased from 30 to 40 per cent. On the other hand, the proportion of small farms increased from 40 to 47 per cent, but the proportion of land under their cultivation remained static at 17 per cent. This resulted in a decline in the mean farm size of small farms from 1.7 acres to 1.4 acres.

The changes in the size distribution of farms in the Muda region between 1966-1975/76 may be decomposed into a "first round effect" (1966-1972/73) and a "second round effect" (1972/73-1975/76 and beyond). The first round of double-cropping had a more pronounced effect on large farms, which declined both in proportion and in area acquired. During this period, the proportion and area acquired by small farms remained relatively unchanged, while medium sized farms gained in proportion as well as in area.

The first round effect of double-cropping (1966-1972/73) saw the increase in cropping intensity, which arose as a response to the tight planting schedule and the regulation of a standard cultivation schedule. This led to increased labour demand especially during the peak transplanting and harvesting periods, which subsequently led to an increase in labour costs. This compelled many large farmers to rent out a portion of their land, thereby reducing the portion and area under large farms.

The second round effect (1972/73-1975/76) saw the reversal of this trend, that is, the increasing trend of land concentration. To cope with increasing labour demand and costs and the uniform timing of operations, large scale mechanization, especially in land preparation and harvesting, was introduced. The rise in the support price of paddy by 77 per cent in 1973/74 and the subsidy schemes made double-cropping more profitable. To ensure economies of scale in mechanization large-sized farms were required. Farmers who previously rent out part of their land saw the attractiveness in resuming cultivation, either by displacing the tenants or by renting-in more land.

The growth of large farms may be observed in the increasing portion and area under this category. Between 1972/73 and 1975/76, the proportion of large farms increased from 12 to 15 per cent, and its share of area increased from 30 to 40 per cent. The growth of large farms (Lim, *et al.*, 1982; Muhammad Ikmal, 1985) which was initially facilitated by mechanization, and more recently, by the fertilizer subsidy schemes, contributed to the displacement of tenants and marginal farmers and contributed to the pauperization of the hardcore poor.

In fact, the displacement of tenants in the Muda region has been a continuing trend since 1955. The advent of double-cropping has speeded the rate of their displacement. The proportion of tenants declined by almost half from 42 per cent in 1955 to 25 per cent in 1975/76. The rate of decline was even faster between 1966 to 1975/76, when the proportion of tenants dropped from 41 to 25 per cent. Similarly the share of paddy area operated by tenants declined by

almost half from 40 per cent in 1955 to 23 per cent in 1975/76. The decline was even faster between 1966 and 1975/76, as it dropped from 39 to 23 per cent. Recent developments in large scale mechanization and subsidization may further expedite their displacement. This was evidenced by the increasing proportion and land area acquired by owner operators since 1955, and especially between 1972/73 and 1975/76. The proportion of owner operators increased from 38 per cent to 56 per cent between 1955 to 1975/76. The share of land area operated by owner operators increased from 31 per cent to 45 per cent during the same period. Owner-tenants have, especially after 1966, also increased their farm area. The proportion of owner-tenants increased from 14 per cent in 1966 to 19 per cent in 1975/76, while their share of the Muda area operated increased from 22 to 32 per cent during the same period. Being more commercially oriented, owner-tenants tend to rent in more land with the increase in better support prices, subsidies and large scale mechanization in paddy farming.

To summarize, the IADP in the Muda region, has brought about at least three major structural changes. These include:

(i) a substantial growth (up to 50 per cent) in the proportion of small farms which cannot produce a family income above the poverty level
(ii) an across-the-board decline of pure tenants
(iii) a growth in the acreage of the largest commercial farms

These changes have been marked by the persistence of a fairly high incidence of poverty and an increasing trend towards greater inequality. There is certainly a need to rehabilitate the marginal and small farmers and displaced tenants into other more profitable agricultural or non-agricultural enterprises. If this is possible then the structural changes in the Muda region could be viewed positively in terms of the creation of a commercially-motivated owner-operator and owner-tenant farmers who have responded positively to the incentives and challenges of double-cropping. The outmigration of small farmers and poor tenants could pave the way for the creation of more profitable and viable ventures in paddy farming. The structural changes may thus provide a better future for the paddy sector.

Prospects

The prospects of making further progress in accelerating rural development in general and eradicating rural poverty in particular depend not only on how best the future directions of IRD strategies could overcome existing structural and institutional constraints, but also on the performance of the economy in the face of world economic recession.

Since 1980 the world recession had adversely affected developing countries

like Malaysia which depend on the export of primary commodities as a major source of national income and growth. Falling commodity prices and the economic recession have put a severe strain on financial resources, which led to various budgetary measures to reduce expenditures. One effect of such measures is reduction in the expenditure for various sectors, including the rural agricultural sector. The proportion of the allocation for rural and agricultural development in the Fifth Malaysia Plan has been reduced to about 12 per cent of the total allocation. This compares poorly with the 26 per cent in the First Malaysia Plan, and is bound to affect rural development and rural poverty eradication programmes. Already there are plans to review and cut down the subsidies and assistance given to other forms of rural poverty eradication programmes.

Economic growth is a pre-requisite for the improvement of a population's welfare. Similarly, accelerated rural development and the eradication of rural poverty depend upon favourable prices for the country's commodities and steady growth in all sectors of the economy. The Malaysian economy was badly hit by the world economic recession. The steady growth rate of between seven to eight per cent in 1970's slumped to about five per cent in 1980 and two per cent in 1985. In 1986, the economy was expected to register a negative growth rate. This would adversely affect its ability to implement rural development and rural poverty eradition programmes. "On current expectation, the prospects for meeting the poverty target... are not bright" (Zainal Aznam, 1984).

Under this scenario, it is unlikely that major changes will be introduced in the IRD strategies to promote rural development and to eradicate rural poverty. The IRD which essentially followed an evolutionary approach will continue to be dominated by productivity- and output-increasing strategies complemented by infrastructural and technological improvements, along with the provision of socio-economic services and amenities. The agricultural component of the IRD, that is, the IADP, land and regional development will continue to be the main feature of rural development programmes.

As outlined by the National Agricultural Policy (NAP), the maximization of farm incomes will be the main thrust of future IRD programmes. It is envisaged that the income maximization strategy would not only be based upon the improvement of productivity and output of a single crop only, but also upon the creation of opportunities and activities in the agricultural and non-agricultural sectors.

Rural industrialization, rural urbanization and the growth of resource-based industries are expected to provide further impetus for the transfer of resources from the underdeveloped rural sector to the modern sector. Non-agricultural development, especially through industrial development is required to absorb a larger portion of the poor rural households to relief the rural sector of some of its burden of underemployment, underdevelopment and

poverty. The strategy of rural industrialization which was incepted with the formation of RIDA in 1965 need to be pursued agressively to speed-up the sluggish growth and to broaden the basis of the rural sector.

Rural urbanization is a recent strategy that is aimed at regrouping traditional villages "with the industrial need of an urban environment "(Zainal Aznam, 1984). This new approach incorporates three aspects of development:

(i) the development of commercially-oriented agricultural enterprises from traditionally uneconomic rice farms and the smallholding sector
(ii) the promotion of rural small-scale industries and other non-agricultural enterprises
(iii) the re-grouping and restructuring of traditional villages as a way of generating new growth centres.

This new rural urbanization strategy is aimed at increasing agricultural productivity, increasing the incomes of farmers and rural workers as well as to facilitate the provision of socio-economic amenities like water, electricity, roads, schools, health, clinic, market and other infrastructures on a more economical basis (Malaysia, 1984b). This new strategy does not, at first glance, offer any new dimension to the traditional IRD strategy. However, the emphasis on group farming appears to offer some prospects for overcoming the constraints of uneconomic farm size and labour shortages due to rapid rural-outmigration among the younger generation and ageing of the agricultural labour force. The group farming strategy will also be used to tackle the problem of idle lands, estimated to be about 900,000 hectares altogether.

With the financial strain that is presently affecting the government, much of the subsidies and assistance are expected to be reduced together with cut-backs in the allocation for the rural and agricultural sector. Various monetary and fiscal incentives have been offered to transfer the burden of developing the rural and agricultural sector to the private corporate sector, particularly in the cultivation of fruits, livestock, food and resource-based and other downstream industries. So far, however, the private sector response to the various incentives has been slow, mainly due to the tight capital market and also the comparatively low returns from agricultural investments. Under such circumstances, the government will still have to shoulder the main burden of developing the rural sector.

Therefore, the prospects for rapid rural development are not bright. Consequently, low productivity, poverty and wide income disparities will persist, and continue to be a major source of concern to policy planners and implementors in the next few decades. The attendant problems of rural outmigration, labour shortages, and idle lands thus represent different dimensions of the problem of relative stagnation in the rural-agricultural sector. Although absorption capacity of the non-agricultural sector is presently limited due to the

sluggish growth, it is expected to increase in future as the economy improves. The rural outmigration would hopefully lessen the pressure on the rural sector and provide an avenue for the structural transformation in some sectors of the rural economy.

Therefore, future IRD strategy would need to be viewed in terms of the overall and inter-sectoral development perspective. Although the development of the rural economy will still be largely determined by the development of the rural-agricultural sector, the role of the non-agricultural sector, particularly the industrial sector will be crucial.

Notes

1. The Rice Committee Report (1956) recommended the implementation of tenancy reform to remove the blatant evils of absentee landlordism in the Muda area. The government response was to introduce the Padi Cultivators Ordinance in 1955. Although the Ordinance contained novel objectives for tenancy reform, it was ineffective due to poor implementation. As a result, tenancy and landlordism prevailed and is often cited as one of the reasons for the persistence of poverty among paddy farmers.
2. The average development cost of resettling a family for a typical FELDA scheme increased from M$37,000 in 1980 to M$53,000 in 1985. In 1985, this cost is 2.8 percent higher than the cost of resettling a family of the same type in a regional development scheme (KESEDAR type).
3. It is not clear what this strategy entails. Literally, it denotes bringing industries to the rural areas. The terms resource-based industries and small-scale industries bear resemblance. However, they may not be necessarily located in the rural areas and may be capital-intensive. The term which best describes rural industries is "tiny scale industries" which operates with five workers and less and with limited capital. In the Malaysian context, it mainly refers to cottage or handicraft industries.
4. Unless otherwise stated this section draws heavily from Sukor, *et al.* (1983), World Bank (1981).

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The Colonial Office and Decolonization in Malaya

Allan M. Healy

The extraordinary conditions during World War II placed an exceptional opportunity for the formulation of post-war policy on Malaya in the hands of officials in the Colonial Office (CO), who worked essentially to a set of extraneous ideals. The first result was the disastrous Malayan Union; but the failure of the Union by no means ended the atypical trend toward the detailed direction of policy by the CO. That meant a succession of policy initiatives inadequately related to the communal/political realities on the ground in Malaya. The increased internationalizing of the 'colonial question' helped perpetuate efforts at remote control by the CO. Paradoxically, the metropolitan failure to deal with crucial problems in Malaya handed the initiative to the leaders of the emerging Alliance, whose principle and objectives were antipathetic to those persisting from the wartime period within the CO. Only at the eleventh hour did that perception begin to dawn in London: as late as 1955 the British Government and the CO still clung to an approach that was politically and tactically unrealistic.

It is in the light of Colonial Office records I was able to consult in 1986 that I can make a few substantive points about decolonization along such lines. I should emphasize, however, that I am a tyro in this area of research on Malaya; though my colonial experience goes back to 1953, covering several parts of Africa, Asia, and the Pacific, and including a stint in the Colonial Service (about which some people these days imagine one should keep quiet). On this period in Malaya I am familiar with the works of de Vere Allen and Stockwell, and with most of the studies on the Emergency and political development, as well as the recent book on the Colonial Office by Lee and Petter.[1] But I am conscious of my ignorance; and essentially what I am doing is throwing out a few ideas, which readers may well consider ill-informed or naive, for what I trust will be constructive comment.

A perusal of primary sources always makes an impact different from that of secondary works. I have long been familiar with the influence of Lord Hailey's magisterial African Survey of 1938 within the Colonial Office; but I was not

prepared for Hailey's very direct and continuing input into all areas of colonial policy, via internal standing committees.[2] I believe that Hailey was a major and progressive influence, not simply because of his comparative perspective, but primarily because of his background in Indian administration. In every colonial respect, of course, India was 'advanced': as we know, it had had a remarkable 'towing' effect on Burma's development. Hailey carried that over the rest of the empire. He also had the capacity to bring together for advice, and retain the respect of, independent experts covering most biases. (He was simultaneously chairman of the councils of the School of Oriental and African Studies [SOAS] and of Chatham House.)

A related factor which struck me forcibly was the moderating effect which wartime participation in government -- the uncommon acceptance of common responsibility -- had on elements in Britain which normally indulged in vague or ideological criticism of colonial policy. That applied particularly to Labour politicians and to the Fabian Society: a point not lost on CO officials. That wartime conjuction of minds promoted a new sense of dedication to accelerated colonial development leading to self-government.

In the political sphere in Britain a new element of realism entered discussion. Those broadly on the conservative side accepted the need to devote metropolitan resources to the colonies, while simultaneously acknowledging that Britain was becoming a debtor nation which could not indefinitely sustain her dependencies. At the same time, politicians and critics on the left switched their focus from immediate political demands to the prior need for economic stimuli and better education. Attlee might occasionally still mouth pre-war slogans within committees of the War Cabinet;[3] but Labour ministers generally came to recognize that colonial development, to make decolonization feasible and responsible, represented a monumental undertaking.[4] Yet that coming together in Britain with a more coherent focus on colonial questions, implied more centralized policy-making, which in turn carried its own dangers as will become evident in what follows.

Another important determinant in bringing various factions together to produce a general colonial policy -- and I think we should see clearly that this is something that had rarely happened before in the decentralized, dependency-specific British colonial system -- was wartime guilt about the abandoning of the Far Eastern colonies and resentment about American criticism of the empire, at a time when it was becoming patent that the United States would have the major say in what happened post-war. Cranborne, the Colonial Secretary, in July 1942 managed to link the two, arguing that U.S. responsibility for the loss of Malaya was heavier than Britain's because of American failure to back the League of Nations over China in the 1930s.[5]

Most thought that far-fetched, and national guilt over the collapse of Malayan defence ran deep: that had the positive effect of further bringing together

people with previously antithetical views. In 1942 the notion of post-war accelerated development within a politically united peninsula had already taken hold: it was then a question of devising the mechanisms for bringing that about. I see that as a logical outcome of what had been happening in the period leading up to the Colonial Development and Welfare Act in 1940 -- including the crucial arguments in the Royal Commission on the West Indies[6] -- together with the special sense of guilt over the possessions in the Far East; but there can be no doubt that American criticism also played a part. We have a study of the impact of the Americans on colonial policy[7] -- a study which I believe exaggerates that impact, for the reasons I have just mentioned -- but the records, including deliberations of the War Cabinet, indicate just how stung both ministers and civil servants were by American comments.[8]

I suppose that the most remarkable aspect of that criticism was that it was so public and so blunt, at such a critical stage of war (1942) when the Allies had their backs to the wall in both Europe and the Far East, and when the closest of collaboration was vital. The general reaction in Cabinet and in the CO -- a reaction with which I happen to agree -- was that the Americans were appallingly ill-informed about the nature, objectives, and difficulties of British colonial administration. From Henry Luce to the State Department to Wendell Willkie, the Americans regarded the British imperial system as intrinsically self-interested, oppressive, and exploitative, and they wanted it to come to an abrupt end when the war was won. They viewed the entire situation as a replay of 1776, when there was in fact virtually no analogy at all: but their accusations certainly drew together those in the U.K. whose function it was to plan post-war policy for the colonies.[9]

The consequent centralized assumption of responsibility for detailed colonial planning was the major outcome of the whole wartime situation -- something that I feel is still inadequately recognized. It has not been given proper recognition because, I believe, many scholars do not know, or concede, just how decentralized British colonial control had generally been. The whole philosophy of the British system -- encouraging the development of civilizations *sui generis*, as Sir Ernest Barket once put it[10] -- implied local flexibility, with just a broad overview from Westminster and Whitehall. Unless things went awfully wrong, governors and their subordinates mapped out policy and told London what they had done, or the general lines of what needed to be done. The men on the spot were regarded as the people with the knowledge essential for appropriate policy formulation. I well remember meeting in East Africa in the 1950s Sir Philip Mitchell, recently retired as governor successively of Uganda and Kenya, who had regularly told the CO where to get off when it had tried to intervene in what he regarded as matters beyond its competence.[11] The capacity and rights of Colonial Officials -- down to the considerable latitude allowed district commissioners -- were respected, and represented an index to

thinking about the system as a whole. Hailey had rightly perceived in 1938 that had been allowed to drift too far -- in the spirt of indirect rule -- and that the time had come for more effective and extensive central planning. But the point is that the circumstances of the war fortuitously provided CO officials with the opportunity to harness that centralizing trend in thinking to the actual definition of detailed policy. Factors such as American criticism reinforced a trend already developing strongly.

That had its good points and its bad points. In most dependencies certain local methods and attitudes had become ossified, and CO control provided an opportunity for necessary challenge. On the other hand, senior CO officials -- of whom Sir Edward Gent in 1941 head of the Eastern department of the Colonial office is a classic example -- chronically lacked field experience (one further outcome of the traditional pattern of decentralization), so that wartime planning came to involve reference to metropolitan principles, with correspondingly inadequate attention to local realities. Malaya in particular suffered from that CO/CS dichotomy under Colonial office/Colonial Service extraordinary wartime conditions. Even the most distinguished of the retired Malayan Civil Service officials living in Britain (including Swettenham, Guillemard, Maxwell, and Winstedt) were regarded inside the CO as antique fogies whose views it would be positively dangerous to seek.[12] At the same time, with rare exceptions active MCS officials had either been interned by the Japanese or were in the services (including army intelligence). That gave an open go to Gent and his associates in the Colonial office, with the result (the Malayan Union) with which we are all familiar (see C.M Turnbull, *A Short History of Malaysia, Singapore and Brunei*, Sydney, 1980, pp. 228-235).

It seems to me that one useful result of the strength of the CO in planning for post-war was the defeat of the more fanciful of the wartime proposals for overall control of the empire. Here American pressure in 1943-44 did indeed look dangerous, with notions being floated of general UN supervision or even of direct control by regional commission under the aegis of the UN. I was surprised by the range and longevity of such proposals; but the fact that the CO had mechanisms in place for re-assuming administration in Malaya, together with new policies advancing self-government for the empire as a whole, preempted initiatives toward international control which would surely have been calamitous. (Of course when the time came in late 1945, anyway, the U.S. had already developed other worries and priorities.)[13]

The Malayan Union period has been argued over for so long now -- and most of the records have been available for seven or eight years -- that it would be presumptuous of me to try to add anything of consequence. I think it important to recognize that, whatever approach had been adopted in 1945-46, the Malays would never have allowed their predominance to be jeopardized. But the coercive approach of the CO reduced Malay confidence in Britain

and British intentions and, in my view, unnecessarily aggravated communal relations (which required particularly delicate handling at that time). That has left unfortunate legacies in Malaysia to the present. On the other hand, the repercussions did lead to the 1948 Federation and to far more effective central administration than the country had ever known before, which, without the pressures of 1945-46, the Rulers may well have been reluctant to concede. By 1947 the Federation proposal had come to be seen by the Rulers generally as a lifeline rather than a threat.

It was a fitting irony that Gent should have been the official on the spot to preside over the demise of the Malayan Union (he was sent out as first Governor of the Union in April 1946) within months of arriving in Kuala Lumpur he had developed a sense of political and communal realities which previously had been spurned with the CO.[14] But the extraordinary fact is that his former colleagues and successors in the Colonial Office persisted into the 1950s in the metropolitan illusions which had produced the Union.

I had not adequately realized, until going through these records, the degree to which wartime opportunities within the CO had had a permanent 'hold' effect in the more centralized control of colonial government -- though accelerated development and the use of metropolitan funds would have necessitated more detailed overview from London in any case. But the relevant senior CO officials continued to see themselves as the orginators and monitors of all key policies, in detail; and they refused to acknowledge, right through to the eve of Merdeka (1957), that the Malayan Union had in principle been a mistake. The officials in the Southeast Asia Section (H.T.Bourdillion, J.J. Paskin, J.D. Higham, T.I.K. Lloyd and others) insisted that a rational and progressive policy had been sabotaged by retired MCS officials who had used their influence with the Rulers, and with the Malay leadership generally, to whip up opposition.[15]

Thus, they laboured through the early 1950s, the years of preparation for Merdeka, in the belief that their dealing with Malaya's politicians had been unnecessarily complicated by compromises they had been forced to make in 1946-48. They saw both the Rulers and the Malay politicians as being in the pocket of retired officials whose ideas were anachronistic and whose objectives were obstructionist. That conviction in the CO became a significant determinant in the way officials approached all key policy discussions.[16]

Yet the retired MCS offcials usually had a much better grasp of the crucial political reality -- the determination of the Malays to preserve Malay sovereignty -- than did the Secretaries of State, the CO, and the post-war Governors. The CO files of the early 1950s are full of memoranda indicating that Malaya was felt to be gradually abandoning the principle of ethnic identity, and that it was only on that basis that political progress toward independence could be encouraged or condoned.[17]

That led to wild political mis-assessments. In 1951, at the time of Dato Onn

bin Jaafar, Chief Minister of Johore, founder of the United Malays National Organisation in 1946 leaving UMNO to found the Independence of Malaya Party (IMP), Tunku Abdul Rahman was referred to as an inconsequential stop-gap leading an organization that was already disintegrating. Dato Onn and the IMP were seen as the bright hope of non-communal politics -- in itself a chronic mis-judgement of Onn and his aims -- and the Secretary of State authorized the CO to offer him a form of *de facto* official recognition.[18] Such illusions, which were faithfully reflected in publications such as *The Times* and *The Straits Times*, continued to impede a realistic perception of political development -- and, consequently, political negotiation -- through to 1955. This was despite accurate intelligence assessments which had been coming through to the CO for years -- for example, reporting on Onn's mercurial or "unrealiable" behaviour on the Communities Liaison Committee (CLC), and on Malay insistence via the CLC that the Chinese would be allowed only those rights decided by the Malays.[19] Wishful thinking and a certain detachment from reality had taken firm hold in the CO during the war, and refused to let go, even in the face of solid and explicit evidence.

This has remarkable parallels in the United States where, as is now well known, a great deal of accurate intelligence provided by the CIA was ignored or distorted in Washington by policy-makers within the State Department. While the intelligence sources reported a range of social, political, and economic facts, those facts were subsequently bent into shapes to suit policies determined by extraneous factors, including Western models and ideological biases. That slotted into the broad objectives of the Cold War: of 'holding the line' against Communism, as defined by the Truman doctrine. The realities of a particular situation became secondary -- or ceased to matter altogether. On that basis London and Washington had begun to draw together in 1947-49; but Washington had specific political expectation.[20]

What happened within the CO thus represented, in part, the increased internationalizing of the colonial question. CO officials, Secretaries of State for the Colonies, and successive British governments of both complexions became very sensitive to foreign opinion, especially the U.S. That again had the effect of deflecting attention from basic determinants within Malaya's communities. A certain element of resentment over American ignorance and unrealistic expectations survived from the war period; but arguments over policy in Malaya reflected the joint belief that the activities of the Malayan Communist Party (MCP) were part of a global communist assault; and that law and order could be restored and independence made feasible only by the gradual erasing of communal difference. In 1951-53 the slightest indications that that might be occurring were seized on within the CO. That is why Dato Onn, who had been viewed within the Colonial Office as a *bete noire* ever since 1946, suddenly became the great non-communal hope.

In January 1952 the British Embassy in Washington notified the Foreign Office that Kenneth Landon of the State Department had indicated confidentially that the U.S. Government would welcome consultation on a statement on policy in Malaya, as they "would be prepared publicly to 'go along' with it." The British Embassy saw this as part of a "steadily improving climate of opinion" in the U.S., which it was important that the Foreign Office and the Colonial Office sustain.[21] It has to be remembered, of course, that Britain had become heavily dependent, economically and militarily, on the U.S. The threat of communism had mitigated American hostility toward colonialism, but that would persist only to the degree that Britain could demonstrate advances toward "democracy", in defence of the "free world", in front-line theatres such as Malaya.

In February 1952 the Secretary of State for the Colonies responded with a policy directive to Malcolm MacDonald, Commissioner-General for South-East Asia, which went out with a CO attachment saying that it should be suitable for U.S. endorsement. It was to be read by Sir Gerald Templer at his swearing-in ceremony as the new High Commissioner. This emphasized the commitment to moving forward to a united Malayan nation, on the basis of "a common form of citizenship for all who regard the Federation as their real home." As a *quid pro quo* it repeated that the Malays would continue to be given special assistance so that economic imbalances would be redressed.[22]

Dean Acheson in fact made a supporting statement on Britain's Malayan policy on 3 March 1952; and Anthony Eden and Oliver Lyttelton sent him a message to say "how deeply grateful" they were. The CO was anxious, despite advance tip-offs to the press, to avoid giving the impression that what was being said and done was "an Anglo-U.S. plot."[23] Clearly, however, the CO was using both the American factor and the Emergency to try to swing political development in Malaya toward the kind of non-communal ideals incorporated in the Malayan Union, regardless of the realities on the ground. One important and apparently contradictory effect was to bring forward the introduction of elections for local and central government despite some misgivings in the CO and among Conservative politicians. This was not seen as being contradictory precisely because it was viewed essentially as a long-term training mechanism, not as an encouragement to rapid and communal political organisation.

Once that had been done, however, an independent political momentum was bound to develop in Malaya, over which the colonial authorities would have very limited control. But that was barely perceived in London at all. CO officials continued to talk in terms of the prior need to redress the poor economic position of the Malays: once that had been done, then real moves toward self-government could be made, as communal divisions, both in political organization and through the citizenship laws, would in their view have been whittled down. Both the CO and Templer saw the instituting in 1952 of elected local councils as the first-step in a protracted programme of political education.

As Templer saw it (27 July 1952) there was no "properly organized responsible political party with a coherent political programme."[24] J.D. Higham of the CO minuted that practicality would dictate that Malayan politicians "would do well to keep their noses to the grindstone of local administration"; but that it would be wise to allow them a little more scope by encouraging elections to State Councils.

> "I feel, too, that elections to State Councils might absorb the energies and blunt the wider aspirations of some politicians who may, if they're not given an outlet in this way, become more clamorous about wider issues of national independence etc."[25]

Clearly the time-table for what was called within the CO "political evolution in Malaya" was still being viewed in terms of decades. However, within the British administration in Malaya itself divisions were already beginning to surface, being precipitated particularly by a widely-publicized visit in August 1952 of Victor Purcell (formerly Protector of Chinese, then an adviser to the Malayan Chinese Association), by F.G. Carnell of the Institute of Colonial Studies at Oxford. Purcell and Carnell publicly advocated a rapid advance to elected self-government and a ministerial system, on the basis of ethnic equality.

Malcolm MacDonald and Sir Donald MacGillivray (High Commissioner of Malaya, 1955-57) were not particularly upset,[26] though they recognized the unreality of the specific non-communal basis of the Purcell/Carnell proposals; but Templer and several of his subordinates in Kuala Lumpur were furious. Fourteen months after the visit Templer described Purcell and Carnell as "vipers at our bosom"[27]; and he sacked after one week's service a young man who had been appointed Assistant Adviser on Aborigines because he was alleged to have absorbed radical ideas from Purcell. In November 1953 Templer wrote to the CO that "almost everybody, both (sic) Malay, Chinese, and Indian, agreed for their different reasons in wanting the British civil servants and the British High Commissioner to remain in Malaya for many years to come."[28]

In short, the Conservative political position on Malaya -- that self-government could be realizable only after ethnic unity had been established and a common basis for citizenship and civil rights agreed -- also appears to have been the fixed opinion within the CO. It was not simply a stand taken for reasons of political or international convenience: the advice going to the Colonial Secretary represented a reiteration of the principles developed during the war, though these were now seen as more difficult to secure, and likely to take a long time to carry over into a national Constitution.[29] CO officials continued to see themselves as the initiators and facilitators: not those on the ground in Malaya, and particularly not Malaya's politicians, who were viewed as irresponsible and power-hungry.

Whenever rapid moves towards self-government were mooted, the poor economic position of the Malays as cited within the CO as a further, major reason for a long-term view. But here again fixed attitudes were leading to a loss of initiative to the UNMO-led politicians. For example, RIDA, Rural and Industrial Development Authority which by its nature could produce only long-term effects, appears to have been viewed as a kind of all-encompassing policy initiatives. (According to Sir George Maxwell, Gurney had told him that RIDA would be a "complete solution").[30] It was the declared policy also to encourage Malays to enter commerce: to that end the Malay National Banking Corporation had been set up in 1947; but the virtual bankruptcy of the organization in 1952, because of mismanagement and suspected corruption, brought no effective response from the CO.[31]

Meanwhile by early 1952 in Malaya a special committee to consider the economic position of Malays, chaired by the Chief Minister of Perak and having only one non-Asian member, was recommending the compulsory employment of Malays at all levels of commerce and industry. This brought a negative response within the CO, where J.J. Paskin wrote that any such move "would only underline racial differences and so run against the general policy of producing a united Malayan nation."[32] Positive discrimination under statute or regulation to advance "one racial section" was deemed unwise. The CO noted the MCA argument that Chinese economic dominance was steadily declining already: according to that view, Chinese by mid-1953 controlled only 20% of rubber land, compared to 22% in the hands of Malays; and only about 20% of the tin industry; while all the major import and export businesses were European.[33] But the real point was that that was not the Malay perception; and the argument had already become one of communal politics, which the CO preferred not to recognize.

By 1954 what was seen as the deteriorating international situation in South-east Asia -- particularly after Dien Bien Phu -- and Malaya's inability to defend itself, were also viewed as pressing reasons for reining in increasing demands for Malayan self-government. That conclusion was, again, unrelated to political initiatives in Malaya. Eden's report to Cabinet on the negotiations at Geneva stressed the need in the long term to establish a South-East Asia Treaty Organization which, to be effective, would have to include the major Asian powers. Nothing in the area should be done precipitately, for fear of jeopardizing such an outcome.[34] The implications carried over into Lennox-Boyd's Cabinet memorandum of 20 July 1955, reflecting discussion between the FO and the CO, on constitutional development in Malaya.[35] [The first elections to a Federal Legislative Council, including a small majority of elected members, were to take place a week later: a result primarily of Alliance initiatives.]

The consequence was that any further negotiations, to be primarily with

the Malay Rulers, would have to seek a satisfactory agreement on defence and the maintenance of internal security, which were linked to the financial relationship. As the Federation Government would be unable to provide or pay for appropriate forces "for many years to come, if ever," the conclusion was Malaya's continuing dependence on Britain. That issue had to be resolved with the Rulers "before there is any further discussion of advance towards self-government."[36] The implied incidental role of elected politicians in such projected negotiations was wholly out of touch with the realities of 1955. The CO patently intended to maintain a *festina lente* approach to self-government, though it was conceded that some early constitutional change was essential if "extremism" were to be avoided.

In the course of the consequent Cabinet discussion the further points were made that Britain's "financial stake in the Federation was one of the buttresses of the Sterling area," and that links between Malaya and Singapore needed somehow to be strengthened -- though bringing Singapore into the Federation "would weaken the status of the Rulers."[37]

Such fundamental problems, not to mention the communally explosive matter of Malayan citizenship, appeared in London to make early independence unlikely. There was also the persistence of the Emergency. The amnesty offer of 8 September 1955 produced no result, and the CO could offer no new suggestion. It was at that point that Tunku Abdul Rahman announced that he would go into the forest and meet the MCP leaders. It was known at the time that that was an initiative independent of the British authorities; but the records now make it clear how dismayed, not to say outraged, was the reaction in London.[38] The Secretary of State and the CO for the first time began to recognize that the course of Malayan politics was taking fundamental decision-making out of their hands, and that it would be counter-productive to object. At one stroke the Tunku and the Alliance (the Alliance comprised UMNO, the MCA, and the Malayan Indian Congress) broke through the barrier of metropolitan attitudes which had obstructed a realistic approach to Malaya's problems since 1942. It won 51 of the 52 elected seats in the 1955 federal elections. From that point on London had to treat the Alliance leaders, and UMNO's leaders within the Alliance, as the people actually determining Malaya's destiny.

Notes

Unless otherwise indicated, all records cited are in the Public Record Office, Kew, Surrey.

1. See J. de Vere Allan, *The Malayan Union*, New Haven, 1967; J.M. Lee and M. Petter, *The Colonial Office, War and Development Policy*, London, 1982; A.J. Stockwell, *British Policy and Malay Politics During the Malayan Union Experiment, 1942-48*, Kuala Lumpur, 1979. This paper carries forward to 1955 some of the issues raised by Stockwell.

2. Hailey led the U.K. delegation to the Pacific Relations Conference in the United States, 4-7 December 1942. On 10-11 September Attlee, Eden, Cranborne (Colonial Secretary) and Amery (Secretary of State for India) had held a series of meetings so that Hailey could be properly briefed, CO 825/35 Pt. 1: 55104.
3. For example, at the meetings referred to in footnote 2.
4. This was very marked, as J. Wilson of the CO noted, at a conference convened by the Fabian Colonial Bureau in Oxford, 3-7 July 1941, Creech Jones, co-founder of the Bureau and later to be Under-Secretary for the Colonies in the Attlee Government, responding to a question about the desirability of retaining colonies, said that 'we cannot escape our obligations." CO 875/12/13.
5. Minute by Craborne, Colonial Secreatry, 14 July 1942. CO 825/35 Pt. 1: 55104.
6. Malcome MacDonald as Colonial Secretary introduced the Report of the West Indian Royal Commission to Cabinet on 15 February 1940: the central argument was that the West Indies had poor economies but relatively sophisticated populations. CAB 65,5/W.M. 42(40)2.
7. W.R. Louis, *Imperialism at Bay, 1941-1945: The U.S. and the Decolonization of the British Empire*, Oxford, 1977.
8. See Co 875/18-20: 9120 and FO A.7112/1684/45, R.J. Cruikshank of the CO minuted that "American education is saturated with historically-based myths and atavistic stereotypes about 'empire and 'imperialism'."
9. Willkie's views were cited in discussions of the War Cabinet: CAB 66:30/W.P.(42)501 – 2 November 1942; CAB 66:31/W.P.(42)544 – 5 December 1942.
10. E.Barker, *Ideas and Ideals of the British Empire*, Cambridge, 2nd ed. 1944, p. 134.
11. As it happens, there is a good article on relations between Mitchell and the CO: see H.F. Morris, "Sir Philip Mitchell and 'Protectorate Rule' in Buganda," *Journal of African History*, XIII, 2, 1972: 305-323. Admittedly, Mitchell was an official of exceptional autocratic temperament. Morris comments on the use of 'semi-official' correspondence in policy discussions. This is also marked in the Co records on Malaya; but the question is, if 'semi-official' letters found their way on to official files, is there any point in distinguishing them from 'official' letters?
12. The retired officials named are: Sir Frank Swettenham, pioneer Assistant Resident in Perak (1874) and High Commissioner of Malya, 1901-05; Sir Lawrence Guillemard, High Commissioner of Malaya, 1924-47; Sir George Maxwell, Chief Secretary Federated Malay States, 1920-25; Sir Richard Winstedt, Director of Education, FMS, 1931-35. All were very active, individually and collectively, in opposing the Malayan Union in 1945-46. They argued that it violated the fundamental undertakings originally given by Britain to the Malay Rulers. References to CO unwillingness to consult them are strewn through the records of 1942-55; but see especially CO 273/676; 50823/35 and CO 537/7257; 526/50.
13. It was already becoming clear to the British Government by May 1945 that U.S. preoccupations lay elsewhere, and that consequently there was likely to be little pressure to internationalize the "old empire." The Americans already had eyes on the former Japanese Pacific islands for themselves. CAB 66:65/W.P.(45)300.
14. Gent to the CO, telegram no. 222 of 4 May 1946: The political interest and cohesion exhibited by all ranks of Malays is surprising but real." CO 537/1549; 50823/34 Pt.2.
15. File CO 537/7257:526/50 contains a series of objections by CO officials to private advice being given to Malay Rulers and to politicians by retired MCS officials, T.I.K. Lloyd complained bitterly to Gurney on the subject (1 October 1951): "Even now no-one can be certain whether, without this public encouragment from ex-Malayan civil servants, the opposition of UMNO to the MU Constitution would have acquired the strength which it did." And J.J. Paskin minuted (29 September 1951): "...opposition to the MU Constitution was very largely whipped up by retired Malayan officers here."

16. Another factor facilitating CO policy determination was the extraordinary workload being carried by officials in Kuala Lumpur – see Appendix A.
17. This is evident in the record of the discussion between CO officials and Victor Purcell in the Colonial Office, 6 March 1952; CO 1022/85; 31/1/06.
18. Colonial Secretary Griffith to Malaya Committee of Cabinet, 26 July 1951; CAB 134/497; MC(51), 1st meeting, Griffith to Gurney, 2 October 1951: CO 537/7303 - 52928/41. Cf. vitriolic comments about Onn, 1946-49, in CO 537/4790: 52928/22. Also see "Recent Political Developments in the Federation of Malaya," 23 October 1951, in CO 1022/81; 31/1/01.
19. See the voluminous file about Onn, CO 537/4790: 52928/22.
20. The effect of the Cold War on London/Washington relations over the colonial question was becoming apparent to the British Government in January 1947; see CAB 129;16/C.P.(47)5 of 16 January 1947. By late 1949 Malaya was clearly in the front line: "The unfortunate experience which the U.S. Government had had in China had made them more receptive of suggestions for collaboration with this country in Asiatic affairs on the basis that the U.K. provided experience and the U.S. provided finance." (CAB 128: 16/C.M. (62)49, 27 October 1949, item 8).
21. B.A.B. Burrows (British Embassy, Washington), to Foreign Office, London, 26 January 1952. O 1022/84: SEA 31/1/06.
22. Co 1022/84; SEA 31/1/05, Colonial Secretary to Malcolm MacDonald (Commissioner-General for South-East Asia), 5 February 1952.
23. Ibid, Anthony Eden to Oliver Lyttelton, 5 March 1952; also minute of 23 February 1952 by T.C. Jerrom (Colonial Office).
24. Templer to Colonial Secretary, 27 July 1952. CO 1022/81: 31/1/01. Also Appendix B.
25. Minute by J.D. Higham, Head of S.E. Asia Section, CO, 30 July 1952, CO 1022/81: 31/1/01.
26. Minutes by Sir Donal MacGillivray, 19 June 1952 and 18 November 1953, CO 1022/85; 31/1/06.
27. Ibid. Templer to Colonial Secretary, 23 October 1953.
28. Ibid. Report of conference between Templer and senior officials, K.L., 11 November 1953.
29. Such views were fully reflected in Colonial Secretary Lyttelton's speech in the House of Commons, 17 July 1952 (Hansard, p. 2383): "Those who regard self-government in this plural society as a means or an instrument, for bringing the races together are, I believe, guilty of a great political misapprehension. Self-government in these plural societies must be the expression of a unity which must be built up - not an instrument for creating it."
30. Co 1022/463: Sir George Maxwell to Oliver Lyttelton, 22 December 1951.
31. Ibid. Memorandum by the Attorney-General and Member for Economic Affairs, Federation of Malaya, 17 July 1952.
32. Ibid. Minute of 5 June 1953 by J.J. Paskin, Colonial Office.
33. Ibid. Statement by Malayan Chinese Association, 5 June 1953. It represented wishful thinking within the CO that officials were prepared to be reassumed by an assessment prepared by the Chinese leadership, when such argeement had long been rejected by the Malays.
34. CAB 128:27, Pt. 1: C.C.(35)54, 24 May 1954, item 1; C.C.(43)54, 22 June 1954, item 2.
35. CAB 129: 76/C.P.(55)81, 20 July 1955.
36. See Cabinet Discussion of 21 July 1955 in CAB 128: 29/C.M.(55)25.
37. Ibid.
38. See Appendix C.

Appendix A

Following the December, 1951 visit to Malaya by Oliver Lyttelton, Secretary of State for the Colonies, a paper on the Emergency was prepared (16 January 1952) by Hugh Fraser, M.O., Lyttelton's Parliamentary Private Secretary. Section A ("The Instruments of Government") included the following:

In principle the administration of the Federation could be comparatively simple. In practice the Federation is cursed with a written Federal Constitution, primarily devised not as an instrument of administration but as a political compromise, with the Central Government safeguarding non-Malay and the States Malay interest.

As a result, far from simplicity there emerges a caricature of government not dissimilar to a cartoon of a constitutional monarch and of an unelected House of Commons attempting to administer through eleven suspicious Houses of Lords, led by eleven more or less recalcitrant Lord Chancellors. Frustration results locally and at the centre. On the one hand Kuala Lumpur, lacking the constant advice or experience of people in the field, tends to become academic, perfectionist and unpractical, overworked and so bogged down in its paper constructions as to make it chronically short of staff, while State Governments, by complaint, obstruction, and jealousy of local privilege, distort and delay the execution of Federal policy.... Whatever the future may hold, the immediate necessity is to gear more closely the central and provincial administrations. Real and psychological rifts are unfortunately widened by the inability of a chair-bound and overworked central hierarchy to leave Kuala Lumpur.

Fraser called for the ablest of the British Advisers to be made Chief Secretary. If the State governments proved unco-operative, more use should be made of the reserve powers of the British Advisers:

> "the very threat of their use might concentrate the minds of the Sultans who daily become more fearful of their futures."

He also devoted considerable attention to the need to push ahead quickly with the instituting of compulsory universal education, using Malay and English as the basic languages, with the object of forming a Malayan nation. The independent Chinese schools would have to be "absorbed or driven" into the Malayan compulsory system.

Co 1022/22: 10/14/08

Appendix B

The Times (London) of 20 March 1953 reported that the Chief Ministers of all the States were calling for a conference in Kuala Lumpur to draw up a plan for "a united, free, self-governing Malayan nation."

Simultaneously within the embryonic Alliance, UMNO also began forcing the pace toward independence. An intelligence document, *the Monthly Review of Chinese Affairs* (March 1953) reported:

> Sir Cheng-lock himself is extremely worried by the Malay demand for independence now, and is hoping that the Rulers will be able to put a brake on this movement, which is clearly designed to give the dominating position to the Malays. It does seem that the Malays are hoping to get Chinese support to enable the Malays to get rid of the British, when they will turn on their friends and suppress them; while the Chinese consider that their best policy is to work in with the Malays, rather than to oppose them, in the hope that by doing so they will be able to take control at the critical moment. To their minds, if it comes to a duel between H.S. Lee and Abdul Rahman, there is little doubt who will win. The position, in fact, is that UMNO wants Independence before Malayanisation, while the MCA wants Malayanisation before Independence.

By mid-1953 UMNO was publicly demanding independence by 1957; while the MCA remained silent on the subject. After a round-table conference of Alliance leaders, a National Convention was held in Kuala Lumpur on 23 August 1953, at which it was resolved that elections to a Federal legislature should be held in 1954. On 25 August Tunku Abdul Rahman sent copies of the resolution, personally and separately, to Templer and Lyttelton, under the printed heading "National Convention". In an accompanying note he claimed that the parties involved represented ninety per cent of the Federation's population.

At a further National Convention on 11 October 1953 it was resolved that Federal elections be held not later than 1956; and detailed proposals for a legislature and for the franchise were drafted. The secretary of the Convention, T.H. Tan, sent a copy of the resolutions direct to Lyttelton (13 October). The CO replied with a bald acknowledgement, deliberately withholding any comment. Even the sending of an acknowledgement was debated within the CO; but R.L. Baxter minuted (26 October) that in courtesy to the Alliance (which may after all become a future Government of the Federation), we should send them one. It would be cumbersome to send it through the High Commissioner....

CO 1022/191

Appendix C

On 25 October 1955 Alan Lennox-Boyd, the Secretary of State for the Colonies, presented a statement to Cabinet on Tunku Abdul Rahman's announcement that he intended to meet the leaders of Malayan Communist Party:

> The Colonial Secretary said that the Chief Minister in Malaya, Mr Tunku Abdul Rahman, had embarked upon a course of action which must give grounds for alarm. As the amnesty announcement of 8th September had failed to achieve any result, the Chief Minister felt it necessary that he should go into the forest himself to hold discussions with Communist leaders. Refusing to be dissuaded from this course, he had at first agreed to refrain at such a meeting from opening negotiations and from according recognition to the Communist Party, but to confine himself to further explanation of the terms of the amnesty. Later he had taken the view that the amnesty offer had not gone far enough and that he must be allowed, for the purpose of a meeting with the Communist leaders, a mandate to settle the situation as best he could. The High Commissioner, who had been instructed to remind Mr Rahman of the undertaking he had given earlier, had replied that he felt that it would be impossible to dissuade the Chief Minister from entering into discussion with the Communist leaders, and that, if unacceptable conditions were imposed, the Chief Minister might well resign and so place himself in a position to cast the blame upon the Government at home for obstructing a course of action which could be represented as opening up a prospect of bringing the Emergency to an end. The Commissioner-General, South-East Asia, had endorsed this view.

The Government of Malaya was not, of course, the responsibility of the Chief Minister but of the High Commissioner in Executive Council, and the Chief Minister would have to report to the Council on his return. While it would be open to the Executive Council to reject any agreement or understanding with the Communists into which the Chief Minister had entered, it could be expected that any such act would precipitate a crisis of first importance. We should have no alternative but to stand firm in such an event and it would be right for us to do so.

The Prime Minister supported this view. The Cabinet were told that Mr Marshall, the Chief Minister of Singapore, had a more resolute approach to Communism, and that his presence at any talks with Communist leaders would have been a strengthening influence; but that, in view of the Tunku's stand, he was reconsidering his position.

Cabinet took note of the Colonial Secretary's statement.

CAB 128:29
C.M.(55)37: Item 4

Appendix D

In 1986 for the first time I did some research in the Colonial Office records held by the Public Records Office on the period 1940-55. Previously I had confined myself to the 19th century, mainly in the familiar CO 273 series. One thing that struck me immediately about the recently released material -- the records covering 1950-55 -- is the number of files listed as either 'Destroyed under Statute' or locked away from researchers for fifty, even seventy-five years.

Some of the files destroyed carry titles that, to me, would indicate significant research potential. Some of the reserved files -- those for which titles are disclosed -- appear historically promising but innocuous in any current political or security sense. We therefore have to ask, I think, whether anything can be done to secure better review and access for independent historians, particularly in the light of Britain's lack of anything comparable to the U.S. Freedom of Information Act.

Perhaps Australia's Malaysia Society and scholars within Malaysia should agree to make representations designed to address this problem of review and access in Britain. I for one consider existing provisions unsatisfactory; and I am particularly unhappy about the destruction of material after what seems to be internal, cursory assessement (and the precise mechanisms for such assessment need clarification). We may well ask why files have to be destroyed at all, unless full and specific duplication in some acceptable form has been established.

How the Opposition Faired in the 1986 Malaysian Elections

Khong Kim Hoong

Malaysia's elections are dull in that the ruling coalition is so well entrenched that the observer sees not so much a possible change of government but wonders whether the opposition can break the government's hold over its two-thirds majority in the national Parliament. Or perhaps there is the possibility of the opposition effecting a change in government at the state level in one or two of the thirteen states. Since the government's debacle in the 1969 elections, the ruling coalition seemed to have grown from strength to strength. Yet in 1986, the ruling Barisan Nasional coalition seemed vulnerable. Public confidence in the national leadership seemed to have beeen eroded.[1]

The economic recession had adversely affected the livelihood of many -- from big businessmen to the workers who had been retrenched. Perceptions of mismanagement of the economy, corruption among influential government leaders, and the blatant abuses of political power became widespread among the population as one scandal erupted after another.[2] The unpredecented resignation of the Deputy Prime Minister added to the feeling that something was amiss in the country and the government. This election therefore presented the opposition parties with many campaign issues which were potentially embarrassing to the ruling coalition and perhaps the opportunity to whittle down the two-thirds majority of the government. Before the elections, the key opposition parties were confident that the tide was on their side. Not only had the various scandals put the government on the defensive, the internal leadership struggle among the top leaders in the coalition had also left the two major partners in the government somewhat weakened.

The Democratic Action Party (DAP) the major opposition party in the urban areas of Malaysia, could have very well been the beneficiary of the two year internal strife within the Malaysian Chinese Association (MCA), its major opponent in the ruling coalition. It would have seemed that the factional leaders within the MCA had reserved their severest criticisms for each other rather than the opponents in the opposition parties. With the establishment Chinese leadership in disarray, the DAP hoped to pick up the mantle of leadership of

the Chinese community. The major Malay opposition party -- Parti Islam (PAS), was reported to have made some headway in the northern Malay belt in the states of Kedah, Perlis, Kelantan and Terengganu. In fact, the government had already shown apprehension towards the rapid growth of Islamic fundamentalism spread by PAS which had challenged the official interpretation of the religion. PAS and its supporters had argued that the religious practices of the government establishment were adulterated. This message was reported to have fallen on receptive ears among the rural Malay population. PAS-organised meetings have also been attended by very large crowds. And finally, PAS was able to forge a United Opposition Front with all the other parties except the DAP.[3] These two major opposition parties were also complemented by a host of other parties, all hoping to send their first representatives to either the national Parliament or the state assemblies. The election results, however, fell short of the expectations of the opposition parties. Only one of them did creditably.

The Democratic Action Party

Despite its claims to multi-racialism, the DAP is essentially a Chinese-based party as its leadership, membership and supporters are mainly Chinese. For this election, the party fielded a record of 64 candidates for the Parliamentary elections and 118 candidates for the state elections.[4] This time, it had one of its biggest electoral victories in the party's history. In the Parliamentary elections, it was able to win a total of 24 seats -- nineteen in West Malaysia and five in East Malaysia -- in comparison to the nine seats it won in 1982.[5] The party was able to hold its ground in the Federal Territory where it was able to win four of the seats it contested.[6] In Penang, where the party was trounced badly in 1982 when it only managed to hold sway in two constituencies, the party won the majority of the seats in the state -- six out of eleven.[7] Perak was another state where the DAP did well. It recaptured the four seats it had lost in 1982 in the Kinta Valley -- the Chinese heartland of Perak which had always returned opposition candidates.[8] In Selangor and Negri Sembilan, where the party did not win any seats previously, it was able to capture two urban seats in each state.[9] The party made further headway in East Malaysia where it won in four constituencies in Sabah compared to one in the previous election, certainly a notable achievement for a party which had hardly any machinery and party workers prior to the elections. In Sarawak, it suffered a slight setback and lost in one of the constituencies it had won in 1982.[10] (See Table 1).

This good showing in terms of Parliamentary seats is also reflected in the popular votes obtained by the party. The DAP obtained 20.39 per cent of the total votes cast in the Parliamentary elections which was more than the combined votes cast for the two Chinese-based parties in the coalition, which

Table 1
Number of Parliamentary Seats won by Party and State
in the 1982 and 1986 Elections

State \ Party	Barisan Nasional	DAP	PAS	Independent	Total
Perlis	(2) 2				(2) 2
Kedah	(12) 14		(1)		(13) 14
Penang	(7) 5	(2) 6			(9) 11
Perak	(21) 19	4			(21) 23
Selangor	(11) 12	2			(11) 14
N. Sembilan	(6) 5	2			(6) 7
Malacca	(3) 4	(1) 1			(4) 5
Johor	(16) 18				(16) 18
Pahang	(8) 10				(8) 10
Trengganu	(7) 8				(7) 8
Kelantan	(8) 12		(4) 1		(12) 13
Federal Territory	(2) 3	(3) 4			(5) 7
Sabah	(10) 15	(1) 4		(5) 1	(16) 20
Sarawak	(19) 21	(2) 1		(3) 2	(24) 24
Labuan	(*)	(*)	(*)	(*) 1	(*) 1
TOTAL	(132)148	(9) 24	(5) 1	(8) 4	(154)177

Notes: * Did not exist in the 1982 Elections.
Figures in brackets are for the 1982 Elections.

Source: Compiled from Khong K.H. "Results of the 1982 Malaysian General elections' in *Jernal Pentadbir* (University of Malaya Public Administration Club, 1984) p. 52 and *The Star*, 5 August 1986 (Election Supplement).

together managed to secure only 15.57 per cent of the votes.[11] In the Federal Territory where it won only 46 per cent of the votes in 1982, the DAP took 52.9 per cent of the votes cast this time.[12] In Penang, it had a 3.74 per cent increase over the previous 35 per cent and in Perak, its share of the popular votes was 27.9 per cent, an increase of 2.9 per cent.[13]

An examination of the Parliamentary results and the population make-up of the constituencies shows that the DAP is strongest where the concentration of the Chinese population is highest. With the exception of three constituencies --

Rasah in Negeri Sembilan, Tanjong Aru and Tawau in Sabah, all the DAP victories have been in constituencies where the Chinese constitute at least 50 per cent of the electorate. It can be observed that in constituencies where the Chinese constitutes at least 60 per cent of the electorate, the party won convincingly by big margins. This can be shown by the six victories in Penang, four in Perak, three in the Federal Territory, one in Selangor, one in Malacca and two in Sabah. In constituencies where the Chinese constitute between 50 per cent to 60 per cent of the elctorate, the DAP's chances were marginal. If the party won those seats, the margin of victory was usually narrow.[14] In cases where the party lost, as in Taiping, Bruas, Kelang, Bakri and Kluang, its candidates lost narrowly. An interesting point to note is that while the DAP had done well in the urban, mainly Chinese populated areas in the west coast of the peninsula, Johor seems to be the exception. No DAP candidate was successful, even though there were four constituencies where the Chinese constituted at least 50 per cent of the electorate and in two constituencies, Segamat and Senai, the party lost by quite substantial margins. It can be concluded that the party is relatively weak in this state compared to others.

In the State elections, the DAP performed equally well. It entered 114 candidates, ten less than 1982, but this time, the party won 37 state seats compared to only twelve previously.[15] Table 2 shows the number of constituencies contested by the DAP and PAS in each of the states.

In areas where the DAP had done well in the Parliamentary elections, the party has also been able to maintain the support in the state elections. In Penang and Perak, there was a strong rebound with ten and thirteen victories respectively compared to two and four seats in the 1982 elections.[16] Despite the very much improved performance in Penang, it should be noted that the party did not do as well in the State election compared to the Parliamentary election. It lost in seven constituencies where the Chinese constituted at least 50 per cent of the electorate. In these constituencies, perhaps local factors and personalities helped the opponents of the DAP. In Selangor, Negeri Sembilan and Malacca, the party took twelve seats compared to five previously.[17] The DAP is still very weak in the Malay belt in the northeast -- Perlis, Kedah, Kelantan and Terengganu. It contested only five out of the 113 seats available in these four states and lost in all.[18] In two other states, Johor and Pahang, the party also did badly, winning only one seat in each state out of a total of eleven constituencies where the Chinese constituted 50 per cent of the electorate in the constituency.[19]

Several reasons can be suggested for the DAP's gain of support and influence in the urban Chinese areas. First, there is the frustration among the Chinese population. Since independence, the government has adopted policies which are seen by the Chinese population to be to their disadvantage. Special privileges for the Malays in education, admissions into the civil service, selec-

Table 2
Number of State Seats Contested and Won by the DAP and PAS in the 1986 Elections

State	Seats Available	DAP Contested	DAP Won	PAS Contested	PAS Won
Perlis	14	--	--	14	0 (1)
Kedah	28	3	0 (0)	28	3 (2)
Penang	33	22	10 (2)	15	0 (0)
Perak	46	25	13 (4)	32	0 (0)
Selangor	42	18	5 (1)	29	0 (0)
N. Sembilan	28	13	4 (2)	13	0 (0)
Malacca	20	8	3 (2)	14	0 (0)
Johor	36	10	1 (0)	20	0 (0)
Terengganu	32	--	--	32	2 (5)
Kelantan	39	2	0 (0)	39	10 (10)
Pahang	33	13	1 (1)	29	0 (0)
Total	351	114	37 (12)	265	15 (18)

Note: Figures in brackets show the number of seats won in the previous 1982 election.

Source: Compiled from Khong K.H., *op.cit.*, p. 53 and *The Star*, 5 August 1986 (Election Supplement), p. 1.

tion for participation in land development schemes, and since 1970, special advantages to the Malays in trade, commerce and industry under the New Economic Policy -- all these are perceived by the majority of the Chinese to be discriminatory. They feel that they are not given equal treatment even though they are citizens of the country. The Chinese are also unhappy about certain government policies related to the Chinese language, education, culture and religion. Increasingly, there is a fear that these would be totally suppressed with the intense promotion of Malay culture as the national culture and Islam as the official state religion.[20] The Malays feel protected by the United Malay National Organization (UMNO) because this dominant party in the national coalition had ensured the adoption of pro-Malay policies by the government but the majority of the Chinese feel that the MCA has not been effective at all despite the fact that the party is part of the ruling coalition. In the 1982 elections, the Chinese community gave strong support to the MCA to ensure the effective representation of Chinese interests in the government, and almost all

the MCA candidates were returned in the Parliamentary and state elections.[21] Despite that, the MCA leadership did not seem to be effective in bringing about any significant change to government policies in the interests of the Chinese community. Since the MCA did not live up to the expectations of the commmunity and government policies always seem to put the Chinese community at a disadvantage, the party lost its credibility. In frustration and protest, the Chinese electorate decided to turn against the MCA in the 1986 elections and voted for the DAP candidates.[22]

Secondly, the DAP benefited from the internal party squabble of the MCA. For 20 months, two leading factions of the MCA were locked in a contest for the control of the party. The squabble not only paralyzed the effectiveness of the party in the representation of the community's interests but also created a very negative impression of the party among the Chinese population as the party's "dirty linen" was washed in public.[23] The crisis affected the selection of candidates for the elections; supporters of the victorious faction in the party struggle were not willing to allow people in the other faction to contest even though they might have had the advantage in their local constituencies. Some candidates were chosen at the last minute before nomination day, giving them insufficient time to make the necessary preparations. Other candidates were too new and their faces were not known to the electorate. The short campaigning period of 16 days between nomination and polling gave them little time to get aquainted with the voters in their constituencies. It was reported that even on the eve of nomination day, the MCA's candidates list was not ready. Last minute changes were still being made as some who were chosen declined to stand.[24] Equally damaging to the MCA was the fact that the party's crisis was only solved through outside interference -- in the form of an ultimatum from UMNO, the senior partner in the coalition. It appeared to many people that MCA leaders seemed to be tough among themselves, but did not have enough toughness when it comes to their relations with the UMNO leaders. When the UMNO leaders gave the orders the MCA leaders obeyed. This certainly did not create a good image for the party to carry into the elections. The DAP therefore benefited through default -- the weakness of its opponents.

Thirdly, the cloud over the MCA President benefited the DAP in the elections. After his election to the Presidency of the party, Mr Tan Koon Swan was arrested and charged in Singapore for a variety of offences -- ranging from abetting in a criminal breach of trust to illegal tranfers and exchanges of shares and rigging of the stock market. His name was also closely associated with the collapse of Pan El, one of the biggest corporations, in Singapore. The case was serious enough to cause a suspension of the Stock Exchanges of both Singapore and Malaysia for two days. Even before Mr. Tan could clear his name over the Pan El affair, rumours in the community linked him to the illegal use of the funds of Multi-Purpose Holdings -- one of the largest companies in Malaysia

and one which was promoted by the MCA. Mr. Tan was alleged to have used $40 million of the company's funds illegally to tide over some of his personal financial difficulties.[25] Even though he had subsequently resigned as managing director of the company and voluntarily reimbursed the company the same amount of money, the popular perception of impropriety could not be eliminated. The party President's image was tainted, so too was the image of the party. The negative view of the MCA which the Chinese community had held in the past came back to the fore; that it was a party of business tycoons, interested only in wheeling and dealing to promote their self interest rather than in the fight for the rights of the community. The large majority of the electorate therefore could not support the MCA. Thus, they turned to the DAP.

Fourthly, the "neutrality" of the Chinese educationist movement in this election could have also benefited the DAP. In the 1982 elections, the United Chinese School Teachers Association (UCSTA) and the United Chinese School Committees Association (USCCA) which together constituted the umbrella organisation for all those who are involved in Chinese education in Malaysia, supported the ruling Barisan Nasional coalition.[26] This endorsement was used by the government to deflect one of the major criticisms made by the DAP -- that the government had suppressed Chinese education in Malaysia and that the Chinese component party in the ruling coalition, the MCA, had not been able to do anything positive to safeguard Chinese education. In previous elections, the Barisan Nasional had made capital of the point that the Chinese educationists would not have seen it fit to support the ruling coalition if the government's policy towards Chinese education had not been sincere and fair. The DAP, therefore, could not make much headway with the voters on this very important issue.

In 1986, the Chinese educationist movement was split and there was no official endorsement of the Barisan Nasional by the UCSTA and the UCSCA (though some educationists did campaign for the ruling coalition in their individual capacities). Furtheremore, the UCSTA and the UCSCA supported the Civil Rights Committee, an organisation which was critical of government policies, including those policies related to Chinese language and education.[27] The Civil Rights Committee had stressed on the need to have an effective opposition in its public education programme at the time of the elections. Thus, the DAP benefited indirectly from the new involvement of the Chinese educationists.

Finally, the DAP was seen as one that had the courage and conviction to articulate its position on current issues which were of concern to the urban electorate. Two clear cut examples were the BMF affair and the Sabah incidents. BMF, a finance company set up in Hong Kong, was a subsidiary of the government Bank Bumiputra, the largest bank in Malaysia. There was ample evidence to show that officials of the BMF were involved in unsavoury financial

transactions and loans which led to a massive loss of $2.5 billion.[28] Despite the public clamouring for details and a Royal Commission of Inquiry to bring to book those people responsible for the gross mismanagement and corruption, the MCA kept silent on the whole issue. It was the DAP that kept hammering at the impropriety of the affair.[29]

In the case of Sabah, there were attempts to destabilize, rioting and bombing.[30] The opposition Parti Bersatu Sabah (PBS) which had just defeated the Barisan government was therefore put under great stress. Understandably, the MCA as a Barisan Nasional member, took no public position on this issue. West Malaysians who had been observing the developments in Sabah were therefore much more impressed with the DAP which came out unquivocally in the defence of the democratically elected PBS government and the condemnation of the central government which was responsible for the internal security matters of Sabah. Thus on both these two issues, the DAP was seen to be fighting for justice and fairness and this created a good impression for the party.

Since its formation, the party had championed the rights of the Chinese and Indians for equal opportunities in Malaysia's political life. In the 1986 election, the party's vociferous criticisms of the government for discriminating against the non-Malay communities struck a consonant cord with the aspirations of large sections of the Chinese and Indian population; particularly those from the lower classes whose chances for social mobility were stymied by government policies. The DAP was therefore in a position to profit from the frustration and "anti-establishment" mood of the people.[31] The DAP has also been in the forefront in the campaign for clean government against mismanagement over the BMF affair, malpractices over the Employees Provident Fund share dealings, the dubious way in which the Finance Minister acquired majority share ownership of the United Malayan Banking Corporation (UMBC) -- the third largest bank in Malaysia -- all these put the party in a favourable light among the urban population who were concerned about the abuse of power among those in the ruling circles. The party's objective -- to deny the government a two-thirds majority in the Parliament to prevent further abuses of power was therefore well received. Of all the urban Chinese based parties, the DAP was the only one which not only refused to join the PAS-led opposition coalition, but also came out unequivocally against PAS' Islamization programme.[32] The Chinse voters, who were frustrated with the government, were also frightened by the idea of an Islamic state. They did not want to give their support to any of the opposition parties associated with PAS but supported the DAP instead.

Parti Islam

Parti Islam (PAS) entered the election fray with a fury, expecting to take control of the state government in Kelantan and to do well in Terengganu. A

total of 98 Parliamentary and 265 state candidates were fielded for the elections.[33] The results were surprising, not only to the party itself but to its opponents as well. PAS only managed to win in one Parliamentary constituency in Kelantan compared to five it won in 1982.[34] All the party's top leaders were defeated. A total of 21 Parliamentary and 41 state candidates lost their election deposits for failing to get at least 12.5 per cent of the votes cast in their constituencies.[35] Nonetheless, in terms of the popular vote, the party's performance was creditable. This in particularly true in the northeast Malay belt where it continued to have a strong following. In Perlis, it took 32.69 per cent of the votes, and in Terengganu and Kedah, voter support were 38.72 per cent and 36.6 per cent respectively.[36] In Kelantan, it was also able to hold its ground compared to its performance in the 1982 elections, capturing 44.78 per cent of the votes.[37] For the country as a whole, PAS won 15.6 per cent of the votes, a slight increase of one per cent over the 1982 score.[38] This improvement, however, has to be seen in the light of the fact that PAS entered many more candidates for the Parliamentary election.

In the state elections, PAS performed slightly better. The party managed to hang on to ten seats in Kelantan, the same number it won in 1982. The contest in this state, however, was much closer than the results indicate. Given the fact that there are 21 constituencies where either PAS or the Barisan Nasional had a majority of only less than 1000 votes, it would not be inaccurate to suggest that those constituencies could have gone either way. In eight of the constituencies, PAS candidates lost by less than 500 votes[39] and in six, by less than 1000 votes.[40] In Terengganu, the party was down by three seats, with only two victories, and in Kedah, it took three seats (see Table 2). In Terengganu, too, the race was much keener and PAS lost by less than 1000 votes in nine constituencies.[41] If the party entered the elections with the ideal of getting representation in the State Legislative Councils, fifteen successes out of 265 contested[42] must have been disappointing.

The question on the lips of many people after the election results were known was "Why did PAS do so badly?" The large crowds that PAS attracted to its *ceramahs* (group meetings) before the election campaign must have created an overestimation of strength, both in the party as well as outside. That could be part of the explanation. Also, PAS itself made several strategic mistakes that alienated it from the voters. As far as the Chinese and Indian voters went, PAS's campaign for an Islamic state instilled some fear. As non-Muslims, they feared that they would have absolutely no stake nor rights in a fundamentalist Islamic order. Statements made by some PAS leaders did not help at all: non-Muslims would be kept out of the Cabinet and decision making bodies of the government; Islamic laws would be applicable to the non-Muslims; gambling, liquor, and even pop music would be banned; women voters would be disenfrachised.[43] Such statements were not acceptable to most non-Muslim

voters. With the mass media under the complete control of the Barisan and employed fully during the election, PAS did not have much of a chance with the Chinese and Indian electorate, as a very negative image of the party was created.[44] Thus, despite the fact that PAS made some very important policy announcements which, by themselves, would have had great appeal to the non-Malays, like the repeal of the special priviledges for the Malays and the acceptance of Chinese and Indian medium education in the country,[45] the vast majority of the Chinese and Indian voters were not enthusiastic about the party's unswerving Islamization policies.

There are a number of reasons why the majority of the Malay voters also withheld their support for PAS. First, the idea of Islamic fundamentalism as promoted by PAS is still somewhat controversial. Many people, rightly or wrongly associated the PAS programme with the Iranian brand of Islam. While the stringent, almost cultish lifestyle and values that are demanded might be acceptable to some Malays, they are by and large of limited appeal to others who do not want the Islamic religion to dominate every facet of their life and activities. The militant behaviour displayed by the PAS members and supporters in their motorcycle parades during the period of the election campaign bordered on intolerance and arrogance towards those who were not close to the party. Instead of whipping up enthusiasm for the party, these activities turned people off.[46]

Second, PAS' establishment of the Chinese Consultative Committee (CCC), and its subsequent efforts to lead an opposition front in a coalition with three other small parties with a joint declaration, confused not only its own members but its potential supporters as well.[47] Long before the elections, PAS had campaigned on the issue of *kafir-mengafir*, that is, it had accused UMNO for betraying the cause of Islam by joining together with the non-Islamic parties in the Barisan. Yet PAS found itself doing the same thing for the purpose of the elections. The Chinese Consultative Committee was set up to spearhead PAS' drive into the Chinese community. For years, PAS had neglected and, in the process, also alienated the Chinese community. However, its new leadership realised the need for Chinese support, in the immediate electoral contest and in the long-run, in view of the fact the Chinese constitute 35 per cent of the population in the country. In the Opposition Front, *Harakah Keadilan Rakyat*, PAS joined forces with two socialist and one nationalist party. PAS had, for a long time, also suggested that socialism and nationalism were two ideologies which were anathema to the principles of Islam. Socialism was associated with atheism, almost by definition, and nationalism contradicted Islamic universalism. An alliance with the Parti Sosialis Rakyat Malaysia (PSRM), the Socialist Democratic Party (SDP) and the Parti Nasionalis Malaysia (Nasma) caused a lot of confusion to the PAS's supporters and would-be voters for the party. The party leadership also did not have sufficient time, resources and machinery to

convince its other sympathizers of the neccessity for this opposition coalition. The fact that the Barisan controlled the mass media and used it to distort the activities and programs of the opposition parties certainly did not help PAS in its campaign to clarify its actions to the voters.[48]

Third, the party's announcements on two controversial issues probabaly lost PAS quite a few votes among the Malay community. Guided by its ideology, PAS stated that it would repeal the provisions for special privileges for the Malays and other Bumiputera communities and even scrap the New Economic Policy.[49] Instead, Muslims of all races would enjoy the same privileges and the rights of the non-Muslims would also be respected. The potential conversion of special privileges based on race to one based on religion caused some apprehension among the Malays who feared that they may lose their special advantage in the country's political life. For the thousands of Malays who have benefited even marginally from special land allocation, subsidies for agriculture, educational scholarships, priority for positions in higher education and employment in the civil service, PAS' policy was certainly a disincentive. This was compounded by PAS' suggestion that though Bahasa Malaysia would be promoted as the official and common language of all the people, it would recognize the right of all communities to choose their own medium of instruction for their children's education. Towards this end, PAS stated that it would be prepared to repeal Section 21(2) of the 1961 Education Act which gives the government the power to convert national type schools (which use either Chinese or Tamil as the medium of instruction) to national schools where Bahasa Malaysia is the medium of instruction. While many Chinese and Indians would like to see the integration of Chinese and Tamil languages in the national education system, a large section of the Malay population remains adamant that Bahasa Malaysia should be the only official language of the country and the sole medium of instruction in education. PAS' policy on this issue created doubts among the Malay electorate.

Finally, it can be noted that PAS did not have the machinery to carry out an effective campaign in comparison to its rival -- UMNO. The party's electoral effort was spread out too widely and thinly.[50] It did not have enough election workers to canvass the voters at the ground level intensively, to monitor the sway in the electoral mood and to counter the propaganda of its opponent which was making full use not only of the party machinery but of the government machinery as well. It was also suggested that PAS' position on women and its reluctance to allow women to play an important role in the party and the elections also alienated the party from female voters, who constitute half the electorate.[51] Traditionally, in the rural areas, female party workers have always been an important part of the party machinery, particularly at election time. The inability or reluctance on the part of the party to recognize and utilize this resource was therefore a tactical error that cost the party its crucial votes.

PSRM, SDP NASMA and the Independents

A few other opposition parties took part in the elections and none of them succeeded in gaining entry either to the Parliament or any of the State Assemblies. Of all these, only the Partai Socialis Rakyat Malaysia (PRSM) gave a creditable performance. Though it entered the elections only in a small way, with four candidates in the Parliamentary and seven candidates in the State elections, it managed to win 1.25 per cent of the votes cast in the Parliamentary election.[52] Most of the party's efforts were concentrated in Johor and in one Parliamentary constituency, it almost unseated a Cabinet Minister. The party campaigned on a populist platform which included demands for limitation of government power and restoration of democratic rights, eradication of poverty and the promotion of the livelihood and facilities for the poor and the elimination of corruption and waste in government.[53]

The Socialist Democratic Party (SDP) ambitiously put up 19 Parliamentary and 30 State candidates throughout the urban areas.[54] Its programme was quite similar to that of the DAP as the party was formed and led by people who broke away from the DAP. However, the party, being relatively new, was in no position to compete against the DAP for the votes. A total of 14 Parliamentary and 27 State candidates, including the party leaders lost their election deposits for not being able to secure more than 12.5 per cent of the votes cast in the constituency.[55] Less than one per cent of the electorate voted for the party in the Parliamentary elections.[56] The party has now been dissolved.

Parti Nasionalis Malaysia (Nasma), a new party formed by some Malay professionals fielded four candidates for Parliament and eight for the State elections. Like the SDP, its candidates were trounced badly and lost their deposits. The party only obtained 0.22 per cent of the votes cast. Top leaders of the party quickly announced their resignation after the elections and the party is now defunct.

The Opposition in East Malaysia

In East Malaysia, only the Parliamentary election was held. Sabah had its State Legislative Assembly election only a few months before the general elections and the Sarawak Legislative Assembly still had a tenure of more than two years. In both these states, the opposition parties are relatively weak and they contested only in a few constituencies. The main opposition came from independent candidates. In Sabah 19 independent candidates contested in 12 of the 20 constituencies and in Sarawak, 28 independents stood in 19 constituencies out of the total of 24.

The large number of independents may be accounted by two factors. First, candidates who were not nominated by their parties to contest under the

Barisan banner found that the only chance for them to participate in the election was to do so as independents. Second, in view of the rivalry between the different partners in the Barisan coalition, it was not uncommon for a party to put up independent candidates to contest in constituencies where they were not contesting. In the case of Sabah, both Parti Bersatu Sabah (PBS) and United Sabah National Organisation (USNO), arch rivals in the context of state politics, were thus reported to have supported independents to oppose each other in constituencies which had been allocated to the other party by the national Barisan leadership. However, only one independent in Sabah and two in Sarawak were successful.

In Sarawak, the DAP contested in five constituencies and won only the Bandar Kuching constituency with its heavy concentration of Chinese (85.9 per cent). It lost in four others with a large Chinese population. A significant loss was Sibu which has an 83 per cent Chinese electorate in the constituency. The incumbent DAP Member of Parliament was defeated by a narrow margin of 519 votes.[59] In Sabah, the party did much better, winning four out of the five contests it entered. Though no breakdown of the ethnic composition of the constituencies are available, it is suggested that these are constituencies with a large Chinese population as even the candidates put up by the ruling Barisan coalition were also Chinese.

There were a few other opposition parties that took part in the election in Sabah. Berjaya, which was the ruling party in the State for the past ten years and a member of the Barisan Nasional, withdrew from the ruling coalition just before the elections and contested in eight constituencies.[60] Unfortunately for the party, it had become a pale shadow of its former self and was decisively defeated in all the constituencies. The election could very well see the end of that party. Of significance to the future politics of Sabah is perhaps the fact that Parti Islam had spread its wings to that State in the election. Though none of its four candidates were successful this time around, PAS could well prove to be the rallying point for Muslims who are disenchanted with the existing Muslim leaders in the State. The other party that took part in the election, Momogun, is no longer heard these days after its two candidates were defeated.

In terms of total votes, the opposition had performed very well in Sabah despite the fact that the opposition won only five out of the twenty contests. A total of 52.58 per cent of the valid votes were cast for the opposition parties compared to only 47.42 per cent for the Barisan coalition.[61] The election in Sabah is also noted for its low turnout -- only 51.2 per cent of the registered electorate voted.[62] This is probably due to the weariness on the part of the voters who had gone to the polls in the State elections just before the national elections and the confusing situation of Sabah politics. The standard bearer for the Barisan Nasional in the election was the Parti Bersatu Sabah (PBS), the

very party that was the rallying cry of the anti-Barisan sentiments in Sabah from the time it was formed 18 months before the national election. Until the national election, PBS was the darling of the opposition in the campaign against the Barisan. The admission of the PBS into the Barisan Nasional coalition just a month prior to the national election complicated the political scene. Thus, the PBS, which for the past 18 months had been campaigning against the Barisan's *dacing* (scales of justice) symbol found itself asking its supporters now to vote for the *dacing*. This turnabout was probably confusing and caused many voters to stay away from the Parliamentary elections.

Conclusion

It can be said that the opposition got mixed results in the elections. In the urban, mainly Chinese populated areas, the opposition had been able to tap the discontent among the people and galvanise them for electoral victories. In the rural constituencies, the opposition's message had not seeped down far enough to be translated into electoral victories. In Malaysia's elections, the opposition has always suffered from certain built-in disadvantages. The 1986 election was no exception. Only a short period was allowed for the campaign with seven days between nomination and polling. This disadvantage was accentuated by the fact that the opposition parties were not given access to state facilities like radio and television which were hogged by the ruling coalition. While the activities of the government leaders were given maximum publicity prior to the election, there was almost a blackout on the opposition. The major newspapers, were either owned or controlled by the member parties of the ruling Barisan Nasional, were generally unsympathetic, slanting their reports to the disadvantage of the opposition parties. The ban on election rallies, was, in fact, applicable largely only to the opposition parties. Under the guise of official welcoming receptions, members of the ruling coalition had been allowed to organise outdoor meetings. In fact, since the beginning of the year, the Chairman of the Barisan Nasional, in his capacity as Prime Minister, had been criss-crossing the country, speaking to large crowds that were organised to 'welcome' him. In addition, the ruling party also made use of other state facilities which were not given to the opposition parties. Public funds were handed out by 'ministers' and their deputies in places where they campaigned, ostensibly to show the government's committment to developkent projects in these areas. The Ministry of Information put up billboards throughout the country with pictures of the nation's leaders and many civil servants at the grassroots became part of the election machinery of the ruling party. The opposition parties got nothing in all these instances. Unlike in other countries, where the opposition has the chance to become the alternative government, the opposition in Malaysia is still too fragmented and weak to come near that. This is a

handicap in terms of easy access to financial resources. Corporations which make financial contributions are unlikely to make such contributions to opposition parties for fear of identification with them and punitive action from the government. The shortage of funds hampered the effective organisation of smooth election campaigns. The opposition parties did not have enough funds to buy television time, newspaper space, to print propaganda materials or to employ election workers. Perhaps, given these limitations the opposition parties did remarkably well.

The DAP has never had so many representatives in the Parliament in its history. Yet it should be noted that there are limitations to the further advancement of the party. Out of the present 177 constituencies in the country, only 32 have Chinese majorities. Given this fact, the DAP must move beyond its Chinese base if it hopes to do better. Perhaps some modification to some of its policies is needed. In any case, it must create a different image for itself if it should want to win some support from the Malay voters.

For PAS, the defeat at the election must have been a great disappointment. There is as yet no solid evidence to prove the claim by PAS leaders that the constituency delineation exercise carried out two years before systemmatically descriminated the party.[63] The party's strongholds were reported to have been carved out and redistributed into other constituencies, resulting in a dilution of their support. For this election, PAS made some very important changes to its strategy in relation to the Chinese community. In addition to the announcement regarding the abolition of Malay special priviledges and the New Economic Policy, the party stated that it would recognize the right of the Chinese to maintain their culture and language even though the Malay language and Islam are the national language and official religion respectively. PAS also set up the Chinese Consultative Committee to spearhead its drive into the Chinese community and later teamed up with three other smaller parties in an Opposition Front for the purpose of the elections. The strategy backfired this time and PAS did not seem to have made further headway with either the Chinese or Malay communities beyond what it already had. It is likely that the party will continue with this strategy which is seen to be in conformity with its interpretation of the Islamic ideology. The leaders of PAS have set its long term objective as the establishment of an Islamic state, and since they have only been at the helm in two state governments for a relatively short period, this election can seen to be an exercise in a long-term struggle. In fact, at the recent General Assembly of the party, the leadership emphatically stated that the "war" is far from over even though the party had just lost a "battle". In view of the fact that Malays are in the majority in about three-quarters of the constituencies in West Malaysia and that the tendency of the electorate is to vote along ethnic lines, PAS appears to be the only opposition party that is in a position to challenge UMNO and the Barisan. Thus, how PAS plays the game and how well its

policies are accepted by the electorate will determine the outcome of future elections in Malaysia.

There is at least one far-reaching consequence that stretches beyond the elections. The Chinese partners in the ruling coalition were quite badly defeated by the DAP in the Chinese-dominated urban areas. In view of the electoral decimation of the Malay opposition by the Barisan, the result is a Malay dominated government with a Chinese-based opposition. In the national debate, UMNO will continue to justify its pro-Malay policies. The DAP, to maintain its base among the Chinese electorate, will continue to be critical of those policies. It is unfortunate that politics is seen as a zero-sum game -- that one side can only benefit at the expense of the other. But, particularly at the time of recession, when economic growth is negligible if not declining, that perhaps is unavoidable. It is likely that the ethnic polarization which is already so clearly reflected in the election results could be accentuated by what may be seen as a broadly pro-Malay and Chinese confrontation in the Parliament.

Notes

1. *Asiaweek*, 27 July 1986, p.12
2. The government's refusal to give any significant information regarding the loss of 2.5 billion ringgit (Malaysian dollars) in relation to the Bank Bumiputra Finance (BMF) loans in Hong Kong and subsequent refusal to set up a royal Commission of Inquiry gave the public an impression of a "cover up" because leading personalities in the government were involved in the whole affair. Before the air over the BMF scandal could be cleared, rumours of stock market manipulation and impropriety over Pan El, a multi-national corporation registered in Singapore were associated with the President of the second largest party in the ruling coalition. Mr Tan Koon Swan was subsequently convicted by the Singapore Court for two years and went on to serve sentence for another conviction of criminal breach of trust in Malaysia. Many manifestations of impropriety were also seen in the transactions involving the third largest bank in the country - the United Malayan Banking Corporation. This time, the Finance Minister was involved. See *Asiaweek* 23 March 1986 p. 30a to 38d and *Aliran Monthly* June/July 86, Vol. VI: 6 p.2.
3. *New Straits Times*, 15 August 1986, *Times 2*, p. 1 & 2., July 1986.
4. National Union of Journalists (NUJ) -- Office Automation (OA) Election Results 1986, Table 1.
5. *The Star*, 5 August 1986 (Election Supplement) p. 1 and Khong Kim Hong, "Results of the 1982 Malaysian General Elections" in *Jernal Pentadbir* (Journal of Administration) (University of Malaya Public Administration Club, 1984), p. 52.
6. *The Star*, *op. cit.*
7. See Khong, *op. cit.* and *The Star*, *op. cit.*
8. *Op. cit.*
9. *The Star*, *op. cit.*
10. The Bandar Kuching Constituency which the DAP won in 1982 by a majority of 3577. See *New Straits Times*, 5 August 1986 (Election Supplement) p. 18.
11. NUJ-OA *Election Results '86* Table ER4.
12. Computed from NUJ-OA Election Results '86 Table ER7 p. 2, for 1982 percentages, see Khong, *op. cit.*, p. 59.

13. *Ibid.*
14. Of the remaining three Parliamentary Constituencies won, the DAP had a majority of 1,064 votes in Seremban (46,866 votes cast), a majority of 1,526 in Sungai Besi (45,408 votes cast) and a majority of 14,529 in Puchong (61,052 votes cast).
15. *New Straits Times* 5 August 1986 (Election Supplement), p. 7.
16. Khong, *op. cit.*, p. 53 and *The Star*, *op. cit.*, p. 1.
17. *Ibid.*
18. *New Straits Times*, *op. cit.*, p. 7-9.
19. *Ibid.*, p. 13 and 17.
20. See *Asiaweek*, 27 July 1986, p.10-16 for an assessment of the pre-election mood of the Chinese community and 17 August 1986, p. 32-38 for an analysis of the election results. See also *Far Eastern Economic Review*, 17 August 87, p. 32-38. *Malay Mail*, 4 August 1986, p. 7 and *The Star*, 14 August 1986, p.2.
21. Khong, *op. cit.*, p. 55.
22. See *New Straits Times*, 5 August 1986, p. 5 and 7; 12 August 1986, p. 8 and *The Star*, 14 August 1986, p. 2 and 15 August 1986, p. 15.
23. *New Straits Times*, 5 August 1986, p. 5, 6 August 1986, p. 7 and *The Star*, 14 August 1986, p. 2.
24. *New Straits Times*, 24 July 1986, p. 5; 5 August 1986, p. 5.
25. *Asiaweek*, 1 June 1986, p. 47.
26. Khong, *op. cit.*, p. 56.
27. *Asiaweek*, 27 July 86, p. 15.
28. See *Aliran Monthly*, June/July 1986, Vol. VI. 6 and *BMF: The People's Black Paper* (Petaling Jaya: Institute of Social Analysis, no date: 1986).
29. *Asiaweek*, 9 February 86, p. 32.
30. See Khong Kim Hoong, "Leadership Crisis in Sabah" in *Ilmu Masyarakat*, Julai-Sept. 1987, p. 21-22.
31. *Asiaweek* 17 August 1986, p. 34.
32. *Ibid.*, 27 July 1986, p. 15.
33. NUJ-OA, *op. cit.*, Table P1.
34. *New Straits Times*, 5 August 1986 (Election Supplement), p. 7 and Khong, "Results of the 1982 Malaysian General Elections", *op. cit*, p. 52.
35. *New Straits Times*, 6 August 1986, p. 2.
36. Compiled from NUJ-OA, *op. cit.*, Table ER7 (p. 2.).
37. *Ibid.*
38. *Ibid.*, and Khong, *op. cit.*, p. 60.
39. They are Geting, Wakat Baharu, Meranti, Bt. Tuku, Peringkat, Tawang, Selising and Banggol Indah. *The Star*, 5 August 1986 (Election Supplement) p. 3, 4.
40. They are Sungai Pinang, Gual Periok, Chetok, Salor, Jeli and Dabong, *Ibid.*
41. They are Hulu Besut, Jabi, Teluk Pasu, Batu Buruk, Serada, Bt. Payung, Binjai Manir and Sura, *The Star*, 5 August 1986 (Election Supplement), p. 4.
42. Compiled from *The Star*, *ibid.*
43. See *New Straits Times*, 25 July 1986, p. 8; 26 July 1986, p. 8; 27 July 86, p. 1 and 3; 1 August 1986, p. 7.
44. *Ibid.*
45. *The Star*, 27 July 1986, p. 4.
46. *Ibid.*, 9 August 1986, p. 4 and *New Straits Times*, 5 August 86, p. 10.

47. *The Star*, 9 August 1986, p. 4 and *New Straits Times*, 15 August 1986, Pt. 2, p. 1.
48. *Ibid*.
49. *New Straits Times*, 15 August 1986, p. 1 and 8.
50. *The Sunday Star*, 10 August 1986, p. 6 and *New Straits Times*, 15 August 1986, Section 2, p. 1.
51. *New Straits Times*, *ibid*.
52. NUJ-OA, *op. cit.*, Table ER4.
53. See PSRM election Manitesto.
54. NUJ-OA, *op. cit.*, Table ER4.
55. *New Straits Times*, 6 August 1986, p. 2.
56. NUJ-OA, *op. cit.*, Table ER4.
57. *The Star*, 13 June 1988, p. 2.
58. *New Straits Times*, 5 August 1986, Election Supplement, p. 18.
59. *Ibid*.
60. *Ibid*., p. 17.
61. NUJ-OA, *op. cit.*, Table ER6.
62. *Ibid*., Table ER7, p. 2.
63. *The Star*, 10 August 1986, p. 6.

Money Politics and Dayak Nationalism: The 1987 Sarawak State Election[1]

Michael Leigh

In each decade since 1963 there has been one election in Sarawak the outcome of which has had important consequences for the future of the state.

The 1963 poll was crucial in determining whether Sarawak would willingly enter Malaysia, and in establishing Alliance party leadership of the state. The Sarawak Alliance was a grouping of four local political parties: SNAP, PESAKA, BARJASA and SCA.[2]

An alternative grouping of two opposition parties, SUPP and PANAS went close to gaining enough seats to re-open the whole question of whether Sarawak would enter the Malaysian federation.

The 1974 election was a test of whether the multi-racial SNAP, based upon the support of the Dayak and Chinese communities could wrest leadership of the state from the Muslim-led Coalition Government of Abdul Rahman Yakub, a government that had come to power on the slimmest of majorities but had strong Federal backing. The margin of victory was again quite narrow.

The premature 1987 poll was in certain respects equally important, though the final consequences may yet take some time to emerge. Again the victorious party was that which had the support of the incumbent federal Prime Minister. Whereas in 1974, the opposition was drawn principally from the Dayak and Chinese communities, in 1987 it came from alienated Bumiputeras, indigenous non-Muslim and Muslim alike. Whereas the Dayak communities strongly supported the Alliance in 1963, in these later critical elections they have indicated their lack of enthusiasm for the ruling state governments. By contrast, whereas the Chinese community were overwhelmingly against the Alliance party in 1963, and less than enthusiastic about Abdul Rahman Yakub's Coalition Government in 1974, in 1987 they strongly backed the incumbent leadership. Finally, the Muslims were grievously split in 1963, but were strongly united under Abdul Rahman Yakub in 1974. However in 1987, Abdul Rahman Yakub, the man who had done so much to unite that community was now leading a new party, PERMAS, a party that threatened to seriously divide again the Muslim community of the state. The position of political leadership

held by the majority Muslim community, which only accounts for 26 percent of the state's population, is heavily dependent upon Federal backing plus their own political unity, hence the danger to the Muslim leadership of such divisions. Given that political reality it is important to first discuss the development of the cleavage in Muslim support that led to the efforts to topple the Chief Minister and his calling of the premature 1987 State elections.

Prelude to Polling

Tun Abdul Rahman Yakub decisively re-shaped Sarawak politics during the period of his Chief Ministership, from 1970 to 1981. He was aided in his task by the favourable economic circumstances of the 1970s. His assuming office coincided with the introduction of Malaysia's New Economic Policy, a policy that was designed to shift productive economic resources from the hands of foreigners and immigrants to the indigenous segment of the population. His close friendship with the late Prime Minister Tun Razak was of considerable assistance to his endeavours.

Following the ascension to power of Hussein Onn, and the scrupulous regard for the law that the new Prime Minister brought to his office, the federal dimension no longer worked in Abdul Rahman Yakub's favour. For reasons of poor health and federal pressure, he agreed to retire in 1981, handing over the post of Chief Minister to his nephew, Abdul Taib Mahmud, and himself being elevated to the position of State Governor.

There was no expectation in Sarawak that Abdul Rahman Yakub would be relinquishing real power, for a whole web of loyal lieutenants remained in place. They were indebted to him for their positions and for past favours.

On the other hand, Abdul Taib Mahmud came into office with the strong backing of Kuala Lumpur and neither he, nor his federal supporters, were happy for him to act as a mere cipher.

As a result, fissures gradually emerged between those owing loyalty to the new Chief Minister, and those who owed their allegiance to the Governor, the former Chief Minister.

For the first two years in office (1981-83) though there had been a formal change of leadership, in reality there was continuity of policy, personnel and even of leadership. However, there were subtle signs of growing restiveness in both camps. Abdul Taib Mahmud was personally unwilling to be directed by his uncle, yet the uncle had the highest office in the state and Abdul Rahman Yakub's former subordinates maintained effective control over critical areas such as the granting of timber licences, the issuing of permits for land subdivision and the award of government contracts. However, during this period those same people were slowly being eased from the principal positions of influence. On several occasions Abdul Rahman Yakub tried to 'stop the rot.'

Abdul Taib Mahmud persisted, and avoided placing himself in a personally vulnerable position by declining various calls by the Governor to meet with him at the Istana, the Head of State's official residence. The Governor expressed his criticism on several occasions, but at that time it appeared that the differences were not of fundamental import.

The first public evidence of the depth of the schism was when the Chief Minister walked out during the Governor's speech opening the new port at Bintulu. In that speech Abdul Rahman Yakub had strenuously criticized the failure of the federal government to meet its promises to build a new airport and open a university campus in the Bintulu area. This public demonstration marked the start of a new phase in the relationship, one marked by the necessity for the politically and commercially ambitious to declare their support for one side or the other. The Chief Minister responded publicly and quite emotionally to Abdul Rahman Yakub's attacks upon the Federal Government. He also worked closely with a coterie of trusted appointees within the government and in the statutory agencies and sought to limit the influence of Abdul Rahman Yakub's earlier appointees.

The Economic Dimension

More critically, the economic cake that had been growing, providing a greater share for all involved in the distribution of benefits, no longer grew so fast. The bottom had fallen out of the timber market. In any case, practically all the best logging areas had already been handed out as concessions. Supporters who had received benefits in the past could no longer count upon the largesse that flowed from timber wealth.

Trenchant criticism of the Federal authorities was expressed in the State Assembly by the Rahman loyalist, Wan Habib.

> The Federal Government seemed only to be interested in the state's wealth and not in its needs.... Projects like the building of hospitals, airports and universities are being shelved.[3]

The 1985 'Attempted Putsch'

The Governor's supporters came to appreciate their vulnerability and pushed their mentor to resume the exercise of effective power, which he had wielded as Chief Minister and in his first years as Governor. In the absence of his intervention, and with shrinking resources at their disposal, there was a danger that his former underlings would start to bicker amongst themselves and be picked off one by one.

So began a concerted effort, at the start of 1985, to tame or be rid of Abdul Taib Mahmud. First the Governor wrote a lengthy 'personal' letter to Abdul

Taib Mahmud that was copied to Prime Minister Dr Mahathir and widely read in political circles. The letter severely castigated 'Anakanda Abdul Taib' for his poor political and personal judgement. Abdul Rahman Yakub ended with the following words:

> I venture to suggest that if you find [sic] unable to change from your present thinking and ways of doing things in Sarawak, you had better make an honourable exit. Pesaka Bumiputera Bersatu will decide who should be your successor. I don't intend to fight you. You are too small for me.[4]

Then, whilst the Chief Minister was on holiday in Canada, there began an unprecedented and virulent press campaign in the Sarawak Tribune, a newspaper owned by supporters of Abdul Rahman Yakub. A range of criticisms were detailed, including the charges that Abdul Taib Mahmud was inacessible, he relied upon bomohs (medium shamanists) for guidance and that he leaned too heavily towards the Chinese. Matters needed to come to a head because the Governor's term of office ended on April 1, 1985. Any recommendation for an extension of his appointment, or the name of a prospective replacement, had to be sent to the King by the Chief Minister. The King was not constitutionally bound to accept such a recommendation. So on the one hand, the Governor was beholden to his nephew to recommend the extension of his term of office. However, on the other hand the Governor himself still had considerable power to influence the outcome.

After a constitutional impasse in 1967, when Chief Minister Ningkan refused to call a meeting of the Council Negeri where his supporters were believed to be in a minority, the Federal Parliament passed an amendment to the State Constitution. The Governor was henceforth empowered to call a meeting of the State Legislature, irrespective of the wishes of the Chief Minister. If at that meeting it could be demonstrated that the Chief Minister no longer had the support of a majority of members then he would be replaced.

In order to dismiss the Chief Minister, before the latter could make his recommendation to the King, 25 members of the State Legislature would be needed to vote their no confidence in Abdul Taib Mahmud as Chief Minister. At the beginning of January 1985 it was widely believed that 18 to 19 members were prepared so to declare. The subsequent strenuous press campaign maligning Abdul Taib Mahmud was designed to create a bandwagon effect and thus help win over sufficient extra members of the Dewan Undangan Negeri (the State Legislature) to achieve the desired outcome. If Abdul Taib Mahmud was to be ousted, then it would be impolitic for members to be too closely aligned to 'the loser'.

Sensing the gravity of his position, the Chief Minister routed his return to Kuching (on January 13) via Kuala Lumpur, in order to confer with his Federal

allies. He was welcomed back to Sarawak by a crowd of some 15,000 that significantly did not include very many of his own party members.[5] However, the SUPP ensured that thousands of its supporters were there to make up the numbers, a fact that was noted by both sides of the dispute. Then the Deputy Prime Minister, Datuk Musa Hitam, arrived in Sarawak and announced the Federal Government's firm support for Abdul Taib Mahmud, as Chief Minister, as he was the democratically elected leader of the state. Datuk Musa went on to warn that the Istana (the Governor) "should not interfere in the administration of the state".[6] This caused a closing of the ranks behind Abdul Taib Mahmud, once the alternative -- of his immediate replacement -- appeared closed. The Governor returned home several days later, and issued a statement to the effect that he was above politics.

That round in the dispute went to the Chief Minister who had played the federal trump card. But his dependence upon outside intervention, and his alleged lack of a broad base of local support, left him vulnerable to deposition from the position of leadership of his own political party. So he sought to shore up his authority by touring the state, addressing large gatherings (numbering 5,000 to 10,000 on each occasion) in Sibu, Miri, Serian, Kapit, Mukah, Sarikei and Limbang.

Abdul Taib Mahmud subsequently chose the path of confrontation rather that concidliation (a) by recommending the appointment of Ahmad Zaidi to replace Abdul Rahman Yabkub as Governor and, (b) further freezing out from positions of influence those whom he considered owed their prime loyalty to his predecessor.

He then went on the campaign publicly against the influence of the 'money men' in politics, whilst at the same time encouraging those who were loyal to him. The power that flows from holding the key political office should not be underestimated. Not only does that include the right to make appointments, it also includes authorizing annual renewal and any transferal of timber licenses and the granting of permission to develop land for housing and commercial purposes.

A small example of the discretion exercised by State Government was the withdrawal of all official advertisements from the Sarawak Tribune, following by the termination of all subscriptions to that newspaper by state government departments and agencies.[7] The Sarawak Tribune had published a series of trenchant criticisms of Abdul Taib Mahmud at the start of 1985, and continued to provide a ready venue for those opposed to his leadership.

The Chief Minister went on to drastically re-shuffle his cabinet removing the last of 'Abdul Rahman Yakub's men' from positions where they could exert important influence. The Ministry of Forestry was abolished and its functions placed under the Ministry of Resource Planning, headed by the Chief Minister himself. Haji Noor, a Rahman loyalist, was given the much less significant

portfolio of Environment and Tourism. A close confident of Abdul Taib Mahmud, Haji Adenan Satem, was appointed Assistant Minister and assigned to the Ministry of Land Development.[8] Abdul Taib Mahmud's position was shored up in a dramatic manner during the visit of the Agong to Sarawak. Departing from his prepared text the King, who has a well-earned reputation for speaking his mind, made the following comments at the State Banquet, off the cuff remarks that were blunt and to the point. After five days delay, the Borneo Post reported his remarks in the following way.

> Having known Tun Rahman since 1955 while they were in Southhampton University and Datuk Patinggi Haji Abdul Haji Mahmud, the King was in the best position to pass judgement on both 'uncle and nephew'. Tun Rahman is not healthy and, what more, there is no reason to be greedy. [sic]
> After attaining the pinnacle of his career in life by becoming Chief Minister of Sarawak followed by the Yang di-Pertua Negeri, it was now time to devote the remaining years for good.... [sic].
> He was disturbed by the quarrel between 'uncle and nephew' and felt that Datuk Taib should be given full support to lead the state without an outside interference.... Give Taib your undivided support if you want Sarawak to have progress and development. All Muslims must unite and not allow yourselves to be divided by anyone no matter who he is.[9]

During the following year, the supporters of Abdul Rahman Yakub tried to capture control of the Party Pesaka Bumiputera Bersatu (PBB), but were unable to do so.[10] Frustrated, they then foreshadowed the formation of a new political party, the Pertubuhan Bumiputera Bersatu Sarawak (PBBS) or the United Sarawak Native Association (USNA).[11] The leader of that new group was Haji Salleh Jafaruddin, a Melanau businessman who had extensive commercial interests both within the state and in the United Kingdom. Having been suspended from a session of the Dewan (Nov 7, 1985), Salleh chose to resign and precipitate a by-election for his own seat of Oya, and to leave the PBB.[12] Salleh was supported in the Dewan by three other members, Wan Habib (another of Abdul Rahman Yakub's nephews), Saidi Olia (Abdul Rahman Yakub's son-in-law) and an Independent Bidayuh member, Wilfred Nissom. The apparent intention was to re-contest and decisively win a series of by-elections, so creating a bandwagon effect, and sweeping the fence sitters onto the side of the new party. The success of Parti Bersatu Sabah (PBS), in the neighbouring state, was a clear example of the potency of such an electoral strategy.

Government resources were poured into that by-election contest, for the Chief Minister understood the mortal danger of opposition success. To the

surprise of many observers, Salleh was soundly defeated when he re-contested his own constituency -- and this negative electoral result no doubt caused many who wanted to support the new party to have second thoughts, or at least bid their time. Attempts even to register the name of the new party were not seriously pursued after that defeat, not until the crisis of March 1987.

However former Governor Abdul Rahman Yakub, now a wealthy private citizen, once again rekindled his hostility to his nephew in a letter to the *New Straits Times* (July 1, 1986) and in a subsequent interview in the same paper at the end of that month.

> His squabble with his nephew... was over the question of faith and problems affecting the people.[13]
> "Taib's well known achievements are *bomoh*-ism, vindictiveness, blowing his own trukpet, arrogance, severance of family and friendly relationships, biting the hand that feeds him, politicizing the civil service and the Yang di-Pertua Negeri (Governor) and spreading falsehoods."[14]

A steady snipping match continued to adorn the pages of the rival Kuching daily newspapers, and it became increasingly doubtful whether a resolution of the conflict was possible without the political surrender of the Chief Minister, but Abdul Taib Mahmud was noted for his stubbornness when cornered. Abdul Rahman Yakub again raised the issue of Bumiputera unity by proposing a merger with UMNO, but there was no positive response to that idea where it mattered, in Kuala Lumpur.

The struggle between uncle and nephew had become an obsession for both protagonists even since late 1984. In March 1987 the conflict once again exploded into the public arena.

The Quest for Dayak Support

By the end of 1986, an important change of tactics was evident. Critics of the Chief Minister had shifted their ground quite perceptively. No longer were they harping on his alleged use of mediums as advisers ['*bomoh*-ism'] and issues related to the Muslim faith, but rather the criticism shifted to Abdul Taib Mahmud's 'style of leadership'. What that shift signalled was that the target group was no longer primarily the Muslim constituency which had not proved as receptive as had been anticipated. Now there was an effort to build an alliance of all the dissatisfied groups, of those who considered that they had been ignored, or had been alienated by Abdul Taib Mahmud for a whole range of reasons.

The numerically crucial group in the State Legislature, the Dewan Undangan Negeri were the Dayak members, principally those from PBDS, but also some of those in SNAP, SUPP and PBB.

PBDS, Parti Bangsa Dayak Sarawak, was formed in 1983 as a result of a split within SNAP. Turmoil had simmered within SNAP ever since the victory of James Wong and his supporters over younger more racially oriented Ibans. Finally the party executive expelled Edmund Langgau and then Daniel Tajem, who was Deputy Chief Minister. Those expulsions followed the success of several Iban independents who had stood against official SNAP candidates in the 1982 federal poll.

PBDS was a party that was avowedly and explicitly Dayak in its orientation and membership. This was a departure from the Sarawakian norm, for virtually all previous parties (the doomed SCA being the exception) had proclaimed their commitment to multi-racialism, whilst depending upon the major community for their core support. The PBDS constitution did not allow Malays or Chinese to be party members, though it was amended in February 1987 to allow for them to be associate members.

The incorporation of purely Dayak PBDS and isolation of SNAP was a successful political strategy of dividing Dayak representation, and of inhibiting the re-creation of a powerful Dayak-Chinese grouping within SNAP, an alternative political alignment that had posed such a formidable threat to the PBB back in 1974. The dismembering of SNAP was aided by the stubborness of its President, who would make no substantive concessions to accomodate the rebels against his authority.

Due to divisions within the Dayak community (ethnic, regional and personal) PBDS was unable to sweep the Dayak constituencies in the 1983 poll. In fact that party was only able to elect one totally new member, Dr James Jemut Masing, in the Balleh constituency. After the 1983 poll, PBDS faced the danger of being viewed as a party of self-serving old faces, albeit presented in a new package, unless they could break out from their political straitjacket.

The PBDS triennial general meeting was held in Sibu, and was conspicuously attended by those Muslims who were the most strident critics of Abdul Taib Mahmud -- Salleh Jafaruddin amongst them, but also Wan Madzihi who had some weeks before expressed his unhappiness with Abdul Taib Mahmud's style of leadership. Goaded on by such 'observers' the PBDS leaders came out with a series of stinging criticisms of the Government of which they were a part. The PBDS Deputy Chief Minister and State Minister for Agriculture and Community Development, Daniel Tajem, spoke bluntly about the neglect of the Dayaks by Abdul Taib Mahmud's government:[15]

> [He] urged Dayaks not to remain just as 'soldiers', but aspire to be 'generals' who have power and give command. Let us move as from today to the frontline and be fired by our enemies [sic].... On our own, we are a strong community, but we have been picked from here and there like the ingredients of a piring (offering). It is good if the sacrifice is

meant for God, but if the piring is meant for evil spirits then it will be eaten by the spirits.

The PBDS Women's Chairman, Tra Zhender, called on the Government to continue with the New Economic Policy:

It must not stop after 1990 as the Dayaks have not benefited from it. NEP is just like durian to us. We smell it but have not tasted it.

The PBDS President, Leo Moggie, stated that the Dayaks could not be blamed for feeling disenchanted with authority:

They have heard many slogans, but have yet to see actual programmes on the ground. The Dayaks, though Bumiputera by law, were not enjoying that status in the practical implementation of the New Economic Policy. The story is the same when you look at the intake into institutions of higher learning, recruitment and promotion in the Civil Service, participation in Government business and participation in the exploitation of naturral resources. Whether by design or ommission the NEP has passed the Dayaks by.[16] Land resettlement schemes, the only viable alternative to shifting cultivation... if successfully implemented would be able to redress poverty in the rural areas. Land development schemes had long been publicized but yet to be seen.[17]

The Ming Court Affair

At the end of February 1987, most Dewan Undangan Negeri members received private invitations to come to a meeting with the Deputy Prime Minister in Kuala Lumpur. With the invitation was an air ticket and the promise of all expenses paid at the Ming Court Hotel in the capital. Nearly half of the assemblymen accepted and arrived at the Hotel. There they were joined by four state ministers and three assistant ministers, who had just announced their resignation from the State Cabinet. In all some 27 of the 48 State members signed letters declaring their lack of support for Abdul Taib Mahmud to continue as Chief Minister. From Kuala Lumpur they issued a declaration that a majority of members of the state legislature no longer had confidence in the Chief Minister and that he should resign forthwith.

Having established their solidarity and the fact that their number totalled clearly more than half of the elected state legislators, they then expected the Chief Minister to capitulate.

Why did the 27 legislators choose that moment to act? The possibility of the Chief Minister advising the Governor to call an election must have been considered by the rebels. Had they moved when the Dewan Undangan Negeri was in session, either the preceding November or at the coming July session,

then a formal vote of no confidence could have been passed and a substitute Chief Minister nominated. In those circumstances, though the Governor retained the option to dissolve the Chamber and call fresh elections, he would have found such a course of action more difficult to justify. A set of letters addressed to the Governor, and copied to the Prime Minister and to the Secretary-General of the Barisan Nasional,[18] did not have the same constitutional imperative, especially when the new Governor did not make himself available to formally receive them.

The likely reasons for carrying out the manoeuvre at that moment were twofold, and were both negative and positive.

1. A state cabinet re-shuffle had just been foreshadowed. There was fear that Abdul Taib Mahmud would sack Daniel Tajem, in reaction to his speeches at and after the PBDS meeting, co-opt Edward Jeli an Iban of SNAP to become a new Deputy Chief Minister, and replace Hollis Tini as an Assistant Minister with James Masing of PBDS.
2. A window of opportunity presented itself at the PBDS Triennial General Meeting in Sibu:
   a) the chance for Abdul Rahman Yakub to ride in on the tiger of Dayak nationalism;
   b) the chance for PBDS to decisively shift the political balance in their favour, no longer being locked in to just eight state seats at the most;
   c) the opportunity suddenly presented itself to gain support of Edward Jeli, Balan Seling and Michael Ben from SNAP, David Tiong, Sung Cho Nam and Ting from SUPP -- each of whom was willing to transfer their allegiance for a complex of personal and political reasons.[19]

The action took place in Kuala Lumpur's Ming Court Hotel because it was easier to stop the Chief Minister influencing Sarawak members if they were ensconced over there. Those planning the move had hoped that the blow would be quick and effective, with enough federal support to ensure Abdul Taib Mahmud's capitulation. The one person who could throw a spanner in the works was Dr. Mahathir, and he was seen to preoccupied with his own re-election as President of UMNO.

The role of the federal leadership was critical to both Abdul Rahman Yakub and Abdul Taib Mahmud, for either side was doomed in the event of an unequivocal stand by the Prime Minister. Abdul Rahman Yakub had close personal and business links with the Deputy Prime Minister, Ghafar Baba. It was his name that was invoked in many of the invitations to come to a meeting in Kuala Lumpur.[20] However, his subsequent public identification by Abdul Rahman Yakub as having 'urged them to save the face of the Chief Minister', and asked them 'to persuade the Chief Minister to withdraw nicely' was

phrased too strongly for Ghafar, and the text of the press report was subsequently denied.[21] An invocation of federal support was viewed as critical, but it was a most awkward time for the federal leadership to take too strong a stand behind either the Chief Minister or his uncle. The hard fought contest for the presidency and vice-presidency of UMNO was of paramount significance, and none of the contenders wanted to put a foot wrong there. Datuk Musa had been criticized within the UMNO for having facilitated the installation of a Christian Chief Minister in Sabah, a leader who gained his legislative majority primarily from the support of the non-Muslim bumiputeras of that state. Dr. Mahathir was unlikely to want to expose himself to the charge of having aided a potentially similar process of non-Muslim bumiputera political supremacy in Sarawak.

There was a dilemma for the Dayak leadership meeting at the Ming Court Hotel. It was the Dayaks who provided the numbers to unseat Abdul Taib Mahmud, but they agreed reluctantly with the argument that there must be a Muslim Chief Minister designate, or else there was simply no chance that Dr. Mahathir would permit the overthrow of Abdul Taib Mahmud, so Haji Noor Tahir was chosen.

After Abdul Taib Mahmud received the Governor's approval to dissolve the legislature and call for elections, the PBDS President, Datuk Leo Moggie, declared that his party would endorse the appointment of Tun Rahman as the new Chief Minister if he and the others were to win the forthcoming state elections. Asked if he was prepared to return and lead the state, he replied that 'the question does not arise, we in the PBDS support Tun Rahman's leadership'.[22] After Daniel Tajem's impassioned speech about Dayaks needing to be the generals, and not just soldiers, PBDS leaders left themselves quite vulnerable to the counter-charge that they had readily sold out Dayak interests. Leo Moggie's 1974 speeches attacking Abdul Rahman Yakub as anti-Dayak were reproduced as campaign material, as was a picture of him standing behind Abdul Rahman Yakub outside the Ming Court Hotel.

The Election Campaign

The Election Commission decided that there would be a period of seventeen days before nominations would close, but only nine days thereafter for actual campaigning. Much of the skirmishing prior to nomination day centred around the question of whether the ruling federal coalition, the Barisan Nasional would determine that each component party must fight under its own symbol, as fervently desired by PBDS, or whether the Barisan *dacing* (scales) symbol would be used against PBDS by the Chief Minister and his supporters. PBDS were confident that their own symbol had a winning appeal amongst the Iban, but their President, Leo Moggie, did not want his party to be seen as

anti-Barisan. For one thing, it would be most difficult for him to remain in the Federal Cabinet were his party fighting in opposition to the Barisan. The party also did not want to lose its somewhat tenous links with the national leadership, particularly in light of the difficulties being experienced by the PBS in Sabah.

To Abdul Taib Mahmud, use of the Barisan symbol was all important, especially in the Malay areas -- for that community had long displayed a loyalty to the ruling party, state and national. Had there been a 'free for all' with each party competing under its own banner [as desired by PBDS and PERMAS], Abdul Taib Mahmud would be one amongst equals. However, as the Barisan state leader, he was in a vastly better position, able to caricature both PERMAS and PBDS as attempting to undermine and defeat the Barisan National Government. In the event, the national Barisan determined that the Barisan symbol could be used by each of the component parties as long as they did not challenge beyond their allocated seats. That formula worked directly against PERMAS, and would have confined PBDS to the few seats that it already held. Thus PBDS saw no choice but to use its own symbol, but made it unambiguously clear that its struggle was with the leadership of Taib Mahmud, and not against the Barisan Nasional.

There was an automatic expectation that considerable federal assistance would be forthcoming to help maintain the state Barisan leadership, though the actual help received from that source appeared to be rather more limited than in earlier contests.

The campaign was brief and fierce, with both sides employing considerable resources of their own in order to achieve electoral success. There was very little obvious federal input, the Prime Minister flying to visit two consituencies only on the day before polling began.

The PERMAS campaign machine was well oiled, and capitalized upon the enthusiastic energy of a large group of young Muslims -- who viewed Abdul Taib Mahmud not only as autocratic but also as propagating beliefs that were contrary to Islam. Considerable financial resources were made available to the opposition, as was the partisan support of the Sarawak Tribune and its Malay and Chinese language stablemates.

Immediately following the defection of the 27 State Assembly members, Haji Adenan Satem, presumably acting on the Chief Minister's behalf, revoked some thirty[23] timber licences, licences that had been issued to supporters of Abdul Rahman Yakub.[24] That action was seen as vindictive, yet was quite effective for it galvanized Abdul Rahman Yakub's supporters to back him to the full, as their cash flow had suddenly dried up. The rationale for the action was that the licensees had breached the terms of their licenses, in many cases by transferring the permits to their contractors. Four of the contractors were placed in an invidious position, denied export permits for their waiting (and

perishable) cargoes until all past duties had been settled, yet unable to obtain the millions of dollars required by the Government from the holders of the licenses, who themselves were strapped for cash at a politically most crucial time. That situation was viewed by Abdul Rahman Yakub's backers as able to be remedied only by a political solution i.e., to be rid of the Chief Minister. Abdul Rahman Yakub's supporters could not wait any longer, for they stood to lose too much. A few could possible switch sides, others had long ago burnt their bridges.

The Chief Minister made it clear that freezing the licences 'was done in the nick of time to prevent Sarawak from being overwhelmed by "politics of timber"'. He said he saw danger looming ahead in the form of a flood of timber money that would have adversely affected politics in the State. The politics of timber can be dangerous if too many concessions are in the hands of a few and who are in one group.[25]

The timber tycoons, whose companies were the actual operators of the timber leases, certainly needed benign politcal leaders, and were prepared to pay considerable sums to ensure continued personal prosperity. The Chief Minister estimated the cost of his campaigning during the 1987 election as between $300,000 and $500,000 per constituency.[26] That gives an acknowledged figure, by only one side of the political struggle, of around M$ 20 million. Add to that the value of government facilities, the range of private cash donations[27] to achieve the desired outcome, and the considerable expenditure by the opposition, and the cost of each vote in a great many constituencies would easily exceed M$100 million. Given the concentration of effort upon the marginal swinging seats, the expenditure in those areas would have been much higher than the average. In the absence of any overarching ideological commitment by the contenders for office, the rural people made the most of their cash bonanza, transient though that benefit might be.

What seemed to be of greater significance -- as the campaign progressed -- was the enthusiasm of Iban, Chinese and Muslim youth for their respective opposition parties: PBDS, DAP and PERMAS. It was not that the opposition candidates were more youthful than their opponents, rather that they were better able to capitalize upon expectations that a change of the state leadership would be beneficial to their respective community.

Cleavages within the Malay community were quite deep, and it was the first time since the uniting of PANAS and BARJASA that there had been such a significant division within the Muslim community. The charisma of Abdul Rahman Yakub had a dampening effect on the morale of the government campaigners. That, the Chief Minister was unable to directly rectify.

On the other hand, the Government had all the resources available to the incumbent: helicopters for access to the rural populace, radio broadcasting in local languages and Information Service officers spread throughout the state.

Any use of helicopters by the opposition was successfully blocked, so inhibiting ready access to the interior by their candidates. As a counter to the Sarawak Tribune, the People's Mirror gave at least as partisan an account of events, from the Government's perspective. Most of the Chinese press was quite partial to the Chief Minister, and was not backward in expressing its views.

Campaign Issues

The issues that receive most prominent attention could be grouped under three headings: Dayak nationalism, style of leadership and money politics. It was PBDS that made the running on Dayak nationalism, PERMAS that took up the style of leadership and the Barisan Nasional leader who constantly reiterated the dangers of money politics.

The PBDS campaign relied heavily upon party workers who spread the word from longhouse to longhouse. The fact that the campaign coincided with the school holidays was most helpful to PBDS, which was able to make use of the eager assistance of Dayak students and teachers alike. A great deal of unpaid labour was available to supplement the work of the usual paid canvassers.

The ubiquitous PERMAS campaign posters summarized that party's principal concerns in five simple points.

VOTE PERMAS FOR SARAWAK RIGHTS

1. TO RESTORE JUSTICE
2. TO ERADICATE VENGENCE AND VICTIMISATION
3. TO REINSTATE DEMOCRACY
4. TO ERADICATE DISRESPECT
5. TO BRING BACK SANITY

What were not so apparent were the stock in trade promises of economic reward and the need to align with the obvious winner. Given widespread uncertainty as to which side would be victorious, promises of economic development could be made with dual credibility by each side. The PBDS certainly made much of the argument that the Dayaks had suffered grievous neglect as a result of the policies of the Taib Government, and a change of state leadership had to be to their benefit.

The argument that you must vote for X in order to have a voice in the new government was no longer such an effective argument for the Barisan, as it also could cut both ways. Even the Democratic Action Party [DAP] issued a policy statement to the effect that it would be willing to participate in a coalition government. DAP capitalized upon the argument that because SUPP had thrown in its lot unequivocally with Abdul Taib Mahmud, in the event of his defeat the Chinese would have no influence within the corridors of power. Thus DAP was a viable alternative within Abdul Rahman Yakub's rival coalition.

The DAP was highly critical of SUPP's rather racist response to Dayak

nationalism. DAP even erected several Chinese language banners with the accusation "SUPP wants the Chinese and Dayaks to kill each other."[28]

The Election Results

Voter turnout ranged from 60% to 83%, with the highest proportion voting in those seats where there was considerable intensity of conflict. Seats contested by luminaries such as Datuk Yusuf Puteh, Adenan Satem, Abdul Taib Mahmud, Abdul Rahman Yakub, Edmund Langgu and Tajang Laing were amongst those with the highest proportion of voters casting their ballots. The lowest voter turnout was found in constituencies in the fourth and fifth divisions of the state,[29] those areas farthest from the state capital. There the personal character of the leadership contest appears not to have impinged to the same extent.

The Barisan component parties gained a clear majority of seats in the new State Legislature, though they faced a much stronger opposition than had previously existed. The Barisan gained 28 seats: PBB 14, SUPP 11 and SNAP 3. The opposition held 20 seats: PBDS 15 and PERMAS 5. The only other major party to contest the poll was the DAP. Though DAP managed to score 11% of the vote, it was unable to gain any seat.

The proportion of the total vote and the number of seats received by each party was as follows:

SUPP	26%	11	seats won	Barisan Nasional
PBB	21%	14	"	55% of 28 seats
SNAP	8%	3	"	
PBDS	18%	15	seats won	Maju group
PERMAS	14%	5	"	32% of 20 seats
DAP	11%	--		
Independents	2%	--		

The electoral arithmetic worked most strongly in favour of PBDS and PBB, and against the DAP and PERMAS. The proportion of votes received by independents was at an historically low level. In past elections independent candidates had regularly received the covert support of one or other component party of the Barisan Nasional. The formula of seat allocation used by the Barisan precluded such challenges, but component parties nevertheles believed that this was a valid means by which to wrest particular seats, and get around the inflexibility of honouring the incumbent party's rights. In the 1987 election the disaffected had parties eager and willing to openly endorse challengers to incumbent candidates. The fact that a majority of the members of the State Legislature had left the Barisan certainly opened up the contest for new players.

Any analysis of the vote must take account of the ethnic support of each of the political parties, even though none of the parties identified itself as representing one ethnic group -- in clear contrast to the parties on the Malayan Peninsula. In Table I we give a detailed breakdown of the percentage of valid votes received by each of the political parties in each of the 48 constituencies. Then follows, in Table II, a breakdown of the racial composition of registered voters in each constituency. The raw figures from each of these two tables were analyzed in order to test the strength of correlation between voting patterns and ethnicity. The numerical coefficient of correlation has only been cited below when it is statistically significant to a level of .001.

The strongest correlation was between Chinese voters and support for SUPP (.98). It was clear that the perceived 'threat' of Dayak nationalism evoked a tight ethnic response from the Chinese community. Chinese voters also gave their support to the DAP [.94] and when they were residing in constituencies where a SUPP candidate was unable to stand, their votes went to the other Barisan parties, particularly SNAP [.88] but also PBB [.65]. They rejected PERMAS, despite that party's efforts to incorporate them into its base of support. (The PBDS Constitution did not allow for Chinese and Malay members).

The next strongest correlation was between Malay/Melanau voters and support for PBB [.81]. Following Barisan recommendations, there was a stronger association with SNAP and SUPP, than with PERMAS and PBDS. Despite encouragement by PERMAS and PBDS leaders, Muslim voters were unable to bring themselves to vote for the DAP. Since the healing of the political schism within the Muslim community, and the merger of PANAS and BARJASA first into Parti BUMIPUTERA in 1967, and then to become PESAKA-BUMIPUTERA BERSATU (PBB) Malay voters had been repeatedly told that the political survival of their community depended upon their unity behind PBB, and maintaining close links with the federal leadership. For almost two decades Abdul Rahman Yakub had reiterated that message throughout the length and breadth of the state. Thus his leadership of a rival party, that now called upon Muslims to oust PBB, was not immediately accepted. The anti-Federal statements that had earlier been uttered by men who now stood as PERMAS candidates[30] may also have sown seeds of confusion.

The Dayak vote, that of the non-Muslim Bumiputera, has always been of crucial numerical importance, for the Dayak make up a plurality of voters in 25 of the 48 state constituencies. In some 17 of those 25 seats Iban are the most numerous Dayak group. The drawing of constituency boundaries in Sarawak has worked to the benefit of the Dayak component of the population, who are over-represented as against the urban dwellers, Chinese and Malay. The rural Malay and Melanau gain a slight advantage.[31]

Though PBDS gained all of its fifteen seats from Dayak areas, and gave the

Table 1
Valid Votes Cast for Each Political Party -- by Constituency

Constituency	SUPP as % Valid Vote	PBB as % Valid Vote	SNAP as %Valid Vote	PBDS as % Valid Vote	PERMAS as % Valid Vote	DAP as % Valid Vote	INDEP as % Valid Vote
Lundu	57.86	0.00	0.00	0.00	42.14	0.00	0.00
Tasik Biru	0.00	0.00	51.64	48.36	0.00	0.00	0.00
Padungan	62.94	0.00	0.00	0.00	0.00	37.06	0.00
Stamoin	63.26	0.00	0.00	0.00	0.00	36.64	0.00
Petra Jaya	0.00	74.81	0.00	0.00	25.19	0.00	0.00
Satok	0.00	69.62	0.00	0.00	29.78	0.00	0.60
Sebandi	0.00	66.62	0.00	0.00	33.38	0.00	0.00
Muara Tuang	0.00	74.75	0.00	0.00	25.25	0.00	0.00
Batu Kawa	64.91	0.00	0.00	0.00	18.99	16.10	0.00
Bengoh	48.01	0.00	0.00	49.95	0.00	0.00	2.03
Tarat	0.00	53.72	0.00	42.02	0.00	0.00	4.26
Tebakang	0.00	0.00	30.35	69.62	0.00	0.00	0.00
Semera	0.00	56.53	0.00	0.00	42.47	0.00	0.00
Gedong	0.00	40.21	0.00	0.00	59.79	0.00	0.00
Lingga	0.00	0.00	50.33	49.67	0.00	0.00	0.00
Sri Aman	53.95	0.00	0.00	46.05	0.00	0.00	0.00
Engkilili	34.93	0.00	0.00	65.07	0.00	0.00	0.00
Batang Ai	0.00	0.00	42.25	57.75	0.00	0.00	0.00
Saribas	0.00	58.39	0.00	0.00	40.24	0.00	1.37
Layar	0.00	62.14	0.00	37.86	0.00	0.00	0.00
Kalaka	0.00	49.47	0.00	0.00	50.53	0.00	0.00
Krian	0.00	0.00	47.08	52.92	0.00	0.00	0.00
Kuala Rajang	0.00	60.64	0.00	0.00	39.36	0.00	0.00
Matu Daro	0.00	59.05	0.00	0.00	40.95	0.00	0.00
Repok	53.80	0.00	0.00	0.00	0.00	46.20	0.00
Meradong	56.51	0.00	0.00	0.00	0.00	43.49	0.00
Maling	66.12	0.00	0.00	0.00	0.00	33.88	0.00
Seduan	68.90	0.00	0.00	0.00	6.71	22.87	1.52
Igan	48.94	0.00	0.00	0.00	49.41	0.00	1.65
Dudong	50.33	0.00	0.00	47.01	0.00	0.00	2.48
Balingian	0.00	59.51	0.00	0.00	40.49	0.00	0.00
Oya	0.00	36.63	0.00	0.00	63.37	0.00	0.00
Pakan	0.00	0.00	47.22	52.78	0.00	0.00	0.00
Meluan	0.00	40.01	0.00	59.99	0.00	0.00	0.00
Machan	0.00	41.58	0.00	58.42	0.00	0.00	0.00
Ngemah	0.00	0.00	46.01	53.99	0.00	0.00	0.00
Katibas	0.00	42.95	0.00	54.18	0.00	0.00	2.87
Pelagus	0.00	35.96	0.00	36.22	0.00	0.00	27.82
Baleh	40.82	0.00	0.00	59.18	0.00	0.00	0.00
Belaga	0.00	66.16	0.00	0.00	33.84	0.00	0.00
Tatau	0.00	0.00	42.24	48.94	0.00	6.82	0.00
Kemena	0.00	48.16	0.00	0.00	33.83	18.02	0.00
Subisas	0.00	45.25	0.00	0.00	50.98	2.03	1.58
Miri	70.25	0.00	0.00	0.00	0.00	29.75	0.00
Marudi	0.00	0.00	41.16	55.15	0.00	0.00	3.69
Telang Usan	0.00	47.88	0.00	52.15	0.00	0.00	0.00
Limbang	0.00	0.00	50.15	0.00	45.89	0.00	3.96
Lawas	0.00	52.21	0.00	0.00	6.94	0.00	40.85

Table II
Racial Composition of Enrolled Voters -- by Constituency

Constituency	Chinese	Malays	Iban	Bidayuh	KKKMS	Others
Lundu	16.11	38.57	10.20	35.08	0.00	.05
Tasik Biru	26.60	10.13	4.16	59.10	0.00	.01
Padungan	93.21	4.26	1.38	.58	.04	.11
Stampin	80.47	12.80	5.35	.36	.04	.97
Petra Jaya	10.31	80.37	7.40	1.71	.11	.10
Satok	24.86	71.50	2.62	.17	.01	.86
Sebandi	15.35	73.85	10.70	.06	0.00	.04
Muara Tuang	8.57	77.73	13.63	.06	0.00	.01
Batu Kawa	60.64	14.31	4.38	20.24	.07	.36
Bengoh	27.83	6.16	2.79	63.10	.01	.09
Tarat	28.92	12.64	.76	57.62	0.00	.06
Tebakang	7.09	4.28	25.45	63.15	.01	.02
Semera	8.55	72.09	19.35	0.00	0.00	.01
Gedong	7.72	50.98	41.30	0.00	0.00	0.00
Lingga	7.93	24.33	67.65	.01	.01	.07
Sri Aman	20.91	19.38	59.57	0.00	0.00	.14
Engkilili	13.56	1.87	84.41	0.00	.16	0.00
Batang Ai	3.10	.78	96.06	0.00	.07	0.00
Saribas	3.94	73.14	22.91	.01	0.00	0.00
Layar	10.38	19.31	70.29	.01	0.00	0.00
Kalaka	7.05	57.29	35.65	0.00	0.00	.01
Krian	8.94	8.50	82.55	.01	0.00	0.00
Kuala Rajang	4.21	68.25	27.55	0.00	0.00	0.00
Matu Daro	4.15	81.88	13.97	0.00	0.00	0.00
Repok	75.05	1.54	23.35	0.00	0.00	.06
Meradong	49.09	12.88	37.99	0.00	0.00	.03
Maling	88.33	8.00	3.28	.28	.01	.10
Seduan	70.79	22.56	6.39	.04	0.00	.21
Igan	27.99	21.06	50.92	.01	.03	0.00
Dudong	16.26	2.33	81.40	0.00	0.00	.01
Balingian	9.21	51.13	39.53	0.00	0.00	.13
Oya	7.63	67.99	24.16	0.00	0.00	.21
Pakan	2.13	.28	97.57	0.00	0.00	.02
Meluan	4.90	.47	94.59	0.00	.02	.03
Machan	24.31	3.93	71.74	0.00	0.00	.03
Ngemah	4.52	.41	95.07	0.00	0.00	0.00
Katibas	5.11	2.91	91.58	0.00	.40	0.00
Pelagus	15.79	3.83	80.29	0.00	0.00	.09
Baleh	.43	.08	99.30	0.00	.19	0.00
Belaga	2.18	3.80	2.15	0.00	91.87	0.00
Tatau	5.46	18.89	75.42	0.00	.21	.01
Kemena	31.86	24.31	43.54	0.00	.21	.08
Subisas	14.05	44.91	40.29	.05	.64	.06
Miri	69.46	19.73	8.93	.15	1.29	.44
Marudi	18.62	9.80	59.00	.20	12.30	.08
Telang Usan	4.00	.30	1.87	.03	93.76	.04
Limbang	22.15	38.46	36.93	.19	2.16	.11
Lawas	12.10	46.40	3.54	.06	37.74	.16

impression that the wave of Dayak nationalism had swept its members into the state legislature, a statistical analysis suggests that Dayak support for PBDS was by no means as solid as the victory in those fifteen seats might at first appear. PBDS achieved a third of its successes with a relatively slight margin of victory. Of the eight seats where the winning margin was less than 300 votes, one went to SNAP, two to PERMAS and five to PBDS.

When one breaks up the Dayak vote into its three principal components, the Iban, the Orang Ulu and the Bidayuh, it was certainly the case that the presence of Bidayuh voters was strongly correlated with support for PBDS, even though only two of the four Bidayuh plurality seats were actually won by that party. The others were taken by SNAP and PBB.

However the only statistically significant positive correlation was between the Iban and votes for PERMAS [.69]. In fact, Iban backing was primarily responsible for the success of each of the five PERMAS candidates -- not the votes of the Muslim community (Malay and Melanau). They tended to support the Barisan Nasional candidate. Of the five Barisan candidates defeated by PERMAS, four stood for PBB and the fifth for SUPP.

The vote of the Orang Ulu: the Kayan, Kenyah, Kelabit and Murut, had the closest association with Independent candidates [.93], though none were actually elected. Two of the three seats where the Orang Ulu form a plurality of voters were won by PBDS, and the third by PBB.

Conclusion

The 1987 Sarawak election evoked Dayak enthusiasm for a greater share of the benefits of the New Economic Policy. However the PBDS was unable to galvanized the Dayak communities and sweep to victory, as did the PBS in Sabah. In fact a good many of the PBDS electoral victories were by only a slight margin. It is quite possible that the depth of grievances was not as great as amongst the Kadazan of Sabah. It is also apparent that the leadership of PBDS allowed itself to be caricatured as subservient to Abdul Rahman Yakub, once he was identified as the Chief Minister designate. Abdul Rahman Yakub has a well-deserved reputation in Sarawak as a master tactician. Doubts over who would really be leading a PERMAS-PBDS alternative Government allowed local issues and personalities to come to the fore, and did not permit PBDS to make a clean sweep of Dayak majority seats. In any case, the arrangement with PERMAS only gave PBDS 21 seats to contest, by no means all the Dayak plurality electorates. So a Sabah-like sweep of a majority of constituencies was not even possible. The other difference with Sabah was that the PBDS excluded Chinese from membership, and was perceived as somewhat hostile to Chinese interest. Chinese voters thus solidly supported the incumbent Chief Minister, with whom SUPP leaders worked most harmoniously.

The split in the Muslim leadership, particularly between uncle and nephew, opened up an unprecedented level of public debate regarding the re-distribution of economic resources to those who have had close political links. Though the word corruption was only rarely employed by the protagonists, a great deal of information was splashed across the front pages of the competing newspapers, revealing the names of companies (and their shareholders) who had benefited from the largesse of government, principally through the granting of timber licenses, but also through the award of government contracts and the re-zoning of land for urban development. The airing of those issues, though often greeted by a cynical response, did introduce a new item to the public agenda of political debate. When added to the concern about the perceived neglect of the Dayak peoples, and of the rapid degradation of their forest land, it foreshadowed a rather more fundamental questioning of political leaders in future campaigns.

Notes

1. The author wishes to express his grateful appreciation to each of those in Malaysia who have so generously given of their time and knowledge. He is also most grateful to Lynne Thomson, of the Department of Government at Sydney University, for all the time she spent wrestling with the electoral data. Her expertise was much appreciated.

2. Though forming an Alliance akin to that forged between the racially exclusive UMNO, MCA and MIC in Malaya, all but one of Sarawak's political parties were explicitly multi-racial in their membership and leadership composition, whilst retaining a solid base of support in one ethnic community.
   SUPP (Sarawak United People's Party), founded in 1959, was a left wing multi-racial party that pressed firmly for independence, and was quite wary about the plan for Sarawak to gain that independence as part of Malaysia. After the outbreak of the Brunei revolt, in December 1962, a great many non-Chinese party members were persuaded to resign, leaving SUPP with a strong Chinese identification.
   PANAS (Party Negara Sarawak) was initally led by prominent Malay aristocrats, plus prestigious figures from the Dayak and Chinese communities.
   SNAP (Sarawak National Party) was led by Iban from the Saribas river, many of whom had experienced life on the oilfields in and near Brunei. SNAP attracted certain Chinese leaders who in time came to play an increasingly dominant role within the party.
   BARJASA (Barisan Ra'ayat Jati Sarawak) was led by Muslims who were none too happy with the establishment orienation of the PANAS leadership, particularly as those were the leaders who had benefited from the cession of Sarawak to the British Crown in 1946. That issue had rent asunder the Malay community. This rift was finally patched in 1967 when PANAS merged with BARJASA to form Parti Bumiputera.
   PESAKA was led by Iban of the Rejang river basin, by Temenggong Jugah who fervently sought recognition as the paramount chief of the Iban. He was concerned about inroads by SNAP, so left PANAS to lead the new PBB (PESAKA BUMIPUTERA BERSATU).
   SCA (Sarawak Chinese Association) was modelled directly upon the Malayan Chinese Association, and had an explicitly racial charter. Not only was it explicitly racially oriented but it was led by Chinese of the Foochow and Teochew dialet groups, whereas the initial key Chinese leaders of SUPP were Hakka and Hokkien. SCA ceased to exist just before the 1974 elections.

3. He then added the question 'Do you call this integration?', so raising the issue of Sarawak's treatment by the federal government, for the Chief Minister had been quick to defend Kuala Lumpur. *Borneo Bulletin* 12 May 1984.
4. A slightly edited version of the letter, dated 6 January 1985 and one that was even more specific (dated 11 January 1985) were later published by Tun Abdul Rahman in the *Sarawak Tribune* 10 April, 1987.
5. According to the *Sarawak Tribune* (13 Jan 1985), Abdul Taib Mahmud had insisted that a demonstration should be held on his return from vacation, and a circular had been issued requiring the attendance of heads and senior officers of federal and state government department and statutory bodies. Of more significance was a strident statement from the PMS (Malay National Union) Youth claiming that 'if the SUPP organizes a grand welcome home reception for the Chief Minister... then SUPP must be held solely responsible for the deterioration in the Muslim and Chinese relationship and the bitterness arising from this incident. The attempt by SUPP to welcome the Chief Minister... [is] a direct interference in the internal affairs of the Malays. PMS Youth warns Datuk Amar Yong not to repeat his previous adverse statements poisoning the minds of Kuala Lumpur against Tun Abdul Rahman. Although the Malays had forgiven him, the patience of the Malays will be tested to the limits by the repeated utterance of Datuk Amar Yong. For Datuk Amar Yong to continue the present cause [sic] of action would sabotage the unity of the Malays.'
6. *Star* 22 January 1985.
7. *Sarawak Tribune* 22 August 1985.
8. *Sarawak Tribune* 12 July 1985.
9. *Borneo Post* 30 September 1985. The King's exact words when referring to his personal friend, Abdul Rahman Yakub were'badan tak sihat apa lagi nak di tamak-tamakkan lagi'. The newspaper report is rather stilted, and there is some jumping between first and second person. There was considerable nervousness about printing the Agong's remarks.
10. When the triennial party conference was held, at the end of September 1986, Abdul Taib Mahmud's supporters were triumphant. Party membership of PBB had been quite loose since its formation. Normally persons only had to declare themselves members in order to be regarded as such. Even top leaders mentioned that they had never formally joined the party. So the Chief Minister, aware of his potential vulnerability, had his workers embark on a formal party registration exercise in the months leading up to the party conference. That meant his people were certain that the numbers were on their side. Wan Yusuf and Haji Noor Tahir, strong backers of Tun Rahman, saw the writing on the wall and did not contest their positions. Wan Habib had already resigned from the party. *Sarawak Tribune* 29 September 1986 gives a list of successful candidates.
11. The party was formed on 17 May 1986, but its registration was rejected by the Registrar of Societies, apparently because of certain technicalities involving its name. PBB objected to USNA's Malay acronym, PBBS. However, with its name changed to Sarawak Malaysian Association (SAMA) the prospective party had still not been registered five months later. *Sarawak Tribune* 11 October 1986. A third name Party Persatuan Rakyat Malaysia Sarawak (PERMAS) was subsequently proposed. Approval of the registration of PERMAS was announced on the same day as the dates for the sudden Sarawak State Election. *Sarawak Tribune* 20 March 1987. One might also speculate whether the first choice of initials for the party, PBBS, sought to capitalize upon certain similarities with the PBS of Sabah which had unexpectedly swept into power in the neighbouring Bornean state.
12. On 19 April 1986.
13. *New Straits Times* 1 July 1986.
14. *New Straits Times* 31 July 1986.
15. *Sarawak Tribune* 28 February 1987. His critics were quick to add that he had been well placed to do something about that neglect, but had been rather more interested in shoring

up his own political support amongst the Ibans, rather than becoming bogged down in day-to-day administration of his important portfolio. It was readily conceded that he had indeed put a great deal of energy into campaigning for his re-election as President of the Sarawak Dayak National Union in November 1985. There was clearly also a personal element for Daniel Tajem. Speaking to the *New Straits Times* reporter he told how he had suffered in silence for a long time. 'I have been slighted and ignored for too long' [16 March 1987].

16. *Borneo Bulletin* 7 March 1987.
17. *Sarawak Tribune* 1 March 1987.
18. A copy of one of the letters, dated 27 February 1987 is reproduced in the *Sarawak Tribune* 14 March 1987
19. For instance, during a speech by Abdul Taib Mahmud at the Melanau 'Farmer's Day' festival in Mukah on March 7, he had told those present to turn to the Assistant Minister Adenan Satem if they had problems involving land. In fact, Adenan was visiting Australia at the time whereas his superior, the Land Development Minister Edward Jeli, who was present at the meeting felt insulted and embarrassed. It was the last straw for Jeli, who soon afterward telephoned Abdul Rahman Yakub in Kuala Lumpur. Tun Rahman immediately saw the significance of Jeli's being made to feel a fool, and cancelled a scheduled trip to London. *Borneo Bulletin* 21 March 1987. The defection of Edward Jeli was of particular significance as Jeli was the most senior Iban who had sided with James Wong in his struggle to control SNAP, the struggle that resulted in the defeat of Daniel Tajem, Leo Moggie and the others who then went over to form the PBDS. Jeli was the epitome of the 'old guard' of Ibans still in SNAP.
Hollis Tini had been a loyal SUPP supporter for half his lifetime. His commitment to SUPP had led the Colonial Government [in January 1986] to restrict his movements first to his own house, and later to the town of Simanggang. The Acting Resident warned that were he elected to the District Council he would not be able to attend the Council Meetings. [United Nations Mission, SUPP memorandum, document D, 1963]. Given that degree of past commitment, his desertion to the PBDS-PERMAS side came as a surprise. No doubt he had heard the rumours that he was to be dropped as an Assistant Minister. He remarked that in 1970, SUPP Chinese leaders did not once consult we Dayak members before covertly taking the party into the Coalition Government under Abdul Rahman Yakub, so why should he be criticized. David Tiong was the SUPP representative for a predominantly Iban constituency. His chances for Ministerial position or other advancement via his party were considered remote, for others such as David Teng had much closer links with the Sibu party leader, Dr. Wong Soon Kai. Tiong did however make a statement that SUPP was victimizing him unjustly after the initial failure of the 'coup'. David Tiong told reporters that 'a Cabinet member and an assistant minister from the SUPP will join the group of 28 members rebelling against the Chief Minister'. *Borneo Post* 12 March 1987. He promised to reveal their true identity when the right time comes. *Sarawak Tribune* 18 March 1987. [The only two who appeared to fill that bill were Datuk Sim Kheng Hong and Dr. George Chan]. Sung Cho Nang, was another SUPP member representing a predominantly Iban constituency. Though he had been accused of communist sympathies and held as a political detainee for some years, he felt the wind of Dayak nationalism and changed to their side.
20. PBDS members were asked to go to Kuala Lumpur to discuss the Lubok Antu by-election, according to Abang Johari. SNAP members were told about a move to expel PBDS from the Barisan National for admitting Independent members. PBB members were told that it was 'to discuss [an] important thing'. *Borneo Post* 20 March 1987
21. See *Sarawak Tribune* 16 March 1987. It was not until the day after Ghafar described that suggestion as 'mischievous' that Abdul Rahman Yakub then claimed that he had been misquoted by the newspaper. Abdul Rahman Yakub is regarded as an old friend and associate of Tunku Razaleigh and Ghafar Baba. 'Four years earlier Rahman's family purchased Sateras Resources, a publicly listed company, from Pegi, a corporation controlled by Ghafar

and his family. Ghafar's family are clients of Bank Utama, a small bank controlled by Rahman's family'. *Asiaweek* 22 March 1987.

22. *People's Mirror* 14 March 1987.
23. It was difficult to be precise about the exact number that were revoked, as the list was kept confidential for legal and political reasons. Thirty-six was the number cited in the *Sarawak Tribune* 17 March 1987, whereas the Chief Minister said 25. *Borneo Post* 10/4/87.
24. The Assistant Minister said that the Government had withdrawn a number of licenses for breach of the Forest Ordinance. He reminded licensees that any sale or tranfer of shares in licensed company, any change of partnership in a timber company and any appointment or change of the logging contractors had first to be approved by the Government. *Sarawak Tribune* 6 March 1987. Adenan Satem added that 'there is no political implication involved at this state.' The Chief Minister also warned of the concentration of wealth in the hands of one single group which could destabilise the country. *Borneo Post* 7 March 1987. Given previous *de facto* laxity in such matters this gave the Government considerable scope for revocation for technical breaches, given the right motivation. Even were the companies to successfully sue the government, the fact that the license technically was granted *gratis* would mean that a logging company could only claim damages for the cost of the infrastructure that it had provided. A month later a letter writer to the *Borneo Post* [7 April 1987] pointed out that the revocation of timber licenses belonging to a political opponent is a practice established by Tun Rahman himself. His Administration refused to renew the timber license of James Wong's Company, Limbang Trading was lawfully exercised. A legal suit was filed, and a fresh license issued on the eve of the trial. Following that suit, Clause 29 giving Licensees a right of renewal, was deleted, and all timber licensees were deprived of the legal right to renewal.
25. *Borneo Post* 10 April 1987.
26. Transcript of Radio Australia [John Lombard] interview with the Chief Minister [Kapit 11 April 1987]
27. Several press correspondents testified that they witnessed extensive handing out of $10 notes, with a view to ensuring voter support in rural constituencies.
28. *Borneo Post* 8 April 1987 prints a photograph of one such banner.
29. When ranking constituencies according to voter turnout, seven of the lowest eight are located in the fourth and fifth divisions.
30. For instance see the comments by Wan Habib, cited above, page 3.
31. This is discussed in *The Rising Moon: Political Change in Sarawak*, Sydney University Press, 1974 p. 124-126. A new set of boundaries was approved by the Federal Parliament just prior to the 1987 Sarawak election, but the Legislature was dissolved too early for them to be used. The boundaries for the 1987 poll were a slightly amended version of those that applied in 1970.

Reorganization of Production in the Semi-Conductor Industry and Its Impact on Penang

Rajah Rasiah

The semiconductor industry first appeared in Penang in 1972 after the Free Trade Zone Act was enacted in 1971 (Ismail, 1981)and except for the periods 1979-1980 and mid 1984-1986, the employment contribution of the industry has risen gradually (Rajah, 1988a). Production machines installed in Penang in the 1970s were those that took full advantage of the dexterity of local women workers (Rajah, 1988b). It was widely believed then that once the stages of assembly and final test become capital-intensive, the firms would be relocated back to their parent sites. Thus, when the semiconductor industry began to automate their production lines rapidly in the 1980s, many felt the exodus of these companies to their parent sites was imminent.[1] It will be argued that the rapid changes toward capital-intensive production beginning from the mid-1980s are, to the contrary, merely aimed at agglomeration of the tail-end stages of production at Penang, and that despite holding an important position in the Far East, the semi-conductor industry in Penang has remained foreign owned.

I will examine the early phase of internationalization in the semi-conductor industry. This will be followed by an assessment of the nature of the mid-1984 industry-wide crisis and an analysis of the impact of this crisis upon the reorganization of production. These analyses will be used to situate Penang's position within the Far East (excluding Japan).

The Early Phase of Internationalization

Micro-electronic technology was born in the United States military which formed the initial market for the semi-conductor industry (Ocampo, 1980). The first transistor was born in the Bell laboratory (Marsh, 1981). Then, with the help of the U.S state, which was interested in generating the development of its capital, private semi-conductor firms began emerging in the 1950s. Fairchild became America's as well as the world's first private semi-conductor company. The origin of the semi-conductor firms was, among other things,

boosted by a large local industrial reserve army that had swelled with the end of the Second World War. With the expansion of the electronics market Western Europe and Japan, semi-conductor firms began internationalizing their sales. As competition between U.S. firms grew, the internationalization of production into Western Europe and Japan began to enable firms to take greater control of markets. The internationalization of production across Western Europe and Japan was not just an effort on the part of U.S. capital to extend its hold of gaining more profits. For it was also part of the United States' and the World Bank's efforts to revive the war-torn nations of the Organization of Economic Cooperation and Development (OECD).

European and Japanese firms also emerged with the help of technology transfer and state support. Tariffs were erected as a means of sheltering their own national capital. For instance, the European Economic Community (EEC) raised its tariffs to 17% (Handerson, 1985). U.S. capital attempting to circumvent taxes relocated production further into Western Europe and Japan. In the short run, this helped U.S. firms retain their grip on the foreign markets. But this also accelerated the growth of Japanese and European firms (MIDA, UNIDO, 1985) which then provided stiff competition to U.S. firms. Competition not only reduced the market share of individual firms, but also helped check prices. This meant that U.S. capital had to contend with the encroaching threat of Japanese and European capital. For U.S. capital, a gradually depleting industrial reserve army in the 1960s saw increasing pressure from labour in the share of the surplus product. Wages started spiralling. For example, in the late 1960s, labour cost amounted to 46.7% of total production cost (Maxwell *et al.*, 1985:5). With a tight rein kept on the price ceiling caused by competition between capital, rising real wages began to pose serious obstacles to U.S. firms. As the *New York Tribune* reported, capital had three alternatives, namely, to emigrate, automate or evaporate (Frobel, 1983:17). Thus, contrary to the claims of the profit-squeeze theorists, it is argued that although the profit-squeeze actually took place in the U.S. in the 1960s, competition between capital has been the more important reason for the relocation of production.

In this early phase, U.S. capital chose to relocate the labour-intensive stages of production. The U.S. state in its efforts to shelter its own capital, introduced customs items 406.3 and 407.0 which gave tariff exemptions for U.S. firms to relocate labour-intensive production in the Third World (Moxon, 1974:29: Linda Lim, 1978:17). As a result, the labour component of production cost fell to 35 percent (Maxell *et al*, 1985:5). Japanese and Western European firms soon followed them (Morris-Suzuki, 1984; MIDA, 1983).

At this point, international institutions such as the World Bank and the United Nations Industrial Development Organization (UNIDO) were at the forefront in encouraging Third World nations to create export processing

zones as a means of accelerating their industrial development (Muto, 1974; Tsuchiya, 1974).[2] Malaysia was one of the Third World nations that chose to introduce Free Trade Zones (FTZs) as part of its export-oriented industrialization model. After the FTZ act of 1971, Penang's first FTZ was launched in 1972. It is important to note here that pressing social problems such as rising unemployment and poverty were important considerations that explain why the Malaysian state was prepared to provide various provisions to attract foreign capital (Malaysia, 1971). Thus, it will be incorrect to state that the influx of foreign semi-conductor firms to Penang was merely an institutional response of foreign capital.

In fact, the first major relocation of semi-conductor production to Penang took place in this period. The second major influx only began in the late 1970s when the firms in Penang decided to integrate their test plants from Singapore. The latter was fuelled by a restructuring of incentives by the Singapore government (Kamal and Young, 1985; Rajah, 1987). The Singapore government revamped its tax structure to promote higher value-added stages of production. Thus, test plants, which are more capital-intensive than assembly plants were transferred out of Singapore. However, the impact of this influx on the semi-conductor employment levels in Penang till 1980 was not dramatic. Falling overall production volumes that were triggered by the oil crisis of 1979 offsetted the increase (Table 1). Such a spatial relocation was indeed the primary factor that accounted for the big jump in semi-conductor firms in Penang in 1982.

Table 1
Employment in Semi-conductor Industry, Penang, 1980-87

Year	Employment
1980	11,779
1981	20,498
1982	18,066
1983	19,076
1984	18,266
1985	15,147
1986	13,098
1987	16,336

Source: Rajah (1987) & PDC (1988).

The Mid-1984 Industry-Wide Crisis

Transnational strategy on the spatial mobility of production in the semiconductor industry took a dynamic shift in the mid-1984 industry-wide crisis. Until then, only the stages of assembly and final test were relocated in Third World sites (Rajah, 1987). Penang remained an off-shore enclave specializing in labour intensive stages of production such as assembly and final test. The picture appears the same for consumer electronic firms even now.[3] But in the case of the semi-conductor and telecommunication firms, the mid-1984 industry-wide crisis accelerated the introduction of capital-intensive automation technology. This section looks at the nature of competition in the 1980s that triggered a change in transnational strategy to rapidly introduce automation technology, planning and organizational techniques that have added a new spectrum to the spatial network of transnational subsidiaries.

Between 1981 and mid-1984, the electronic industry enjoyed an upswing when production volumes reached peak levels. Most firms recorded profits that more than doubled (Rajah, 1987). However, by mid-1984 the semi-conductor inventory in the world market had reached its peak. For example, the memory chip market was so glutted that every US$100 million investment in new capacity triggered vicious price cuts and shrunk revenues by US$500 million (*International Business Week*, January 11, 1988:61)

This enormous glut brought about an immediate fall in product prices. The price of 256K erasable, programmable, read only memory (EPROM) chips dropped from US$17 to US$4 within a period of just ten months in 1985 (*Fortune*, January 6, 1986:21). Rivalry between firms was so intense that US firms accused the Japanese of dumping, claiming that the cost of producing a unit of 256K EPROM chip could not dip below US$6.85. Even more phenomenal was the case of the 64K dynamic random access memory (DRAMs) chips, the prices of which had initially fallen from US$50 in 1980 to US$10 in 1981-82, and subsequently from US$3 in 1984 to US50 cents in 1985 (*Financial Times*, July, 8, 1985).

US firms in particular, stunned by the effects of competition, looked upon its own national state for support. The US government concluded that the Japanese had, in fact, dumped and subsequently raised tariffs on Japanese chips to 188 percent (*Fortune*, January 6, 1986:2). This was the first direct effort by the US state to revive its ailing national corporations, but which was dropped subsequently when the two economic giants signed a floor price agreement. Meanwhile, the US applied pressure upon the Japanese government to reduce its massive balance of payments surplus. Subsequently, the Yen was forced up (*Electronic Business*, January 1, 1987:64-65). In addition, a whopping US$300 million economic sanction was slapped on Japan. Most of these sanctions have now been removed as a result of a sharp decline in Japan's balance of payments

surplus. The US state has also pressured Japan to open its domestic market which exceeded US$13 billion in 1988 (*International Business Week*, January 11, 1988:61). In fact, the US government was instrumental in the withdrawal of the generalized system for preference (GSP) from the newly industrializing countries (NICs) which were also gradually cutting into the domain of US firms. Consequently, the currencies of South Korea, Taiwan and Singapore too have been forced up (*Economic Impact*, March, 1987:34; *International Business Week*, December 28, 1987:21). In addition, Singapore and Taiwan have been forced by the US to lower their tariffs (*Economic Impact*, March, 1987:34). In order to shelter its own corporations, the European Economic Community (EEC) supported the efforts of the US state. Along with Canada, the EEC has erected various tariffs and sanctions on electronic goods from South Korea (*Economist*, December, 1988:68). These responses were meant to check the threat from Japanese corporations as well as those from the NICs.

Despite the global downturn that characterized the electronic industry, the only Japanese corporation in Penang did not suffer a drop in sales until 1985 (Rajah, 1988). But in 1986 and 1987, Japanese firms for the first time since incorporation recorded a reversed trend. The Yen appreciation gave a big advantage to the NICs. For example, most of South Korean electronic products were sold at prices 30-40 percent cheaper than Japanese goods (*Newsweek*, February 29, 1988:36). To overcome the constraints imposed upon them, Japanese firms began relocating major production ventures off-shore to offset the 'yen effect' and circumvent taxes. In fact, the Japanese semi-conductor company in Penang has as a result included two new product lines. Its plant in Kulim in the state of Kedah, which was being phased out gradually since 1985 (Rajah, 1987), has now been given new life. However, most of the relocation was centered in the US which continues to be the biggest market for Japanese goods. Corporations from the NICs are following suit. Taiwan's and Singapore's machine tool and plastic industries have moved part of their production into Malaysia to escape the 'GSP and currency appreciation effects'.

The Japanese had on many occasions claimed that the stringent clampdown by the US on Japanese firms was unreasonable (*Economic Impact*, 1987:24). However, this brought a contradictory effect, for stopping the Japanese from cutting chip prices within their market caused American computer prices to increase appreciably, thereby giving Japanese computer makers a big advantage (*Forbes*, April 4, 1988:91).

Reorganization of Production

The above turn of events led to new development. Semi-conductor firms began to introduce various changes following the industry-wide crisis. First, companies began to pile up investments on research and development (R&D).

This had the effect of shortening the product cycles which, in turn, became the main drive behind the mergers that began in mid-1984 (Rajah, 1988:28-30). Second, the process of automation that was begun in the late 1970s, received added impetus despite the fact that labour remains cheap in Penang. Third, systematic planning and reorganization of production took a dynamic turn with the incorporation of Just-In-Time (JIT)[4] techniques and Materials Requirement Planning (MRP).[5] In fact, this third response, with the emergence of the Far East market, provided the basis for a dramatic shift in the spatial organization of production at major regional markets.

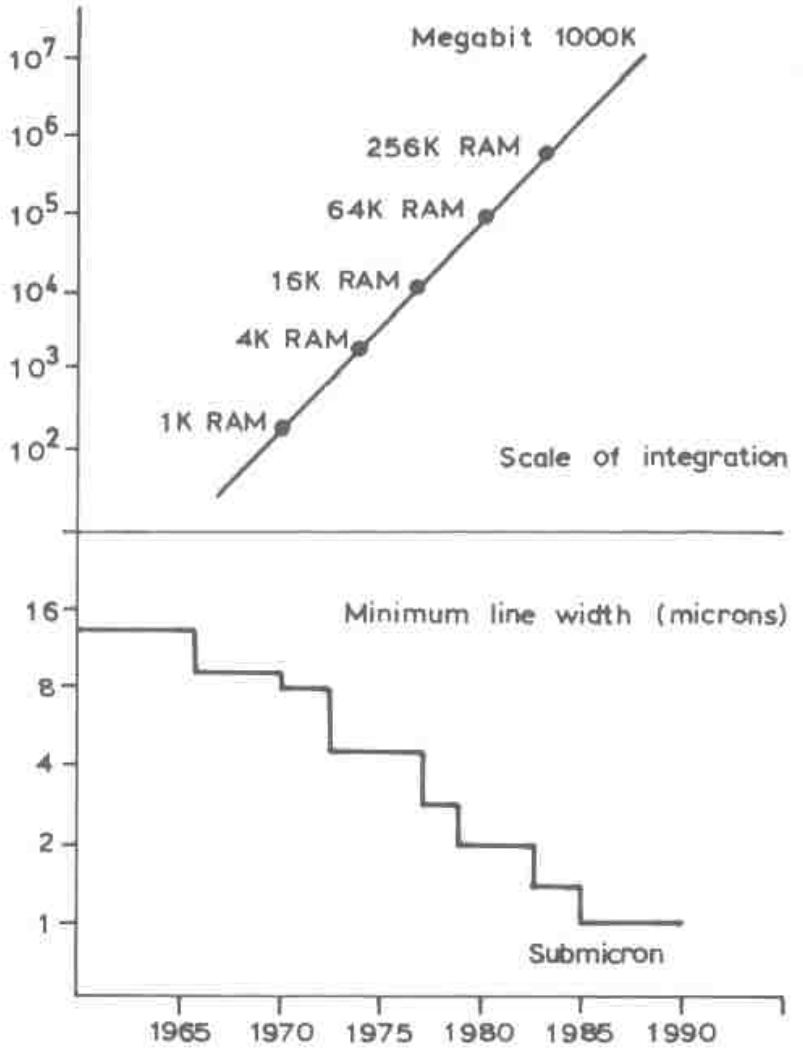
Acceleration of Product Cycles

The acceleration of product cycles represents one of the most important responses made to overcome the massive glut. To remain competitive, firms, among other things, began to place priority up on producing newer and better commodities. For example, Advanced Micro Devices (AMD) invested US$45 million on R&D in 1985 (*Fortune*, January 6, 1986:20). The scale of integration within the semi-conductor industry, has increased exponentially, and this has led to a big reduction in production cost (Lalor, 1986:26). The minimum line width has shrunk tremendously. As in the case of DRAM chips, a million bytes can now be inserted into chips that have a minimum line width that run into submicrons (see Figure 1). Forming the heart of all electronic goods, integrated circuits often determine their level of sophistication. Cheaper chips have also led to a marked shift in consumer demand from mainframes to personal computers. Better monitors and operations now characterize consumer electronics appliances such as video cassette recorders and telecommunications equipment.

The absence of emphasis on R&D explains why Mostek, an American semiconductor subsidiary that depended heavily on 64K DRAM chips, crashed in the mid-1984 industry-wide crisis (*Fortune*, January 6, 1986:21-23). Even in Penang, firms are rapidly introducing new products (Rajah, 1988a:45). In fact, at least two firms have already introduced the assembly and testing of the megabyte chip in Penang.

Product acceleration efforts have also been boosted by mergers and commercial alliances. In the case of U.S. corporations, a shift in anti-trust policy under the Reagan administration opened the door for corporate mergers and joint ventures (*Economic Impact*, March, 1987:24). National Semiconductor (NS) acquired Fairchild. AMD merged with Monolithic Memories (MMI) in order to share product technology (Rajah, 1988:28). These boardroom manoeuvers were of considerable significance for Penang, since both firms had subsidiaries in Penang. The mergers led to a restructuring of the plants. MMI officially lost its name after the merger. Production was streamlined. The old

Figure 1
Scale of Integration and Minimum Line-Width of DRAMs



K - One thousand bits
RAM - Random Access Memory
DRAM - Dynamic Random Access Memory

Source : Ypsilanti, 1985 ; cited in Edquist and Jacobson (1987 : 3)

AMD plants began specializing in hermetic line products while the previously MMI plants began specializing in moulded-line products. Professionals were reshuffled. Some key employees were promoted, while other important ones were encouraged to stay. Surplus workers arising from such a reorganization were retrenched through last-in-first-out basis.[6] In fact, the *Star* (October 1,

1988:6) reported that AMD shedded 900 of its 6,000 workers on the 30th of September 1988. The retrenched employees included executives, engineers, supervisors and production operators.

Other mergers involving Penang firms included Siemen which merged with Litronix in the early 1980s (Rajah, 1987). Thompson of France merged with SGS of Italy in April 1987 (*International Business Week*, May 25, 1987: 89-90). Thompson subsequently sold its plant in Penang to Integrated Device Technology and moved its Malaysian operations temporarily to Johore (Rajah, 1988). Mergers and alliances have also gone across boundaries. For example, despite legal problems entangling Intel and Nippon electric Company (NEC) over the latter's semi-conductor division's attempt to replace Intel's chip, Intel financed NEC to make some chips in order to gain access to NEC's important technology -- in particular, a chip that governs displays on computer screens (*Economic Impact*, March, 1987:28). These are only a few of the countless mergers and alliances that have taken place. While the absorption of ailing firms by stronger ones is one of the main reasons causing mergers (as in the case of Mostek by Thompson[7] and Fairchild by NS), technology and capacity sharing and market access appear to be more important.

Automation

Automation is rapidly making even the tail-end stages of production (assembly and final test), capital-intensive. Two important reasons explain the move toward capital-intensive production. First, value-added can be expanded by increasing the productivity of labour. Second, the acceleration of product cycles have attained a highly sophisticated level that many processes cannot be effectively performed without the aid of automated machinery. For instance, the introduction of the electron microscope has boosted chip yield. By enabling the highly successful detection of defective units early in the phase of wafer fabrication, this high-precision device allows defective units to be recycled efficiently. In Penang, certain processes are done by the electron microscope. The submicron chip also cannot be produced without the aid of computer-controlled machinery (*International Business Week*, June 10, 1986).

Thus the machine/man ratio in the electronic industry have since risen sharply. A Japanese firm with a machine/man ratio of 12:1 was the most automated in 1988 (Rajah, 1988). The most automated American firm had a machine/man ration of 8:1. The least automated firm, a small American one, had a machine/man ratio of 4:1.

Rapid automation is associated with a decline in labour force. The crisis of mid-1984 triggered structural adjustments that have displaced many workers. First, when demand nose-dived, low orders made a sizable proportion of the labour force redundant. Then, the reorganization of production through auto-

mation and JIT reduced the need for nimble fingers and unskilled labour. This explains why although the semi-conductor industry has recovered considerably (see the rise in U.S chip sales in Figure 1) and the demand for chips has increased, employment in the semi-conductor industry of Penang in 1985-86 fell gradually (see Table 1). Employment in 1981 peaked mainly due to the relocation of test plants from Singapore (Rajah, 1987). This figure fell slightly in 1982 because some of the test plants had actually over-recruited workers in 1981.

Although another cyclical upswing appeared to increase employment once again in 1987 (see Table 1), increasing capital-labour ratios mean that production is obviously becoming capital-intensive (Rajah, 1987: Chapter 5). Besides, employment levels are not likely to rise significantly unless new firms relocate in Penang. But unlike the 1970s when high labour turnover rates were actively encouraged to keep wages low (Linda Lim, 1978; Rajah, 1987), the current practise is different. Workers are now motivated to acquire many skills. One manager stated that workers who show flexibility and mastery of at least three line processes are promoted to 'super-operator status' (Rajah, 1988). Their monthly salary ceiling in one American firm was M$750. The figure was M$800 in another American firm. All the eight semi-conductor firms reported that headcount-trimming since 1985 was underway mainly to adapt to the new organizational systems. With the need for technical skills (such as basic programming and statistical process control methods), the practise of replacing 'expensive workers' who possessed longer years of service with 'cheaper new workers' is no more advantageous to the firms. Training and skills development has become very important. Contrary to the claim of some scholars such as Braverman (1974), the introduction of scientific management techniques seems to have improved the welfare of the workers, as increased productivity has led to a scramble for more skilled personnel.[9] With the four-shift system, working hours have been shortened, and jobs have become more permanent now. The lack of unions is certainly an important factor that has encouraged semi-conductor firms to retain production in Penang. Rapid changes in technology necessitate frequent re-training of employees. Opposition to re-training is hardly a problem in Penang. This may be a result of the lack of unionization. Apart from the incentives provided for skill development, the fear of the firms re-locating elsewhere is also regarded as a major reason explaining why employees in Penang readily accept re-training efforts (Rajah, 1988). In this regard, the recent stand by the Malaysian government to allow the unionization of electronic workers may eliminate this advantage enjoyed by Penang (*Star*, September 23, 1988). The Malaysian-American Electronic Industry (MAEI) has already voiced its unhappiness over this change (*New Sunday Times*, September 25, 1988). American semi-conductor firms in Penang are viewing it seriously. One has already threatened to re-locate in Bangkok where it has its own unused factory premises (Rajah, 1988c). Although unions are necessary

it is important for the government to understand that a move to unionize the 85,000 electronic workers in the country should not be done at the expense of scaring away the transnational firms.

Despite the rapid incorporation of automation, it is necessary to note that some product lines are still very much manually operated. For instance, the production of cerpacks and flatpacks are done manually. Two firms reported that the production of such products, being small in volume, is not economic to automate. Four firms still had manual scopework (that co-exists alongside automated dye separation and attachment) in the second optical operations where good dyes are arranged onto vacuum plates.

Planning and Organizational Techniques

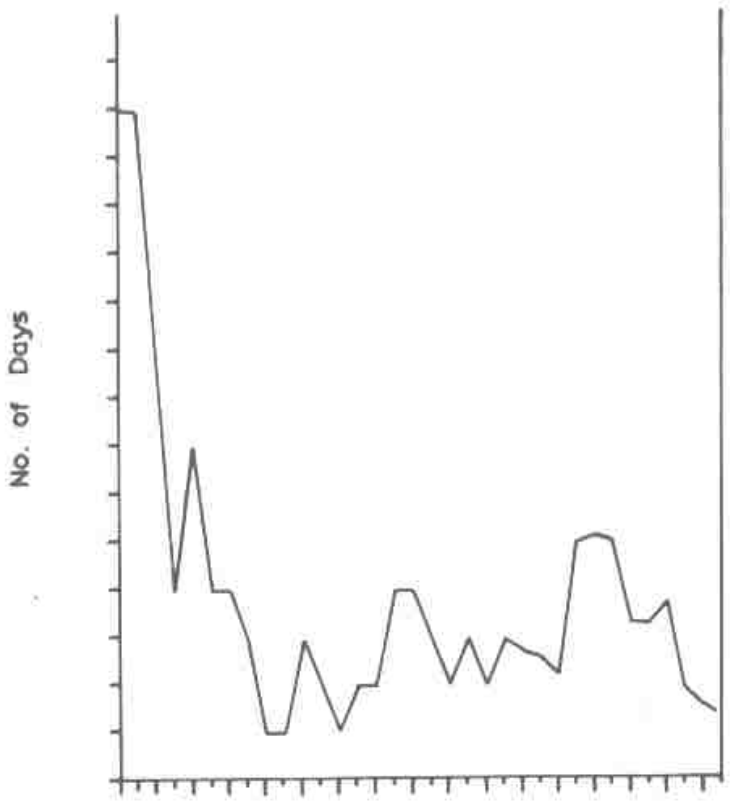
One of the most significant impacts competition has on semi-conductor firms is the introduction of sophisticated planning and organization techniques of which the JIT and MRP are the most significant. All the semi-conductor firms in Penang have instituted these changes.[10] With JIT, inventories are reduced to a minimum. Although the ultimate objective of JIt is to ship to stock, none of the semi-conductor firms have touched zero inventory levels. Since most of the products produced in Penang are semi-customized, the production line is organized in such a way so that the front of line (FOL) processes are the common ones. The whole reorganization of production including breaking and rebuilding of walls characterized the early implementation of JIT. More efficient, new and modified machines that reduce work-time and factory space are constantly being introduced (Rajah, 1988c). Plant layout is frequently restructured whenever management teams develop better inventory control systems, client-customize new processes are developed or when more efficient machinery is incorporated.

The results of JIT have been awesome. Set-up times of machines have fallen markedly while production flexibility has increased. Besides, inventory buffers, defects, idle time, surplus workers, access capacity and insufficient preventive maintenance have all been reduced. A fixed work cycle that provides a "smooth flow" in the labour process has helped reduce cost sharply. With the introduction of the four-shift system, shift-change time has fallen considerably. The normal working week has been made flexible, usually about four days when orders are low. The work-week is, however, extended when orders increase.

American semi-conductor firms in Penang use materials requirement planning (MRP) production control systems alongside JIT. Various efforts are underway to reduce the complexities involved in MRP. Statistical process control and the 'bar code' system (instead of the earlier run-card system where tallying was done manually) have been incorporated (Rajah, 1988:3). Just like JIT, MRP too is based upon improving efficiency and quality.

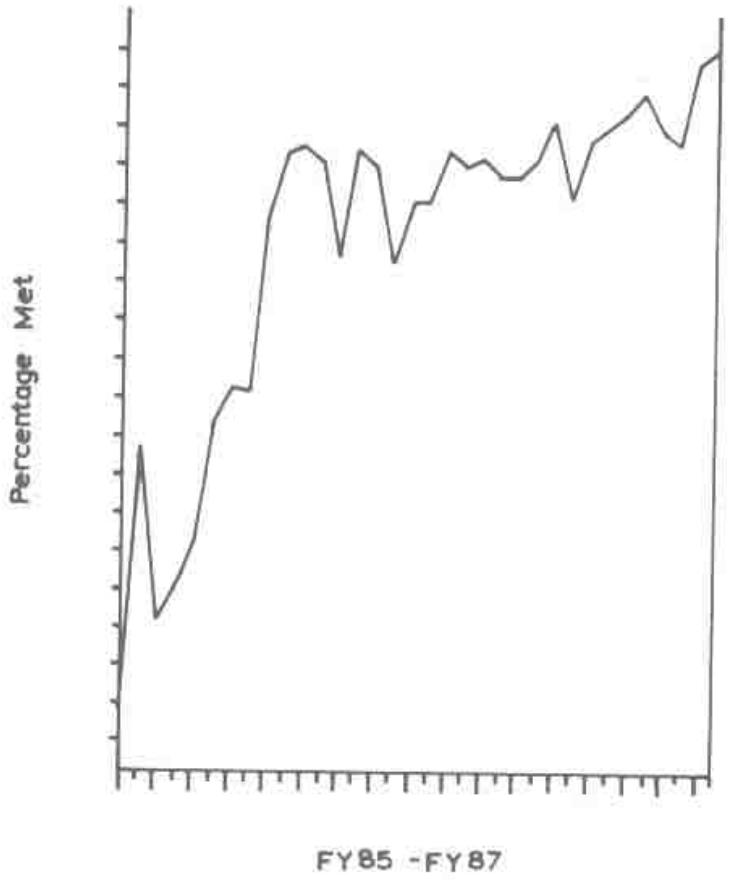
One American firm reported that such planning and reorganization have halved the required factory space (Rajah, 1988:33). About half its labour force has been slashed. The work-week too was shortened to four days. This triggered international restructuring as well. Consisitent with its need to centralize production at proximate sites to maximize the benefits of JIT, the firm moved its assembly and test operations from Barbados and Puerto Rico to fill the excess capacity created in Penang. As Hutchins (*Fortune*, June 9, 1986) has pointed out, the success of JIT depends very much on close proximity to markets and suppliers, and a close working relationship with them. This point was also noted by Sayer (1986). Not only has manufacturing throughput time fallen sharply, delivery time too has dropped considerably (see Figures 2 & 3). Furthermore, direct shipment to the Far East customers is on the increase. Unlike the 1970s when 100 per cent of all semi-conductors were exported to

Figure 2
Manufacturing Throughput Time,
National Semiconductor, Penang, 1985-87



Source : Tan, J. M. (1988 : 17)

Figure 3
Performance to Customer Due Rate,
National Semiconductor, Penang, 1985-87



Source : Tan, J.M. (1988 : 17)

parent firms, many firms send a sizable portion of their sales direct to the customer. For example, in 1988, one American firm reported to have sold between 10-15 per cent of its products in the Far East (Rajah,1988c). Another exported about 7-8 per cent. Overall, in 1985, American-owned semi-conductor firms in the Far East sold 16-18 per cent of all their sales within the Far East (Scott, 1987:26).

When inventories, materials and other inputs are kept minimal, delivery of supplies and sales need to be prompt. Thus, the general tendency for firms seeking the benefits of JIT is to centralize production at major regional markets and in places that have strong ancillary support (Rajah, 1988: 32-78). The Far East market which produced 22 per cent of the world's electronic equipment in 1983, was projected to expand this share to 29 per cent in 1988 (see MIDA/UNIDO, 1985:31). In fact, the Far East market was projected to record the fastest growth rate of 23.7 per cent over the five years. In the case

of Penang, these developments have boosted the growth of sub-contracting. Transnational corporations are now playing an active role in funding and providing the know-how for the manufacture of certain components and processes. The development of such linkages is inevitably one of the major reasons why Penang is likely to remain as one of the main points of centralization of the tail-end stages of production for semi-conductor firms.

Local Supporting Firms

The rationalization and reorganization of production has given a tremendous boost to local ancillary firms. Sub-contracting within Penang now gives many advantages to the semi-conductor corporations in Penang. Consequently, supporting firms that are linked to the semi-conductor industry in Penang now perform auto-precision turning works, precision engineering, plastic-mould parts fabrication, manufacture automation systems, precision plastic moulding products, plastic extrusion products, make moulds, stamping, tool and dye as well as packaging (PDC, 1985a; 1985b).

There are six foreign supporting firms in Penang that have linkages with the semi-conductor industry. The three which are Singapore-controlled provide burn-in and other stress-test services (Rajah, 1988c). One American supporting firm modifies existing machinery and produces automation systems. Two American supporting firms produce lead frames and some metal-plating and stamping (Rajah, 1988c). The American supporting firms have shrunk in size since 1984 as the cheaper costs of local supporting firms are gradually attracting attention. In line with cost-effective JIT requirements, the three firms stated that they would phase out once local firms in Penang and in Ipoh mature (Rajah 1988c).

Of the 38 local supporting firms in Penang in 1985, 25 are linked with the semi-conductor industry (see Table 2). The electronic industry as a whole was linked to 35 local supporting firms, with ten other firms mainly linked to audio-electronic corporations (PDC, 1985a; 1985b). Firms that have ancillary links with the semi-conductor industry provide more than half (1,448) the total employment (2,925) provided by local supporting firms in the state. It is clear that transnational electronic corporations have contributed significantly to the emergence of supporting firms in Penang. In fact, some have capitalized and provided the essential technology for the manufacture of components that were sub-contracted to other supporting firms. As a result, one firm, for instance, now supplies not only automation systems and precision engineering parts and moulds to Penang's FTZ factories, but also exports to South Korea and the U.S. In 1987, out of a total sale of about M$5 million, the firm sold 71 per cent of its produce in Malaysia (Rajah 1988c). Exports to South Korea amounted to 17.4 per cent of total sales, while exports to the U.S accounted 5.8 per cent of

Table 2
Local Ancillary Industries in Penang, 1985

	Ancillary to Semi-conductor Industry		All local Ancillary Firms	
	No.	Employment	No.	Employment
Metal Engineering	19	475	23	625
Plastic Engineering	1	200	8	1,347
Metal Packaging	3	623	4	783
Plastic Packaging	2	150	3	170
Total	25	1,448	38	2,925

Source: Calculated from Interviews & PDC (1985a : 1985b)

the total. Singapore took 1.7 per cent of the sales. The rest were sent to Hong Kong and the Philippines. The managing director of this firm was quick to point out that the rapid growth of the firm was to a great extent the result of technology transfer from the major semi-conductor corporations in Penang (Rajah, 1988c).

Therefore, it is clear that the changing dynamic of production seems to support the growth of ancillary industries in Penang. The appreciation of the Yen, withdrawal of the GSP from NICs and the rising value of the currencies of South Korea, Singapore, Hong Kong and Taiwan have given a big boost to the supporting industries in Penang. This advantage will, however, vanish into thin air if the U.S government decides to remove the GSP for Malaysia.[11]

The incorporation of JIT techniques in Penang has raised the importance of getting material supplies and other services at close proximity so that inventory flow can be minimized and made flexible. Transport costs too can be minimized. As a result, the semi-conductor corporations in Penang increasingly buy their source materials and services locally. If Penang succeeds in augmenting the momentum gained by local ancillary industries, then this will indeed be a major plus factor for re-investing in Penang.

Impact on Penang's Position

The impact of these changes on the spatial organization of production is phenomenal. In the late 1960s and 1970s, the search for cheap cost sites led to the re-location of the labour-intensive stages of production in the Third World. The machines installed then were designed to take advantage of the attribute of "dexterity" to Third World women.[12] Rivalry between firms led to firms resort-

ing to a spatial re-organization of production to retain their competitive edge. Today, Penang is one of the most important Third World sites for semi-conductor firms. But till the early 1980s, Penang had very much remained an off-shore enclave for semi-conductor firms. Even up to 1985, there was much debate whether the firms were capital-intensive (Kamal and Young, 1985).

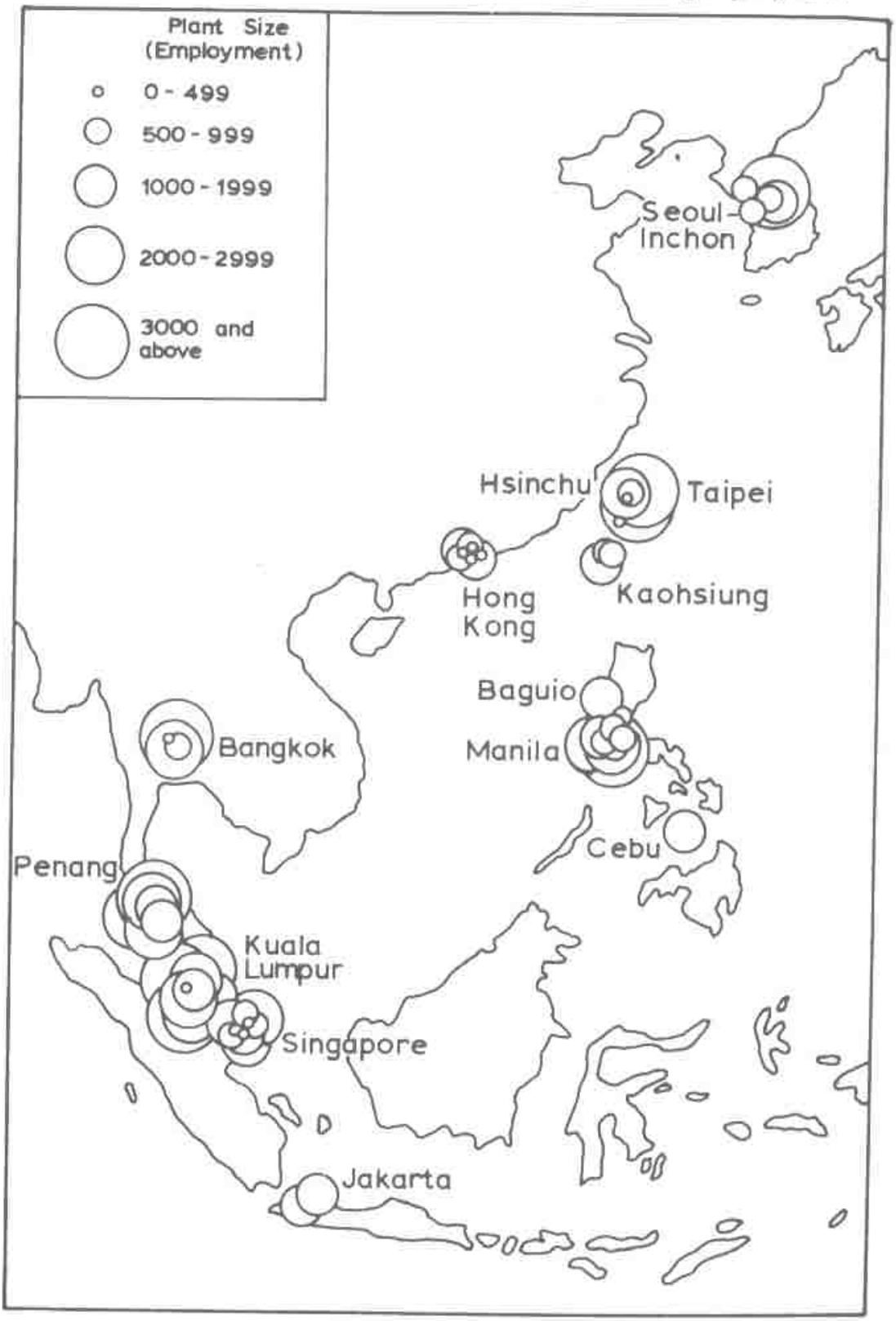
However, the nature of re-organization in the semi-conductor industry has instead transformed the once-held belief that once automation sets in, firms will gradually be re-located at parent sites in the advanced nations. With the reorganization of production since the mid-1984 industry-wide crisis, Penang has indeed become one of the major sites for the centralization of the tail-end stages of semi-conductor production. For example, one firm brought its plants from Puerto Rico and Barbados to Penang (Rajah 1987). When the government extended the Investment Tax Credit (ITC)[13] of a 100 per cent, two firms shelved plans to emigrate to Bangkok. Until late 1986, semi-conductor firms with subsidiaries in Penang considered plans to bring to Penang subsidiary plants from Manila and Jakarta and Seremban, Kulim and Malacca. One American firm had actually closed its plant in Seremban (Rajah, 1987). These plants were abandoned as a result of political tensions in Malaysia and subsequent developments in the international economy. As for Japanese capital, the period after 1986 has seen an exodus of plants out of Japan. For example, the 'Yen effect' and tariff walls erected at major markets such as the U.S market have led to Japanese firms re-locating a significant portion of production off-shore. This explains why one Japanese firm in Malaysia introduced two new product lines in Penang and shelved plans to close its plant at Kulim (Rajah 1988c).

Another significant development is the emergence of Bangkok as a strong competitor to Penang. The Thai government not only provides more attractive incentives but has also ironed out bureaucratic delays in processing foreign investment. However, because Penang has a very experienced workforce that is among the best in the world, and because the infrastructural support in Bangkok is only now being developed, Penang still enjoys a clear advantage over Bangkok (Rajah, 1988c).

In 1985, with the notable exception of Brunei, Papua New Guinea and the socialist countries of Burma, Cambodia, Laos and Vietnam, the rest of the East Asian nations had semi-conductor firms. U.S firms were found in all the countries where semi-conductor firms operated (see Figure 4). In fact, Penang is one of the major assembly and test sites in East Asia. But for all the importance of semi-conductor production, every one of the semi-conductor firms in Penang is foreign-controlled and is export-based. The two locally-owned semi-conductor firms in Malaysia are located in Ipoh and Seremban.

Another major development emerging is the possible integration of certain tail-end stages of wafer fabrication in Penang. For instance, one American firm

Figure 4
Local Semiconductor Plants in the Far East (excluding Japan), 1985



Source : Scott, A.J. (1987 : 45)

has brought the end-of-line wafer fabrication processes of dye-bumping and electrical tests to Penang (Rajah, 1988c). Another American firm is contemplating integrating a range of fabrication processes in Penang. One American firm went to Singapore after failing to obtain favourable capitalization benefits from the Malaysian government. Meanwhile, the Japanese firm in Penang is also contemplating integrating such processes.

Hong Kong, South Korea and Taiwan hold a clear edge over the other Far East countries (excluding Japan) as they have fully integrated local semi-conductor firms (Edquist & Jacobsson, 1987; MIDA/UNIDO, 1985). Thus, they are gradually creating a horizontal division of labour *vis-a-vis* the two semi-conductor superpowers, the U.S and Japan. Apart from these three countries, much of the semi-conductor production undertaken by other Far East countries is also done by foreign firms. With the exception of Manila which had 14 local sub-contracting assembly houses, the others had very few (Scott, 1987:28). Thailand and Malaysia had two assembly plants each. Singapore despite its NIC status had one assembly plant. However, Penang, the Klang Valley, Manila, Singapore and Bangkok continue to remain as important sites for foreign firms. With regard to assembly and test, the seven American semi-conductor firms in 1988 reported that for assembly and test, Penang was their most important site in the Far East (Rajah, 1988c). Six American firms went further to state that their Penang plants were the most important in the whole world.

Due to Penang's importance to foreign semi-conductor firms, the Malaysian government's apparent nod for the unionization of electronic workers in Malaysia was monitored carefully by MAEI officials. This change of stand, though denied by the Labour Minister, is widely speculated as resulting from the government's fear of a possible withdrawal of the GSP from Malaysia. Whilst the GSP is vital for Malaysia's progress and unions are necessary for the workers' welfare, efforts by the government to start unions should be done very carefully so as not to scare away the firms. Malaysia, and, therefore, Penang cannot afford to see the foreign firms leave at this point in time. Malaysia's dependence on the electronic industry can be assessed from the fact that it contributed M$6.9 billion of exports in 1987, making it the chief export earner in 1987 (Rajah, 1988a). And the semi-conductor industry contributed more than 80 per cent of Malaysia's electronic exports (MIDA, 1988). In Penang, it provided 16,336 of the 23,368 electronic and electrical employees in the Penang Development Corporation (PDC) Industrial estate (PDC, 1987).

Conclusion

Competition between firms have indeed been a major agent of change in the semi-conductor industry. In the late 1960s and 1970s spatial re-structuring

was characterized by the re-location of labour-intensive stages of production at Third World sites that offered non-unionized cheap but literate labour with various tax incentives. Penang was one of the most important of these sites.

Then, when the mid-1984 industry-wide crisis struck, the re-organization of production that followed seems to have strengthened the foundation of foreign semi-conductor firms in Penang. This can be seen from the ensuing centralization of the tail-end stages of production in Penang. Production has indeed become capital-intensive. Production technology in Penang had changed so fast that employees are re-trained frequently. Yet no signs show a possible exodus of the firms from Penang. In fact, if the Malaysian government handles the issue of unionizing the electronic workers without scaring the firms, and if the GSP is not withdrawn from Malaysia, then foreign firms should remain in Penang at least till their ITC expires.

Meanwhile, the employment contribution of the semi-conductor industry has risen once again although this time the increase is not expected to reach the peak of the early 1980s. In addition, the search for proximate supporting factories by these transnational firms have led to the development of local ancillary firms.

The reorganization of production has undoubtedly made Penang an important site for the agglomeration of the tail-end stages of production within the Far East. But because Penang has no local semi-conductor firms, it has a long way to go before it can rival Hong Kong, South Korea where there exists fully integrated semi-conductor firms.

Notes

1. For instance, Kamal and Young (1985), predicted that the semi-conductor firms would gradually leave Penang. However, Kamal and Young (1987) later in a joint paper prepared with the author, dropped this prediction.
2. These developments were believed to be engineered by the U.S government and the transnational corporations after the Tet (Vietnam) defeat in 1968. Muto (1977:16) explained that Nixon's role was only to tailor the imperial garment to suit the MNC strategy in changed circumstances.
3. Product lines in consumer electronic firms are generally labour-intensive. Even the most automated consumer electronic firms -- a German firm and a Dutch firm -- have only automated printed-circuit-board (PCB) insertions. Even this is done only in some product lines. Thus, the machine-man ratio remains 1:1 (Rajah, 1988).
4. Strictly speaking, JIT refers narrowly to a way of organizing the immediate manufacturing labour process and buyer-supplier relationships between firms, but it is normally surrounded and supported by a wider set of practices regarding skills, management-labour relations and labour market conditions (Sayer, 1986:51).
5. MRP are computer-controlled materials requirement planning systems that are employed to plan, control and monitor materials used in production (Rajah, 1988c).
6. A retrenchment benefit equivalent to four months salary plus additional cash payment for remaining annual leave as well as a month salary bonus for each year worked was paid to all those retrenched (Rajah 1988c).

7. Thompson subsequently sold the plant to International Device Technology (IDT) and moved to Johore. But sources from the firm say that the firm is on the verge of coming back to Penang (Rajah, 1988c).
8. The chip industry is again experiencing an upswing. Because production has been unable to keep up with demand, prices are soaring. Customers who used to buy the 256K DRAMs -- the 'benchmark' chip for as low as US$1.50, have been paying as much as US$15 in the informal spot market in Hong Kong. The minimum long-term contract price in the U.S today is US$2.75. Short-term contracts may be as high as US$4, while spot prices, for batches of 100 or less have reached US$5.25 a chip (*Asian Business*, August 1988).
9. Competition have pushed up wages so much that workers in semi-conductor firms are among the best paid in the Free Trade Zone in Penang. Although such a rise is not considered to form a major proportion of the surplus product, the increase has indeed improved the welfare of the workers. Even working conditions are better now (Rajah, 1988b).
10. One Japanese used Minimum Stock Turnaround (MST) which in practise resembled the way JIT is used in Penang's American firms. While calculations differ, the emphasis is placed on minimizing stock and defects (Rajah, 1988c).
11. The American Federation of Labour-Congress of Industrial Organizations (AFL-CIO) filed a petition in June 1988 calling for the withdrawal of duty-free privileges under the GSP programme from Malaysia. It is said that the Malaysian government had violated freedom of association, the right to organize and bargain collectively (*Star*, September 24, 1988).
12. The dexterity of Third World women has attributed to their ability to work carefully and at tremendous pace (Rajah, 1987; Chapter 4). Linda Lim (1978) went on to call Oriental women 'Fast Fingered Women'.
13. Investment Tax Credit (ITC) was restructured in 1985 -- extending tax exemptions to 100% of fixed investment, over five years. Losses in the five years can be accounted for after the ITC matures (*Electronic*, June 1986).

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The Seventy Million Population Policy: Implications on Health, Nutrition and Aging

Wan Abdul Manan Wan Muda

Malaysia's new population policy, popularly known as the "70 million population policy" is an ambitious and a controversial agenda that attempts to confront the challenges of the 21st century. The new policy is a complete reversal of the old policy, which was passed by the Parliament in June, 1966, under the Family Planning Act (Aziz, 1979). The National Family Planning Board (NFPB) was established in 1967 to co-ordinate and implement this Act. What prompted the government to sanction family planning was the awareness of the consequences of rapid population growth upon the social, economic and health of the population in general. The 1966 Act can be considered as the first population policy which was enacted in the country. The long-term objective of the programme was to reduce the population growth of Peninsular Malaysia to the rate of 2.0 by 1985, in consonance with improvement in the quality of life.

The population programmes have been included in the subsequent Malaysian Five-Year Plans with specific demographic goals, even though their budgets were negligible in comparison with other development programmes. The demographic objective of the family planning programmes was to reduce the population growth rate from 3.00 in 1966 to 2.0 by 1985 was short of the target. The growth rate has only declined to 2.4 by 1984 (Table 1). There has been a retroflexion in policy and objectives with the formulation of the New Population Policy, which aims to achieve a 70 million population by the year 2100. The new policy can be seen as a reversal from an anti-natalist to the pro-natalist inclination. The old policy was more concerned with controlling and managing the growth rate. This has now has shifted to one aimed at devising ways and juggling the statistics to arrive at the miracle number of 70 million in the far distant future.

The aim of this paper is to examine the implications of the "new population policy". First and foremost I will examine the rationale for selecting the "70 million" figure. Due to the limited scope of this paper, I will focus only on three implications namely, health, food and nutrition, and aging. It is not my aim to

Table 1
Average Annual Growth Rate of Malaysian Population

Year	Growth Rate (%)
1961 - 1965	3.0
1965 - 1970	2.6
1970 - 1975	2.6
1975 - 1980	2.4
1980 - 1984	2.4

Source: Hamid Arshat "New Population Policy: Some Findings from the MPFS". Paper presented at Seminar on the Findings of Population Surveys and Their Polity Implications, Pulau Pinang, 15 Feb.-1 March, 1987.

provide any alternative policy because any such recommendation is beyond the scope of this paper and requires a separate discussion.

Population Change: Theoretical Perspectives

Rapid population growth is generally regarded as a major obstacle to economic development in developing countries. Population theorists emphasized the causes and nature of population change. One of the most prominent population theorists was Thomas Robert Malthus, whose *An Essay on the Principles of Population*, written in 1798, remains an important point of reference. According to Malthus' theory, population tends to increase faster than the means of subsistence and he suggested that the increase in population must be checked. In his own words:

> Population, when unchecked, increases in a geometrical ratio. Subsistence increases only on an arithmetical ratio. A slight acquaintance with numbers will show the immensity of the first power in comparison to the second.

Malthus also maintained that the passion between the males and females is necessary and will remain constant (Harvey, 1980), but the population resource question remains his central theme. However, his "arithmetical ratio" was later replaced by the "law of diminishing returns" by his followers after realizing that the "ratio" did not hold true (Meek, 1971). In his critique of Malthus, Engels pointed out that Malthus had ignored the contribution of science which also

advances in proportion to the body of knowledge, which under normal conditions, also grows in geometrical progression. In Engels's words:

> The area of land is limited -- that is perfectly true. But the labour power to be employed on this area increases together with the population; even if we assume that the increase of output associated with this increase of labour is not always proportionate to the latter, there still remains a third element -- which the economist, however, never considers as important -- namely, science, the progress of which is just as limitless and least as rapid as that of population".
>
> (Engels, 1942)

Since the Bucharest World Population Conference in 1974 there has been an on-going debate on population theory and policy (Simmons, 1983). There are several prominent views on how to manage the population problem. The first view upholds family planning strategies that reduce growth rates, and also, therefore, fertility rates (Berelson, 1975). This school of thought argues that the population problem is a result of the lack of knowledge in birth control (Ritchie-Calder, 1980). Family planning is treated as an antidote to population explosion and socio-economic woes. Massive family planning schemes were carried out in the developing world through the exportation of birth control technology from the west since the 1960's to reduce fertility (Epstein and Jackson, 1977). However, family planning programmes have not been proven to be the single factor which reduce fertility in developing countries. The shortcoming of the family planning approach rests on the mistaken assumption that poor people in developing countries want small families and they also lack the techniques of fertility control (Epstein and Jackson, 1977). Evidence from the Khanna study in India and the Ibadan study have disputed the above assumption (Mamdani, 1972; Caldwell, 1977). These studies indicate that reducing fertility was not the primary aim among women.

The contribution of family planning towards the decline in fertility in countries which promote family planning are also ambiguous. Declines in fertility in a country like Taiwan "was neither induced nor accelarated" (Li, 1973) by family planning programmes, and in Turkey fertility decline occured in the absence of family planning programmes (Sri Kantan, 1977). The basic factor which induced fertility decline rests on the improvement in the socio-economic well being of the population.

The second view is epitomized by the neo-Malthusian school which pressed for coercive measures to check population growth. This view is based on what is referred to as a race between population and resources or population and the food equation. Many negative metaphors have been created to alert people of the horrors of large populations, and are also sometimes used to justify unscrupulous means of population control. Such metaphors include "the life boat

ethnics" (Lucas and Ogletree, 1976)", "the spaceship earth", (Hardin, 1980) "ecodestruction", "the population bomb", (Ehrlich, 1968) "the triage", "standing room only", "the doomsday syndrome", (Maddox, 1972) "zero population growth", "the tragedy of the commons" and many other expressions which depict the monstrosity of population explosion. The proponents of this view believe that the problem of over-population can be solved by denying or withdrawing aid (food) to countries which, or people who, do not show any hope of solving them. According to Hardin (1980), the rich should seek to neglect the poor to avoid material ruin, in his words, "complete justice is complete catastrophe". The rich country is a lifeboat full of rich people and the poor should never be allowed to climb aboard. "The triage" policies' solution to the problem would be to allow the poor and the incapacitated to drown naturally when they no longer have the strength to cling on the lifeboat. This intolerable view and unfounded trepidation of overpopulation have led their proponents to advance vicious measures to curb population growth. The phobia of overpopulation has brought about serious impediments towards understanding the mechanics of population change and developing a rational population policy.

The third view insists on development. According to this view, the population problem can be overcome through economic development, social change, and social and political revolution. This view is shared by adherents that employ a wide spectrum of approaches, ranging from liberal to radical change. This view relates population growth to economic and political factors, and it prescribes economic and political solutions to the population problem. More precisely, this view propounds that the population problem is a function of the welfare of the people (UNFA, 1974); population control is no panacea for the population problem, because the cure lies in poverty eradication, redistribution of resources, agrarian reforms, land reforms, modernizing industry and agricultural production, increasing the level of education and general improvement of the health of the population.

Commoner (1980) argues that it is poverty and not overpopulation which is the essential problem. The process of demographic transition did not take place in developing countries. This is due to the prevalence of poverty, which, in turn, is attributed to colonialism. Although colonialism helped in some ways to reduce mortality through improved medical services and sanitation, it also robbed the Third World of the means to achieve industrialization. Mamdani (1972) has redefined further the over-population problem by arguing that there is no fundamental difference in the number of people who crowd the streets of London or New York City and the streets of Delhi. For him, it is not the masses of people, but rather mass poverty that depicts the striking difference between two cities. The other aspect of this view argues that socio-economic upgrading of the family, particularly the increase in income and education of the mother, would bring about the desired fall in fertility (Murdoch, 1980).

Another component of the view outlined above explains the persistence of poverty and unprecedented population growth by the so-called "dependency" or "underdevelopment" theory. The dichotomy between the rich and poor countries is maintained by the exploitation of the "center" (rich countries) over the "periphery" (poor countries) (Streeten, 1979). The ruling elites in the perphery are comprised of those whose economic and political power are linked clearly with the national and international systems of inequality. Therefore, unless the bondage is cut loose, the problem of population and poverty will stay.

On the other hand, the ILO has adopted the "basic needs" model to meet the needs of the poor in order to improve the quality of life of the population, and therefore, the population problem. The basic needs approach consists of two essential elements (ILO, 1977): (i) certain minimum requirements for private consumption -- adequate food, clothing and shelter; and (ii) essential services provided by and for the community at large, such as safe drinking water, sanitation, public transport, and health and educational facilities.

The fourth approach that shares the above view on the population problem is the Marxian version. According to this analysis the scientific population-resource question is ideological in nature (Harvey, 1980). The crux of the Marxian analysis on population is essentially a response to Malthus (Willigan and Lynch, 1982). According to Malthus, the historically meaningful struggle is between human beings and nature (resource), but for Marx the struggle is waged among specific classes of people -- class struggle. Marx also criticised Malthus' theory for being ahistorical because Malthus did not consider the historicity of man and his relation to nature in his law of the population's relation to subsistence (Marx, 1974).

In Marx's view, the population problem is, in fact, the product of the process of capital accumulation, for it is in relation to this process that an increasing number of people are transformed into a surplus population (Willigan and Lynch, 1982). Seen in this perspective, the pressure of population is not against the means of subsistence but against the means of employment (Meek, 1971). The means of employment will increase only when there is an increase of machine power and capital; while the means of subsistence will increase with the increase in productive power (Engels, 1971). Relative surplus population or the industrial reserve army according to Marx, is necessary for capitalist production and accumulation on which the law of demand and supply of labour works. Therefore, preventive checks or controls on surplus population can be self-defeating.

On the question of subsistence, resources and scarcity, the Marxist analysis reveals that there are various ways to deal with them. Their options, as Harvey (1980) has outlined, consist of the following:

(1) change in societal goals and social organization of scarcity
(2) change the technology and cultural appraisals of nature

(3) change the material needs
(4) seek to alter the size of population

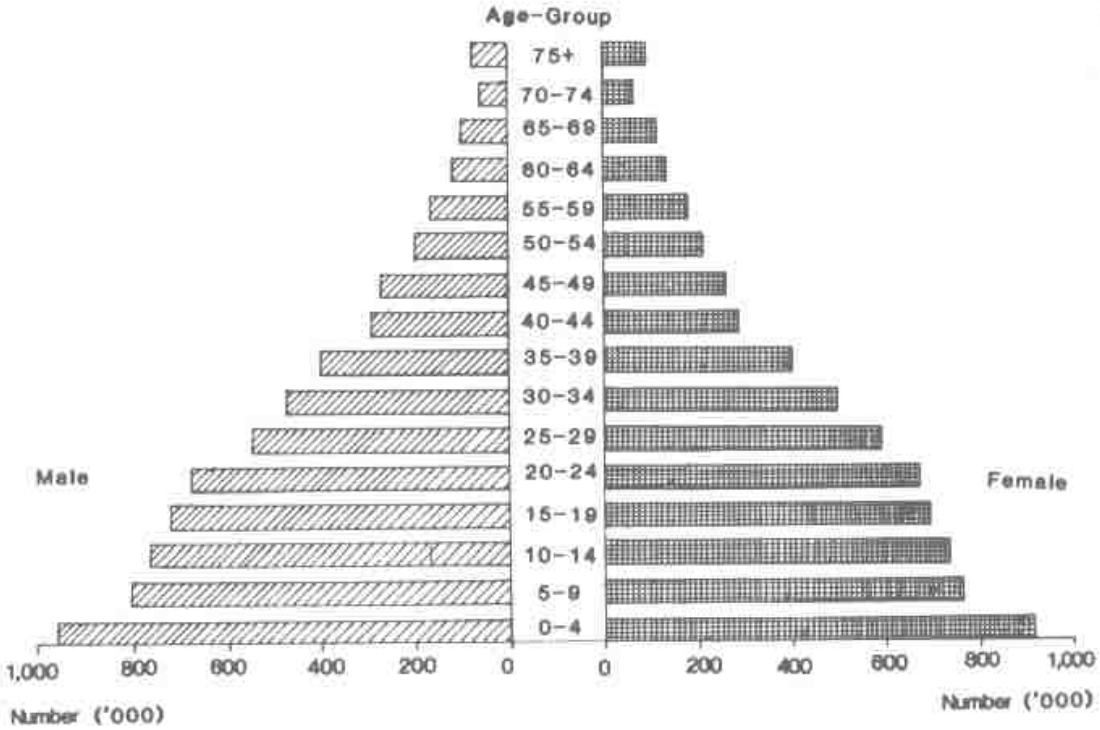
The above views are not exhaustive; there are other views and theories are not covered here. I have only presented the more prominent viewpoints which have been widely employed in analyzing the population problem.

The Demographic Situation

World Demographic trends have been shifting over the decades due to changing growth rates in many countries particularly the developing regions. The world population in 1950 was about 2.5 billion, the figure then doubled to about five billion within 35 years (that is, in 1985) (United Nations, 1986). The developing countries' share of the world's population has reached 75.7 per cent and is expected to increase to 83.0 per cent by the year 2025. This change in the geographical distribution of world population will have a considerable impact upon the developing countries. The annual rate of natural increase for the developed countries has declined progressively from 1.28 per cent between 1950-1955 to 0.64 per cent between 1980-1985 and is expected to further decrease to 0.29 per cent by 2025. The rate of increase for the developing countries between 1950-1955 was 2.04 per cent. This increased for two decades before it reached 2.39 per cent in 1970-1975, and later decreased to 2.01 per cent in the 1980-1985 period. However, it must be remembered that the decline in the growth rate does not mean that the population size is decreasing. As a matter of fact, the population size is still expanding. This is because population size is increasing faster than the decline in the growth rate; thus, it is only a matter of time before a certain population size is reached if the growth rate does not decline.

The population growth of a country is determined by the interaction between births, deaths and migration in a given period of time. For Malaysia, the rate of natural increase has been the main determinant of population growth since the country's independence. In general, Malaysia has a relatively young population with almost half of the population under 15 years old. This phenomenon can be seen in Figure 1 where the population pyramid for Peninsular Malaysia in 1980 represents a broad base structure. The population size and growth rates for Malaysia from 1961 to 1980 is shown in Table 2. The trend indicates that the growth rate has declined from 3.3 in 1962 to 2.5 by 1980 for the whole country. However, growth rates in Sabah and Sarawak indicate a different pattern. Sabah, in particular, has a much higher growth rate than the general average, and it has not shown any consistent pattern of decline. In fact, the growth rate has shot up since from 3.0 in 1963 to 5.6 in 1972 and 1973, before declining to 4.3 in 1978. It remained at that level till 1980. If the growth rate of 2.5 of 1980 continues at the same level, Malaysia can expect to double

Figure 1
Population Estimates by Age-Group in Peninsular Malaysia



Source: Social Statistics Bulletin, 1986 Kuala Lumpur: Department of Statistics.

her population by 28 years. The total population for Malaysia have shown a steady increase since 1961 from 8.4 million to about 14 million in 1980. The increase in the size of the population is the result of a gradual decline in mortality patterns and the increase in life expectancy of all ethnic groups (Tey and Abu Bakar, 1986). The mortality decline represents a steady decline in the crude death rate, infant mortality rate, neo-natal mortality rate and toddler mortality rate since 1957 (Tey and Abu Bakar, 1986). The pattern of fertility in the country has also declined since the post war period and the decline will continue unless some drastic measures such as the pronatalist strategies are adopted to slow or reverse the trend.

The 70 Million Policy

Following the United Nationn's use of the term, a population policy refers to:

> ...measures and programmes designed to contribute to the achievement of economic, social, demographic, political and other collective goals

Table 2

Population Size and Growth Rates For Malaysia, Peninsular Malaysia, Sabah and Sarawak

Year	MID-YEAR POPULATION (100's)				ANNUAL GROWTH RATE (%)			
	Malaysia	Peninsular Malaysia	Sabah	Sarawak	Malaysia	Peninsular Malaysia	Sabah	Sarawak
1961	8,378.5	7,146.7	470.3	761.5	3.2	3.3	3.5	2.3
1962	8,651.8	7,383.7	486.2	781.9	3.3	3.3	3.4	2.7
1963	8,920.2	7,614.2	500.9	805.1	3.1	3.1	3.0	3.0
1964	9,168.4	7,822.3	519.7	826.4	2.8	2.7	3.7	2.6
1965	9,436.6	8,045.9	538.7	852.0	2.9	2.9	3.7	3.1
1966	9,732.7	8,294.9	559.5	878.3	3.1	3.1	3.9	3.1
1967	10,007.4	8,520.7	581.9	904.8	2.8	2.7	4.0	3.0
1968	10,252.8	8,724.2	601.3	927.3	2.5	2.4	3.3	2.5
1969	10,500.2	8,927.9	623.8	948.5	2.4	2.3	3.8	2.3
1970	10,768.1	9,146.7	649.0	972.4	2.6	2.5	4.0	2.5
1971	11,067.7	9,390.0	680.0	997.7	2.8	2.7	4.8	2.6
1972	11,376.3	9,634.8	718.1	1,023.5	2.8	2.6	5.6	2.6
1973	11,683.1	9,874.2	758.4	1,050.5	2.7	2.5	5.6	2.6
1974	11,982.1	10,114.3	790.0	1,077.8	2.6	2.4	4.2	2.6
1975	12,295.8	10,369.4	821.4	1,105.1	2.6	2.5	4.0	2.5
1976	12,609.4	10,614.5	826.5	1,132.5	2.6	2.4	5.0	2.5
1977	12,946.3	10,882.2	903.8	1,160.4	2.7	2.5	4.8	2.5
1978	13,269.4	11,133.7	918.2*	1,188.5	2.5	2.3	4.3*	2.4
1979	13,611.2	11,401.5	959.5*	1,258.5*	2.5	2.4	4.3*	2.8*
1980	13,881.2	11,583.8*	1,002.6	1,294.8	2.5*	2.4*	4.3*	2.8*

Source: Noor Laily Dato' Abu Bakar *et. al. Facts and Figures*, Kuala Lumpur: National Family Planning Board, 1982.

> through affecting critical demographic variables, namely the size and growth of the population, its geographic distribution (national and international) and its demographic characteristics..."
>
> (NAS, 1974)

Policies can influence the demographic variables directly or indirectly depending upon their objectives and the means to achieve them. A population policy usually aims to improve the living conditions of the masses as well as restructure the population within a country. Malaysia's population is also economically differentiated along ethnic lines. This makes a population policy all the more necessary. However, it is should be made clear at the outset that the primary emphasis of population planning should aim to satisfy the basic needs of the inhabitants rather than meet other lesser problems associated with over-population or under-population.

The Malaysian government was recently alarmed to the possibility of under-population. This was partly based on the projection made by the World Bank in its World Development Report 1983, which projected that with the current growth rate Malaysia will achieve a stationary population of 35 million by the year 2100 (World Bank, 1983). The projection was based upon the 1980 data on age and sex, fertility rates, mortality rates and international migration. A stationary population refers to the condition where age-specific and sex-specific mortality rates have not changed over a long period, while age-specific fertility rates have simultaneously remained at replacement level (NRR = 1). At this stage, we can assume that the birth rate is constant and equal to the death rate and the growth rate is zero.

The desire to have a stationary population of 70 million was mentioned by the Prime Minister of Malaysia in the Dewan Rakyat (Parliament) on March 29, 1984. The objectives of having a 70 million population are not clearly specified. The Prime Minister argued that "we must have a sufficiently large domestic base if we are going to industrialize" (*Business Times*, 1982). This view was already expressed earlier in the *Mid-Term Review of the Fourth Malaysia Plan* (Malaysia, 1984:21):

> The formulation of a new population policy will be necessary as the current target for population growth is up to 1985. Malaysia's population is relatively small and the nation has the capacity to generate the wealth that will support a much larger population. The domestic market is relatively small and this has also put constraints on the development of industries. Recognizing that a large population constitutes an important human resource to create a larger consumer base with increasing purchasing power to generate and support industrial growth through productive exploitation of national resources, Malaysia could, therefore, plan for a larger population which could ultimately reach 70 million. The

> experience of some countries of similar size to Malaysia has shown that a large population is not necessarily a liability if the population is provided with skills that can be effectively and productively utilized for national development. It needs, therefore, to be stressed that raising the level of productivity of the population and being more diligent will be critical for further improving the standard of living of an anticipated larger population.

He also seemed to believe that Malaysia should follow the path of the Japanese, noting that Japan's industrialization was partly due to the large size of her domestic market (Population Council, 1983). This "Look East" view tends to ignore other successful industrialized countries such as Switzerland and the Scandinavian bloc which have small populations but are considered as a member of the highly industrialized nations of the world.

The new 70 million population policy does not list any valid rationale for its formulation. Even the rationalization that Malaysia needs a large market is debatable. The belief that a lower birth rate and small population would inhibit the investment of capital due to low demand is misleading (Aziz & Yunus, 1982). What encourages investment is not the size of the population but the economic climate. The lack of domestic capital can also result in poor investment. Population only affects the size and growth rate of the labor force and it is unlikely that it will dictate economic growth. However, the age composition of the population can have a significant effect upon the savings ratio. Studies by N. Leff show that an increase in the proportion of people age sixty five and above lead to the decrease in savings ratio (Leff, 1969). In another study Ahluwalia (1974) found that a one per cent positive difference in the rate of population growth correlated with a negative difference of 1.6 per cent in the income share of the poorest group of people in the countries he studied.

Attempts by the government to propagandize the 70 million policy have invited an array of responses from the public (*Malaysian Business*, 1984; Azizah Kassim, 1984; *The Diplomat*, 1984). The new National Population and Family Development Board (NPFDB) have been employed to study the implications of the policy and to provide rationale in support of the policy. According to the NPFDB (1984), the policy is essentially anti-natalist. This means that the policy is not directed towards increasing population growth but an attempt to deliberately limit fertility. Whether the new policy can be called anti-natalist or pro-natalist is moot, particularly because of the obfuscation created by the proponents of the policy. Taking into account the current growth and fertility rates, the suggestion by ministers in the government that each family should aim to have five children is overtly pro-natalist. Most pro-natalist policies are very costly, the state would have to provide economic support to disadvantaged families, tax incentives, free services in the form of medical,

dental, food supplements programmes and education. Hitler embarked on a pro-natalist policy for a strong Aryan Germany. However, his success is doubtful (Thomlinson, 1976).

There are basically two types of population policies. The first may be termed a population-influencing policy and the second, a population-responsive policy. A population-influencing policy aims to influence the demographic variable, such as to decrease child mortality through mass immunization against measles or other diseases (NAS, 1974). On the other hand, a population-responsive policy is a policy that responses to population changes. Population responsive programmes include building enough schools for children for certain age groups, maternal and child health services or establishing health centers for the elderly. In this instance, the policy is dictated by the number of children or elderly within the population. Population policies can also influence population variables directly or indirectly. Malaysia's previous population policy was geared towards the reduction of fertility rate. A direct way of controlling fertility rate includes such family-planning measures as the pill, use of the condom, intra-uterine device, sterilization, rythm method, post-partum motivation and other less popular methods (Sodhy, 1986). Legalized abortion, practised in some countries, can also have a direct effect on fertility rate. Policies which trigger indirect effects on macro demographic variables rest upon the social, economic and cultural conditions. These policies can bring about changes in the fertility rate much slower than family planning programmes. However, they are quite feasible when considered in the long run.

Malaysia's 70 million policy does not seem to consider the many responses needed in relation to demographic transformation. The main objective is only to achieve the targeted number.

It can be anticipated that in order to achieve the 70 million figure various adjustments are required in the form of social and economic reforms to accomodate the macro-demographic changes. A population responsive policy will have to be integrated with current policy to ensure that the quality of life will not deteriorate. However, available evidence indicates that the basic needs of the population, particularly among the lower socio-economic strata, have not reached a satisfactory level. Major programmes such as the New Economic Policy (NEP), whose main objectives are to eradicate poverty and to restructure society, have yet to meet their specified targets. Here lies the contradiction of the 70 million policy. Unless the NEP is successful in eradicating poverty and restructuring society, the 70 millon policy would form an obstacle to achieving the NEP objectives. Whether we need to increase the quantity or the quality of the population is a choice between scientific objectivity and political expediency.

The socio-economic implications of the 70 million policy can be very costly especially with the current stagnation in the economy. Among the important

sectors which would be adversely affected are food supply, health, education, housing, water supply, energy supply and employment. The rate of unemployment does not appear to decline. It is even expected to increase from 7.6 per cent currently to 10.1 per cent by 1990 (Malaysia, 1986). The percentage of those registered as unemployed within the 20-24 age group has increased dramatically from 36.9 per cent in 1975 to 56.7 per cent in 1986 (Ministry of Finance, 1986). The 20-24 age group consists mainly of first-time job seekers who are educated with a minimum secondary school certificate. The number of registered unemployed females is increasing. There is also the problem of housing, which has lagged behind population growth. Low-cost housing is particularly in short supply. Apart from the major sectors above there are also social problems such as crime and drug addiction which have to be dealt with. Within the age group of 19-30 alone there about 110,000 drug addicts in the country and the government spent $400,000 per day for maintenance, treatment and rehabilitation services; this amounts to $146 million per year).

Implications on Health

Health, according to the Constitution of the World Health Organization (WHO), is defined as "a state of complete physical, mental and social well being and not merely the absence of disease or infirmity" (WHO, 1964). The above definition has been adopted since its inception in 1948. Traditionally, the health of a population is reflected by the infant mortality rate and the life expectancy at birth. With the improvement in the level of health in many countries over the past decades, a new awareness has emerged on the possibility of constructing what is referred to as "health indicators". The reasons why health indicators are needed are:

a). The growing awareness that as a consequence of the impressive success against most traditional killers in the developed world, such mortality-based measures have lost much of their information value and can no longer be viewed as adequate measures of health status of a population.

b). The widespread fascination with quantitative measurement has transgressed into the social sciences and the debate in social policy. (Hansluwka, 1985)

Deliberations on health measures have also brought about a new dimension to the problem. This is referred to as "equity (social justice) in health" (Hansluwka, 1985). "Equity in health" is basically 'equal access to health care' (Le Grand, 1984). Equity in health is aimed not only to improve the level of health but also to reduce the inequalities of health within a country and between the various strata of the population. Thus, the equity in health approach requires more than just delivering the services but at the same time redistributing resources and improving the socioeconomic conditions.

The "equity of health" approach has yet to gain currency in Malaysia. Data and information on the inequalities of health within the country are very scanty. For the purpose of this paper I will, in most cases, use the traditional measures of health status to assess the quality of health of the population. There are four measures which are normally considered, namely (a) mortality-survival (b) morbidity-disability (c) growth and development (d) social and economic productivity.

The level of health of Malaysians has improved progressively over the years. Mortality rate, particularly infant mortality has declined at an average of 6 per cent per annum between 1957-1982 (Tey Abu Bakar, 1986). Table 3 shows the trend in infant mortality for Peninsular Malaysia from 1946-1984. The infant mortality rate (IMR) was 102 per 1,000 live births in 1947, but declined to 17.5 in 1984. Several factors are responsible for this dramatic decline. They include increased mothers' education and improvement in water and sanitation (Da Vanzo & Habitch, 1986). The reduction in breast feeding kept the IMR from declining as rapidly as it would have otherwise (*ibid.*). Malaysia's current IMR and crude death rate (CDR) is, in fact, comparable with that of Korea's (see Table 4). The CDR for the various ethnic groups has also declined substantially, with Malays registering the largest. In 1947, the Malay CDR was 24.3, and this declined to 5.0 in 1982, the lowest among the three major ethnic groups (Tey and Abu Bakar, 1986). The general expectancies of life have gained 11.4 and 14.3 years respectively for males and females from 1957 to 1979 (Tey and Abu Bakar, 1986). The mortality and life expectancy trends show a promising health elevation of the general population. The population growth rate declined gradually from 3.0 per cent in the 1961-1965 period to 2.4 per cent in 1980-1984 term (see Table 1). Total fertility rate has declined by 40 per cent from 6.2 in 1958 to 3.7 in 1983 in Peninsular Malaysia (Hirschman, 1986). Table 5 shows the total fertility rate (TFR) and population size of Malaysia from 1958 to 1984. The decline in TFR has been most dramatic in the Chinese group, a decline of 60 per cent, from 6.5 in 1958 to 2.7 in 1983 (Hirschman, 1986). Málays experienced the slowest decline in TFR; from 5.8 in 1958 to 4.5 in 1983. The slow reduction of the Malay fertility rate is believed to be due to the rapid rise in the age of marriage among Malay women of child-bearing age (Hirschman, 1986). The median age of marriage for Malay females in 1947 was 16.6 but increased to 21.4 years in 1974, an increase of 29 per cent (Abu Bakar, 1982). For Chinese females, the median age of marriage increased only by 18 per cent from 20.2 in 1947 to 23.8 in 1974.

The consequences of rapid population growth on health should not be ignored in the formulation of any population policy. High fertility rate can have immediate effects on the health sector, particularly in relation to the allocation and cost of health services. In the case of Malaysia, recent population growth has not been correlated with negative effects in health status (IMR) (Siti

Table 3
Infant Mortality Rate by Ethnicity Peninsular Malaysia 1946-1984

Year	All Races	Malays	Chinese	Indians
1946	92	118	64	92
1947	102	130	71	100
1948	90	111	67	89
1949	81	93	64	85
1950	102	121	74	114
1951	97	108	82	104
1952	90	101	70	109
1953	83	99	61	92
1954	83	100	59	83
1955	78	96	53	78
1956	75	95	47	73
1957	76	96	47	76
1958	80	102	49	74
1959	66	84	41	63
1960	69	87	43	65
1961	60	78	34	54
1962	59	75	36	58
1963	57	72	34	53
1964	48	59	32	51
1965	50	61	32	53
1966	48	58	31	51
1967	45	53	30	52
1968	42	48	30	53
1969	43	49	31	52
1970	41	48	29	46
1971	39	46	25	45
1972	38	43	27	45
1973	39	43	28	46
1974	35	40	27	40
1975	33	37	24	38
1976	31	35	21	37
1977	32	36	23	37
1980	24	27	17	30
1982	19	22	12	21
1983	20	23	12	21
1984	17.5	20.1	10.5	17.3

Sources: 1. Evaluation of Mortality Data in the Vital Statistics of West Malaysia, Research Paper No. 5, Kuala Lumpur: Dept. of Statistics, Dec. 1971.
2. Vital Statistics – Peninsular Malaysia, 1963-1977. 1980, 1982-1984.

Table 4
Crude Death Rates and Infant Mortality Rates of
Selected Asian Countries for 1985

Country	Crude Death Rate	Infant Mortality Rate
Japan	6.1	6
Korea	6.1	27
Singapore	5.2	9
Malaysia	6.2	28
Thailand	7.6	53
Philippine	8.0	56
Indonesia	12.0	79

Source: 1985 ESCAP Population Data Sheet Adapted from Chak Choy Sim & Nazileh Ramli "Infant Mortality and Its Differential -- Some Findings from Malaysian Population and Family Survey 1984". Paper presented at Seminar on the Findings of Population Surveys and Their Policy Implications, Pulau Pinang, 15 Feb. - 1 March, 1987.

Table 5
Total Fertility Rates by Ethnic Community for Selected Years:
Peninsular Malaysia, 1958-1984

Year	Malay	Chinese	Indian	Total
1958	5.8	6.5	7.2	6.1
1963	5.8	5.9	6.9	5.9
1968	5.6	5.0	5.7	5.3
1970	5.1	4.6	4.8	4.9
1973	4.7	4.0	4.1	4.4
1975	4.6	3.6	3.9	4.2
1978	4.3	3.4	3.5	3.9
1980	4.5	3.1	3.4	3.9
1981	4.6	3.1	3.3	3.9
1982	4.6	2.9	3.2	3.8
1983	4.5	2.7	3.0	3.7
1984	4.7	2.7	3.0	3.8

Source: 1. Charles Hirschman "The Recent Rise in Malay Fertility: A New Trend of a Temporary Lull in a Fertility Transition? *Demography* Vol. 23(2): 161-184, May 1984. Table 1, p. 164.
2. *Quarterly Review of Malaysian Population Statistics*, No. 2, April 1986.

Norazah Zulkifli and Khairuddin Yusof, 1985). However, the trend cannot be expected to continue indefinitely if the current growth rates are to remain at the present level. Even though the growth rate has remained constant, the absolute number of people would actually increase progressively because of the exponential character of population increase.

The status of health in Malaysia has not attained the desired level stipulated by the WHO to meet the "Health for All by the Year 2000" target. Of the 12 indicators that are used to gauge the progress towards health for all (see Appendix A), Malaysia falls short in the following areas:

1. Malaysia has not met the minimum five per cent of the gross national product that should be spent on health. In fact, the allocations for health services have been gradually reduced since 1961 (see Table 7).
2. A reasonable percentage of the national health expenditure is not devoted to local health care which include preventive health, community health care, health center care and dispensary care. An extremely large proportion of the allocation (54 per cent) goes to building new hospitals and hospital extension and improvements (FMP, 1986).
3. Resources are not equitably distributed, disparities still exist in terms of facilities devoted to primary health care between the urban and the rural areas.
4. The nutritional status of children indicates a significant level of malnutrition. A substantial number of children have weight for age measurements that are below the WHO standard reference values.
5. The adult literacy rate for both men and women has not surpassed the 70 per cent level.

The above indicators reflect the current state of health status of the nation in general. Although the IMR and life expectancy of the population have improved over the years, the present trend can adversely affect the health of the coming generations if no incentives or programmes of action are formulated to restore or maintain the present level of health services. The expansion of the population of childbearing age and youth will alter the population pyramid. The current median age for Malaysia is 20.0 (Malaysia, 1981). This is indeed a very young population when we compare to the age structure of developed countries.

Health care services in Malaysia has its origins in the colonial period. The colonial heritage persists to this day without much fundamental and structural changes to the services (MMA, 1980). In Malaysia, massive expenditure in connection with health care systems has been substantially diverted to fund the expansion of hospitals, the building of new hospitals, medical schools and other related hospital development. Such extravagant services are largely directed towards the wealthier and the urban segment of the society, while the poor and

Table 6
Public Development Expenditure for Health Programme ($ million)

Programme	SMP 1971-75 Actual Expenditure	(%)	TMP 1976-80 Estimate Expenditure	(%)	4thMP 1981-85	(%)	5thMP 1986-90	(%)
Public Health Services	37.92	20.7	66.07	21.0	194.20	25.0	234.90	33.6
Patient Care Services:	110.48	60.3	166.40	52.9	470.64	60.6	377.57	54.1
New Hospitals	67.27	(36.7)	89.97		470.64		377.57	
Hospital Extension and Improvements	43.21	(23.6)	76.63		-		-	
Dental Health Services	2.35	1.3	3.96	1.3	4.02	0.5	13.09	1.9
Training	17.39	9.5	16.15	5.1	18.96	2.4	3.25	0.5
Applied Food & Nutri. Prog.	-		7.30	2.3	14.33	1.8	30.00	4.3
Other Health Prog.:	13.01	7.1	29.30	9.3	26.85	3.5	26.54	3.8
Population & Family Health Programme	2.09	1.1	25.36	8.1	46.75	6.0	12.53	1.8
Total	183.24	100.0	314.54	100.0	775.75	100.0	697.88	100.0
Total Public Expenditure	9,783		24,937		59,669		40,075	

Source: Various Malaysia Plans.

Table 7

Malaysia: Original allocations for public development expenditure by sector
(million ringgit)

	1 FYP (1956-60)	2 FYP (1961-65)	1 MP (1966-70)	2 MP (1971-75)	3 MP (1976-80)	4 MP (1981-85)	Revised 4 MP (1981-85)	5 MP (1986-1990)
Health & Population	50.0 (4.4%)	145.0 (6.7%)	189.4 (4.2%)	213.65 (2.9%)	377.15 (2.9%)	588.44 (1.4%)	762.34 (1.3%)	714.98 (1.8%)
Water	69.6 (6.9%)	140.0 (6.5%)	202.0 (4.4%)	183.75 (2.5%)	563.17 (3.0%)	1,085.71 (2.5%)	2,137.91 (3.6%)	3,130.52 (7.8%)
Sewerage	14.9 (1.5%)	8.0 (0.4%)	21.6 (0.5%)	23.97 (0.3%)	138.50 (0.3%)	200.00 (0.5%)	217.41 (0.4%)	220.29 (0.5%)
Education & Training	95.4 (9.5%)	260.0 (12.1%)	440.8 (9.7%)	537.26 (7.4%)	1,671.32 (9.0%)	2,992.83 (6.9%)	4,568.03 (7.7%)	5,582.78 (13.9%)
Security & Defence	--	93.0 (4.3%)	739.0 (16.1%)	1,100.07 (15.2%)	2,200.00 (11.9%)	9,371.55 (21.9%)	7,733.33 (13.0%)	4,704.44 (11.7%)
Total Public Development Expenditure	1,148.7	2,150.0	4,550.9	7,250.00	18,554.99	42,829.50	56,669.38	40,075.41

Sources: Various plan documents.

Adapted from Jomo K. Sundram & Chee Heng Leng "Public Health expenditure in Malaysia" *Journal of the Malaysian Society of Health* Vol. 5(1): 73-83, 1985, p.74.

the rural population bear the burden of debilitating illness and inadequate access to the services (CAP, 1983). The government health services are also highly capital intensive, particularly with the increase in over-medicalization.

Large amounts of medical expenditure in Malaysia have been used primarily for curative purposes instead of preventive care (MMA, 1980; CAP, 1983). Table 6 shows the Malaysian Ministry of Health expenditure under the different Malaysia Plans (1971 to 1990). More than half of the various health budgets were allocated or spent on the curative services in the form of building new hospitals or hospital extensions. Except for the Fifth Malaysia Plan, public health services constituted less than a quarter of the total health budget. Dental health services received only 1.3 per cent of the total health budget in the Second and Third Malaysia Plans, and was subsequently reduced to 0.5 per cent in the Fourth Malaysia Plan. Population and Family Health Programmes for the Fifth Plan was reduced to 1.8 per cent rom the previous 6.0 per cent in the Fourth Plan.

The pressure of rapid population growth will demand more services in terms of dental care and population and family health in the future. However, the present and past budgetary allocation on health did not consider these sectors the attention they deserve. The plan for a 70 million population can be hazardous to the health of the population if present trends in the delivery of health services were to continue to the 21st century. Unless fundamental reappraisals of the health services are carried out, the present services will not improve the quality of health with the expanding population.

The total government budget for public expenditure in the various Malaysia Plans show that health has been given a very low priority. Under the First Plan, health and population commands 4.4 per cent of the total budget (see Table 7); however, the percentages were further reduced in the Second, Third and Fourth Malaysia Plans (2.9, 2.9 and 1.3 per cent respectively). In relation to other essential services such as education and water supply, the allocation for health services have not shown any significant improvement. On the contrary, they were gradually reduced (Table 7). As a comparison, the health budget constituted only 15 per cent of the total defence budget for the Fifth Malaysia Plan.

The right to proper health is a human right. However, in recent times the cost of medical care in Malaysia has risen to the point of threatening the poor of sufficient access decent medical care. The Consumer Price Index for health care increased by 109 per cent between 1973 and 1983. This is much higher than the increase in the General CPI (82 per cent) within the same period (Table 8). The cost of health care is not likely to drop to the old level due to the increase in the cost of medication and also to the high technology approach in medical care. The consequence of higher medical bills can create a wider gap between those who can and those who cannot afford health maintenance. The

Table 8
Consumer Price Index For Medical Care and Health Expenses, Peninsular Malaysia 1973-1983 (1967 = 100)

	General Consumer Price Index*	% increase since 1973	Consumer Price Index for Medical and Health Expenses	% increase since 1973
1967	100.0	--	100.0	--
1973	117.4	--	107.8	--
1974	137.8	17	116.4	8
1975	144.0	23	122.4	14
1976	147.7	26	135.2	25
1977	154.8	32	140.9	31
1978	162.4	38	146.0	35
1979	168.3	43	155.3	44
1980	179.5	53	167.0	55
1981	196.8	68	185.0	72
1982	208.3	77	194.2	80
1983 (March)	214.0	82	224.9	109
1984	226.9	93		

Note: * measures average price increase of all consumer goods and services.
Source: *Curing the Sick or The Rich, CAP Report No. 2*, June 1983.

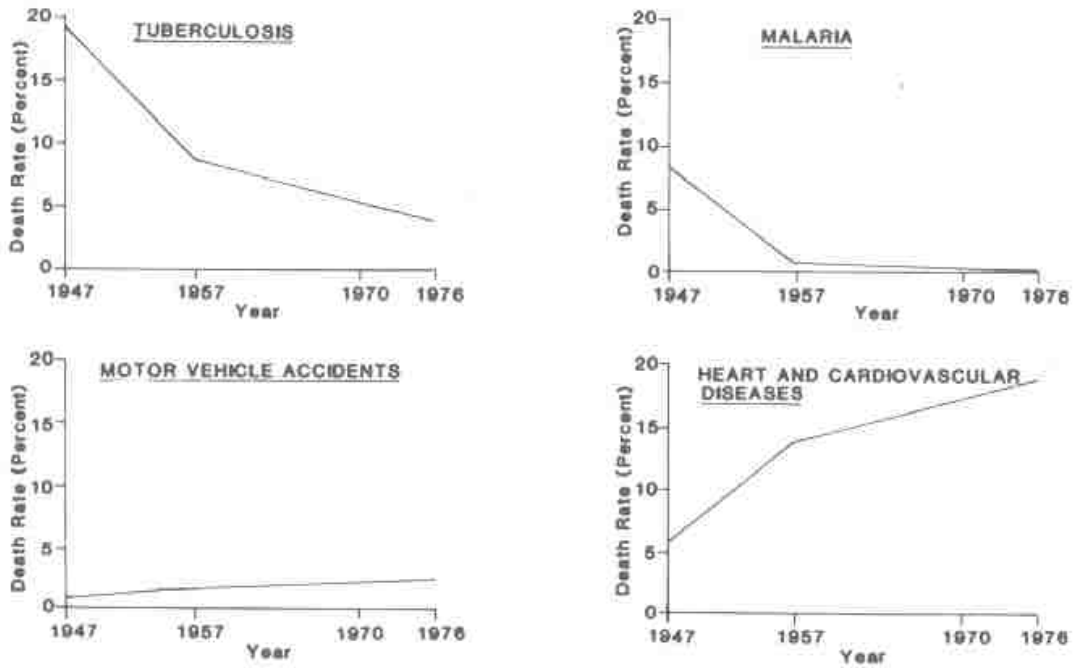
provision of health services by the government have shown a positive shift to increased awareness for public health. However, its priority for high technology medical care has not changed (see Table 6). What is imperative at this juncture is to improve the quality of health of the population rather than to increase the quantity of the population. With the present rate of rising cost of health care, promoting a pro-natalist population policy will only burden the health services structure and a further deterioration of health, particularly for the poor, the elderly, the slum dwellers and the rural population. The situation can become worse with the increase in number of private hospitals and clinics who treat patients in terms of their purchasing power rather than the merit of the illness.

Another factor that needs to be considered is the changing pattern of diseases. As the country becomes more developed and industrialized, the pattern

of diseases would also shift. Infectious diseases begin to decline and diseases associated with affluence (degenerative diseases) will begin to increase. In 1955, the leading causes of medically certified deaths due to tuberculosis, malaria, deficiency diseases and gastroenteritis represented about 30 per cent of the total deaths in Peninsular Malaysia (MMA, 1980). However, in 1976, the same diseases constituted only seven per cent of the causes of death. On the contrary, the causes of death due to cardiovascular and heart diseases, neoplasms and motor vehicle accidents have increased dramatically. From 1947 to 1976 the number of deaths in government hospitals due to heart and cardiovascular diseases and neoplasms increased by 4.57 times and 3.24 times respectively (see Table 9). This is further depicted in Figure 2. The rank order and percentage of major causes of deaths in government hospitals for 1970, 1977 and 1980 reveal that the number one killer for 1980 was heart disease (see Table 10). The changing pattern of diseases in Peninsular Malaysia will directly increase the cost of health maintenance in the future. The leading

Figure 2

Percentage of Deaths by Selected Diseases in Government Hospitals, 1947, 1957 and 1976, Peninsular Malaysia.



Adapted from MMA The Future of Health Services in Malaysia, p.19

Table 9
No. of Deaths by Selected Common Causes in Goverment Hospitals in 1947, 1957 and 1976 Peninsular Malaysia.

Causes	1947		1957		1976		Difference in No. of deaths in Goverment hospitals in 1947 and 1979
	No. of Deaths in Hospitals	% of Deaths in Hospitals	No. of Deaths in Hospitals	% of Deaths in Hospitals	No. of Deaths in Hospitals	% of Deaths in Hospitals	
Diseases of early infancy	794	6.28	1696	13.45	3301	18.81	+4.16 times
Heart & Carrdio-vascular diseases	722	5.71	1738	13.79	3298	18.79	+4.57 times
Motor vehicle accidents	124	0.98	212	1.68	448	2.55	+3.61 times
Other accidents	380	3.01	528	4.19	1461	8.33	+3.84 times
Neoplasms	358	2.83	627	4.97	1159	6.60	+3.24 times
Tuberculosis	2432	19.25	1083	8.59	656	3.74	-3.71 times
Malaria	1047	8.29	87	0.69	39	0.22	-26.85 times
Disease of liver	253	2.00	242	1.92	384	2.19	+1.52 times
Gastro-enteritis	542	4.29	113	8.83	363	2.07	-1.49 times
Pneumonia	1355	10.72	1441	11.43	778	4.43	-1.74 times
Deficiency diseases	111	0.88	338	2.68	205	1.17	+1.85 times
Other diseases	4519	35.76	3500	27.78	5456	31.10	+1.21 times
Total Deaths	12,637	100.00	12,605	100.00	17,548	100.00	

Note: Hospitals refer to Goverment hospitals only.
Source: MMA, The Future of Health Services in Malaysia, p. 18.

Table 10
Major Causes of Death in Government Hospitals in Peninsular Malaysia, by Rank Order and Percentage, 1970, 1977 and 1980

Major Cause	1970		1977		1980	
	Rank	Per Cent	Rank	Per Cent	Rank	Per Cent
Accidents	3	8.06	3	11.36	3	13.14
Gastro-enteritis	8	4.06	8	2.71	8	1.87
Heart Diseases	2	13.94	2	15.68	1	16.44
Diseases of Early Infancy	1	18.86	1	18.65	2	14.90
Cardio-Vascular Diseases	6	6.71	4	7.70	4	7.93
Neoplasm	4	7.21	5	7.07	5	7.78
Pneumonia	5	6.55	6	5.17	6	4.05
Malaria	--	--	--	--	--	--
Skin Disease	--	--	--	--	--	--
Tuberculosis	7	5.88	7	3.16	7	3.12
Pyrexis of Unknown Origin	--	--	--	--	--	--
Disease of Liver	--	--	9	2.12	--	--
Total	16,509		17,423		17,014	

Note: * Refer to the rank order of the major causes of deaths in Government hospitals in Peninsular Malaysia.
Source: Adapted from Tay (1986:115).

disease which include cardiovascular and heart diseases and cancer require expensive medical cost to treat them. The diseases will continue to increase in the future because they are basically the disease of the middle age and the elderly. As the middle age group and the elderly population increase, the incidence of such diseases will also surge. Therefore, a population policy which encourages the development of a large population will have to bear the ubiquity of degenerative diseases. Unless complete cure or miracle drugs are discovered in the near future, we will witness a sharp rise in morbidity due to these illnesses.

The response by the government to the increase in degenerative diseases is not very promising. The ratio of hospital beds to the population, which reflects the adequacy of medical facilities, has remained unchanged, and had even decreased below the previous ratio in some years. As we can see in Table 11, the acute bed situation in terms of the number of bed per 1,000 population have decreased from 1.74 in 1980 to 1.68 in 1983. The decline in the acute-bed-population ratio was due to the inability of the health sector to keep pace with the rate of population growth. It is very unlikely that the present state of health services will keep pace with the burgeoning population.

Table 11
Malaysia: Acute bed situation

Year	Bed per 1,000 population	Bed : population ratio
1947	2.73	1:366
1957	2.03	1:493
1967	1.96	1:511
1970	1.56 (1.59)*	1:641
1975	1.62	1:617
1976	1.80	1:555
1978	1.59	1:629
1980	1.74	1:575
1983	1.68	1:595

Note: * The MMA Report cites 1.56 whereas the Fourth Malaysia Plan cites 1.59.

Source: *MMA Report*, pp. 27, 29
Fourth Malaysia Plan, pp. 105, 371
Mid Term Review, Fourth Malaysia Plan, (MTR4MP), p.368.
Adapted from Jomo K. S. & Chee Heng Leng "Public health expenditure in Malaysia" *Journal of the Malaysian Society Health*, Vol. 5 (1): 73-83, 1985, p. 76.

Unequal access to health services contributes to poor health and low productivity. The Mid-Term Review of the Fourth Malaysia Plan mentioned the need to increase population in order to increase productivity (Malaysia, 1984). However, productivity is very much linked to the state of health and the level of income (Richards, 1979). The relationship between health, productivity and income is determined by the nature of production function and the supply of the various factors of production (Lecaillon, *et al.*, 1984). The supply of labour will depend on the health conditions of the labour force which in turn affects the factors of production. In the case of manual work, improvement in health will enhance productivity, which is measured by output per head per day. Ill health can affect productivity through the number of days lost due to illness. In some cases, chronic sicknesses, which do not lead to absenteeism but which, nonetheless, results in reduced physical strength and mental efficiency, can reduce the potential productive output by individuals. To increase productivity of a large population, therefore, will require an improvement in the state of health of the people and their level of income. The means to better health in Malaysia can be achieved through providing equal access to health care for the general population.

Food and Nutrition

The role of food and nutrition is a prime factor in health. The vital role of food is to provide the physiological needs of the individual. The nutritional status of the populace reflects the level of health and national development. Lack of food will result in hunger, starvation and malnutrition. The diseases produced by malnutrition in the past were mainly due to the lack of vitamin intake. In fact, these diseases were due to lack of nutrients and food. In the modern world malnutrition is still one of the main scourges of the earth. According to the Food and Agriculture Organization, there are about 450 million people (excluding China) in the world suffering from severe malnutrition (FAO, 1983). The underlying causes of malnutrition and hunger are basically the failures of government or people to reduce the disparities in food distribution and socio-economic inequalities (Latham, 1984). In Malaysia, the nutritional state of the populace has improved gradually since 1970s, but pockets of malnutrition still exist in isolated areas. The victims are usually children, pregnant women and elderly individuals.

Recently, several studies have indicated that the problem of malnutrition still persist, particularly among children of families living in rural villages. Chen *et al*. (1981) reported that the prevalence of malnutrition was directly associated with poverty in rural communities in the west coast and Kudat Divisions of Sabah. Chong *et al*. (1984) found that chronic undernutrition was highly prevalent among pre-school children (43 per cent) and primary school children (49 per cent for boys, and 35 per cent for girls) in 14 poor villages in Peninsular Malaysia. Household food consumption among the respondents revealed that 66 per cent of the households had inadequate calorie intake and 34 per cent of the households were deficit of dietary protein. The prevalence of growth retardation in pre-school and primary school children are shown in Table 12 and 13 (Chong *et al*. 1984). Recent findings from my own study of 482 (ten year old) children from ten selected rural primary schools in northern Peninsular Malaysia corroborate this. On the basis of weight for age reference, it was found that the incidence of malnutrition among these school children was 25 per cent among girls and 18 per cent among boys (Wan Abdul Manan, 1986). This study also found that the nutritional status of the children was significantly correlated with their school achievement.

Although malnutrition is a serious problem for the younger generation, there is, as yet, no major nutrition programme in Malaysia that aims to monitor the nutrition situation or improve the nutritional status of the poor in the country. The Applied Food and Nutrition Programme (AFNP), which was introduced in 1976, has not been effective in meeting the nutritional needs of the deserving groups. This might be due to the fact that the AFNP has too many ambitious goals. The objectives of the AFNP include improving the

Table 12
Prevalence of Growth Retardation in Pre-School Children (Both Sexes)

	Kota Baru	Mersing	Baling	Perak Tengah	All Kampungs
% "Stunted"	42	47	44	41	43
% "Wasted"	5	6	4	6	5
% "Stunted & "wasted"	2	4	2	3	3
% "Underweight"	30	38	35	41	37
% "Poor" mid-arm circumference	--	12	30	25	22
n	77	128	283	238	726

Source: Chong Y. H. *et. al.* Status of Community Nutrition in Poreity Kampungs. Institute for Medicasl Research (MR) Bulletin No. 23, Kuala Lumpur: IMR, 1984, p. 23.

Table 13
Prevalence of Growth Retardation in
Primary School Children (6.0-11.99 Years)

		Kota Baru	Mersing	Baling	Perak Tengah	All Kampungs
Boys:	% "Stunted"	54	41	57	41	49
	% "Wasted"	0	3	4	1	2
	% "Wasted & Stunted"	0	1	3	0	1
	% "Underweight"	42	33	46	28	38
	n	81	76	158	145	460
Girls:	% "Stunted"	34	33	42	28	35
	% "Wasted"	1	3	1	3	2
	% "Wasted" & Stunted"	1	0	1	3	1
	% "Underweight"	18	34	25	18	23
	n 100	90	159	152	501	

Source: Chong, Y. H,. *et. al.* Status of Community Nutrition in Poverty Kampungs. Institute for Medical Research Bulletin No. 22, Kuala Lumpur: 1 March, 1984, p. 26.

economy, education, health and sanitation, and supplementary feeding. It seems, therefore, that the revival of the AFNP is significantly important in order to provide more operational programmes to monitor and eradicate malnutrition.

The causes of malnutrition are many and are integrally connected with the individuals's environment. Factors which predispose the community to malnutrition include socio-economic characteristics, infectious diseases, uneven distribution of food, food availability, cultural factors, etc. These factors may be a barrier to social and economic growth, and can contribute to low labour productivity (Popkin, 1978), increased morbidity and mortality (Grosse, 1980), and poor achievement in school (Wan Abdul manan, 1986). The prevalence of malnutrition, coupled with poverty and impoverished environmental conditions, are anathemas to general development. It can be envisaged that if the population of the country were to grow to 70 million, the nutritional problems would be a hindrance to better health and higher productivity in the future unless specific measures are formulated to combat malnutrition.

The presence of modern diseases such as cardiovascular and heart diseases are closely associated with the nutritional status of the individual. Thus, changes in dietary patterns may have deleterious effects on nutritional status. Over-nutrition, another form of malnutrition, is also beginning to increase in Malaysia. Over-nutrition can result in overweight, obesity, cardiovascular problems and diabetes. These are diseases of the post-industrial society, and are becoming more prevalent in the urban and affluent segments of society. This trend is likely to continue in the future, considering the fact that there is an increasing number of fast food restaurants which are selling western diets with high caloric and high fat contents in the urban areas of Malaysia.

It is quite clear, therefore, that Malaysia is facing both the nutritional problems of underdevelopment and the dietary diseases of advanced societies. In facing these problems, preventive measures are extremely important to reverse nutritional deterioration.

The caloric supply per capita per day in Malaysia was adequate since 1961. The figures indicate that the supply of calories in Peninsular Malaysia has increased progressively from the quotient of 109.2 in 1961 to 115.1 in 1974 (Keda, 1983). The protein and fat supplies have also risen between 1970 and 1977 (SEAMIC, 1982). The production of cereals in Malaysia has decreased slightly between 1975-1984, but, the production of meat and milk within the same period has increased by 3.2 per cent and 3.7 per cent respectively (Qureshi, 1987).

It should be noted that the per capita food supply does not always represent the actual food intake. Some may be wasted or exhausted prior to actual consumption. Thus, the per capita figures are only estimates of the supply of food available within the country. For this reason, the per capita statistic may

actually mask the disparity in actual consumption between groups and between members of families. The pattern of consumption usually varies between socio-economic groups; the upper strata consume more than their per capita supply, and the lower strata consume less than the average availability of food per head. Since the amount of per capita supply does not reflect the nutritional status of the population, the distribution and accessibility of food would be better indicators. This is closely linked to the purchacing power of the consumer, where individuals (families) with higher purchasing power can hoard more foods.

The unequal distibution of food within groups and/or within families can be detrimental to the nutrition of the population. Existing inequalities among the various socio-economic groups and geographical areas have a direct influence upon consumption patterns, and, consequently, upon nutritional status. Therefore, equal access to food must be ensured to prevent hunger, starvation, and malnutrition before one can embark upon planning for a larger population.

The Aging Population

Aging is a normal and natural process. This subtle and slow process is sometimes taken for granted or totally ignored by individuals. Physical and internal body system changes are usually used to detect the aging process (Williams, 1979). The definition of aging varies according to different geographical areas, economic states and cultures. The role of the elderly are viewed differently in different societies (Cogwill and Holme, 1982). Aging is a complex biological process in which there is reduced capacity for self-maintenance and a reduced ability to repair body cells (Alfin-Slater, 1984).

In general, the attention given to the aged is mostly in terms of their physical and physiological changes. Mental changes, social and economic adjustment of the elderly are accorded little importance, as a result of which the needs of the aged are not met. When does one reach old age? The people in Igbo reach old age when they are between 40-50 years old. An individual is said to reach old-age at 50 in Samoa, but between 65-70 years in Western industrialized countries (Megama, 1982). One way of determining an "old person" is by using an economic measurement. The age of retirement is commonly accepted as that point upon which one may be classified as having reached old age. However, this may not be the end of productive life for an individual. Wage earners in Malaysia attain their senior citizen status at the age of 55. However, the census on aging in Malaysia considered old age to begin at 60 (Chen, 1986). There has been a steady increase in the proportion of the elderly in the country since the last decade. There were 745,000 elderly in Malaysia in 1980. This is about six per cent of the total population and is expected to increase to 15.5 per

cent by the year 2030 (Chen, 1986; Chan, 1986). There is nothing alarming about the figure if we compare it to the desired 70 million target. Even so, there are many factors which require close scrutiny, particularly in relation to the care and welfare of the elderly.

The economic resources for the elderly, especially the source of income is the greatest worry for the aged (Philipson, 1982). For wage earners, it means a reduction in income; but for non-wage earners, old-age can also mean a total loss of income. Chen *et al.* (1986) reported that 62 per cent of the elderly in Malaysia received their income from their families, 19 per cent from work, 12 per cent from pension and superannuation, two per cent from state welfare and four per cent from other sources. The above situation indicate that families particularly children are important sources of income and security for the elderly.

The state provides services to the elderly through the Ministry of Welfare. There are 23,394 elderly under the care of the welfare department. This constitutes about 15 per cent of the total clients of the ministry. They receive financial aid, total care in the homes of the aged and disability aids such as spectacles. About 21,300 of the elderly recieved the financial aid in the form of public assistance or allowance for the aged (Appraisal 1980). At the present rate of inflation, the monthly $50 allowance given by the state is certainly not enough. The elderly usually look for other forms of assistance that exist in the community. The state provides homes for those who can no longer take care of themeselves. There are only eight such homes run by the state and there are 15 others that are run by voluntary organizations. The long waiting list for these services clearly suggest that the state has not given such institutions the priority they deserve. At this stage, one can only imagine the hardship that the next generation of elderly will face, especially those who are unmarried or those who do not have any immediate family.

Besides regular income, supportive services are also needed by the elderly to ensure their physical and social mobility. There are no bus services that provides a special section in the bus or special fares for the elderly. Transportation, particularly public transport is important for the aged. This is because it is often through public forms of transport that the aged can hope to remain mobile within their respective localities. So far, discount fares for the aged in the cheaper forms of public transport are very limited. Such discounts are available for plane and railway fares. This reflects how inequality in society is being perpetuated amongst the elderly.

Another important aspect in caring for the elderly is health services. At present, there is no hospital that provides special services for the elderly. The elderly patients have to compete with the general public in the long queues in government hospitals, even though it is known that they usually take a longer period for recovery. The fields of gerontology and psychogeriatrics are still very

new to Malaysians. Once again, caring for the sick elderly falls on the shoulders of family members, and most of the time this means female family members (Chen *et al.*, 1986). Besides physical illnesses, the elderly must also face the possibility of being alone. In the study undertaken by Chen *et al.* (1986), "18% of the elderly indicated that they have no one to confide in, while 10% indicated that they feel lonely and 17% of the elderly expressed that they do not see their families and friends frequently enough". This situation is probably enhanced by the migration of family members to other parts of the country. The drive for economic and social mobility has made it necessary for family members to migrate from their local area. This has resulted in leaving the elderly alone or with smaller number of family members. The effect on caring for the elderly is obvious, especially when the female members of family join the migration process. The educated ones move away for white-collar jobs and the less educated into factories and domestic work, (Heyzer, 1986). This could easily create the feeling of helplessness and worry among the elderly. If this process goes unabated, the elderly will have no other choice but to turn to the state to take care of them.

The aging population is increasing. At present the pressure of caring for the elderly is left on the shoulders of family members and the community. However, this will definitely change. If the existing rates of migration and mobility are anything to go by, the elderly would no longer be able to depend on their families. Consequently, the state would have no alternative but to take full responsibility for the welfare of the aged.

Conclusion

The New Population Policy of Malaysia expects to achieve the target of 70 million in the year 2100 by allowing the total fertility rate (TFR) to decline gradually by 0.1 for every five years (NPFDB, 1984). This projection was chosen as the most feasible of seven other alternatives. According to projection scenarios by Jones and Lim (1985), if the present fertility levels of the Malays and East Malaysians remain constant for the next 15 to 20 years, the 70 million population can be reached before the year 2060. They also provide three other alternative scenarios for Malaysia's future population, which will consist of a larger Malay majority and a smaller non-Malay minority in Peninsular Malaysia (Jones and Lim, 1985).

All the population projections for Malaysia concluded that in order to achieve the 70 million, the fertility rate has to be reduced. What is puzzling is at what rate should the fertility level decline? The current trend in fertility decline is largely contributed by the decline in Chinese and Indian fertility in Peninsular Malaysia. The decline in fertility amongst Malays in Peninsular Malaysia and East Malaysians is slacking, and this trend will remain for sometime with

the increase in the absolute numbers of these groups.

Whatever the demographic changes that may occur in the future the population will surely multiply according to the current rate of fertility and increased life expectancy. The discussion has focused upon the implications of population growth on the health and food and nutrition situation. Based on current evidence, an increase in population will have adverse effects on the health status of the country. The rising cost of medical care and other basic needs have made it very difficult to maintain the present level of health. Access to health care in Malaysia is still unequally distributed between different socio-economic groups and between regions. The increase in the elderly population will definitely be a new burden to the improvement in health services. Changing patterns of diseases provide a new scenario in hospital care and medication. The past public expenditure allocations have not given priority to health in relation to other expenditure such as defence and security. With a large population in mind more resources are needed to restructure the health services and to allocate a bigger share for the health budget.

The nutritional status of the population is gradually improving. However, malnutrition, particularly amongst pre-school and school children in the rural areas, remains a srious problem. The underlying causes of malnutrition include poverty, lack of food and education, all of which require fundamental changes in the socio-economic structure. On the other hand, the problems of over-nutrition, which are manifested in the increased incidence of obesity and cardiovascular and heart diseases, can be overcome with nutrition education and consumer awareness.

The increase in the number of the aged in the country requires careful and detailed analyses in all aspects in future planning. The government should start thinking and planning for a social security system for all sections of the populations or a pensions scheme for the elderly in order to ensure that a certain minimum standard of care will be available. The other alternative is for the state to take full responsibility of its aging population.

The 70 million population policy does not seem to consider the various implications if the present level of quality of life is to be maintained. Although the New Population Policy is anti-natalist in its objectives, the programmes that have been carried out are largely pro-natalist. One clear example of the government's pro-natalist approach is reflected in its income tax allowances; the maximum allowable tax deductions has been increased up to five children, and the tax relief has been increased to $3,800 per family (Hamid Arshat, 1987). Other pro-natalist incentives include granting paid maternity leave limited to five surviving children and awarding scholarships irrespective of family size. In conclusion, the New Population Policy need to be reformulated with clear objectives, and priority should be given to improve the quality of life of the population instead.

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APPENDIX

The 12 global indicators for monitoring progress towards health for all by the Year 2000 are:

1. Health for all has received endorsement as policy at the highest official level, for example, in the form of a declaration of commitment by the head of state; allocation of adequate resources equitably distributed; a high degree of community involvement; and the establishment of a suitable organizational framework and managerial process for national health development.
2. Mechanisms for involving people in the implementation of strategies have been formed or strengthened, and are actually functioning, that is, active and effective mechanisms exist for people to express demands and needs; representatives of political parties and organized groups such as trade unions, women's organizations, farmers' or other occupational groups are participating actively; and decision-making on health matters is adequately decentralized to the various administrative levels.
3. At least 5 per cent of the gross national product is spent on health.
4. A reasonable percentage of the national health expenditure is devoted to health care, that is, first-level contact, including community health care, health centre care, dispensary care and the like, excluding hospitals. The percentage considered "reasonable" will be arrived through country studies.
5. Resources are equitably distributed, in that the per capita expenditure as well as the staff and facilities devoted to primary health care are similar for various population groups or geographical areas, such as urban and rural areas.
6. The number of developing countries with well-defined strategies for health for all, accompanied by explicit resource allocations, whose needs for external resources are receiving sustained support from more affluent countries.
7. Primary health care is available to the whole population, with at least the following:
   - -- safe water in the home or within 15 minutes' walking distance, and adequate sanitary in the home or immediate vicinity;
   - -- immunization against diphtheria, tetanus, whooping-cough, measles, poliomyelitis, and tuberculosis;
   - -- local health care, including availability of a least 20 essential drugs, within one hour's walk or travel;

-- trained personnel for attending pregnancy and childbirth, and caring for children up to at least 1 year of age.

8. The nutritional status of children is adequate, in that:
   -- at least 90 per cent of newborn infants have a birth weight of at least 2500g.
   -- at least 90 per cent of children have a weight for age that corresponds to the standard reference values adopted by WHO.
9. The infant mortality rate for all identifiable subgroups is below 50 per 1000 live-births.
10. Life expectancy at birth is over 60 years.
11. The adult literacy rate for both men and women exceeds 70 per cent.
12. The gross national product per head exceeds US$5000.

Source: *World Health Annual 1986*, Geneva: WHO, 1986. pp. VI-VII.