SIGNIFICANCE OF A FERTILITY REDUCTION ON ECONOMIC DEVELOPMENT IN WEST MALAYSIA

by

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INTRODUCTION

The objective of this exercise is to bring out the significant impact of population growth on the rate of economic development in West Malaysia. This relationship becomes even more delicate should the population growth be left uncontrolled while the rate of economic development is planned according to the availability of natural resources. This stems from a new awareness that substantial economic development has in many instances brought only rather limited prosperity because of population growth. Net population increase depends on births, deaths and migration. A post-war phenomenon is that the effect of migration on population increase is almost nil. Mortality can be regarded as an inverse function of the modernization of the economy. As the pace of the latter increases, mortality rates decrease, usually faster. At the same time, should the fertility rates remain high and stationary, the resultant population increase affects economic development adversely. Obviously, as no policy can but choose to lower mortality, population growth can only be controlled through a fertility reduction to a rate comparable to that of economic development. Thus, the significance of a fertility reduction is self-illustrative.

After recognising the significance of an uncontrolled population increase in Chapter I, an attempt is made in Chapter II, to review the economic achievements of West Malaysia and the extent to which its rate of development is threatened by the current 3% per annum increase of population. Chapter III is focused on the past and present determinants of population increase. Detailed analysis is devoted to the prospective rates of decline of an already 20th century - mortality rate and the comparatively high traditional fertility rates. Since a spontaneous fertility reduction is negligible, efforts made by the Family Planning Organisations are outlined in Chapter IV. Moreover, the prospective targets of the National Family Planning Board are geared to the responses of the people, revealed through observations and surveys. Of particular significance is the Knowledge, Attitude, Practice in Family Planning Survey carried out in 1966-67. A detailed evaluation of this survey is attempted, so as to assess the prospects and speed of fertility decline through birth Control. To further illustrate the significance of a fertility reduction, some favourable economic consequences

(both immediate and less so) as a result, are analysed in terms of changes in the size of the labour force and the age distribution of the population. Finally, Chapter VI presents the conclusion to the study, with a final appraisal of the sifnificance of reducing the fertility rate by a strong population policy of birth control, since a reduction of fertility will not come spontaneously.

The analysis is limited by the scarcity of reliable population data especially after 1957, whereby only estimates, subject to variations, are employed. This is due to the U.N.'s recommendation of planning the Population and Housing Census for 1970. Moreover, after Malaysia came into being in 1963, data available are often for Malaysia as a whole rather than for West Malaysia alone. Quantification of certain features of an underdeveloped economy e.g. the extent of the under-utilization of resources also poses difficulties. Nevertheless, the statistical data and the information available for analysis is abundant enough for the scope to be covered in this exercise.

The approach adopted in this study is both descriptive and analytical so as to facilitate a better understanding of the objective of this graduation exercise.

CHAPTER I

RELATIONSHIP BETWEEN POPULATION GROWTH AND ECONOMIC DEVELOPMENT

Impact Of Population Increase On Economic Development

The relationship between the size of population and real income has interested economists for several centuries. In the late eighteenth century and first half of the nineteenth century, the population problem was central to the enquires of leading economists. Interest in it receded partly because the problem seemed to become less intractable and also because the population question seemed to be less amenable to the techniques of economic analysis. In more recent years interest has revived. The facts and fears of declining population in some Western European countries and, later, population pressure in many parts of the underdeveloped world would have attracted attention and provoked enquiry.

It took off on an international level. In the General Assembly of the U.N. in December 1962, 69 nations voted for and carried out a resolution recognising the significant relationship between population growth and economic development.1 A formal request to promote assistance on population problems in the underdeveloped countries resulted in a great deal of research being done under the auspices of the U.N. which allocates a generous amount of its resources to the study of population growth and the factors responsible for it. The various endeavours of the U.N. in this aspect have produced gratifying results, as it has to a very large extent, achieved in arousing general awareness to the balance between population and world resources in terms of quantity as well as distribution. Their achievements are especially useful to the under-developed nations which generally lack the required facilities to undertake population research projects. In 1954, the World Population Conference was organised by the U.N. in Rome. This time, attention was focused on one of the basic characteristics of underdeveloped nations;

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1. Hauser, P.M. The Population Dilemnia, New Jersey Prentice Hall, 1963. Pg. 3.

that of population increase brought about by falling death rates while the birth rates remained high. Other establishments of the U.N. include the F.A.O., which specialises in the improvement upon food production especially in underdeveloped countries to feed the growing population; the U.N.'s statistical office whose compilation of population information is greatly appreciated because of the crucial shortage of existing accurate data in countries whose population increase is one of the highest in the world.

The increasing concern over population growth on an international basis has brought about ample efforts to solve unfavourable population growth and its associated problems in development conscious nations of which West Malaysia is of no exception. Population growth is regarded as an important variable in the economic development of West Malaysia as stressed in the first and second 5 - year Plans of Malaya and the 1st Malaysia Plan 1966-70. In the latter specifically prominence is given to the effect of population increase on the endless efforts to raise per capita income. Population increase is the combined effect of natural increase and net immigration. Before the Second World War, although both the factors were brought into play, emphasis was focused on net immigration. A remarkable change after the War is that net immigration ceased to be of any importance as a result of legislation and the increased outflow of emigration. The rapid population increase is entirely accounted for by a high rate of natural increase, the consequence of the combination of a medieval birth rate and a 20th century death rate before a significant increase in total output can take place. In such circumstances, population is likely to increase at about the same rate as the volume of output. There may be no marked improvement in the standard of living, the increased output being taken out largely in the form of increased numbers. As a result population tends to increase before there has been a substantial increase in real income per head. The situation becomes more adverse when as in West Malaysia, economic development progresses at a planned rate but at the same time, it has assimilated quite rapidly modern science and medicine to reduce the death rates remarkably but due to religious, social, cultural and moral purposes is rather slow in adopting contraception to curb fertility as is practised in western countries.

Population growth in an underdeveloped or developing country does not induce capital - widening investment or innovations. Instead, it diminishes the rate of capital accumulation, raises cost in extractive

industries, increases the amount of disguised unemployment and in large part simply diverts capital to maintaining children who die before reaching a productive age. In short resources go to the formation of population not capital.[2] As Malthus remarked, "A man whose only possession is his labour can make no effectual demand if his labour is not wanted ..... It will be found that those states often make the slowest progress in wealth where the stimulus arising from the population alone is the greatest."[3] Thus the prospects for economic development are crucially related to population trends.

Economic Development: Definition

Economic growth and development are often used synonymously. J. Viner attempts at a distinction and uses the term economic development to signify not merely economic growth but economic growth with which is associated either with the rising per capital levels of income or the maintenance of the existing high levels of income; of which the ultimate realization of development lies in the higher levels of consumption for the masses.[4] However, there are great diversities in the definition because there is no traditionally established and clear cut notion to its definition. As a result, different economists have come forward with different definitions and explanations to the term, economic development C. P. Kindleberger[5] takes economic growth to mean more output, more input and more efficiency i.e. an increase in output per unit of input. On the other hand, development implies both more output and changes in the technical and institutional arrangement by which it's produced i.e. changes in both the structure of output and in the allocation of inputs by sectors.

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2. For a more complete discussion of problems raised by a supra-optimum population, see Spengler, J.J. "The Population Obstacle to Economic Betterment". American Economic Review Papers and Proceedings, May 1951.

3. Malthus, T.R. Principles of Political Economy, London, 1820, Chapter VII, section II.

4. Viner, J. International Trade And Economic Development: Lectures delivered at the National University of Brazil, Oxford, The Clarendon Press, 1953, Pg. 125.

5. Kindleberger, C.P. Economic Development. New York, 2nd edition, McGraw Hill, 1958. Pg. 3.

Growth and development go hand in hand especially in the less developed countries which have low incomes or facing the difficulty in adapting to the economic opportunities available to them.

Still some other writers like D. B. Singh[6] views economic progress as the advancement of a country along the line of evolving new and better methods of production and the raising of the levels of output through the development of the human skill and energy, better organisation and the acquisation of capital. He further adds that an increase in the national and per capita output is implicit in economic growth. Some economists express their differences in opinion over the general acceptance of the term economic development being defined as a mere increase of the real national income or the real per capita income.

The significance of economic development lies in the fact that it should be sustained over a period of time long enough to reflect more than a cyclical expression, an unusually large harvest, a post-calamity recovery or some other transient rise.[7] The time factor involved in economic development is of paramount importance. This is further echoed when G.M. Meier and R.E. Baldwin[8] define economic development as a process whereby an economy's real national income increases over a long period of time. And, if the rate of development is greater than the rate of population growth, then per capita real income will increase. "Process" implies the operation of certain forces which operate over the long period and embody changes in certain variables. The general result of the process is growth in an economy's national product - in itself a particular long-run change. J.J. Spengler[9] further asserts that fundamentally economic development is rising per capita income or a discernible rise in the total or per capita income, widely diffused throughout the occupational and income groups continuing for at least two generations

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6. Singh, D.B. Economics of Development, with special reference to India, Asia Publishing House, London, 1966. Pg. 1.

7. Kuznets, S, Economic Growth. The Free Press of Glencoe, 1961. Pg. 13.

8. Meier, G.M. and Baldwin, R.E. Economic Development: Theory, History, Policy. Modern Asia Edition, Tokyo 1968. Pg. 2.

9. Spengler, J.J. The Population Obstacle to Economic Betterment. American Economic Review. Papers aid Proceedings, May 1951.

or becoming cumulative. C.P. Kindleberger concludes therefore that it is vitually impossible to contemplate development without growth because a change in the function requires a change in size. Thus, until an economy can produce a margin above its food through growth, it is unable to allocate a portion of its resources to other types of activities i.e. development.

Economic Development: Measurement

Economic development can commonly be gauged by the use of per capita income or per capita output or their corresponding aggregate figures. However, there are dissension among writers regarding the usage of either of the two indices of development.

B. Higgins maintains that although the trend of gross national income at constant prices is a simple measure of economic development, measuring national income itself is a complex task in the underdeveloped countries due to the difficulty of determining the proper deflators to eliminate the effects of price changes. Moreover, the elimination of cyclical fluctuations to get the actual trend presents a statistical complexity. A more fundamental inadequacy of national income trend as a measure of economic progress is that in itself, National Income tells little about the standard of living of the people. It is very likely that a rising aggregate income may reflect population growth while the standard of living may actually fall. This would happen whenever population growth surpasses the increase in national output, with the result that real per capita income falls or if the increase in national income is paralleled by an equal increase in population, real per capita income would remain constant. On the other hand, Meier and Baldwin prefer the use of the aggregate figure because "a larger real national income is normally a pre-requisite for an increase in the real per capita income".10

The use of per capita income or per capita output as an index of economic development is not universally accepted either. While D.B. Singh, on the one hand, contends that per capita income is a more superior indicator of growth because economic growth

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10. Meier, G.M. Baldwin, E.E. Economic Development: Theory, History, Policy. Modern Asia Edition, Tokyo 1968. Pg. 5.

should bring about improvement in the material well-being of the people, others like Meier and Baldwin think that output per head is misleading as a country which is advanced economically may have to bear the burden of a rapid population increase. As a result the increase in per capita increase will be smaller than the increase in aggregate income and therefore may not reflect the actual growth which has occured within the period considered. It is a possibility that one may end up in the awkward position of having to say that a country has not developed if its real national income has risen but population has also risen at the same rate. The fact that the per capita income figure is an average figure shows that there is little point in debating whether the definition of development should focus on an increase in real National Income or real per capita income, since the latter can always be found by dividing the National income by population.

Thus the analysis of economic development centres on an increase in the real National Income and the particular changes that accompany such an overall increase. Having measured the amount of development by the increase in real National income, one may then confront it with changes in population and consider real per capita income. Although an increase in output per head is in itself a significant achievement, neverthless, this cannot be equated with an increase in economic welfare, let alone social welfare without additional consideration. To specify an optimism rate of development, value judgements regarding income distribution, composition of output, tastes, real costs and other particular changes that are associated with the overall increase in real income must be made.

To facilitate the understanding of the close link between population growth and economic development in West Malaysia, both the indicators of economic development would be employed in order to make a compromise, thus determining whether population increase acts as an obstacle or a stimulant to economic development.

CHAPTER II

REVIEW OF ECONOMIC DEVELOPMENT IN WEST MALAYSIA

Economic achievement in West Malaysia is best reviewed according to the Five-Year development plans which have been framed, not in terms of ideal and ambitious goals; but in terms of objective feasibility which is realistic in relation to the resources and the capacity of the country. Analysis will be given to the achievements made and in what respects, and for what reasons, performance has fallen short of targets so that the prospects for a more rapid rate of economic development can be planned accordingly.

First Malayan Five-Year Plan 1956-60

The agricultural sector was by far the largest in the economy, providing employment to about 58% of the labour force and accounted for about 47% of the total national output.[1] A large part of the increase in investment occured under the stimulus of the various government programmes designed to promote rubber replanting and new planting with high yielding seeds; to increase irrigation supplies and to launch new land development schemes. The rubber produces of both the estates and the small-holdings carried out a massive replanting programme to replace the over-aged and the low-yielding trees with high yielding materials in preparation of the industry to meet the challenge of synthetic rubber. The progress made by the rubber industry could be measured by the fact that the area (mature or immature) under high yielding materials rose from 30% to 46% of the total rubber acreage during the Plan period.[2] The acreage replanted increased from 124.9 thousand acres in 1956 to 144.7 thoudand acres in 1960; while that newly planted increased from 27.8 thousand acres to 46.8 thousand acres.[3]

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1. Second Five-Year Plan 1961-1965. Pg. 5.

2. Second Five-Year Plan 1961-1965. Pg. 8.

3. Lim Chong Yah: Economic Development of Modern Malaya, K.L., Oxford Universal Press, 1967. Pg. 335.

The F.L.D.A. (Federal Land Development Authority) was established in 1956 to open up virgin jungle for agriculture operation and for new land settlement. From the governments land and irrigation schemes, the production of oil palm increased from 115,000 acres in 1956 to 135,000 acres in 1960 and production increased from 55,900 tons to 90,300 tons.[4]

In padi cultivation too, there was a marked tendency for yields to rise as a result of the larger availability of irrigation supplies, the successful extension of double-cropping experiments with improved varieties of padi and the use of fertilisers e.g. urea. During the Plan period, the acreage, the yield per acre and the total production of rice displayed an increase. The acreage under wet and dry padi increased from 879,000 acres in 1956 to 950,000 acres in 1960. The yield per acre increased from 305 gantangs to 379 gantangs in 1960. Production too increased from 268 million gantangs in 1956 to 360 million. Gantangs in 1960 due to both the increased acreage and the increase in the yield per acre.[5]

In the manufacturing field, the industrial policy of the government provided considerable incentives to investors who wee also encouraged by the growing awareness of the market potential of the Federation among the domestic and foreign entrepreneur. Gross fixed investment in manufacturing amounted to M$85 million or about 14% of the total investment. The response was very good to the government's offer of specially prepared industrial sites complete with access to the basic utilities such as roads, water and power. Additional inducements included the Pioneer Industries Ordinance 1958 which provided for the exemption from income tax ranging from 2 to 5 years depending on the amount of fixed capital invested. This Ordinance was amended by the Pioneer Industries (Vanation) Act 1965 whereby a company would enjoy an initial period of tax relief for a period of 2 years. Should its investment excceed M$250,000 by the end of the second year, it would be granted an additional year of relief. The possibility of tariff protection could also be negotiated in deserving cases.

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4. Lim Chong Yah: Economic Development of Modern Malaya. K.L., 1967. Pg. 337.

5. Lim Chong Yah, op. cit. Pg. 339.

An important structural change was witnessed in the manufacturing sector. The main handicraft industries i.e. rattan, attap, clothing and jewellery had declined in importance relative to the factory type capital-intensive industires. Total employment in the handicraft industires declined from 46,000 in 1947 to 34,000 in 1957, a fall of about 26% within a decade. In contrast, factory employment rose from 80,000 to 102,000 during the same period i.e. employment rose by 28%. Total employment in the manufacturing sector might be roughly estimated at 145,000 in 1960 compared with about 133,000 in 1955 or an increase of about 9% during the Plan Period.

However, the investment target was not fully realised. Investment expenditures undertaken by the Federal and the State governments, municipalities and autonomous public enterprises were estimated to be M$100-120 million per annum in the few years preceding the plan. In an attempt to raise the annual level of public investment by about 100%, a target of M$1,150 million was aimed at. Unfortunately, the actual investment was only M$971.7 million representing 85% of the target figure. This was mainly due to the lack of finance as a result of the world-wide recession in 1957-58, and the Emergency which lasted till 1960, thus diverting the use of considerable resources and time. The deficiency of skilled personnel also contributed towards the failure to implement the Plan fully. In the private sector, investment amounted to M$2,000 million.[6]

The total labour force increased by about 310,000 and there was no sign of an excessive level of unemployment. Along with the investment, the output of the economy grew substantially at 4% per annum which more than kept pace with the population which was increasing at an accelerating rate of 3.3% per annum, one of the highest rates of natural increase in the world.

Second Malayan Five-Year Plan 1961-1965

Between 1960 and 1965, the economy experienced a rapid rate of economic progress measured in terms of the growth of output, income and employment. Output grew at 6.3% annually, a very satisfactory rate of economic growth by international standards. This was very much

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6. Official Year Book of Malaysia. Government Printers, Kuala Lumpur 1967. Pg. 202.

higher than that of previous Plan period of 4% per annum. The growth of output is not necessarily, however, a good indicator of the growth of real income especially in West Malaysia which is export oriented to a great extent. Consequently, income growth has always been sensitive to changes in the price of export goods especially rubber and tin in the world market, and to a lesser extent, to changes in the prices of Malaysian imports. This phenomenon explained why over the 1960-65 period, real income grew at 5.8% annually which was somewhat slower than the rate of output growth due to the fact that the steady decline in the price of rubber and a small fall in the round timber price had more than offset the sharp rise in the price of tin while the price of Malaysian imports remained relatively stable.

Per capita income however grew at less than half the rate of total income during this Plan period at a rate of 2.7% due to the high rate of population growth of 3.0% annually. The acceleration in the growth rate occured in spite of a stagnant level of export earnings and a sluggish rate of expansion in export volumes. Gross export earnings rose rather slowly. Moreover, export proceeds from rubber was reduced because the increase in the quantity of rubber exported was not adequate to compensate for the rapid fall in the price of rubber. As for tin, the increase in export earnings was extremely slow compared to the steep rise in the price because of a reduction on the quantity exported. This was due to the fact that tin was a wasting asset and therefore a fall in production and consequently of exports was due to the exhaustion of reserves. In the same way, income from the exports of iron ore also fell because of the reduction in the amount exported. Thus the export sector achieved scarcely any expansion of its foreign exchange earnings. In 1965, the merchandise exports were at approximately the 1960 level after the slow recovery from the sharp drop in 1961, while the total value of the goods and services exports grew at a rate of less than 1% per year.

The answer to the impetus for the expansion of output lies in the rapid rise of domestic demand, a recent change in the structure of the Malaysian economy when G.D.P. rose at a faster rate than the G.E.P. (Gross export proceeds). The contribution of the public sector to the growth of the domestic sector was greater than that of the private sector. The target set out for the public development programme expenditure was M$2,150 million but at the end of 1965, it amounted to M$2,650 million, thus exceeding the target by nearly 5%. The

sharp increase in public investment during 1956-60 was concentrated upon laying the foundation for a steady long-run increase in economic welfare. Thus, investment was concentrated in projects which provide a firmer infrastructure for the economy e.g. transport and communications or those which will improve the long-run productivity of resources such as education, drainage and irrigation, rubber replanting and land development so that the growth of output can be achieved by both stimulating current production and providing the capacity for the future increase in output. The public investment programme also placed heavy emphasis on rural development because it was felt that if the prevailing infrastructure was inadequate, economic growth would be retarded since the conditions in the rural areas were not conducive to raising the productivity of resources in the rural economy. This is done with an aim to provide a more balanced distribution of economic benefits and opportunities between the rural and urban sectors of the economy.

The pattern of private capital formation showed a steady growth in the investment in perennial crops especially in the rubber replanting programme. The initial movement in the direction of import substitution also played an important role in stimulating investment. Some of the goods produced as substitutes for imports included cigarettes, manufactured tobacco, biscuits, soap, cement and bicycle inner tubes.

Table II-1 shows that employment increased at approximitely the planned rate of 3% during the Plan period although the distribution of employment was somewhat different from that which was projected in 1960. Despite the fact that the increase in the total employment was in line with the Plan objective, the overall unemployment remained at approximately 6% of the labour force and the high proportion of young urban workers in this group constituted one of the most urgent and serious problems. On the whole, this period of rapid growth produced some evidence of a structural change in the economy but diversification had not as yet substantially reduced the heavy dependance of the economy upon agriculture, especially upon the production of natural rubber.

Table II-1

West Malaysia:

Employment Growth (in thousands) 1960-1965

Sector	1960	1965		Annual Growth rate%
		Target	Actual (preliminary)	
Agriculture.	1,277	1,417	1,388	1.7
Mining and manufacturing.	196	235	234	3.6
Construction, transport and utilities.	150	219	210	7.0
Government services.	200	236	257	5.1
Other trade and services.	351	393	429	4.1
Total employment.	2,174	2,500	2,518	3.0
Unemployed.	138		160	
Total labour force.	2,312		2,678	
Unemployment (%)	6.0%		6.0%	

Source: First Malaysia Plan 1966-70. Pg. 35.

First Malaysia Plan 1966-70.7

Since the duration of the Plan is incomplete, economic achievement will be centred on those materialised in the first part of the Plan i.e. until the end of 1968.

Progress in the rural sector is crucial for the overall development of the economy because the majority of the population depend on agriculture and therefore, increase in the income of this sector will lead to an increase in the aggregate demand of the economy. Ultimately, the economic activity of the country is also raised.

In 1965, agricultural production constituted 50.4% of the total employment. In the rural development programme some of the physical results of this investment within 1966-68 itself included the planting of 64,300 acres by the F.L.D.A.; the provision of drainage and irrigation facilities to an additional 250,000 acres; new planting and replanting of rubber by small-holders on more than 180,000 acres. As a result, the proportion of the small-holder acreage under high yielding rubber was raised from 50% in 1965 to about 56% in 1967. Furthermore investment also included the application of subsidized fertiliser to about 600,000 acres of padi land during the 3 year period and the replanting and rehabilitation of coconut and fruit trees over 10,000 acres and 25,000 acres respectively.

Although replanting led to higher yields per acre, rubber small holders had to face the sharp fall in the rubber price between the beginning of 1967 and the early part of 1968. With respect to padi cultivation, double cropped acreage grew from about 90,000 acres in 1965 to 220,000 acres in 1968. Yields per acre harvested increased by 5% in the two year period 1964/65 to 1966/67. On the other hand, severe floods in some padi growing areas resulted in the proportion of planted areas harvested being only 93% on the average during the period compared with 98% for the previous three years.

The Plan attempts to reduce the dependancy on exports especially rubber and tin by laying greater

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7. In reviewing economic development according to this Plan the figures quoted should be treated with caution as sometimes West Malaysia is not treated individually but as a component of Malaysia as a whole. Unless otherwise stated, the figures are relevant for West Malaysia only.

emphasis on industrialization and diversification. Admittedly though, the 2 commodities will continue to play an important role in economic growth. Agriculture (including forestry and fishing), manufacturing, wholesale and retail trade and services comprise about 2/3 of the total volume of output. The largest is the agricultural sector whose rate of growth was markedly higher in 1966-68 than in the 1961-65 period, designed for both export and domestic subsistence. This reflected in part the growth of rubber output generated by replanting in the fifties and most important, the dramatic expansion in the palm oil and kernel production and in forestry and fishing output.

The present higher levels of consumption of imported manufactured goods promise market potentialities for the domestic production of these goods. As a result manufacturing recorded a high rate of growth as import substitution continued and the efforts of industrialists to export manufactured goods were intensified. Further impetus was given by the establishment of the Federal Industrial Development Authority (F.I.D.A.) in 1967 and the passing of the Investment Incentives Act in the subsequent year providing a variety of incentive to induce a greater and more rapid flow of investments into manufacturing, and other enterprises.

The success in achieving output growth targets and materializing development plans would inevitably generate employment opportunities e.g. industrialization and consequently expansion in the industrial sector will create new jobs in those areas of economic activity. The basic problem is the shortage of qualified manpower and the existence of a base of plentiful or even excess labour resources which is not well distributed in relation to the requirement for manpower. The overall development expenditure in the 1st Malaysia Plan is M$4,500 million (see Table II-2) out of which M$3,810 million is allocated for economic and social development. Approximately M$835 million is to be spent on social services, of which education expenditure accounts for nearly M$450 million in more than half of the total alloted for social services. Out of the M$2,775 million alloted for economic services, well over M$1,000 million is to be spent on agriculture and rural development. Expenditure in many other fields will also benefit rural development e.g. much of the expenditure is to be circumed for education, health, transportation and water supplies

in the rural areas. With regards to the public investment programme, priority is given to those which directly increase income through agricultural and industrial development or those which upgrade the quality of the human resource through education, especially in the agricultural and technical fields.

Table II-2 indicates the achievements of each Sector of the Plan targets in the period 1966-68. However, it is noted that the balance to complete during 1969-70 will be based on the revised Plan targets instead.

Table II-2

Malaysia: Sectoral Allocation Of Public Development Expenditure 1966-70 ($ million)

Sectors	Plan target 1966-70	Estimated Expenditure 1966-68	Achievement %	Revised Plan target 1966-70	Balance to complete 1969-70
Agriculture and Rural development.	1,086.6	556.0	51.3	1,177.9	621.9
Mining.	1.3	0.4	30.8	0.8	0.4
Industrial development	114.5	90.4	79.0	133.9	43.5
Transport.	546.0	332.5	60.9	705.9	373.2
Communication.	205.4	103.2	50.2	236.9	133.7
Utilities	786.3	453.6	57.7	793.5	339.9
Education and Training.	440.8	191.1	43.4	391.5	200.4
Health and family planning.	189.5	106.5	56.2	178.9	72.4
Social and community services.	315.1	175.8	55.8	323.8	148.0
General Administration.	126.2	87.7	69.5	205.2	117.5
Sub-total: (Non-security)	3,811.7	2,097.2	55.0	4,148.1	2,050.9
Defence.	600.0	345.4	57.6	555.3	209.9
Internal Security	139.0	66.5	47.8	135.5	69.0
Sub-total (Security)	739.0	411.9	55.7	690.8	278.9
Total	4,550.7	2,509.1	55.1	4,838.9*	2,329.8

* Allowing for shortfalls, the revised Plan target is $4,477 million.

Source: Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 8.

Some of the economic objectives outlined in this Plan include:

1) To increase the well-being of Malaysia's rural inhabitants and other low income groups, primarily by raising their productivity and thus their income-earning capacity.
2) to lay the ground work for less rapid population growth by instituting an effective programme of Family Planning;
3) to educate and train Malaysians from all walks of life in order to equip them for effective participation in the process of economic and social development, and
4) to generate employment opportunities at a rate sufficient to provide productive work for new entrants to the labour force and lower the rate of unemployment.

Concluding Observations

Between 1960 and 1965, real gross domestic product (R.G.D.P.) grew at an average annual rate of 6.3%. This is a very satisfactory rate of economic growth by international standards. It has been estimated that output in the non-communist world has been growing at an average rate of about 5% annually in recent years and slightly less than 5% in the average in developing nations. West Malaysia's growth in output had been particularly rapid by Asian standards, especially for an economy which remained essentially agricultural in character. Among Asian countries; this growth rate had probably been exceeded in recent years only by those of the more heavily industrialised economy of Taiwan and Japan.

In contrast, between 1955 and 1960, output only grew at about 4% per annum. Thus the acceleration in the growth rate between 1960 and 1965 could be traced to the investment in the economic infrastructure and the productive capacity made in the earlier period which began to bear fruit as well as to an increased rate of domestic expenditure, particularly in the public sector.

During 1966-1968, the volume of output or GNP at constant prices rose by 6.7% per annum, 2.2% higher than the rate envisaged in the 1st Malaysia Plan and 0.4% higher than that achieved in 1961-1965. During this

period, the primary source of growth in the volume of output was production for export for Malaysia as a whole. Exports grew by 7.6% per annum in volume, more than five times the rate projected in the Plan[8] for these three years, while production for domestic use expanded by 5.8% as compared with the Plan project of 7%. The higher export volume reflected primarily an underestimate in the Plan of the growth potentials of a number of commodities notably palm oil, timber and tin and a host of smaller items. On the other hand the relatively low rate of growth in the volume of production for domestic use during 1966-68 was certainly not indication of any dimension in the potential of the economy. Rather, it was the result of reduced aggregate demand following the sharp drop in the price of rubber during 1967. Indeed the Malaysian economy in 1967 and 1968 appears to have been characterised by the existence of under-utilised capacity. Although exact data are not available on the extent of excess capacity, the persistence of the unemployment problem and the evidence of under-utilised plant and equipment in many sectors of the economy suggest that it was of significant magnitude.

The growth of output in an economy is not necessarily a good indicator of the growth of real income i.e. the purchasing power of its citizens, because of changes in the value of exports on international markets in terms of the imports which may be bought in exchange. Income growth in West Malaysia has always been sensitive to changes in the price of export goods, especially rubber and tin, on the world market and to a lesser extent, to the changes in the prices of West Malaysian imports.

Over the 1960-65 period, real income grew at 5.8% annually, which was somewhat slower than the rate of output growth. This was due to the steady decline in the price of rubber and a small decrease in the round timber price which had more than offset the sharp rise in the price of tin, while the price of West Malaysian imports, on the average, had remained relatively stable. Because of the extraordinary high rubber price in 1960, the 1960-65 expansion may slightly overstate the divergence between the long-term growth rates of output and income. Nevertheless because of the secular decline in the rubber

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8. Unless otherwise stated, the term "Plan" refers to the First Malaysia Plan 1966-70, in this section.

price, West Malaysian income has in general grown less rapidly than output in the period since the 1950s.

Similarly, the pattern of production in 1966-68 was also different when price developments were taken into account. At current prices, export receipts increased over the 3 year period by only 1.4% per annum as the price of tin, palm oil and rubber especially feel much more than expected. On the other hand, the current value of productive for domestic use grew as planned by about 8% per annum thus constituting the main source of growth in the value of output. Prices for the domestic products appeared to have increased a little faster than projected in the Plan in particular in consequence of a temporary shortage of rice during 1966 and 1967. The rate of growth of the national output, adjusted for changes in the terms of trade, yields a measure of the real income accruing to West Malaysia. So estimated the R.G.N.I. (Real gross national income) grew by an average of 4.1% per year in 1966-68.

The rise in individual incomes within an economy is determined, of course, not simply by the growth rate of income but by the rate of population growth as well. Population in West Malaysia has been growing at 3.0% annually. As a result per capita income grew at less than half the rate of the total income during the 1960-65 period or at a rate of 2.17%. The current rate of natural increase of population of 3% limits income per capita to grow by over 1% per annum in the period 1966-68, as compared with 0.5% projected in the Plan although this is viewed as a positive achievement in view of the adverse influences affecting the economy during recent years.

It's obvious that the economy has experienced a rapid rate of economic progress measured both in terms of the growth of output and income. This rapid growth has taken place in spite of adverse external circumstances beyond the control of West Malaysia which has resulted in a very slow rate of growth in the export sector. The economy's ability to grow in spite of the virtual stagnation in its traditional leading sector is testmony to its resilience. Furthermore, the fact that a positive increase in per capita output and income has been achieved while population is increasing at one of the highest rates in the world can also be considered as an achievement. In 1965, per capita income averaged about M$950/-, one of the highest per capita income in Asia. If Malaysia is considered as a whole during 1966-70, it is projected that if the real gross National

income grows at an annual rate of 4.1%, the real gross per capita income will only grow at an annual rate of 1.1%. Thus, the rapid population growth together with the falling price of rubber will lead to only a small increase in the per capita income. The solution lies in the success at checking population growth to a rate in step with the planned economic development, in the country. Before this can be done, the causes of the rapid rate of population growth have to be analysed.

CHAPTER III

DETERMINANTS OF POPULATION GROWTH

Perspective Of Population Growth 1911-1967[1]

Population growth is a particular state of balance among the factors of birth, death and migration. In modern times, it is almost a universal trend for the population to increase. Population growth tends to follow the pattern of compound interest because the increased people contribute to further increase during the life time. Therefore, even a constant rate of growth leads to even greater increases of population; even a small rate implies a tremendous annual increase if it is continued for a long time. Natural increase is the ultimate source of increase because migration responds to government polices and employment opportunities which are themselves subject to variations.

1. Since 1957, there have been no estimates of population by age, race and sex for each state in West Malaysia, following the U.N.'s recommendation, the Population and housing census is now being planned for 1970. Thus only estimates can be employed in the calculation for 1967.

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Table III-1

Population 1911 To 1967

And Annual Rates of Increase

Year	Population (million)	Period	Annual rate of increase (%)
1911	2.34	-	-
1921	2.91	1911/21	2.4
1931	3.79	1921/31	3.0
1947	4.91	1931/47	1.9
1957	6.28	1947/57	2.8
1967	8.65	1957/67	3.7

Sources: (1) For 1911 to 1957 figures, taken from H. Fell, J.M.N. Report no.14. 1957 Census of the Federation of Malaya. Statistics Department, Kuala Lumpur. Pg. 2.

(2) The population figure for 1967 is taken from the Monthly Statistical Bulletin of West Malaysia, May 1969. Statistics Department, Kuala Lumpur. Pg. 3.

In 1957, the population of West Malaysia totalled slightly over 6 millions i.e. a big increase from its population of 2.34 millions in 1911. It was obvious that within less than half a century, population increased almost three-fold. In each inter-censal period, a high rate of increase in population was maintained, rates which were among the highest in the world. What then

caused the high rate of population increase? Except for the period 1947-1967, net immigration played an important part in the growth of population. However, since 1947, net immigration has been a contributory factor of little significance. The average annual increase in the population of 2.8% between 1947 and 1957 was entirely accounted for by the high birth rates and the falling death rates. The same reason can be given for the increase of population within the decade 1957 to 1967. Although the crude birth rate still remained relatively high at 35.2 per thousand population in 1967, it was accompanied by a rapid decline of the crude death rate to 7.5 per thousand population. (see Table III-2)

Even though the average annual rate of increase for the inter-censal years was 2.8%, nevertheless the rate exceeded 3% in the past seven years with a climax of 3.4% in 1956. The chances are that population will be doubled in less than 25 years if such rates of increase should continue.

Table III-2

Crude Birth And Death Rates 1947 To 1967

Year	Crude birth rate	Crude death rate	Natural increase
1947	42.9	19.4	23.5
1948	40.4	16.2	24.1
1949	43.8	14.2	29.6
1950	42.0	15.8	26.2
1951	43.6	15.3	28.3
1952	44.4	13.6	30.8
1953	43.7	12.4	31.3
1954	43.8	12.2	31.6
1955	43.0	11.5	31.6
1956	45.5	11.3	34.3
1957	46.2	12.4	33.7
1958	43.3	11.0	32.3
1959	42.2	9.7	32.4
1960	40.9	9.5	31.4
1961	41.9	9.2	32.7
1962	40.4	9.4	31.0
1963	39.4	9.0	30.5
1964	39.1	8.1	31.1
1965	36.7	7.9	28.8
1966	37.3	7.6	29.7
1967	35.2	7.5	27.8

Source: Monthly Statistical Bulletin of West Malaysia, May 1969. Statistics Department, Kuala Lumpur. Pgs. 4-6.

West Malaysia is a region of mixed ethnic composition. Marked changes had been observed in the racial composition of the population. In 1967, the Malays were the largest group with about 49.86% of the total population followed by the Chinese with 37.27% and the Indians 11.32%. Shown in Table III-3.

Table III-3

Racial Composition 1911 to 1967

Race	Percentages %					
	1911	1921	1931	1947	1957	1967
Malays	58.5	54.0	49.2	49.5	49.8	49.86
Chinese	27.3	29.4	33.9	38.4	37.2	37.27
Indians	10.2	15.1	15.1	10.8	11.3	11.32
Others	4.0	1.5	1.8	1.3	1.8	1.55
Total	100.0	100.0	100.0	100.0	100.0	100.00

Sources and notes:

(1) Data for the years 1911 to 1957 were taken from H. Fell, J.M.N. Report No.14. 1957 Population Census of the Federation of Malaya. Statistics Department, Kuala Lumpur. Pg. 3.

(2) Figures for 1967 are calculated from Estimates of Population for West Malaysia (1967). Research Paper: No.1. Statistics Department, Kuala Lumpur. March 1969. Pg. 44.

(3) "Malays" includes the nomadic aborigines. It is used in preference to "Malaysians" as used in the Fell Report No.14 to avoid confusion.

(4) "Indians" includes Pakistanis unless otherwise stated.

On closer analysis, the racial composition was found to be quite different from that just a few decades earlier. In 1911, the Malays comprised 58.5% of the population, fell to 54.0% in 1921 and then was sharply reduced to 49.2% in 1931. Since then until 1967, the Malays did not reach the 50% mark, despite that the immigration of the other races was severely restricted between 1947 and 1957. The Indian and Chinese immigrants were regarded as "alien" immigrants in West Malaysia and were generally denied most of the citizenship privileges enjoyed by the Malays until after the Second World War. In addition, the rate of natural increase of the Malays was as high as that of the Chinese community. In 1957, the crude rate of natural increase of the former rose from 17.1 per thousand in 1947 to 33.2 per thousand in 1957, while that of the Chinese rose from 29.7 per thousand to a mere 33.5 per thousand within the same decade. However by 1967, the natural increase of the Malays recorded 29.8 per thousand population, thus exceeding that of the Chinese of only 26.2 per thousand population.

In comparison, the Chinese community comprised of 29% in 1921, increased to 38% in 1947 and then experienced a slight decline to 37% in 1967. Both the pre-war increase and the post war decline can be accounted for. Undoubtedly, the pre-war increase was the result of the heavy inflow of immigrants which reached its peak in 1937. On the other hand, the slight post war decline can partly be explained by a net migrational outflow to Singapore and overseas especially between 1947 and 1957.

With regards to the Indians, a noticeable fluctuation can be observed through the decades. In 1921 and 1931, the Indians comprised 15.1~~90~~ of the total population. The pattern of stability in numbers, however, was not maintained. Between 1938 and 1941, there was a net migrational outflow, followed by a net inflow in the post-war period. A change was also seen in their rate of natural increase. In 1947, the crude rate of natural increase was 33.3 per thousand which rose to 38.6 per thousand in 1957. As a result, from just under 11% of the total population in 1947, the percentage of Indians increased to just over 11% in 1957 again. It managed to maintain it at 11.3% of the total population in 1967.

The growth of population can be ascribed to 2 main factors, natural increase and net immigration. Before the Second World War, both the factors were present. In the post-war period, net immigration ceased to be of any

real importance and the rapid increase in population was entirely accounted for by the high rate of natural increase. Even when the Chinese and Indian immigrations were high, it was thought that the birth place statistics overstated the tendency to permanent settlement. In the 1931 Census Report, the Superintendent of Census took great pain to warn against the danger of regarding the small increase since 1921 in the percentage of locally born persons as demonstrating a tendency to permanent settlement by the non-indigenous portion of the population. Sir M. V. Del Tufo in his report on the 1947 Census analysed the figures then available and concluded that there was positive evidence of a general intention of the Chinese community to settle in the Federation of Malaya, but the evidence of the Indian community was not so convincing. The data collected at the 1957 Census, undoubtedly, supported him regarding the Chinese community but also demonstrated the intention of the Indian community to settle permanently.

Table III-4

Percentage of the population, by race, enumerated in West Malaysia and born in West Malaysia or Singapore

Race	1921	1931	1947	1957
All races	56.4	58.9	78.3	84.8
Malays	n.a.	n.a.	96.0	97.4
Chinese	20.9	29.9	63.5	75.5
Indians	12.1	21.4	51.6	65.0

Source & notes:

(1) H. Fell, J.M.N. Report No.14. 1957 Population Census of the Federation of Malaya. Statistics Department, Kuala Lumpur. Pg. 2.

(2) n.a. means not available.

The Malays are indigenous to the country. It is only logical to expect net immigration to have played only a very small part in the growth of the community. With the Chinese, Indians and other minority groups, immigration has been very significant, though Table III-4 reveals that between 1921 and 1957 - a period of rapid population growth, the increase in the proportion of the locally born has been very substantial as well.

The perspective of the past population growth up till 1967 gives a general idea of the causes of the population increase as well as the part played by each ethnic group. In viewing West Malaysia as a whole, the long-run trend seems to be towards a gradually widening gap between the birth and death rates, culminating in a demographic explosion. The fall in the death rates was slow and uneven till the mid-1950s when an unprecedented decline began causing an increasing imbalance between the births and the deaths and a sharp acceleration in the natural population growth. Since immigration can be treated as nil since the War, attention will be devoted to the components of natural increase i.e. the mortality and fertility rates.

Analysis of Mortality

Measure of Mortality

Mortality is defined as the total absence of health. Mortality rates merely give an indication of the resultant of two component factors i.e. the prevalence of diseases which can be fatal and the extent to which these diseases are not prevented from becoming fatal. Mortality data alone do not tell much about the frequency, the duration and the after effects even of the diseases that are usually fatal. Moreover, they tell next to nothing about many other important health deficiencies e.g. physical infirmities like blindness, incipient illnesses and the more general physical and mental weaknesses caused by malnutrition, intestinal worms and other infestatious diseases which are not usually fatal in themselves. It is conceivable that a large part of the population may be diseased or at least lacking in the normal vigour, all or most of the time, even though the rates of mortality are falling and life expectancy is increasing. It is even conceivable that people live longer only to suffer

delibilitating conditions of ill-health in a greater extent than before.

The crude death rate, the measure for mortality does not reflect the differences in the age composition of the population. It simply states the number of deaths per thousand population in a particular country at a given period of time and thus can be used profitably for inter-country comparisons only when their respective age structures are fairly similar as for instance among the less developed countries in South Asia where the populations are significantly "younger" than those of developed countries.[2] Moreover, since the death registration of most underdeveloped countries including West Malaysia must be assumed to err by more than 10%, only the probable range of crude death rates can be indicated. The scarcity of reliable vital statistics is especially evident when one attempts to study differentials in mortality. This holds true for the age and sex differentials and still more for the urban-rural differences and those related to economic, social or occupational status.

Break-down of Mortality Rates

Table III-5 reveals that the male mortality generally exceeds female mortality except in the 15-40 age range. Only the Chinese in Malaya seem to conform to the pattern, typical of advanced countries that of lower female than male mortality. This ethnic group, moreover, is exceptional in other respects as well; being mainly an urban population comprising of 73% of the population in 1952[3] and comparatively well-off, the Chinese have more access to the medical facilities than do other population groups. To some extent, the explanation for the excess of female deaths is to be found in the high fertility rate which increases the risk of maternal deaths particularly in the absence of good maternal care and reduces the resistance of women to diseases during

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2. In West Malaysia, the proportion of population under 15 years of age constitutes 44.2% as compared to 23-30% in developed countries. See Appendix V-2.

3. H. Fell, J.M.N. Report No. 14. 1957 Census of the Federation of Malaya, Statistices Department. K.L. Pg. 11.

Table III-5

Mortality Rates

(Average deaths 1956/58 as a proportion of the estimated population at 30/6/57)

Age group	Malays		Chinese		Indians	
	Males	Females	Males	Females	Males	Females
1-4	13.28	13.38	6.00	5.73	8.41	7.91
5-	4.42	4.55	1.73	1.51	1.79	1.81
10-	2.16	2.10	1.13	1.01	1.47	1.77
15-	2.82	3.61	1.32	1.15	2.11	3.63
20-	3.37	5.19	2.30	1.75	2.15	5.00
25-	3.74	6.87	2.95	2.52	3.03	5.83
30-	4.89	7.59	3.54	3.49	3.87	6.72
35-	6.84	8.88	4.89	4.42	4.63	7.53
40-	9.05	10.01	7.43	5.01	7.18	7.92
45-	15.88	15.36	10.58	6.38	10.97	14.10
50-	18.75	15.02	16.46	9.00	15.16	19.05
55-	31.92	31.81	26.40	12.92	24.60	32.27
60-	33.30	25.10	41.04	21.84	41.11	43.04
65-	61.36	53.08	61.65	31.86	59.00	73.73

Source: H. Fell, J.M.N. Report No. 14. 1957 Census of the Federation of Malaya. Statistics Department. K.L. Pg. 39.

the child-bearing years. However, it is believed that the high number of pregnancies lowers women's resistance to illness even when they receive moderately good maternal care. The effect of the traditional Indian child marriages is apparent from a comparison of the rates for the Indians and that for the Malays, who on the average are not better off in regard to the levels of living or anything else. For both groups, but especially the Indians, female mortality in the procreative ages is much higher than the male mortality, despite the availability of hospitals and other medical facilities in relatively liberal quantities. Indeed, Chinese women make much greater use of hospitals than the Indian and Malay women do. As a result, by 1967, the crude death rate for the Chinese is 6.3, a rate which is lower even than the average of 7.5 for all the races. The crude death rates of the Malays and the Indians have been 8.3 and 8.2 respectively in the same year. (See Appendix III-1)

Percentage changes in the age and sex-specific death rates suggest that the rapid post-war decline in mortality has had no marked effect on the sex differential. Among the Chinese and the Indians, no systematic advantage of either sex is discernible in the 1947-57 decline of death rates; but among the Malays themselves, the gap between the male and female mortality appears to have widened especially in the age range of 15-45 years. As public health campaigns have not been directly concerned with reducing the hazards of birth, the lesser use of hospitals by the Malay women may be partly responsible for the fact that improvement in their mortality rate has trailed behind that among the Chinese and Indian women.

In Western countries, the mortality for males is higher in all the age groups than for females but the differences narrow for the reproductive age. But in West Malaysia, mortality for males is higher than for females except during the reproductive age as seen earlier. Mortality is markedly higher at the lower ages than in the Western countries, less so at the higher ages. To be more specific, at ages below 30, mortality rates are double or triple those of the West. After 40, the differences narrow rapidly and above 85 years, they are negligible.

Thus the age differential in mortality is that Malaysia conforms to the universal U-shaped curve, which starts high at birth, falls rapidly towards a minimum around the twentieth year of age and then rises slowly

with the advance in age, reaching a maximum at the end of the human life span, because, except in childhood, the chances of dying increase with the age.[4]

"The general belief among demographers is that rapid drops from high mortality change age distribution very little."[5] Thus, the post-war decline in the death rates in West Malaysia has been remarkably uniform in the various age groups except that it has been less pronounced among the infants and the old people. The comparatively slow advance in lowering the rates of mortality among the old people is not difficult to explain, in as much as the principal causes of death in old age i.e. degenerative diseases and senility, do not respond readily to the mass measures of the kind undertaken in West Malaysia since the War. The relatively slow progress in reducing the infant mortality may seem more surprising. It was only reduced from 98 per thousand population in 1951 to 48 per thousand population in 1966. (See Appendix III-2). This is because, though responsive to the public health measures, it is sensitive to the prevailing economic and social living conditions and during the post-war period, these have not changed substantially. The "lag" of infant mortality may also be attributed in part to the varying degrees of the under-registration of births and deaths. For any case, such a "lag" may be temporary, only attributable to an exceptionally rapid decline in the death rates among other age groups.

Concerning urban-rural mortality differences, it is clearly discernible since it co-incides with the ethnic differences i.e. death rates are highest in the rural areas which are inhabited predominantly by the Malays and lowest in the urban areas where the majority of the Chinese live. The ethnic differences are correlated with the economic ones as the Malays are on the average, very much poorer than the Chinese. Undoubtedly, both urban and rural areas have benefitted from the fight against diseases. The rural areas have gained most e.g. from the

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4. Undoubtedly, within this general pattern, there are rather wide divergences in the age differences especially between developed and under-developed countries.

5. Coale, A.J. "Effects of Mortality and Fertility on the Age Composition". Milbank, Memorial Fund Quarterly, January 1956. Pg. 79.

anti-malaria campaigns, whereas the urban areas have been the chief receipients of the investment in medical facilities and environmental sanitation.

Prospects for Mortality

Mortality will continue to be a dynamic element in population development. If the possibility of a major catastrophe is excluded, one can predict that these rates will continue to fall substantially from time to time. G. Myrdal, author of "Asian Drama - an inquiry into the poverty of nations" estimates that the mortality rate for West Malaysia to be 8 per thousand population in 1980 whereas it has already reached 7.5 per thousand population for all the ethnic groups in 1967. Evidently, the decline in mortality has been far more rapid than at any time in the West. e.g. the change in mortality that took place in the few years between 1940 and the early 1950s is equivalent to the change that occured in Scandinavia between 1850 and 1912 and in Belgium between 1890 and 1920.[6] The death rate was 7.5 per thousand population in 1967 as against 16.3 per thousand population in 1948. On the basis of data for 15 poor countries including West Malaysia, it was shown that the crude death rate dropped by 53% during the 30 years from 1920-1924 to 1950-1954.[7]

Among the total population, the weighted average expectation of life at birth for both sexes was 56.6 years in 1957. Although marked differences in life expectation exist among the 3 ethnic groups: the Chinese having presently the highest expectation of life and the Malays the lowest. This however will probably narrow down

Table III-6

1957 - Life Expectation at Birth

Sex	Malays	Chinese	Indians
Males	50.23	59.52	57.49
Female	53.39	66.73	54.50

Source: Fell Report No.14. Pg. 40

6. G.M. Meier and R.E. Baldwin: "Economic Development; Theory, History, Policy". Modern Asia Edition, Tokyo, 1968. Pg. 286.

7. G.M. Meier and R.E. Baldwin. op. cit. Pg. 287.

considerably since in planning its health policies, the government has been giving priority to the expansion of health services and the improvement of sanitation in the rural areas, where most Malays live, in contrast to the almost entirely urbanized Chinese and Indian population. Thus, by 1982, it is believed that the differences in mortality both by sex and by the race would have considerably narrowed.[8] Conservatively, it is also estimated that the life expectancy in general might rise from 58 years in 1960 to 65-66 by 1980.[9]

Health conditions are obviously a determinant of mortality. In many, if not most, the decline in mortality is an interplay of the general forces of social and economic development and specific advances in science and technology of health and medical practices, e.g. in recent years, medical science has provided effective means for preventing, detecting and curing T.B. which was widespread in South Asia after the beginning of the present century. Death causes by T.B. recorded about 10% in West Malaysia in 1950 as compared to 15 to 20% in the large Indian cities. The National Campaign launched in 1961 for controlling T.B. resulted in 384,000 new-born babies and 535,000 persons living in T.B. - risk areas receiving B.C.G. vaccination since 1961. The case-finding campaign X-rayed 821,000 persons during the same period and uncovered 9,848 confirmed cases of pulmonary T.B. Moreover, M$3 million has been allocated for T.B. control during 1966-70 for the expansion of the existing facilities both for prevention and cure; the continuation of the training of technical personnel and the gradual rectification of existing deficiencies.

Modern transportation is essential to reduce deaths from the natural catastrophes and their ancient co-relates of flight and starvation. The integration of the people within an advancing economy combines with formal education to replace supersitious practices with ways of child-care, also lessens the chances of illness and death especially in the rural areas. In West Malaysia,

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8. Paper A, Forecasted Population, 1957-1982. Statistics Department. Kuala Lumpur.

9. Myrdal, G. "Asian Drama, An Inquiry into the Poverty of Nations." Volume II. London, A. Lene, the Penguin Press, 1968. Pg. 1418.

only 9 out of a total of 1,200 doctors worked in rural areas in mid-1965. "This regional maldistribution is probably true of most (if not all) developing countries in this region."[10] Most young doctors prefer lower initial earnings in cities rather than take up, even temporarily, vacant rural posts. This leaves the rural population at a great disadvantage. It is easier to attract personnel to cities because city hospitals are better equipped with laboratory facilities, and greater opportunities for specialisation. Moreover, effective demand in rural areas is low because of poverty and the preference for the indigeneous practitioners e.g. the "bomohs". Therefore, government posts in general are not sought after due to the heavy workload coupled with relatively lower salaries. The proportion of private practitioners exceeded 60% in 1957 and a considerable number (35% in 1957) of established government posts remained vacant.[11]

Fortunately, nurses and mid-wives are more evenly distributed geographically than the physicians. The proportion of registered nurses and mid-wives was 82% in 1956. The encouragement to attract personnel into the rural areas is in line with the Plan objective i.e. "to expand and improve medical and health facilities especially in rural areas".[12] Thus, the government is ear marking a considerable sum of M$20 million in 1966-70 for the extension of the existing network of 31 main health centres, 132 sub-centres and 645 mid-wives clinics constructed within 1961-65. A total of 60 sub-centres and 450 mid-wives clinics is to be envisaged within the 5-year period 1966-70. These facilities provide both preventive and curative services including two specialised services in dental health care and maternal and child-health care.

The crude death rate registered in 1967 of 7.5 per thousand population is a rate in conformity with economically advanced countries. How much further and how fast such rates can be improved upon cannot, of course, be forseen with any certainty. Similarly, how consequential new medical discoveries and innovations will be, is impossible to predict also. But one factor

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10. A statement by the Director of Medical Services, Malaysia. The Straits Times, August 4, 1965 reported in The U.N., Economic Survey of Asia and Far East, 1965. Pg. 76.

11. Malaya, Government of the Federation of Malaya, Federation of Malaya, Annual Report. 1957, Kuala Lumpur, 1958. Pg. 290.

12. 1st Malaysia Plan, 1966-70. Pg. 175.

is significant: mortality rates are falling rapidly in West Malaysia, not because of development but because modern medical knowledge and scientific techniques of death control can be readily transferred from the rich countries and applied i.e. the fall in mortality is largely "autonomous" in the specific sense that it is not connected with any preceding or concomitant rise in incomes and the levels of living or even in urbanization or education. A main reason why the population explosion was not forseen by the experts was that they believed mortality could not improve until the levels of living did! However, modern medical and public health advances have tended to make the decline in mortality independant trends in economic development and social change because there is no cause to think that incomes and the levels of living for the masses of people have risen substantially because of a decline in mortality. And, whereas, European industrial countries began lowering their birth rates before their sharpest declines in mortality, less developed countries like West Malaysia will not do so until long after their mortality has reached a modern low level, as it now has. Thus, unless fertility rates also fall sharply, the present annual population growth rate of 3% will double the population in less than 25 years, a much greater increase than that occured in Western Europe during the 19th century within 2 or 3 generations, thwarting the efforts of economic development as a result.

Analysis of Fertility

Measure of fertility

The measure of fertility, the crude birth rate, is the annual number of births per thousand population i.e. mid-year population. But the recorded figures generally fall short of those that can be assumed to correspond to the real situation which consequently must be gauged by various demographic techniques. The fertility of a population depends in the first place, on the fecundity of its inhabitants i.e. on their ability to achieve conception. The degree to which that ability results in the birth of children is determined mainly by the frequency of, and the modal age at marriage; by the customs and the taboos affecting sexual activity and birth control practices; and by the health and mortality status of the population. It is difficult to assess because the production of offspring, which is the only absolute evidence of fecundity, normally falls well

below the biological potential in any population. The maximum family size, resulting from uncontrolled normal intercourse in the advanced Western countries is estimated to range somewhere between 12 and 14 live births per average woman living a married life from puberty to menopause.[13] The corresponding averages for the West Malaysian population groups in the rural areas seem to be lower mainly because of poor health and nutrition. However, data for the Chinese, who live under comparatively good health conditions and have few fertility-reducing customs suggest that the differences, if any, in physiological fecundity cannot be large. The marital fertility rates[14] for the Chinese yield a total marital fertility rate of 10.8.[15] This is the hypothetical number of children born to an average women married from 15 to 49 years of age. However, since fertility-depressing factors are not completely absent in the Chinese families either, the figure of 10.8 may safely be taken as a low limit of physiological fecundity for that South East Asian population group. The lower figures, derived by the same method are 7.7 for the Malay women and 6.6 for the Indian women.

The fertility in West Malaysia does not seem to have changed appreciably; the crude birth rate being 44.0 per thousand population in 1955 and only dropped to 36.1 per thousand population[16] within a decade. More refined measures of fertility are the Gross Reproduction Rate which calculates how many girls will be born to an average women living through her reproductive period of ages between 15 and 49 years. Nevertheless, the Gross Reproduction Rates do corroborate the impression given by the crude birth rates that fertility has been and is generally high still.

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13. Myrdal, G. "Asian Drama, An Inquiring into the Poverty of Nations," Volume II. London, A.Lene, the Penguin Press 1968. Pg. 1429.

14. Obtained by dividing the general age-specific birth rates for women by the proportion married.

15. Considering the weakness of the data, the figure should be regarded only as tentative.

16. The present crude birth rates are around 15.4 in United Kingdom and 14.8 in Sweden.

In determining what happens to a population, the primary consideration is its rate of replacement measured by the Net Reproduction Rates which indicate the extent to which the women of one generation are replaced in the next i.e. they purport to take into account the effect of mortality as well. Thus, a Net Reproduction of one will lead in the long-run, to demographic equilibrium. However, this measure has fallen into disuse because "changes in mortality have been discovered to affect its prognostic value".[17] This is especially true for West Malaysia where the distortion has grown particularly significant. Hence, such unreliable estimates will not be employed, in the analysis of fertility rates here.

Break-down Of Fertility Rates

This section attempts to explain the variations of the fertility rates experienced over the years by the different ethnic groups, and further from their trends of development to speculate on the prospects for fertility decline, vital to the economic development in West Malaysia.

(a) By Crude Birth Rates:

Prior to 1957, the crude birth rates did not undergo any clear-cut movement but rather fluctuated above 40 in general i.e. fertility remained somewhat high and stationary. (See Table III-2) Since then, a decline in the crude birth rates was registered every year (except in 1961) to below 40. An interesting question naturally arises as to whether this sustained decline merely reflects a change in the proportion of women in the reproductive ages to the total population or marks the beginning of a change in the actual level of fertility downwards.

The crude rates are especially unreliable because of the shift in the abnormably smaller cohort of survivors born during the Japanese occupation into the peak reproductive ages. (War was declared in Malaya on 8th December, 1941 and Japanese occupation lasted officially until 9th September, 1945. During these

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17. Myrdal, G. "Asian Drama, An Inquiring into the Poverty of Nations." Volume II, London, A.Lene, the Penguin Press 1968. Pg. 1428.

difficult war years, fertility was somewhat lower and mortality was exceptionally high. This accounted for the smaller cohort of survivors who are now within the age group of between 22-25 years.) This phenomenon serves to reduce the proportion of women in the reproductive ages and tends to reduce the crude birth rates. Thus, it is more important to base the fertility analysis on the gross reproduction rates which are considered as the best measure of fertility trends and differentials.

(b) By Gross Reproduction Rates

Table III-7

Gross Reproduction Rates 1956-1965

Year	Rate	% decline
1956	3.242	-
1957	3.192	1.5
1958	3.042	4.7
1959	2.973	2.3
1960	2.916	1.9
1961	2.982	+2.3
1962	2.813	2.3
1963	2.875	1.3
1964	2.867	0.3
1965	2.693	6.1

Table III-7 suggests that the general trend in the level of fertility was downwards since 1956, though the progression over the years was rather uneven. In 1957, the rate fell by a modest amount of about 1.5% and in the following year, a drop of about 4.7% was recorded. In the next 2 years, the decline moved back to the modest amount of about 2%. Surprisingly enough, the following year, 1961, witnessed a rise of about 2.3% which was rather difficult to explain. In 1962, the rate once

again dropped and was reduced by about 2.3%. Thereafter the decline seemed to have slackened considerably, but suddenly gathered momentum in 1965 with a fall of about 6.1%, the greatest decline so far recorded. All in all, the level of fertility declined by about 17% during the decade 1956 to 1965.

(c) By Age Group

Table III-8

Age - Specific Fertility Rates, 1956-1965.

Year	AGE GROUP						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1956	135.6	336.5	335.0	257.0	171.4	71.5	20.7
1957	134.2	333.1	331.6	254.4	169.7	70.8	20.5
1958	126.9	314.9	313.5	240.5	160.4	66.9	19.4
1959	120.5	309.4	299.6	234.6	166.1	68.8	19.5
1960	111.0	303.4	293.9	237.5	158.9	67.8	18.5
1961	115.3	308.9	307.3	253.7	159.6	67.1	8.7
1962	105.9	293.3	312.1	252.2	157.6	64.8	6.8
1963	91.3	276.3	318.8	245.6	153.7	91.9	18.9
1964	84.4	272.9	318.8	240.8	155.7	78.2	21.4
1965	79.9	249.4	300.6	231.1	153.4	71.3	19.8

Fertility changes by age group is evident from Table III-8. By far the most clear-cut and pronounced change was induced in the youngest age group where the rate was brought down from 135.6 in 1956 to 79.9 in 1965. It's very likely that a rise in the average age at the marriage of women and a wider spacing of childbearing are the principal factors behind this change. The next age group also experienced a decline though not so pronounced. In the early thirties, a very irregular movement in the rates is to be seen, generally going down in the beginning, followed by a rise and then

falling slightly again towards the end of the period, with the final figure a shade lower than at the beginning. In the late thirties, the rates exhibit a more definite downward trend, being reduced from 171.4 in 1956 to 153.4 in 1965. While the quinary age groups below 40 here shown a tendency to decline by varying degree by 1965, a minor rise is being recorded in the 40-44 age group. This seems to suggest a new development towards child-bearing at a later age. The rates for the oldest age group are not very reliable, being affected by random fluctuations in the small number of births born to women in this age group.

(d) By Race

Table III-9

Fertility Changes By Race

Year	Rate			Per Cent Decline		
	Malays	Chinese	Indians	Malays	Chinese	Indians
1956	3.129	3.129	3.832	-	-	-
1957	2.968	3.498	4.091	5.1	+2.2	+6.8
1958	2.908	3.178	3.593	2.0	9.1	12.2
1959	2.849	3.083	3.597	2.0	3.0	0.1
1960	2.837	2.962	3.491	0.4	3.9	0.9
1961	2.950	2.982	3.557	+4.0	+0.7	+1.9
1962	2.876	2.928	3.465	2.5	1.8	2.6
1963	2.889	2.792	3.355	0.1	3.8	3.7
1964	2.938	2.714	3.311	+2.3	3.6	0.8
1965	2.715	2.597	3.206	7.6	4.3	3.2

In order to obtain a greater insight into the nature and causes underlying the decline in overall fertility, an analysis of the changes in the levels and patterns of fertility encountered by the 3 main races in West Malaysia would help.[18] The gross reproduction

18. These 3 races combined to form 98% of the total population in Mid-1965 with the Malays accounting for about 50%,,the Chinese 37% and the Indians 11%.

rates indicate that a fall in fertility level is being experienced by every race, though the downward path was by no means regular (see Table III-9). Apart from the varying percentages of decline registered from year to year, there was the odd rise for certain years. Taking the period as a whole it is to be noted that the fertility of the Malay women was brought down by 13.2% only during 1956-65, as compared to the 25.8% and 21.6% during 1956-1965 for the Chinese women and the Indian women respectively. The main explanation lies in the fact that the last two races are primarily urban dwellers whose reproductive behaviour is more amenable to influences that favour lower fertility.[19]

At the beginning of the period in 1956, the highest fertility was recorded by the Indian women and the lowest by the Malay women, with the Chinese women occupying an intermediate position. To a very large extent, the relatively lower fertility of the Malay women, who are Muslims, may be attributed to the high rate of divorce and hence unstable marriages, which tend to reduce their period of exposures to the risk of childbearing. Incidentally, this implies that a reduction in the divorce rate would lead to a rise in fertility, which is exactly what is happening among the Malay community in Singapore where the institution of stringent measures have brought down the divorce rate drastically.[20] For Malaya, it may be observed that with the variation in the speed of reduction experienced by the 3 races, the lowest fertility is now being recorded by the Chinese women, with the highest still being recorded by the Indian women.

(e) Age - Specific Fertility Rates By Race

From Appendix III-3, it is to be noted that with regard to the Malay women, the rates for the first

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19. According to the 1957 Census of Population, the figures for the proportion of the total population of each of the 3 races residing in towns with 10,000 people and more are as follows:- Chinese 44.7%, Malays 11.9% and Indians 30.7%.

20. For greater details, see Shirle Gordon, "Marriage/Divorce in the Eleven State of Malaya and Singapore." Intisan, Volume II, No. 2, pg. 23-32. Also H. Fell, J.M.N. Report No. 14. Census of the Federation of Malaya. Statistics Department, Kuala Lumpur. Pgs. 73-74.

two youngest age groups exhibit a downward trend, while the rates for the age groups between 25 and 39 do not seem to have undergone any marked changes, generally fluctuating around the initial levels. But a rise was recorded by the 40-44 age group and to a limited extent by the last age group. It is indeed interesting to note that essentially the same pattern of changes was experienced by the Indian women over the past 10 years. On the other hand, a simple and clear-cut pattern was delineated by the Chinese women whose fertility at every age-group was lowered, though the extent of the reduction at each group varies somewhat.

It is possible to distinguish 3 distinct patterns of age-specific fertility rates; the first type with the highest fertility at ages 20-24 and the second highest at the next age group 25-29; the second type with the highest fertility at ages 25-29 and the second highest at 20-24; and the third type with the highest also at 25-29, but the second highest at 30-34. A careful examination of the rates seems to suggest that in the declining phase of fertility, the pattern of the rates tends to evolve from the first towards the third type. Thus, the pattern for the Chinese women has evolved from the second to the third type and the Malay and Indian women have their patterns evolved from the first to the second type. There is every possibility that the next few years will witness the evolution of the pattern of the women of the last 2 races towards the 3rd type; if there is a continued rise in the average age at the marriage of women, which is the primary factor responsible for the shift in the pattern.

Prospects For Fertility Decline:

The experience of many countries in the past has shown that once fertility has commenced to decline from a high level, the chances are that it will continue on a declining path in the future. Demographers predict that if fertility does not decline, a time will come when mortality loses its relative independance of living and begins to rise again.

This poses a most complicated problem. With social and economic development and all the facets of modernization which accompany it, fertility decline has been affected adversely, e.g. certain superstitions and taboos against intercourse on particular days or

under particular circumstances are more likely to weaken than to become stricter, resulting in a greater risk of pregnancy. Ironically the improvements in health conditions lead to a continuing decline in infant mortality, incidence of miscarriages and spontaneous still-births; the increased sexual vigour thus exhances the chances of conception. The impact exerted by the decline in the mortality of adults further hinders fertility decline. This raises the duration of marriage because the expectation of life is increased. This tendency is strengthened if any equalization in the age of spouse were to take place e.g. as a result of a rise in the women's (but not men's) age at marriage; since the loss of spouse through death under the risk of pregnancy would increase and even though, very often, the years added would not be years of high fecundity, being close to menopause, the actual birth performance would some what increase as well.

The differences in women's age at marriage also affect fertility decline since the relationship between marriage and child-bearing is very close. Among the main ethnic races, about 50% of the Malays are married in the 15-19 age group in 1957 whereas the figure is only 10.2% for the Chinese in the same category.[21] This in a way, discloses the "excess" fertility due to the earlier marriages in West Malaysia as compared with advanced countries. However, even if a rise in the effective marriage age resulted, fertility decline is not greatly altered for there is a great deal of sub-fecundity among girls under 18 years. Any changes in the marriage frequency in that age group would have then less impact on fertility than corresponding changes in a more mature age group.

Despite all these unfavourable factors against fertility decline, one can still say with some measure of confidence that fertility will continue to decline in the future and perhaps at an accelerated rate too. In this respect, the achievements, progress and the fulfilment of the targets of the government policy "to lay the ground-work for less rapid population growth by instituting an effective programme of Family

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21. H. Fell, J.M.N. Report No. 14. 1957 Census of the Federation of Malaya. Statistics Department, Kuala Lumpur. Pg. 73-74.

Planning" outlined in the First Malaysia Plan 1966-70 must be given due emphasis. Of equal significance is the voluntary dissolution of the traditional norms of favouring high fertility by the people through educational, social and economic development, bearing in mind that "our country since its inception, stood for quality, not quantity".22

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22. Speech by Tun Haji Abdul Razak b. Hussein at the Inauguration ceremony of the N.F.P.B. on 10th June 1966 reproduced in Kajian Ekonomi Malaysia (Malaysian Economic Studies) Volume III, No. 1. June 1966. pg. 8.

CHAPTER IV

ANALYSIS OF FAMILY PLANNING POLICY

From the preceding analysis, it is clear that the rate of population growth in West Malaysia is now largely independant of the rate of economic development. It could affect the speed and the extent of decline in mortality rates since it determines the level of living and may influence the amount of public expenditure devoted to improving health conditions. But, fertility, if, left to spontaneous forces, will remain at the traditional high levels, or may even rise slightly, whether or not there is economic development. As there is no prospect of significant migration out of West Malaysia after the war, the population will tend to grow at an accelerating pace. "With the population growth rate of 3% per annum, the effort made by development to raise the level of living of our people can in fact become negative unless by various means, we control the growth of population ..... living in a planned economy with development plans designed to give employment, social services education and the best possible for the people in West Malaysia".[1]

Thus as migration is not a feasible policy and as no government can but choose to decrease mortality, the practical problem facing the government is to attempt to induce a fall in fertility that will not come spontaneously. Thus only the modern equivalent of Malthus's moral restraint i.e. the control of fertility, remains as the only acceptable means of effectively curbing fertility. Evidently, there is a great measure of truth in Malthus's doctrine that men feel the need of resorting to contraception and Family Planning to keep their families within reasonable limits and to keep the nation's population within the bounds of economic achievement potential. Family Planning not only can achieve the economic objective

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1. Inaugural address delivered by Tun Haji Abdul Razak bin Hussein at the inauguration ceremony of the National Family Planning Board at the Dewan Tunku Abdul Rahman on 10th June 1966 on "Government Policy on Birth Control in Malaysia".

of hopefully checking the rate of population growth to 2% by 1985[2] but a more human and personal advantage can be gained in all strata of the social structure. It is only logical that parents with 3 or 4 children, are in a much better position to give tender care, continuous consideration, a better home influence and much better financial means to a family which is small, rather than to a family so large that it becomes neglected, so numerous that it becomes impersonal and so unmanagable, that it becomes a financial strain on the parents.

National Family Planning Board (N.F.P.B.) and voluntary Organisations

Organised Family Planning movement in most states was introduced only very recently. Family Planning activity began in July 1953 with the formation of the Family Planning Association of Selangor. Only as late as 1962 that the Federation Family Planning Association (F.F.P.A.) was established when a Family Planning Association came into existence in every state.

The aim of the F.F.P.A. can be said to provide education to publicise the significance of family planning described as the conscious desire and endeavour of married persons to control fertility. Unfortunately, the F.F.P.A. suffers from several limitations. It is solely governed by limited resources available to meet the increased demand from services created by over activity on the education side. This results in a modest target. Over 50% of the present activity engaged in the provision of family planning service are voluntary workers. There is insufficient resource to attract a really adequate nucleus of paid full-time professional staff especially doctors and social workers which remains a major problem and an impediment to more rapid family planning progress. The major family planning activity is confined to larger towns and concentrated areas of population. This is due to the fact that it is too expensive and uneconomical for a body, which has to depend for much of its resources on the government and others financially, to operate in ruual areas. Nevertheless, there is a certain amount of family planning work in the rural areas by motorised

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2. Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 119.

transport. It is of no surprise therefore that the sole objective of the F.F.P.A. is to attract increased government concern and its active involvement in family planning activities. This came into being when the National Family Planning Board[3] (N.F.P.B.) was established in June 1966.

In the words of the Chairman at the inauguration of the N.F.P.B., "voluntary organisations especially the F.F.P.A. has done a wonderful job over the past 10 years but activities have not reached the majority of the population in the rural and urban communities mainly because of the lack of personnel and resources." The response and participation by the people to family planning practices have so far indicated that they would like to avail themselves of opportunities if facilities are readily available to them. So far, government participation has been indirect in the form of an annual cash grant of M$200,000/- to the F.F.P.A. Now, for the first time, the government has come out into the open and has adopted family planning as one of the major objectives of the 1st Malaysia Plan in the course of economic development,[4] thus rendering much desired service and meeting the popular needs of the community. The F.F.P.A. is represented on the N.F.P.B. whereby the government takes full advantage of the available expertise and the experience gained in other countries especially the Population Council of New York and the Ford Foundation.

The functions of the N.F.P.B. are as follows:-

(1) the formulation of policies and methods for the promotion and the spread of family planning knowledge and practice on the grounds of health

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3. It was established under the Act of Parliament 42 of 1966 with an autonomous status and coming into force on 10th June, 1966. Section 5 of the Act stipulates the functions and the responsibilities of the Board.

4. Unlike in Western Europe where the spread of birth control was truly spontaneous in that it was not promoted by any type of population policy directed towards lowering fertility. In fact, it had to overcome inhibitions of a population policy on the opposite direction which was supported by organised societies through legislation, the church, the press and medical profession.

of the mothers and children and the welfare of the family.

(2) the programming, directing, administrating and co-ordinating of family planning activities in the country.

(3) to be responsible for the conducting of research on medical and biological methods relating to family planning.

(4) the promotion of studies and research on the inter-relationship between social, cultural, economic and population changes and also research concerning fertility and maternity pattern in the country.

(5) to be responsible for the training of all persons involved in the Family Planning extension work.

(6) to set up a system of evaluation by means of which it will be possible from time to time to assess the effectiveness of the programme and the progress towards the attainment of national objectives.

(7) to employ such officers and servants as may be necessary on such terms as may be approved by the Minister for carrying out the functions and duties of the board.

However, it is agreed as a policy that all the state Family Planning Associations should endeavour as soon as possible to set up offices and clinics in premises entirely separate from the government or local Authority hospitals or clinics. This is a step towards the institution of a more personal service designed to meet the needs of those who do not wish to avail themselves of government service, in addition to the provision of sessions after office hours which are not possible in government clinics.

Family Planning Progress And Targets:

In large urban areas, where the previous F.F.P.A. efforts have been concentrated, 41.4% of eligible women are currently using contraceptives as compared to 5.9% in

the rural areas where the F.F.P.A. has been far less active. The N.F.P.B. commenced clinical operations in May 1967 and has thus far concentrated its efforts upon disseminating information on family planning, distributing contraceptive materials (oral pills in over 90% of the cases) to interested "acceptors" and training personnel for work at all levels in both the public and private sectors family planning programme. The N.F.P.B. has been establishing its own clinics and sub-stations at a rapid rate. By November 1968, 57 clinics and 155 sub-stations[5] had been established. Nevertheless, a large portion of the programme is, and will continue to be carried out through the voluntary Family Planning Associations, (158 clinics) rubber estates (146 clinics up from 85 at the end of 1967) and individual doctors.

An analysis of the operation of the N.F.P.B. may prove to be beneficial.

The Service Programme as stipulated in the "Red Book"[6] would be carried out in phases beginning from the metropolitan areas where medical facilities are conveniently available, then to smaller towns and finally to rural areas. Phase I of the programme started in May 1967 covered the metropolitan areas, the 4 Rural Health Centres, one F.L.D.A. Land scheme and one New Village. These metropolitan areas were opened at Alor Star, Penang, Ipoh, Kuala Lumpur, Seremban and Malacca. In August, another regional centre was set up in Johore Bharu and this was followed by one in Kuantan in October, and Kuala Trengganu and Kota Bharu in November. These centres are attached to General Hospitals and all the operations around the areas are conducted from these centres. Clinics at Bukit Merah New Village in Perak and at Kong Kong F.L.D.A. hand scheme, in Johore were started in October and November respectively.[7]

The National programme stipulates an annual target number of acceptors. For the year 1967, it was 39,340 which represented slightly over 3% of the

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5. Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 119.

6. Document containing the Policy and the Operational Programme of the N.F.P.B. adopted in 1966.

7. Pilot projects scheduled for 4 rural Health Centres in Rembau, Jitra, Bachok and Parit Jawa were not set up as the Staff were not available at that time.

population of child-bearing (married) women of ages 15-49 years who formed about 14.7% of the total population. Proportionately the target number of patients to be reached from May to the end of 1967 was 22,946 (see Table IV-1). This target covered the areas that the programme would be extended and that services would be given through various Family Planning agencies, such as the N.F.P.B. itself, the F.F.P.A., the Estates and the Private Practitioners. It is heartening to note that in 1967, the total acceptors were over 90% of the target.[8]

Table IV-1

Family Planning Acceptor Target & Achievement
(May—December 1967)

State	(a) Population June 1967	(b) Estimated No. of child-bearing Women (15-49) (married)	(c) Annual Target	(d) Target (May-Dec. 67)	(d) No. of acceptors (May-Dec. 67)	(e) Achievement %
Johore	1,297,463	190,727	3,860	2,252	2,565	113.9
Kedah	927,299	136,313	1,290	752	1,838	(f) 244.4
Kelantan	675,679	99,328	1,290	752	177	23.5
Malacca	410,339	60,320	2,410	1,406	1,443	102.6
N. Sembilan	510,873	75,098	4,410	2,572	2,864	111.4
Pahang	425,001	62,475	——	——	*288	
Penang	754,990	110,984	8,130	4,742	2,216	46.7
Perak	1,637,934	240,776	4,490	2,619	3,165	120.8
Perlis	118,139	17,366	——	——	*442	——
Selangor	1,407,045	206,836	13,460	7,851	5,495	70.0
Trengganu	376,940	55,410	——	——	*293	——
West Malaysia (Total)	8,541,720	1,255,633	39,340	22,946	20,726	90.3

(a) = Population projected from "Malaysian Population Statistic, December 1966".
(b) = Computed on assumption that 14.7% of (a) are married and within child-bearing age (15-49).
(c) = Annual Target is taken from Table 2, pg. 17, of "Policy & Operational Programme, NFPB."
(d) = National Target is calculated for 7 months (conservatively) instead of 8 months because acceptors reported by NFPB were for 8 months (May-Dec.) by FPA and Private Practitioners were for 6 months (July-Dec.) and by Estates were for 5 months (Aug.-Dec.)
(e) = Proportion of Acceptors to Target (d) in %.
f = NFPB developed services in Kedah more rapidly than orginally planned.
* = These States had no targets set for 1967.
NOTE: Annual National Target (39,340) is slightly over 3.1% of the total No. of married child-bearing women (1,255,633) of West Malaysia, June 1967.

Source: Annual Report, 1967. National Family Planning Board, Malaysia. Pg. 10.

8. Even though the programme was new and that the 4 areas under the rural pilot projects originally included when the target figures were calculated have not been covered and also that the figures for May and Junefor F.F.P.A. were not available.

The results of the Phase I Programme would throw some light on the potential achievements of birth control through Family Planning:-

(1) The oral pills form the most popular method currently used by Malaysians representing 89.5% of the total acceptors during May to December 1967.

(2) The programme is reaching the younger age groups e.g. more than half of the total acceptors (56.1%) are under 30 years old.[9]

(3) Malaysian women who are in the fertile age group would want to plan their family as more than 38% of the total acceptors during May to December 1967, want another child.

(4) About 60% of the acceptors are being drawn from women who had their last births in 1967 because the Board's programme concentrated more in hospitals and emphasis is placed on patients during the post-partum period.

(5) An interesting observation is that more women from the lower educational level groups are taking advantage of the Board's programme which offers contraceptives at a low price.[10] It was estimated that 54.8% of the acceptors either have no schooling (28.4%) or education up to the primary level only (26.4%).

(6) 70.7% of the year's acceptors have never been Family Planning patients before. This is an interesting indication, limited as it is, that the information campaign has made some impact on people in those areas. Moreover, even among such groups, the oral pill is the most commonly contraceptive method adopted (24.9%).

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9. % of child-bearing women by age-groups:- 15-19 years, 4.5%. 20-24 years, 21.4%. 25-29 years, 30.2%. 30-34 years, 24.6%.

10. Oral pills are offered to the public at a fixed price of $1/- per monthly cycle. Free supply is also being made available to those who cannot afford, usually confined to professional acceptors. The "one dollar per month scheme" actually raises the number of acceptors according to state Family Planning Associations

The success and achievement of the Phase I programme indicates further potential effectiveness of Family Planning in West Malaysia. The Board's ambitious schemes envisage the extension of services to all regions of West Malaysia by the end of 1969 and sets its target 407,700 contraceptive acceptors (or about 34% of the relevant population) by the end of 1971. (See Table IV-2) Looking beyond 1970 into the future, efforts will be made to increase the rate of adoption of Family Planning in the rural areas.

Table IV-2

Family Planning Progress and targets, 1967-71

Year	Phase	Target Proportion (a) of married women of child-bearing age to become acceptors	Target number of new annual acceptors		Achievement	% of target (d) Category (II)
			Category I (15-44)	Category II (15-49)		
1967	I	3%	29,000	31,500	20,726(b)	99
1968	II	5%	49,000	54,100	62,757(c)	139
1969	III	8%	82,100	89,100	-	-
1970	IV	10%	105,700	114,800	-	-
1971	-	10%	108,900	118,200	-	-
	Total	34%	374,700	407,700	83,483	-

(a) % of "potential acceptors" in areas being provided with family planning services in this area expands gradually from the major urban areas until the entire population of West Malaysia is reached in 1970.

(b) May - December. (c) January - October

(d) Using annual rate

Source: Mid-term Review of the 1st Malaysia Plan, 1966-70. Pg. 120

The targets outlined, though ambitious have apparently good prospects of being materialised based on both local and foreign support and assistance in various forms. On the part of the government, its own expenditure has increased from M$900,000/- in 1967 (3½ times over the previous years' estimate of M$248,000/- besides applying for a supplementary budget to recruit additional staff later) to M$1,600,000/- in 1968 and M$1,750,000/- in 1969. Full support for the spread of the activities of Family Planning comes in the form of financial aid, technical assistance and overseas training for the local personnel. For instance, in late 1967, Ford Foundation gave a grant of M$75,000/- for the training programme. Continued support from this Foundation appears as a grant of US$268,000/- to be alloted to the Regent of the University of Michigan over a 2-year period for the provision of experts, advisors and the training of local personnel. The aid from SIDA in 1967, described as "the best gift that any developed country could offer to a developing country in Asia to-day" consisted of 750,000 monthly cycles of oral contraceptives; 15,000 gross of condoms, 30 scooters, 5 vehicles and equipment and supplies required in the training and information programme. The value of the total grant was approximately M$650,000/-.

Perhaps the progress achieved is largely attributed to the Information Programme which aims to provide the widest publicity to inform, and more important, to convince the people that Family Planning, as a part of the government programme is necessary, practical and respectable. A face-to-face communication pilot scheme conducted in mid-1967 found that it was necessary to invite people of a higher educational level who are more influential to attend Family Planning talks before going direct to the kampong people. This reflects the elements of doubt and scepticism of the latter on Family Planning as a form of birth control. Other forms of publicity to combat ignorance on Family Planning were: participation in the MAHA exhibition which was visited by 50,000 people in 1967, "Family Planning Social Evening" and "Meet-the-People Sessions" to inform the people of the national objectives and the Board's programme in the field of population and Family Planning. Furthermore, a N.F.P.B. exhibition was held in conjunction with the National Family Planning week whereby free consultation was given and drug firms exhibited the latest pills and contraceptives on the market. This Family Planning exhibition is now touring all the 11 states in West Malaysia. Moreover, a Family

Planning Seminar held was well-attended by more than 150 delegates and observers.[11]

Thus, though West Malaysia is the most recent country to officially recognise the impact of birth control through Family Planning, the trend of its development and encouraging achievements so far (at its very initial stage) promises greater progress ahead. This is enhanced by the increased awareness on the part of every individual of his responsilities to his family and the nation in affecting the rate of population increase in relation to the pace of economic development. Although a very effective Research, Evaluation and Planning Division is established to maintain the sound and encouraging progress made, further analysis of the attitude towards potential Family Planning of the growing population through surveys will determine the rapidity of the control of fertility. In this light, the K.A.P. (Knowledge, Attitude, Practice) Survey 1966-67 will be given due to attention.

K.A.P. Survey (Knowledge, Attitude, Practice in Family Planning) 1966-67

The attitude of the people in the nation towards family planning can be used as a base line to measure the success or failure of the programme. More significant still, it also measures the future impact on the population. This motivated the K.A.P. survey in 1966-67 in which 5,457 married women were interviewed. The findings help to assess how the programme and other forces are actually affecting demographic trends which will in turn affect per capita results of the general development effort. Thus the results of the survey are essential to the N.F.P.B. which should then focus greater attention on those who desire more children.

No doubt, women have large families, but whether they want these large families and whether preconditions necessary for fertility decline are evident in West Malaysia, prove to be more problematic.

(a) By Residence:

The recent birth decline is mainly in the urban areas. The urban especially metropolitan women want and

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11. The Malay Mail, June 11th 1968.

are having fewer children, beginning to use birth control in sizable numbers and marry later. On the other hand, few rural women use control methods, actually want and are having larger numbers of children and they marry much earlier. The women want 4.2 children in large urban areas, 4.8 children in rural small urban areas and 5.2 children in rural areas. The practice of family planning is more common in cities and towns than in rural areas. In large metropolitan areas, 39% of the currently married women aged 15-45 years use contraception or sterilization at some time and 31% are currently using them. This is in sharp contrast to the 6% of rural women using contraception or sterilization at some time and the 2% currently using them. More than 77% of the small town or metropolitan women who used family planning are currently practising it compared to that of 38% of rural women. This is partially due to the fact that modern methods are used in metropolitan areas compared to 34% of the rural women using "folk methods" which are either ineffective or unpleasant.

(b) By Race

In terms of races, fertility is especially high among Indian or Pakistani women for ages 35-44 years. The relative standing is the same even if the differential child mortality is taken into account.

Table IV-3

Number Of Children Desired By The Races

West Malaysia - Total	Chinese	Malay	Indian or Pakistani
Mean no. of live birth	6.0	5.6	6.9
Mean no. of living children	5.6	4.7	6.2
Mean no. of children wife wants	4.8	5.5	5.6
% who don't want any	85.0	52.0	71.0

The mean number of live birth is 6.9 for the Indian or Pakistani women, 6.0 for the Chinese and 5.6 for the Malays except in metropolitan areas where the Chinese women have the lowest cumulative fertility. (See Table IV-3). A large majority want smaller families and a high percentage do not want any. The average desired family size for the Malays is intermediate between the other 2 races, but the Malays have the lowest percentage who do not want any. In rural areas as a whole, the Indian or Pakistani women want the largest families but are intermediate in percentage who want no more children. Most of the older women of every race in every stratun do no want any more. The rural Malay women express the lowest percentage but even this group has 49% who want no more. The lower figure is consistent with the fact that child mortality for the Malay women in rural areas is quite high. e.g. 18% of children born to the Malays dies, 9% for that of the Chinese and 10% for that of the Indians and Pakistanis.

In all the strata, the Chinese form the largest percentage of those who have used contraception or sterilization. (See Table IV-4).

Table IV-4

Use of Contraception according to Race and Residence

For women 35-44 years:- % who have used contraception or sterilization	Chinese	Malays	Indian or Pakistani	Others
(1) Metropolitan areas	47%	26%	28%	72%
(2) Small towns	36%	14%	19%	-
(3) Rural areas	11%	6%	0%	-
Total, West Malaysia	34%	8%	9%	24%

In metropolitan areas at least, the effects of the high level of contraceptive use by the Chinese seem to be reflected in their fertility. That Chinese living in small towns and rural areas have high cumulative fertility do not seem consistent with the extent to which they have used contraception. However, so much of contraception use in West Malaysia has begun only recently that its impact on cumulative fertility has not yet really started.

(c) By level of education:

Education is one of the major factors which determines the number of children which women desire. Generally speaking, more educated women have more modern fertility behaviour in having fewer children and wanting fewer. Among women between 35-44 years, women with no education whatsoever want 5.5 children, those with one to five years of education desire 5.2 children while those with more than a primary education want 4.3 children only. In the whole of West Malaysia, the most educated women are almost five times more likely to have used contraception than those women with no formal schooling. Although this is true in all groups, the differentials are greatest in the small towns and also large in metropolitan areas. For all educated groups, more than 50% want no more children but nevertheless even in the more educated group, the mean number of living children exceeds the mean number desired in all the strata.

(d) By Income:

Education is closely linked with the renumeration of income. It's expected therefore that women in higher income brackets, naturally want fewer children than women in lower income brackets. Married women with a monthly household income of M$500 want an average of 4.2 children. This figure increases to 5.0 for those with M$200 to M$499 to 5.3 children for those with M$100 to M$199 and finally to 5.5 for those with less than M$100/-.

(e) By Age

Among the older women i.e. between 35-44 years,

6 out of 10 no longer want any more children. Many women even in the younger age groups have already reached the point at which they want no more. It's significant to note that women below 25 years have a much lower ideal family size either because they are adjusting this ideal size to coincide with the present family size or that size and ideals are changing rapidly with the times.

Generally therefore, Family Planning Practice is consistently much higher in metropolitan areas and small towns than in rural areas within various age, race, education and income groups.

Evaluation Of K.A.P. Survey 1966-67:-

From the analysis, it's obviously important to spread the activities of N.F.P.B. to women in rural areas, women in lower income groups and women with lower or no education. A statement in the Straits Times, 8th June 1968, announced that by the end of 1968, between 50 to 60 rural health centres, sponsored by the Ministry of Health, would have trained family planning staff. It's gratifying to note that a % of the acceptors of birth control are rural women served by mobile teams. In 1967, the N.F.P.B. only covered 3% of married women of child-bearing age (i.e. 15-49 years) who formed about 14.7% of the total population resulting in a modest decline in the birth rate, because even in the urban and metropolitan areas, the practice of family planning control is relatively recent and involves a minority of women. However, unlike such other developing countries e.g. Taiwan, the use of family planning in West Malaysia has begun in the younger age groups where families are still small; more than half before their 4th pregnancy and 27% after their 6th pregnancy because of spacing.

If this pattern were to become general, the fertility decline in West Malaysia would be more rapid than other Asian countries.

To What Extent Does The Survey Indicate The Likelihood Of Future Fertility Decline?

81% of the women interviewed said that more children live to be adults now than when they were

children. This recognition of mortality decline stresses the unnecessary need to bear as many children now to attain a given desired family size. Moreover, to enhance the certainty of fertility decline, women in general express their desire for fewer children in one way or other. The general expression for a rather large number of children may simply reflect the reluctance to say that they do not want some of the children already borne. As a result, when asked for the number an ideal Malaysian family should have, a smaller number is usually given. However, many were not willing to state an ideal lower than the number of children they already had because it amounted to saying that some of their children were unwanted.

However, the survey shows that the ideal family size is smaller than the ideal for their own families and 57% agree on 4 or 5 children as the ideal size for West Malaysia. Further evidence that the chances of fertility decline are good is that more than 1/3 of the women in child bearing years want no more. A sizable minority of those with two children are ready to stop. Among those with moderate numbers of three or four children, 30-40 % want nor more. An increasingly large majority of those with more than four children also express the desire to stop.

Conventional Family Size

The success of the Family Planning movement also depends on certain social and cultural influences. It is a common belief that a large number of children in the family provides not only additional workers but may also be a source of status in the community. Unfortunately, the tradition of such a large family structure is not conducive to fertility control. Fortunately, on the other hand, in the present era, the great financial responsibility of large families is under increasing attack from the external force of cultural modernization. The external influence may lead to the break-up of multi-generation families. In actual fact, a discernible movement towards smaller families is observed. Such a tendency is especially obvious in the Chinese community. The process of immigration itself has produced a considerable number of Chinese and Indians whose family connections are few. The turnover in the Chinese population has ensured that few local large multi-generation families can come into being.

Approval Vs Ignorance

The majority i.e. more than 60% of the women interviewed approve of Family Planning practices and that the majority of other people they know also approve. The relatively high level of approval, coupled with the significant proportion of women who do not want any more children, raise the interesting question of why there's not more family planning practice in West Malaysia. Failure to do so is not opposition but rather ignorance and the lack of knowledge about the methods used. Only one out of four married people who wish to restrict family size knows how to use contraceptives. Only 22% know at least one method. Among the women who approve, a relatively high proportion has used it and know how to use one or more methods. While approval is co-related with knowledge and behaviour, even more important to notice is that the majority of women who approve do not know how to practise it. Even fewer have actually done so. Thus, a situation whereby approval is widespread but specific knowledge about it is not, exists sadly in West Malaysia. Consequently, to a very large extent, the success of the government's family planning programme would depend on how information and knowledge are disseminated especially in rural areas among women who are less educated. The majority of the women are aware that family limitation is possible and may have the perception that others are practising it.[12] Such perceptions about what others are doing are important because the chances of the adoption of family planning much more likely, if there exists a reassuring belief that this is not an unusual act but involves many others.

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12. In fact, the Annual Report 1967 indicated that 70.7% of the year's acceptors have never been family planning patients before.

Significance Of The N.F.P.B.

Table IV-5

West Malaysia:

Perspective Annual Growth Rates

Of Population And National Income

Annual growth rate (%)	First Malaysia Plan 1965-70	Second Malaysia Plan 1970-75	Third Malaysia Plan 1975-80	Fourth Malaysia Plan 1980-85
Population: No Family Planning.	3	3	3	3
Population: Malaysia Perspective Plan.	3.0	2.7	2.4	2.2
Population: N.F.P.B. estimates.	2.8	2.5	2.2	2.0
Gross National Income.	4.2	5.0	5.7	6.5
Per Capita Income.	1.1	2.3	3.2	4.1

Sources: 1st Malaysia Plan 1965-70. Kuala Lumpur Government Printers, 1965. Pg. 61. National Family Planning Board Malaysia - Annual Report, 1967.

Note: Per Capita income annual increase is based on the annual rates of population increase according to the Malaysia Perspective Plan.

The main objective of the country's economic development is to raise the standard of living of the people. By reducing the birth rate, it is hoped to contribute substantially to the desired objective of raising the income level. It has been the target objective of all government plans to raise per capita income from M$950/- in 1965 to M$1,500/- or more in 1985. However, should the growth rate of population persist at its current high rate of 3% per annum, the rate of growth of national output in the next 20 years will be adversely affected and the target level of per capita income could be no more than about M$1,400/- at most. Population will increase by 1½ million from 9.4 million in 1965 to 10.9 million by mid-1970. Such rapid population growth will present a serious challenge to the effort to provide rising income levels and improved public services (see diagram IV-2).

Through a determined development effort, the government hopes to raise per capita income to a level of M$1,500 or more by 1985; an income sufficient to assure every Malaysian a decent, though not luxurious standard of living. It is of interest to note however, that "the increase in per capita income which results from output growth will be less than the rise which will take place if a successful Family Planning programme is implemented."[13] Thus, the significance of Family Planning lies in that it offers an opportunity to influence birth rates and sharply accelerate the pace at which levels of welfare rise. The N.F.P.B. has geared its target to gradually reduce the rate of population increase to 2% per annum by 1985; for only then, the national target of a per capita income of M$1,500/- or more can be achieved (see Diagram IV-1).

Thus, it is not too optimistic to predict that with the current drive on the spread of knowledge on Family Planning. West Malaysians are adopting a broader and much more favourable attitude towards Family Planning, thus curbing potential fertility. The prospects of materialising a rate of population growth compatible with the rate of planned economic development are hopeful. This is further assured by the growing awareness (or is it fashionable to be bachelor girls?) of the economic role of women resulting in a class of career conscious women; later marriages in life as well as the increasing popularity of having smaller families. However, it must be borne in mind that fertility decline is a gradual process which should be viewed in a long term perspective.

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13. 1st Malaysia Plan 1966-70. Government Printers, Kuala Lumpur, 1965. Pg. 15.

IMPACT OF POPULATION GROWTH ON PER CAPITA INCOME OF MALAYSIA

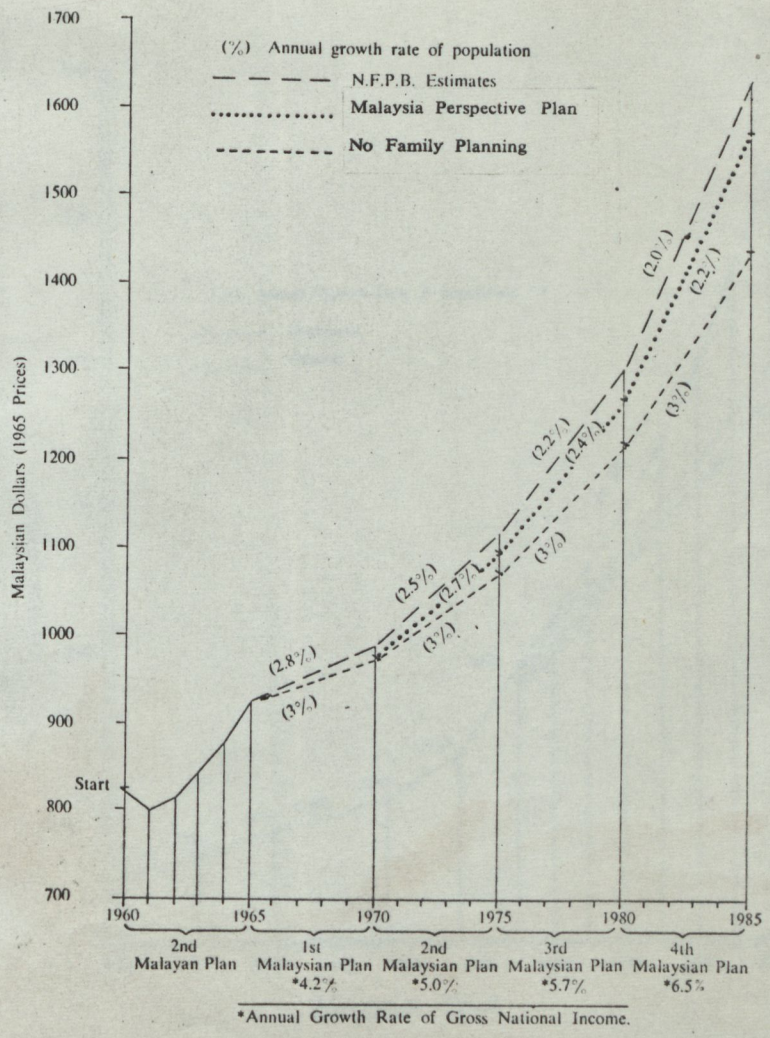

Diagram IV-1

Malaysia Population (Planned & Unplanned)

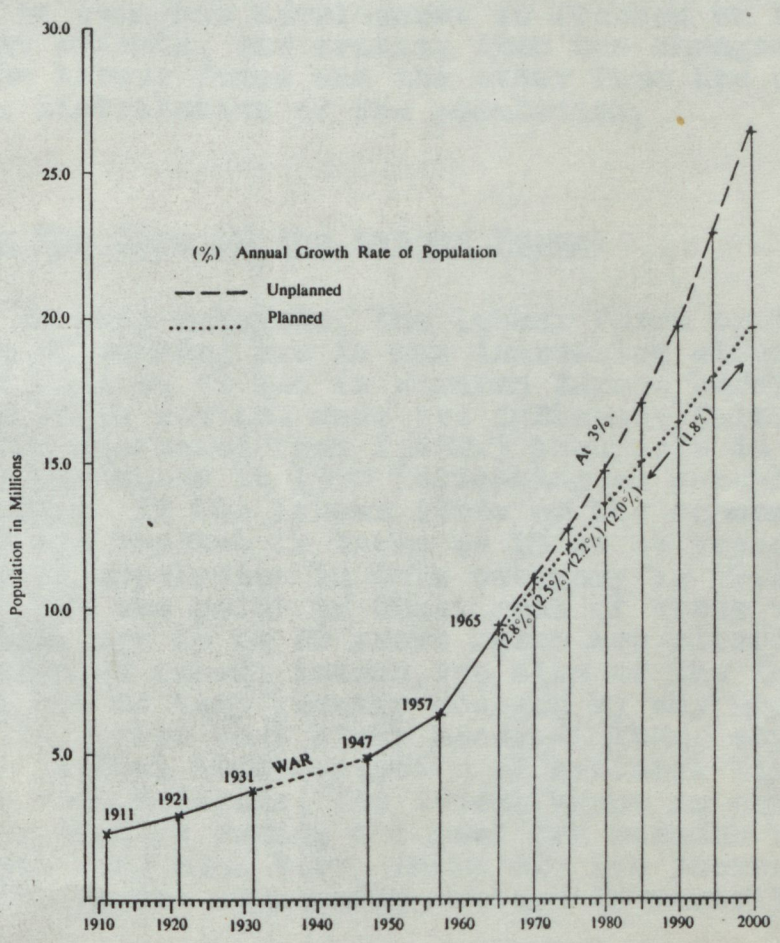

Diagram IV-2

CHAPTER V

CHANGES IN THE LABOUR FORCE AND THE AGE DISTRIBUTION

The analysis of the influence of fertility reduction on economic development is focused on two significant effects, one arising from the changes in the size of the labour force and the other from the changes in the age distribution of the population.

Changes In The Size Of The Labour Force:

In West Malaysia, the labour force or the population of working age is now increasing almost 2 or 3 times as fast as it did in Western Europe before the effects of birth control made its influence felt. The labour force increased from 2,492.3 thousands in 1962 to 3,208.3 thousands in 1970 indicating an annual growth rate of 3.2%.[1] If the labour force or the economically productive age bracket is taken as 15 to 64 years, the proportion of population in this category is 52.1% in mid-1967. But the point is that, most of those who will be of working age 15 or 20 years hence are already born. For a generation ahead indeed, the size of the labour force will not be very greatly changed by any reduction in fertility rates that might occur.[2] Thus, especially due to the initial implementation of national birth control in West Malaysia, the labour force is certainly to increase rapidly during the next few decades because of the prevailing high birth rates and its increase will be magnified by the continuing decline in mortality.

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1. Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 62

2. Coale, A.J. and Hoover, E.N. "Population Growth and Economic Development in low income countries", Princeton, University Press, Princeton, 1958. They estimated in this study (Pg. 232) that a decline of 5% in Fertility in India between 1956 and 1986 would reduce the number in the 15-64 age group at the end of period by only about 8% below what it would be under conditions of constant fertility throughout the 30 years.

From the stand point of development, what really matters about the population structure is that labour is the relatively abundant factor, per capita output is low and the supply of labour remains larger than the demand.3 As a result, job-seekers continue to outnumber the available opportunities causing involuntary unemployment. Secondly widespread underemployment of all forms is a notable and inevitable feature because agricultural activities constitute 52.2% of the total employed in 1967. Finally, unemployment is caused by a lack of the skill required for the employment opportunities available i.e. manpower shortages.

Unemployment And Underemployment

The unemployment rate for men over 25 years of age has been held to under 3% of the number seeking employment. Youth unemployment, nevertheless, remains high. Of the young men between the ages of 15-19, who are seeking work, about 16% are believed unemployed in West Malaysia as a whole. In the major towns, the unemployment rate is 27% as compared with about 14% in the rural areas. This suggests some movement of youths from the rural to the urban communities, thus flooding the towns with a surplus of inexperienced young workers. On closer analysis, it is found that about 30% of the unemployed males in the age-group between 15 and 19 years has remained unemployed for more than one year and that 80% has never had a job. Many of the latter are presumed to be fairly recent school leavers still living with their parents. Among young men aged 20 to 24 years, the unemployment rate is lower, averaging 10% in the large towns and around 6% in the rural areas. Thus the fundamental problem starts from a base of plentiful or even excess labour resource which are not well distributed in relation to the requirement for manpower. In geographic terms, the maladjustment of labour supply to the demand in the aggregate limits economic growth in the rural areas and swells the major towns with a surplus of inexperienced young workers.

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3. In Ricardo's words, "to say that there is a great abundance of labour is to say that there is not an adequate capital to employ it". A.N. Agarwala and P.S. Singh: "The Economics of Under-Development," Bombay, Oxford University Press, 1958. Pg. 57.

Disguised unemployment or more frequently called under-employment generally manifests itself in the form of a surplus population on the land, so that a material proportion of the rural population is largely idle, involuntarily. For instance, when one sector of the economy expands, such as the export sector, it can then draw on a pool of labour from the subsistence sector without causing a rise in the real wages. Underemployment assumes that under the unchanged conditions of capital input, production technique, institutional framework and with only minor changes in the organisation of work, the same aggregate produce could be obtained even if a part of the labour force is removed. This implies a tremendous waste of labour and its mere existence assumes that the marginal productivity of labour is near zero or even negative. Underemployment is usually associated with family employment or subsistence agriculture where the resources available are too small to keep all the working members fully employed throughout the year; and no alternative opportunities exist for redirecting a part of the excess labour supply, away into other occupations at the appropriate times.

More than half i.e. 52.2% of the total labour force is engaged in agriculture in West Malaysia, what then is the portion of rural underemployment? Quantitative measurement of this underemployment is difficult[4] because rural areas are not fully monetized and the demand for labour varies greatly with the seasons, constituting a large element of part-time or seasonal employment. Moreover, contributions by wives and children are on a part-time or a discontinuous basis; and it is virtually impossible to distinguish involuntary idleness from those with strong preferences for leisure; for a subsistence of life or for casual or mere intermittent employment. Quantification of underemployment in services and public administration poses similar problems.

However, an attempt has been made to measure the extent of underemployment. It is defined in the Survey of Employment 1962, as persons working less than

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4. Unemployment and underemployment in India may annually waste as many gross-man years of labour as is contributed by the entire labour force of United States. - An observation made by C. Wolf Jr. and S.C. Sufrin, "Capital Formation and Foreign Investment in Under-developed areas" Pg 13-14. Quoted in G.M. Meier and R.E. Baldwin "Economic Development, Theory, History, Policy." Pg. 282.

25 hours per week but who would like to work more. Surprisingly there were far fewer of these than might be supposed from the heavy emphasis on under-employment in works dealing with underedveloped countries. The survey result shows that only 2.4% of the labour force is underemployed in the sense defined above. In part, this seemingly low figure results from the use of only 25 hours per week as the dividing line between the fully-employed and the underemployed. If the 40 hour per week were taken as the standard, the proportion of underemployment would doubtless be higher.

On the other hand, the existence of underemployment can be viewed as a labour reserve or a reservoir of untapped productive potential. The remedy apparently is to drain this labour reservoir by creating work opportunities and by channelling unemployment and underemployment into productive work. Thus, if the economy does not grow fast enough, not only will overt unemployment expand but an increasing number of those employed will be driven into greater underemployment. It is stated with optimism in the First Malaysia Plan that the "total unemployment at 6% of the male and female labour force has remained at a somewhat satisfactory level and compares not unfavourably with other nations in West Malaysia's stage of development". Nevertheless, the unemployment figures in 1967 (Table V-1) depict the increasing urgency of employment creation in the country.

Employment Opportunities

One of the major objectives outlined in the First Malaysia Plan is "to generate employment opportunities at a rate sufficient to provide productive work for new entrants to the labour force and lower the rate of unemployment" in view of the existing manpower situation. In this endeavour, the nation is not starting anew but is building on the solid foundation laid by previous decisions, particularly the decision to undertake a rapid expansion of educational and development programmes in all the sectors.

The major sources of employment in the economy are the agricultural, service and manufacturing sectors (see Table V-2). Even considering past trends, production in agriculture, forestry and fishing sector constituted 34% of West Malaysia's G.D.P. in 1965, by far the largest component. Next was the manufacturing and construction

Table V-1

West Malaysia:

Employed, Unemployed[5] and Labour Force.

1967

Males	No.	Percent
Employed	1,671,582	93.55
Unemployed (1)	100,461	5.62
Unemployed (2)	14,774	0.83
Labour force	1,786,817	100.00
Females		
Employed	768,343	86.44
Unemployed (1)	80,406	9.05
Unemployed (2)	40,054	4.51
Labour force	888,803	100.00
Total		
Employed	2,439,925	91.19
Unemployed (1)	180,867	6.76
Unemployed (2)	54,828	2.05
Labour force	2,675,620	100.00

Source and notes: Provisional data on employment and West Malaysia 1967, Statistics Department, 1967. Pg. 5.

(1) Actively looking for a job.

(2) Not actively looking for a job, but will accept job if offered.

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5. Category (i) of the unemployed group will be comparable to the data obtained in the previous years.

sectors representing 16%. Expansion in each sector demands new employment opportunities for the unemployed and for those who join the labour force every year.

In 1967, agricultural activities engaged 1,275,512 workers, constituting more than half i.e. 52.2% of the total employed by industry. This heavy concentration of labour in agriculture reflects the structure of the Economy (see Table V-2).

Employment figures in public administration and the services reflect the urgent needs arising from the governmental, economic, social and defence programmes. It constituted 17.64% of the total employment in 1967. However, as a source of potential employment absorption for a movement of labour from the rural districts into such urban services and trades, there is limited scope because they are already plagued by underutilization of labour and low productivity.

In the mining sector, because of the prospective decline in output, since it is an exhaustive industry, it is expected to barely maintain its present level of employment of 67,446 workers i.e. 2.76% of the totally employed by industry in 1967 (a mere increase of 8,947 workers since 1957). In the Mid-term Review of the 1st Malaysia Plan, the projection of tin production indicates a decrease in the production of 4.1% in 1969 and 1.4% in 1970. In the longer term, off-shore prospecting which is now being initiated is expected to lead to a new boost in tin production. The projection of iron-ore production, however, forsees a rise in the production of 0.2% in 1969 and 2.1% in 1970.

Given the heavy concentration of labour in agriculture, industrialization seems the evident solution. And it is undoubtedly true that in the long-run, particularly in more densely populated countries, the absorption of a much larger part of the labour force into modern manufacturing industry, offers the only hope for a substantial rise in the labour utilization and in the economic levels. However, the potential increase in the number of workers engaged in industry is a function, not only of the rate of industrial growth but also of the present state of industrialization. West Malaysia, though adopting an intensive and aggressive industrialization campaign, has in 1967, only 208,550 workers i.e. 8.54% of her total labour force engaged in manufacturing. In addition, industrialization normally has backwash effects on the employment opportunities in the existing enterprises that sometimes offset, or more than offset, the increase in the demand for labour.

Table V-2

Employment By Industry - West Malaysia, 1967.

Industry	Total	
	No.	%
Agriculture, forestry, hunting and fishing.	521,324	21.34
Agricultural products requiring substantial processing.	754,188	30.86
Mining and quarrying.	67,446	2.76
Manufacturing.	208,550	8.45
Construction.	83,870	3.43
Electricity, Gas, water and sanitary services.	17,744	0.73
Commerce.	259,615	10.62
Transport, storage and communication.	94,479	3.87
Services.	431,059	17.64
Industry not specified.	5,239	0.21
Total	2,443,514	100.00

Source: Provisional data on employment and unemployment, West Malaysia 1967. Statistics Department, Kuala Lumpur. Pg. 14.

As in elsewhere, the rise in the total manufacturing employment is affected by the productivity gains within particular industries and the mix or the pattern of the industries established. The tendency for productivity in manufacturing to rise more rapidly than in the other sectors of the economy during this stage of development reflects the increased efficiency of modern, large-scale industrial operations and the use of greater amounts of capital equipment and mechanical power per employee. This is highly desirable because the rising labour productivity is an indicator that the national economy is enjoying an increasingly better return on its resources. Yet, increased labour productivity taken by itself, may mitigate against solving the unemployment problem, at least in the short-run. Thus, while manufacturing may become a leading and very important growth sector, it is not realistic, at least in the next few decades to expect industrialization to offer employment to any significant proportion of the national increase in the labour force even if industrialization efforts are being sharply accelerated. Moreover, the spread effects of industrial development are also generally weak in West Malaysia precisely because of the initial state of underdevelopment. Consequently, it is obvious that although the share of manufacturing in the G.D.P. is expected to increase by more than half to about 13% during the decade of the sixties, industrial employment as a fraction of the total labour force is likely to remain almost constant at about 7% throughout the decade (see Table V-3).

This emphasizes the importance of agriculture as the major present and prospective source of employment absorption for the expected increase in the labour force. Within the next few decades, there can be no question, of an actual decline in the size of the agricultural labour force; or even of its stabilization at a higher level. Agricultural policy in West Malaysia has to focus on raising labour utilization and to do so while the labour force is increasing rapidly. This is a slow but not impossible task since as seen earlier, the marginal productivity of labour in traditional agriculture is not near zero or negative as is commonly asserted. The main and more apparent obstacles seem to be institutional especially in regard to land tenure, credit, marketing and processing, fortified by the prevailing political conditions and attitudinal condition e.g. careful counselling and guidance are essential to enable the rural youth to realise that modernising agriculture provides a promising vocation.

Table V-3

West Malaysia:

Share Of Manufacturing In Employment And Output

1962-1970

	Estimates			1962-70
	1962	1965	1970	Growth rate
Labour force ('000)	2,492.3	2,773.9	3,208.3	3.2%
Employment in manufacturing ('000)	165.8	181.7	208.6	3.0%
Share (%)	6.7	6.6	6.5	-
G.D.P. (M$ million)	5,496	6,844	8,650	5.8%
Output of manufacturing (M$ million)	472	701	1,130	11.5%
Share (%)	8.6	10.2	13.1	-

Source: Mid-term review of the First Malaysia Plan 1966-70. Pg. 68.

The number of full-time jobs created each year in agriculture during the 1964-66 period probably did not exceed 15,000.[6] As a result, it is estimated that about 20,000 new job opportunities must be generated annually in 1966-70 to provide full-time employment to the new entrants to the agricultural labour force. Moreover, this annual job-creation rate of 20,000 in agriculture, fishing and forestry has to be increased by at least half if underemployment is to be eliminated by 1985. The realization of these job-creation estimates

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6. Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 56.

will help to narrow significantly the productivity gap[7] between agricultural and non-agricultural sectors. Also employment opportunities are hoped to be ensured for 70% of the farm youth coming to working age in West Malaysia. The chances of augmenting labour utilization and productivity while the labour force is rapidly expanding depends on an aggressive policy of opening up new land for agricultural and forestry development. Thus, any satisfactory rate of employment absorption in agriculture in the next decades will inevitably require an increase in the amount of land under cultivation and the conversion of the land existing to new, more productive lands. This results in one of the Plan objectives being "to open for development sufficient new lands to keep pace with the formation of new farm families and to reduce the number of landless people desiring land for agricultural purposes." Some 16 million acres of land are believed suitable for agriculture but only about 7 million acres are being presently cultivated judged from an aerial survey. Thus an additional 9.4 million acres (1/3 of which is thought to be of especially high fertility) are potentially available for agricultural production and therefore creates employment opportunities. West Malaysia is "indeed fortunate in its endowment of natural resources particularly in its vast tracts of cultivable land".[8]

During the next 2 decades, considerable inroads will be made into the total availability of the 9.4 million acres of undeveloped potential cropland. Undoubtedly, an endeavour of this magnitude necessitates the involvement of both the public and the private sectors. Before the Second World War, land development was spearheaded primarily by the private sector. Since 1957, it has been the public sector. But from the present to the future, acceleration in the land development of the order visualised demands joint participation. To this end, the Federal government has to work closely with the State governments to ensure a sizable and speedy alienation of land to private enterprise, both local and foreign; on attractive terms, for estate and small-holder development in addition to the development under government auspices for the landless rural people. A concomitant of this more liberal land alienation policy must be the cultivation of good land already alienated and not being cropped,

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7. G.D.P. per worker in 1968 was estimated to be about M$1,800/- in agriculture and M$4,200/- for the non-farm worker.

8. Mid-term Review of the 1st Malaysia Plan 1966-70. Pg. 3.

which comprises a considerable segment of the potential cropland reserve.

Thus, the elimination of unemployment and underemployment, particularly in the rural areas and the narrowing of the rural urban income gap, depends primarily on an aggressive land policy of opening up new land for agriculture and forest development. This does not imply though, that the creation of employment opportunities is not important in the other sectors of the economy.

A point of significance is that, whatever the prospects of employment creation in the agricultural sector, in keeping pace with the increase in the labour force, can offer only in the best cases, no more than a temporary solution. It must be faced that eventually, a situation where more labour cannot be absorbed by agriculture or can be absorbed only at very low productive rewards, will be reached. By then, if industrialization has not reached the level where it can more massively supply jobs to a growing part of the increase in the labour force, this will mean greater misery for the masses in agriculture and stagnation or even retardation of economic development generally!

Fortunately, this dismal situation is not in near sight in West Malaysia. This is due to the attractive possibilities of increasing the area of cultivation; large-scale effective administrative exertions; substantial public investment and a continual aggressive policy of economic diversification especially industrialization. Even though it is so, it will be entirely unrealistic to assume that a growth in the labour force, corresponding to the present and prospective rates of births and deaths, can be absorbed indefinitely without causing calamity, from the analysis on the unemployment trends in West Malaysia.

Manpower Shortages

In occupational terms, West Malaysia is experiencing a surplus of untrained workers while the expansion of investment and job opportunities is being retarded by the shortages of many types of specialised know-how.

The professional, technical and managerial personnel grouped under the term high-level manpower constitutes the energizers and designers of economic

change. It is not known with precision just how much such personnel represent the optimum for a nation in the present development stage of West Malaysia. Nor is it possible to fix a minimum overall quantity in the absence of which the growth targets would not be attained. It is of no doubt however, that the increasing use of personnel of this level is essential to development and that higher stages of development are characterized by the use of a far higher proportion of trained managers and of professional and technological specialists than West Malayisa now possesses.

In 1960, 138,000 people were unemployed out of a total labour force of 2,312,000 in West Malaysia.[10] In 1965, the Manpower Survey revealed that 160,000 were unemployed. At the same time, however, there were about 18,000 vacancies in existence. This number of vacancies is 11% of the number of unemployed. This therefore indicates the important shortage of appropriately qualified and skilled labour. The Malaysia socio-economic sample survey of households 1967/68 indicated that 180,867 were unemployed in 1967 constituting 6.76% of the total labour force. If "unemployed" is defined to include not only those actively looking for a job but also those who are not, but will accept the job if offered, the number of unemployed rises to 235,965 i.e. 8.81% of the total labour force.

In terms of sectors, nearly 30% of the jobs in the private sector in West Malaysia, which requires more than a secondary school education are either vacant or filled by non-Malaysians. Most, if not all, of these represented jobs for which qualified Malaysians, are not available. Recruitment in the public service during 1964 succeeded in filling only 70% of the 3,500 vacancies in the government departments.

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10. 1st Malaysia Plan, 1966-70. Government Printers, Kuala Lumpur, 1957.

Table V-4

Vacant Positions By Sector & Educational Level (March 1965)

Occupational Level	Government Sector		Educational System		Private Sector		Grand Total	
	Va-can-cies	% of Total Posts	Va-can-cies	% of total sec-vice	Va-can-cies	% of total Posts	Va-can-cies	% of total posts
All occupations	10,742	6.3	5,603	7.7	1,823	0.4	18,168	2.5
Professional level								
Managers	238	17.1	65	27.1	33	0.9	336	6.1
Technologists	428	20.7	-	-	62	4.2	490	12.9
Teachers	-	-	953	24.3	-	-	953	24.3
Other Professions	211	16.0	3	33.3	26	4.4	240	12.0
Sub-professional level								
Junior Managers and Accountants	415	11.7	17	9.0	42	1.3	474	5.8
Teachers	-	-	1,474	13.4	-	-	1,474	13.4
Technologists and other specialists	1,558	18.3	33	12.3	62	3.2	1,653	15.2
Skilled level								
Blue collar.	1,425	6.2	101	15.2	453	0.8	1,979	2.3
Teachers	-	-	983	2.2	-	-	983	2.2
Other White collar	2,868	6.7	65	14.7	46	0.5	2,979	5.4
Semi-skilled and Unskilled level								
Blue collar	1,691	2.8	1,013	13.7	1,017	0.3	3,721	0.9
White collar	1,908	7.0	895	18.2	82	0.27	2,885	4.4

Source: Economic Planning Unit, Prime Minister's Department.

Definition of terms:

(1) Professional level designates the occupations which normally require a U. degree.

(2) Technologists is used as a convenient notation to cover the far wider field encompassing the physical and life sciences, architecture and surveying as well as engineering.

(3) Teachers include all teachers whether or not they might qualify also in other occupational groups.

(4) Sub-professional level consists broadly of those occupations typically requiring one or more years of full-time schooling after attainment of the School Certificate.

(5) Skilled level groups together are occupations which require training beyond the L.C.E. level but less than sub-professional level.

(6) The terms 'white collar' and 'blue collar' are used as a convenient way of distinguishing between office and out-of-door occupations.

A study of Table V-4 indicates the demand for professional manpower, a commensuarate demand in a growing and industrializing economy. The largest requirement for qualified workers are found in teachers, technologists and specialists, both in the professional level which normally requires a University degree and in the sub-professional level which requires one or more years of full-time schooling after the attainment of the School Certificate.

The educational system reflects the greatest vacancy rates. In the schools in 1964, an estimated 5,000 teaching positions are reported either unfilled or filled with under-qualified teachers. It is common to find teachers with only a secondary education or post-secondary education teaching Forms IVs and Vs where graduate teachers would be more appropriate in that role. In March 1965, teaching posts in both the professional and sub-professional levels recorded 953 and 1,474 vacant posts respectively. The former is almost one-quarter of the existing total posts. Even teaching posts requiring a mere training beyond the L.C.E. level but less than the sub-professional level had 983 vacancies in 1965. The demand for professional and sub-professional level technological skill is reflected in the number of vacant posts recorded in such areas. The governmental sector records the highest percentage of vacant positions for all occupations on various educational levels.

The shortage of skilled manpower in relation to the growing needs of the nation is an adverse factor for economic development. The situation is made worse by the fact that many jobs are filled by either unqualified or underqualified personnel thereby affecting the quality of the final product. The other alternative is for the vacancies to be filled by expatriates. A close study of the posts for which qualified Malaysians have not become available (Table V-5) indicates the crucial shortage of qualified Malaysians. In fact, shortages are apparent at every level. Practically in each occupation at the professional level, there are 1 in 4 positions which are either vacant or filled with non-Malaysians in the government sector. In the private sector, due to the substantial use of expatriate employment, there seems to be an even greater deficit of qualified Malaysians than the government sector. The seriousness of this phenomenon is shared by all the sectors in the economy. The anti-cipated growth rate of the demand for educational and

Table V-5

Posts For Which Qualified Malaysians Have Not Become Available

Occupation level	Government		Education		Private Sector		Grand Total	
	No.	% of Posts	No.	% of Posts	No.	% of Posts	No.	% of Posts
All occupations	11,028	6.5	7,722	10.5	4,463	1.0	23,213	3.2
Professional level:								
Managers	279	20.1	73	30.4	1,081	29.7	1,433	26.1
Technologists	591	-	-	-	707	47.8	1,298	34.2
Teachers	-	-	1,624	41.3	-	-	1,624	41.3
Other Professions	272	20.6	5	55.5	168	28.4	445	22.3
Sub-professional level								
Junior Managers and Junior Accountants	418	11.8	20	10.7	514	16.6	952	11.6
Teachers	-	-	2,316	21.0	-	-	2,316	21.0
Technologists and other Specialists	1,562	18.3	34	12.7	293	15.3	1,889	17.3

Source: Economic Planning Unit, Prime Minister's Department.

medical personnel[11] is anticipated to exceed 15% per annum in the period between 1965 and 1970 although the Manpower Survey of 1965 anticipated a growth rate in the employment of only slightly less than 5% per annum.

However, West Malaysia has reached a stage of economic development which justifies her rapidly increasing demand for technological and other specialised professionals, her commensurate demand for craftsmen and her diminishing need for unskilled labourers. The largest requirement for qualified workers are found in teachers, technologists, specialists and craftsmen occupation. As a percentage of the total number of workers required, the skilled category represents 38.9% reflecting the importance of middle-level manpower in a rapidly developing economy.

The shortage of such key personnel have to a certain extent, adversely affected the implementation of some development projects. "In several areas, programmes have had to be trimmed to more modest proportions than was at first thought desirable because the personnel required to implement the projects contemplated were not in existence."[12]

The shortage of qualified manpower has had other effects which are less measurable but perhaps even more costly to the nation. This is because the pace of locally financed industrial expansion depends in part upon the availability and use of a substantial supply of trained and experienced business specialists - men qualified to assess industrial opportunities to help small businessman develop and justify bankable projects and to provide expert counsel while the projects are

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11. Educational personnel include:
    (a) University and College lecturers.
    (b) School teachers (U.T.S.) with honour's degree.
    (c) School teachers (U.T.S.) with pass degree.

    Medical personnel include:
    (a) physicians and surgeons
    (b) dentists
    (c) pharmacists
    (d) Nurses.

12. 1st Malaysia Plan 1966-70. Government Printers, Kuala Lumpur, 1965. Pg. 13.

becoming established. These scarce skills are required in significant numbers for the staffing of government agencies concerned with industrial expansion as well as for private, financial and industrial concerns.

The agricultural sector is viewed as the major present and prospective source of employment opportunities in West Malaysia. Simultaneously, the considerable expansion in agricultural research development creates substantial requirement for qualified research specialists. Agricultural research alone requires more than 400 additional Division I and II specialists, while the planned expansion of land development programme and F.A.M.A. further demands a substantial number of specialists. As has been seen, equally difficult manpower problems have long existed in the health and medical fields and requirements of this sector could continue to demand special attention.

Nearly 700,000 young Malaysians are estimated to complete their schooling during the 1966-70 period with perhaps 65% of them seeking employment. Of the total number, from 2.0% to 2.5% would have had College or University training, a majority of them abroad (excluding teachers' training outputs). This implies a five-year output of the order of 15,000 College and University trained Malaysians. With the present stock of professional, technical and managerial personnel estimated at around 80,000, at least 1,200 addition to the group are needed each year merely to replace losses due to death, disability and retirement. Consequently, the projected output of 3,000 graduates per year would represent a net increase in the availability of such high level manpower of about 1,800 per year. This constitutes a rate of increase in the stock of such skills of about 2.5% per year. By any calculation, the demand for personnel with such qualifications would grow at a materially higher rate. The recent survey of manpower requirement in manufacturing suggests that by 1970, this sector alone will need double the number of engineers and related technologists it now employs, if it is to achieve the manufacturing output growth target of 10% per year. For such professional level specialists as accountants and auditors, the manufactures expect to need almost 3 times the small number they now employ. Thus, there is no alternative but to continue to depend far more than it would choose upon professional, technical and managerial personnel whose qualifications derive from experience without professional education.

There is no doubt therefore, that the scarcity of personnel with modern training and experience in a wide range of specialised, scientific, technical and management skills, both in the government and in the private sectors, is the major obstacle in accelerating the pace of economic development. In short, scientific and technical specialists are urgently needed in large numbers for the implementation of educational, agricultural, and health programmes; and of the industrial analysts and specialists needed for the rapid expansion of private investment. This is due to the fact that the private sector carries the main thrust of the industrial development effort.

Skilled labour may be the bottleneck in economic expansion, just like capital or land. However, skill labour is only what Marshall might have called a "quasi-bottleneck", for it is only a very temporary bottleneck in the sense that if the capital is available for economic development, the government will soon provide the facilities for training more skilled personnel. In West Malaysia, however, the problem is more of an orientation of the educational output towards the economic goals of the country rather than the shortage of capital needed.

Education As An Index Of Skill

It is apparent from the preceding analysis that the nation's priorities should be reflected in the national educational system in order that an adequate supply of skilled manpower will be forth coming in carrying out the various development programmes.

In so far as the extent of education is an index of labour skills, Table V-6[13] contains some interesting information. Rather surprisingly, the unemployment rates seem to be lowest for those with the least education. The authors of the Survey in 1962, perhaps skeptical of this apparently anomalous finding, checked into the underlying data in some detail but could only conclude that "the interpretation of these % is not obvious". However, this can be attributed to the fact that people with no formal education do not

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13. Another employment and unemployment survey was taken in 1967 and one in 1964 (limit to urban areas). Both indicate no substantial change from the situation in 1962.

Table V-6

Unemployment Rates

By The Level Of Education, 1962.

Education level	% unemployed	
	Males	Females
No education.	3.1	4.3
Primary.	5.3	12.8
Form 1 and 2.	9.4	31.7
L.C.E. or Form 3.	10.9	29.3
Form 4.	12.1	22.8
School Certificate.	6.7	10.2
Higher School Certificate.	9.5	21.9
All	5.2	7.9
Trade school or technical institute.	0.2	0.3
Teachers' Training College.	0.00	0.00
Technical College or Polytechnic.	0.01	-
University.	0.04	0.07

Source: Survey of Employment and Unemployment, 1962. Statistics Department, Kuala Lumpur. Pg. 12-13.

think it below their dignity to accept jobs like being hawkers at road-side stalls, domestic servants, drain sweepers, petrol attendants etc. Such employment opportunities are relatively more available than "white collar" jobs which has an element of prestige attached to them, thus creating stiff competition in its labour market. The survey results for persons with technical training or higher education are more in line with expectations and the demand of the nation. The table suggests the generalization that West Malaysia's moderate overall surplus of labour is made up of the following components:-

(a) extreme tightness in the market for the technically and University trained persons;

(b) considerably less tightness, but still not much relative slack for the most unskilled labour;

(c) comparative ease in the markets for labour between the highly trained and the very unskilled, particularly with respect to females.

It should be borne in mind, however, that the absolute number of persons with more than a primary education is small relative to those with only a primary education or less.

In the future, the demand for better educated and more skilled personnel would increase much faster than the demand for unskilled labour due to the growing needs of the nation, so that the surplus in the more educated, group would be used up much more rapidly than in the less educated groups.

This is contrary to the suggestion made by H. Myint "that the problem of creating and organizing demand for trained personnel in the underdeveloped countries may even be more important than the problem of creating the supply by investment in 'social capital' i.e. education, which may result in a form of intellectual disguised unemployment".[14]

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14. Myint, H. "An Interpretation of Economic Backwardness", article in "The Economics of Underdevelopment" by Agarwala, A.N. and Singh, S.P. Bombay, Oxford University Press, 1958. Pg. 104.

As the above suggestion is not applicable in West Malaysia, she has instead resolved "to educate and train Malaysians for all walks of life in order to equip them for effective participation in the process of economic and social development".[15] Consequently, the traditional system of education is hoped to be reoriented to achieve not only the objectives of nation building and universal literacy but also the economic goals of the country.

At the upper secondary, college and University levels, the economic manpower situation requires that greater emphasis be placed on vocational, scientific and technical education rather than on general education However, the shortage of teachers is the main inhibiting factor in the restructuring of upper secondary education towards this goal. This is inspite of the fact, that the big expansion of educational output during the 10 year period between 1960 and 1970 are, and would be, of teachers, many of whom are equipped with in-service or part-time training. More than 2,000 additional teachers with a scientific or technical training are required to fulfil the scheduled expansion of upper secondary or higher education during the period 1966-70.

Thus, ideally, the number of students completing education at different levels should correspond to the demand for manpower at those levels. It is of vital importance therefore to reorient educational output to manpower demand through co-ordination of the various government agencies engaged in the overall manpower planning effort. The measures taken include the establishment of the following:-

(1) <u>The Development Administration Unit of the Prime Minister's Department</u>.

In collaboration with the Staff Training Centre, it has made a comprehensive study of the training requirement of the public services in West Malaysia; its objective being to improve the competence and performance of the public services as a whole. This study outlines short and long term plans for improving the government training facilities and will form the basis of a systematic and comprehensive post-entry training programme for the government personnel at all levels.

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15. One of the objectives outlined in the 1st Malaysia Plan 1966-70, Government Printers, Kuala Lumpur, 1965.

(2) The Manpower Planning Section Of The Economic Planning Unit.

This aims to provide the overall leadership and co-ordination of the manpower planning and operational effort by developing close working relationships with the various agencies involved. This ensures that whatever imbalances between the manpower requirement and supply can be detected in time so that remedial action can be initiated at an early stage.

(3) The Department of Employment And Training In The Ministry Of Labour.

This Department works closely with (2). With the assistance of the I.L.O., it has already begun to make some impact on the training and manpower information programme of the Ministry. It also encompasses and extends the present employment exchanges and develop a staff of career specialists to provide more effective placement services for applicants, recruitment assistance for employers, guidance for job seekers and a variety of specific training services to equip unemployed workers with the skills needed by the expanding industries. Particular attention has been paid to the reorganisation and strengthening of the Educational Planning and Research Division of the Ministry of Education, in the light of the need to restructure the education system.

(4) The Ford Foundation

The Ford Foundation is expected to give significant assistance early in 1969, in the forms of experts and consultants and the training of local staff.

(5) A Higher Education Council

A Higher Education Council, as recommended by the Higher Education Planning Committee (established in 1962) has already been established to advise the Minister of Education on the planning and co-ordination of higher education.

(6) An Advisory Committee

An advisory Committee on Technical and Vocational education, with representatives from the private sector, has also been set up under the auspices of the Council to review the curricula and standards of the technical and vocational education programmes of the Ministry.

Education and training have been accorded very high priority in development planning with an allocation amounting to nearly 10% of the total public development expenditure. Total education expenditure has been increasing steadily since independance. As a % of N.I., expenditure rose steadily from 3.8% in 1960 to 6.4% in 1965, then fell slightly to 6.1% in 1967. In terms of G.N.P., it increased from 3% in 1960 to 5% in 1967. Based on the 1963 Statistical Year book of UNESCO, which gives figures of the proportion of N.I. devoted to education in respect of some 80 countries, the total estimated expenditure on education by Malaysia in 1967 puts her in the top 14% of the 80 countries.

The expenditure is based on the premise that major changes are needed in the education system in order to reorient output to manpower demand, and to rectify the imbalance in education opportunities between urban and rural areas. It would not be realistic, in the short term, to expect rapid changes in the pattern of educational output, as considerable time-lags are involved before investment in education brings about the necessary structural changes. Of all the resources required for economic development, high talent man-power requires the longest "lead-time" for its creation.

Changes In The Age Distribution

As a result of the high fertility rates experienced and prevailing, combined with a rapidly declining mortality rate, the age distribution of the population is skewed in the direction of a high dependancy burden. The percentage of population below 15 years of age in mid-1967 constituted 44.2% (see Appendix V-1), but only about 25%

in the United States and 23% in the United Kingdom.[16] Forecasted population of the "younger" population under 25 years of age of 6.3 millions indicates the continuance of the high dependancy burden per man adult (see Table V-7) in 1967, the percentage of total population between ages 15 and 64 is 52.1% (see Appendix V-2). Although a fall in death rates will lengthen the average span of economically active life of each successive generation, this will not improve the balance between the productive and dependant parts of the population unless there is also a corresponding fall in birth rates. It is primarily the birth rate that determines the age structure. If death rates fall while birth rates remain constant, each successive generation will be larger in size but the average number of dependant children per adult will be practically unchanged. Since the decline in the birth rates is gradual although steady in West Malaysia, the resultant "bottom heavy" age structure of population produces a large number of dependants and a relative deficiency of adult manpower. This reduces the differentiation and productive power of the labour force and it also entails a greater burden of consumption whereby a substantial portion of the economy's resources is devoted to the maintenance of children and social investment rather than to accelerating the rate of economic development, e.g. Primary education for children forms 91% of the age group of 6 to 11 years in the assisted schools in 1967.[17] This entails a great amount of expenditure since it is the government policy to provide 9 years of education (inclusive of 3 years of lower secondary) to any child who desires it.

The reduction of fertility rates would have a direct effect of decreasing the dependancy burden. There would immediately be fewer children to support, and if the lower fertility were maintained, this decrease in dependancy burden would continue until the children begin to reach working age. The decrease in the proportion of children would be progressive, if the decline in the fertility rates were gradually intensified. A couple of decades from then, when the depleted age cohorts enter the reproductive age, there would also be a decline in the relative number of people in the reproductive ages, which is after all the basic determinant of the future population size. If the

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16. Meier, G.M. and Baldwin, R.E. "Economic Development - Theory, History, Policy." Modern Asia Edition, Tokyo, 1968. Pg. 283.

17. Educational Statistics of Malaysia 1938-1967 Prepared by the Educational planning and Research Division, Ministry of Education.

Tanle V-7

Forecasted Population Of Certain Age Groups

Estimated population in June	AGE GROUPS				
	0-4	5-9	10-14	15-19	20-24
1957*	1,187,037	953,818	693,669	601,563	515,903
1962	1,285,252	1,146,692	943,748	687,209	592,851
1967	1,479,649	1,241,566	1,134,594	934,958	677,253
1972	1,764,560	1,429,356	1,228,464	1,124,023	921,406
1977	2,131,670	1,704,583	1,414,272	1,217,023	1,107,725
1982	2,526,914	2,059,215	1,686,595	1,401,100	1,199,387

* Actual Population.

Source: Statistics Department, Kuala Lumpur.

reproductive age of females is taken to be 15-49 years of age, it forms about 44.3% in 1967. To view the situation in a much longer perspective than an assumption of 2 to 3 decades, if fertility should be stalibilized at a much lower level than now, the age distribution would tend to become "normal" and the chances of returning to a high dependancy ratio are most unlikely. Every prevented birth implies a yearly "saving" of expenditure as children represent a liability rather than an asset to the nation, before they reach productive age.

There is no doubt that whatever happens, a lower dependancy ratio will lead to increased national output and rising per capita income and ultimately to increased

levels of living, each gaining a larger share in the educational and health facilities and other social benefits provided for in the public budget.

Simultaneously, lower fertility rates speed up the decline in mortality rates for various reasons: fewer maternal and infant deaths, higher levels of living and with progressively higher income levels, a broadened financial base for public health work. Declining mortality rates, in turn, tend to raise economic levels because of the decrease in illnesses which affects labour productivity. In short, a lower dependancy ratio has an immediate effect on economic development in that a greater amount of resources is available for economic development; a less immediate effect being to lower the proportion of females in the procreative age, thus results in a tendency towards a "normal" age distribution of population growth.

CHAPTER VI

CONCLUSION

Although in the perspective of 2 to 3 decades, whereby the effect of a fertility decline will be negligible on the size of the labour force, it is no argument to neglect the initiation of a strong population policy of birth control through Family Planning. This is more so since population policy is more appropriately viewed in a longer time perspective whereby a fertility decline, will then affect the size of the labour force significantly. Hence, then a fertility decline will substantially put a brake on the growth in the labour force at a rate oriented to the pace of economic development. Moreover, the present employment situation in West Malaysia, complicated by the existence of a growing unemployment rate, underemployment especially in agricultural production and the ironical situation of high-level manpower shortage have already caused considerable concern to the government and the economic planners. This is reflected in their continued efforts in initiating remedies through the orientation of the educational output and the creation of employment opportunities in the various sectors.

It is of great relief to note, therefore that the government is fully aware of economic consequences of uncontrolled population growth in a nation which follows a planned rate of economic development. Consequently, the government has taken into its stride the radical policy of a nation-wide Family Planning Programme to lay the basis for reducing the current 3% per annum rate of population growth with the objective of an accelerated pace of overall economic development. This stems from the fact that the present rate of population growth in West Malaysia, is now largely independant of the rate of economic development. It could affect the speed and the extent of decline in the mortality rates, since it determines the level of living and may influence the amount of public expenditures devoted to improving the health conditions. But fertility, if left to spontaneous forces, will remain at the traditional high levels or may decline insignificantly over a long period, whether or not there is economic development. As there is no prospect of significant emigration, the population will tend to grow at an accelerating pace, if unchecked. This will retard economic advance, sooner or later, depending

on the planned rate of economic development. Emigration is not a feasible policy. Moreover, no government can but choose to decrease mortality. Thus the only practical alternative facing the government is to attempt to popularize birth control through Family Planning, to induce a reduction in fertility rate that will not come spontaneously - if left untouched by a government policy.

Period	Malaya	Chinese	Indians and Pakistanis	Other races	All races
1948	19.7	13.0	12.9	14.0	16.3
1949	16.7	11.8	12.4	14.2	14.3
1950	18.7	12.9	13.8	13.0	15.9
1951	17.3	13.6	13.7	10.7	15.4
1952	15.5	11.9	13.3	9.1	13.8
1953	14.6	10.5	11.5	8.8	12.6
1954	14.8	9.9	10.8	8.3	12.4
1955	14.0	9.3	10.1	6.8	11.7
1956	14.2	8.7	10.1	6.2	11.6
1957	14.9	9.8	11.1	6.7	12.4
1958	13.5	8.4	9.9	5.2	11.0
1959	11.6	7.8	9.0	4.6	9.7
1960	11.2	7.6	8.7	4.8	9.5
1961	11.1	7.2	8.4	4.5	9.2
1962	11.1	7.5	8.9	4.4	9.4
1963	10.6	7.1	8.2	4.4	9.0
1964	9.2	6.7	8.0	3.9	8.1
1965	8.9	6.7	8.4	3.6	7.9
1966	8.6	6.4	8.2	3.1	7.6
1967	8.3	6.3	8.2	3.0	7.5

Source: Monthly Statistical Bulletin of West Malaysia May 1969. Pg. 6.

Appendix III-1

West Malaysia:

Crude Death Rates By Race 1948-1967.

Period	Malays	Chinese	Indians and Pakistanis	Other races	All races
1948	19.7	13.0	12.9	14.0	16.3
1949	16.7	11.8	12.4	14.2	14.3
1950	18.7	12.9	13.8	13.0	15.9
1951	17.3	13.6	13.7	10.7	15.4
1952	15.5	11.9	13.3	9.1	13.8
1953	14.6	10.5	11.5	8.8	12.6
1954	14.8	9.9	10.8	8.3	12.4
1955	14.0	9.3	10.1	6.8	11.7
1956	14.2	8.7	10.1	6.2	11.6
1957	14.9	9.8	11.1	6.7	12.4
1958	13.5	8.4	9.9	5.2	11.0
1959	11.6	7.8	9.0	4.6	9.7
1960	11.2	7.6	8.7	4.8	9.5
1961	11.1	7.2	8.4	4.5	9.2
1962	11.1	7.5	8.9	4.4	9.4
1963	10.6	7.1	8.2	4.4	9.0
1964	9.2	6.7	8.0	3.9	8.1
1965	8.9	6.7	8.4	3.6	7.9
1966	8.6	6.4	8.2	3.1	7.6
1967	8.3	6.3	8.2	3.0	7.5

Source: Monthly Statistical Bulletin of West Malaysia May 1969. Pg. 6.

Appendix III-2

Infant Mortality Rates By Race: West Malaysia

Period	Malays	Chinese	Indians and Pakistanis	Other races	All races
1949	109	68	95	69	91
1950	112	73	102	60	95
1951	112	76	109	51	98
1952	105	72	104	43	92
1953	102	64	96	44	87
1954	100	58	86	46	82
1955	100	54	79	42	81
1956	98	50	77	37	78
1957	99	48	75	35	78
1958	93	46	71	32	74
1959	91	44	67	34	71
1960	84	39	61	32	65
1961	81	38	59	32	63
1962	76	35	55	33	59
1963	69	34	54	29	55
1964	64	33	52	29	52
1965	60	32	52	27	49
1966	58	31	51	32	48

Source: Monthly Statistical Bulletin of West Malaysia May 1969. Pg. 7.

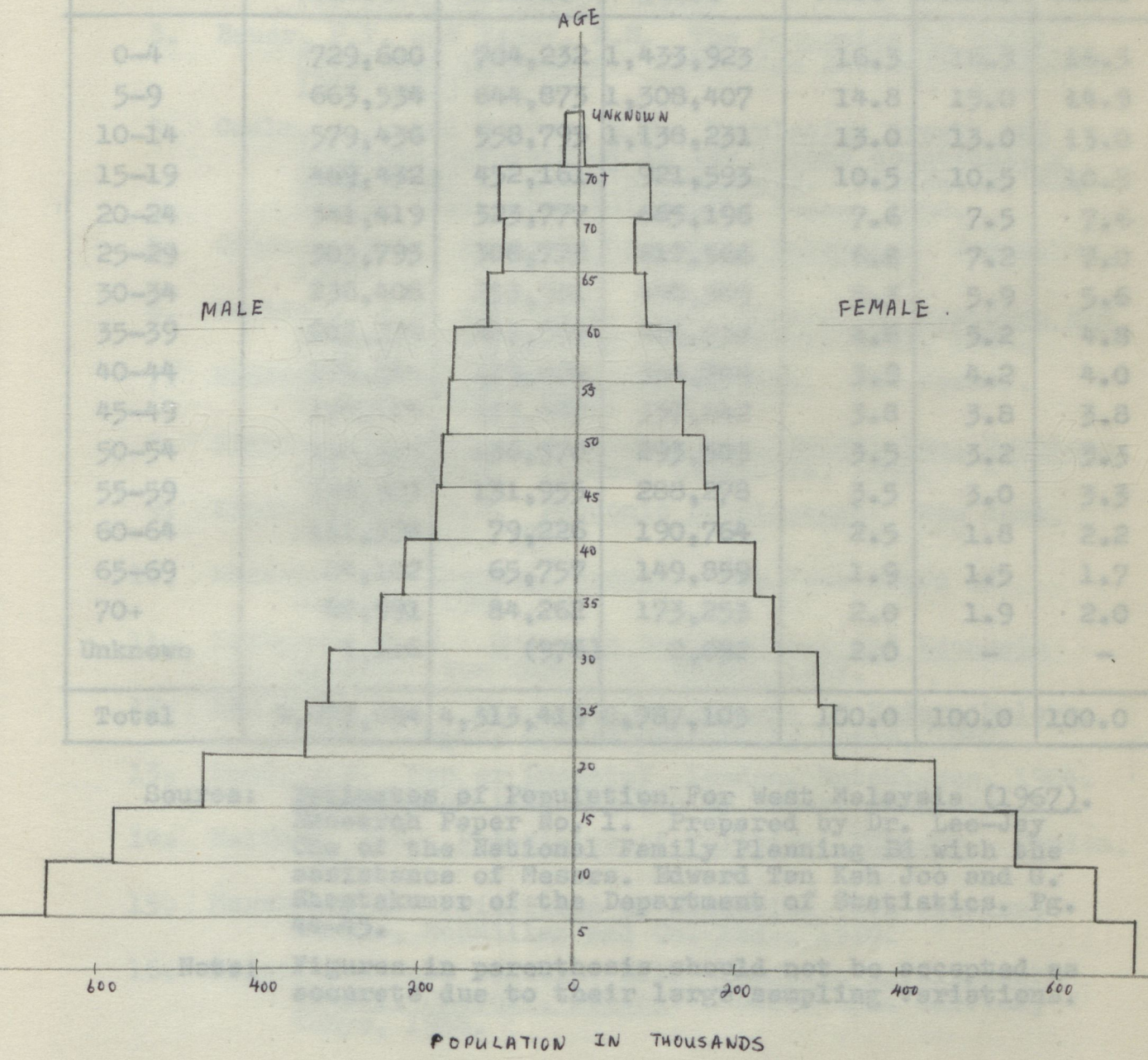
Appendix III-3

Age - Specific Fertility Rates For 3 Main Races, 1956-65

MALAYS	AGE GROUP						
Year	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1956	188.3	362.1	300.2	219.9	142.8	46.9	17.2
1957	179.7	345.6	286.5	209.8	136.3	44.8	16.5
1958	174.6	335.8	276.4	203.8	132.4	43.5	16.0
1959	170.3	332.7	254.5	199.6	141.5	49.8	17.2
1960	159.7	326.8	254.6	205.0	138.0	51.3	15.9
1961	172.2	338.4	270.6	226.2	138.6	51.7	7.3
1962	154.6	310.7	290.2	226.1	136.1	49.3	5.7
1963	131.5	293.4	315.2	221.4	136.8	62.3	18.5
1964	119.4	299.2	316.1	220.1	147.4	75.6	23.2
1965	106.0	273.6	292.8	209.8	143.1	63.5	20.5
CHINESE							
1956	46.2	285.8	372.1	333.9	235.9	115.8	27.6
1957	47.3	292.3	380.6	341.5	241.3	118.4	28.2
1958	42.1	260.2	358.8	304.0	214.8	105.4	25.1
1959	37.3	246.9	350.9	295.3	212.2	102.8	23.2
1960	33.8	239.7	335.8	295.8	197.7	99.7	23.0
1961	33.3	238.5	344.9	300.4	199.2	99.8	11.4
1962	32.0	240.1	333.6	292.9	200.5	98.6	8.8
1963	28.4	227.0	315.2	279.3	188.4	95.0	21.4
1964	28.2	219.1	311.7	268.0	176.5	91.0	20.2
1965	32.5	203.3	300.1	257.8	175.4	79.1	21.0
INDIANS							
1956	226.4	404.8	363.7	260.5	150.8	48.9	12.7
1957	239.9	428.9	385.7	276.0	159.7	48.7	13.5
1958	223.8	400.1	359.8	257.5	149.0	45.4	12.6
1959	204.8	413.7	370.1	246.6	163.3	48.4	17.3
1960	184.8	417.4	358.5	233.2	161.2	47.4	14.9
1961	182.3	422.1	372.1	260.1	161.7	44.2	5.5
1962	173.1	410.9	351.6	266.9	155.1	43.2	4.3
1963	145.8	385.2	353.2	266.4	144.4	53.2	12.6
1964	131.4	360.9	364.6	269.6	142.9	60.6	15.2
1965	131.9	325.8	357.7	265.5	146.0	55.2	13.7

Appendix V-1

Age Pyramid of the Estimated Population by 5-Year Age-groups and Sex for West Malaysia, Mid-1967



Appendix V-2

Estimated Population And Percent Distribution Of Population By 5-Year Age-group And Sex For West Malaysia, Mid-1967

Age group	Estimated Population			% Distribution of population		
	Male	Female	Total	Male	Female	Total
0-4	729,600	704,232	1,433,923	16.3	16.3	16.3
5-9	663,534	644,873	1,308,407	14.8	15.0	14.9
10-14	579,436	558,795	1,138,231	13.0	13.0	13.0
15-19	469,432	452,161	921,593	10.5	10.5	10.5
20-24	341,419	323,777	665,196	7.6	7.5	7.6
25-29	303,793	308,773	612,566	6.8	7.2	7.0
30-34	236,408	253,901	490,309	5.3	5.9	5.6
35-39	203,739	222,999	426,738	4.6	5.2	4.8
40-44	175,145	179,604	354,749	3.9	4.2	4.0
45-49	172,175	165,467	337,642	3.8	3.8	3.8
50-54	156,933	136,570	293,503	3.5	3.2	3.3
55-59	156,323	131,955	288,278	3.5	3.0	3.3
60-64	111,538	79,226	190,764	2.5	1.8	2.2
65-69	84,102	65,757	149,859	1.9	1.5	1.7
70+	88,991	84,262	173,253	2.0	1.9	2.0
Unknown	1,116	(976)	2,092	2.0	-	-
Total	4,473,684	4,313,419	8,787,103	100.0	100.0	100.0

Source: Estimates of Population For West Malaysia (1967). Research Paper No. 1. Prepared by Dr. Lee-Jay Cho of the National Family Planning Bd with the assistance of Messrs. Edward Tan Kah Joo and G. Shantakumar of the Department of Statistics. Pg. 44-45.

Note: Figures in parenthesis should not be accepted as accurate due to their large sampling variations.

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