

A DEMOGRAPHIC TRANSITION IN MALAYSIA: THE CHANGING ROLES OF WOMEN

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Abstrak

Malaysia mengalami transisi demografi seiring dengan peralihan daripada ekonomi yang berasaskan pertanian pada awal abad ke-19 kepada ekonomi yang berasaskan pengetahuan (k-ekonomi) pada pertengahan tahun 1990-an. Tahap pertama transisi demografi bermula pada tahun 1911-1927 (16 tahun), seterusnya memasuki tahap kedua pada tahun 1928-1957 (29 tahun) sebelum berada di tahap ketiga sejak tahun 1958 sehingga kini. Kertas ini bertujuan membincangkan corak transisi demografi di Malaysia dan kesannya kepada perubahan peranan wanita. Perubahan ini digambarkan melalui data Banci Penduduk dan Perumahan, Perangkaan Penting dan data pentadbiran yang diperolehi daripada agensi kerajaan berkaitan. Seperti di kebanyakan negara di seluruh dunia, wanita membentuk hampir separuh daripada jumlah penduduk di Malaysia. Kajian ini menunjukkan tahap pendidikan yang lebih tinggi dan peningkatan penyertaan wanita dalam guna tenaga telah memperluas peranan wanita daripada sekadar melahirkan anak kepada penyumbang ekonomi. Masa yang diperuntukkan untuk menyambung pengajian ke peringkat yang lebih tinggi dan pembangunan kerjaya mendorong kepada penangguhan kehamilan dan seterusnya menyumbang kepada penurunan dalam kesuburan. Berdasarkan kajian ini, didapati bahawa terdapat hubungan negatif antara pendidikan dan penyertaan wanita dalam tenaga buruh dengan kadar kesuburan.

Kata kunci : Transisi demografi, Perubahan peranan wanita

Abstract

Malaysia experienced demographic transition as it shifted from agricultural-based economy in the early 19th century to knowledge-based economy (k-economy) in the mid of 1990s. Stage one of the demographic transitions began in 1911-1927 (16 years) and subsequently entered stage two in 1928-1957 (29 years), henceforth settling to stage three in 1958 until present. The purpose of this paper is to shed some light on the demographic transition patterns in Malaysia and its effects to the changing roles of women. These changes are illustrated through the Population and Housing Censuses

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data, Vital Statistics and administrative data from related government agencies. As in most countries around the world, women make up for almost half of the total population in Malaysia. The study showed that higher educational level and increasing participation in employment among the women have provided the preconditions for women to move from the private sphere and constant childbearing to the public domain and the expanding industrial work force. The roles of women have now extended beyond childbearing and motherhood. The number of years spent on pursuing higher education and career development has delayed childbearing and to some extent contributed to the decline in fertility. This study suggests that there is an inverse relation between both women's education and labour force participation to Total Fertility Rate.

Keywords: Demographic transition, Changing roles of women

Introduction

The demographic transition explains the process of shift from high birth and death rates to low birth and death rates as part of the economic development of a country from a pre-industrial to an industrialised economy. Prior to Independence, access to services is reflected in marked improvements in education and health for both men and women (United Nations Development Programme, 2005).

In Malaysia, women make up almost half of the total population and their ever increasing roles become more prominent. Women have been mainstreamed into the development process and by carrying variety of roles at the family, community and society levels, they have been able to contribute to national development and prosperity. The government has taken initiatives to incorporate women in development as early as in the First Malaysia Plan. Starting from the Fifth Malaysia Plan (1986-90) and with the adoption of National Policy on Women in 1989, the role of women in development has been increasingly reflected in national development plans.

This paper reviews the demographic transition patterns in Malaysia and its parallel effects to the changing roles of women. The paper will draw highlights on the diverse roles of women from the social and economic perspectives as well as some discussion on women-related policies.

Literature Review

Lee (2003) in his study stated that before the start of the demographic transition, life was short, births were many, growth was slow and the population was young. During the transition, first mortality and then fertility declined, causing population growth rates first to accelerate and then to slow again, moving toward low fertility, long life and an ageing population. The transition began around 1800 with declining mortality in Europe. It has now spread to all parts of the world and is projected to be completed by 2100. He also cited that in 1800, women spent about 70.0 percent of their adult years bearing and

rearing young children, but that fraction has decreased in many parts of the world to only about 14.0 per cent, due to lower fertility and longer life.

Similar to this study Frejka (2008) suggested that the underlying demographic transition consisted of gradually declining fertility combined with a postponement of marriages and of childbearing. Among the basic circumstances driving this demographic transition were increasing need for large proportions of the population to acquire more than a basic education, high and increasing labour force participation rates of women, and increasing roles and responsibilities of women.

Meanwhile McNay (2003) found out that with the increasing entry of women into the labour force, the advent of industrialisation and the associated role conflict which they experienced, the conditions were laid for the move to smaller family sizes. However, having fewer children does not necessarily reduce women's caring role, particularly in the context where women continued to be evaluated primarily according to their roles as wives and especially as mothers. Women's roles have expanded rather than basically changed. Not anticipating their lives to be otherwise, women are expected to manage and fulfill their dual roles successfully.

Other study on the changing roles of women in the context of economic reform and globalisation was done by Razavi (2003). His study found that between 1950s and the end of the 1990s, the proportion of women age 20 - 59, who were in labour force increased from one-third to one-half. The women labour force participation rates increased further particularly in the 1980s and 1990s - the era of globalisation.

According to Mahpul and Abdullah (2011), the increase in women labour force participation rate was largely resulted from the educational improvement, as better educated women are more likely than the lesser educated to be in the labour force. In view of balancing both work and family roles, they have recommended employer to provide childcare facilities at the workplace, flexible working hours and paid parental leave. Besides family support especially from spouse and other family members plays an important role in reducing work-family conflict.

Methodology

Data Source

This paper extensively used Population and Housing Censuses data (1911-2010), Vital Statistics (1911-2010), Labour Force Surveys (1970-2011) and administrative data (various years) from other government agencies to illustrate the stages in demographic transition in Malaysia and the changing roles of women.

Concept

The Demographic Transition Model used is first developed by Warren Thompson² in 1929. According to Thompson, the transition involves four stages, or possibly five as follows:

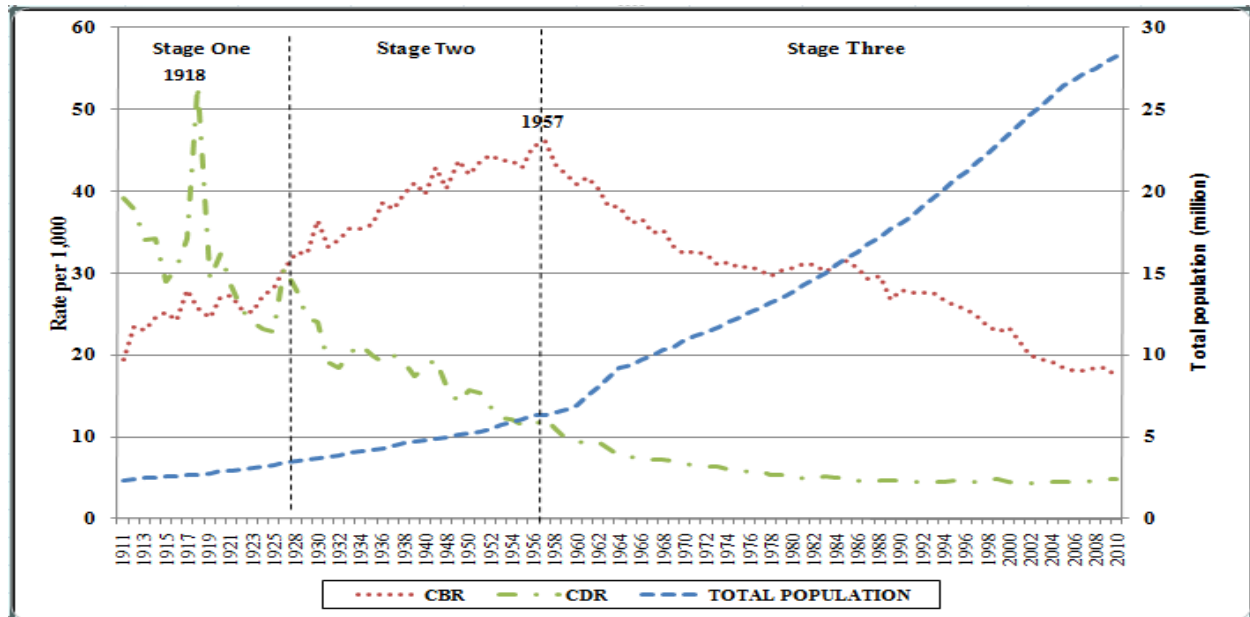
- In stage one, pre-industrial society, death rates and birth rates are high and fluctuate giving a small population growth as shown by the small total population.
- In stage two, birth rates remain high but death rates drop rapidly due to improvements in food supply and sanitation, which increase life spans and reduce disease. These changes usually come about due to improvements in farming techniques, access to technology, basic healthcare and education. The countries in this stage experience a large increase in population.
- In stage three, birth rates fall rapidly while death rates continue to fall. The birth rates fall due to access to contraception, increases in wages, urbanisation, a reduction in subsistence agriculture, an increase in the status and education of women, a reduction in the value of children's work, an increase in parental investment in the education of children and other social changes. Population growth begins to level off.
- During stage four, both birth and death rates are low. Birth rates may drop to well below replacement level as has happened in countries like United States, Italy, and Japan, leading to a shrinking population, a threat to many industries that rely on population growth. As the larger group born during stage two ages, it creates an economic burden on the shrinking working population. Death rates may remain consistently low or increase slightly due to increases in lifestyle diseases and an aging population in developed countries.
- A stage five was not originally thought of as part of the Demographic Transition Model but however, some theorists consider that a fifth stage is needed to represent countries that have undergone the economic transition from manufacturing based industries into service and information based industries called deindustrialisation. Countries such as United Kingdom (the earliest nation universally recognised as reaching Stage Five), Germany, Italy, Spain, Portugal, Greece, and most notably Japan are now reaching the stage where total population is declining due to birth rates dropped rapidly below death rates.

Demographic Transition Patterns in Malaysia

Stage one of demographic transition period in Malaysia began in 1911-1927 (16 years), subsequently entering stage two in 1928-1957 (29 years), before settling to stage three in 1958 until present day. The stages of the demographic transition in Malaysia are illustrated in Chart 1.

² Warren Thompson was a US Demographer, with Ph.D in Sociology from Columbia University

Chart 1: Demographic Transition, 1911-2010



Source: Authors' calculation, Vital Statistics, various issues.

Stage One (1911–1927)

Stage one of demographic transition is normally characterised by high Crude Death Rate (CDR) and Crude Birth Rate (CBR). At this stage, Malaysia experienced a different scenario where the CBR was initially low. Data shows that from 1911-1921 the CDR were higher than the CBR. Beginning in 1923 to 1926 only the CBR started to exceed the CDR. CDR showed a declining trend except in 1918 in which it increased to unprecedented point (52.9) before decreasing sharply while the CBR increased steadily.

Two important events that took place in the world calendar may have attributed to the high CDR. The first event was the World War I in 1914-1919 and the spread of Spanish Influenza in 1918-1919. The highest CDR recorded in 1918 may be caused by the Spanish Influenza that killed an estimated 20 to 40 million people worldwide (Stankovic, 2005).

In Asia, India, Japan and Indonesia were highly affected. As many as 17 million died in India about 5.0 per cent of the population (Chandra, et.al, 2012). The death toll in India's British-rule districts alone was 13.88 million. In Japan 23 million people were affected and 39,000 died (Kawana, et.al, 2007). In Indonesia 1.5 million were assumed to have died from 30 million population (Fitri, E, 2009).

Other than these, the high CDR at this stage was due to common factors such as untreatable disease, malnutrition, poor hygiene and sanitation. In the case of birth, the CBR were low due to low number of women in childbearing age. This is further

supported by the result of the 1911 Census³ which showed that there were more males (1.5 million) as compared to females (0.8 million). Breakdown by ethnic groups showed that there were 571,893 Chinese male as compared to 123,077 Chinese female and 181,502 Indian male as compared to 58,284 Indian female. The high number of males may be attributed by the British colonial policy which encouraged the immigration of Chinese to work in the tin mines and Indians to work in the rubber estates (Ariffin & Tey, 2008).

Stage Two (1928–1957)

The stage two of demographic transition in Malaysia covered the period of 1928-1957. During this stage Malaysia experienced high CBR and low CDR. The high CBR were most likely attributed by the fact that Malaysia was still an agricultural based society where it was customary to have a large family size as children also contributed towards family economy.

This was consistent with a study done by Grint (2005). He found that family size during the pre-industrial period (where the economic activity was very much related to agriculture) was usually rather large. This was further supported by a study done by Drabble (2005) that found Malays who were smallholders usually either rely on family members for labour or share-tapper. Besides rubber, the Malays were also engaged in subsistence (rice) farming and other crops.

For the most part of the twentieth century, prior to World War II, population growth was characterised by large-scale immigration of Chinese and Indians (Nair & Jantan, 2006). From the late 1950s, Malaysia was poised for rapid population growth from high fertility as the large cohort of post-war baby boomers began to marry and have children (Robinson & Ross, 2007).

The medical breakthrough in 1928-1957 worldwide has a positive impact on health and wellbeing of the population (Bloom & Williamson, 1997). The wellbeing status of the population can be measured through the health indicators of CDR, Infant Mortality Rate (IMR), Under-5 Mortality Rate (U5MR) and Maternal Mortality Ratio (MMR). In Malaysia, these indicators are gradually decreasing during this stage. For Peninsular Malaysia, the CDR was 18.5 (1932) dropped to 12.4 (1957), the IMR was 137.2 (1932) has improved to 75.5 (1957) and as for U5MR was dropped from 223.4 (1935) to 110.4 (1957). The MMR has decreased from 10.8 (1933) to 2.8 (1957).

Stage Three (beginning 1958)

The stage three of demographic transition in Malaysia began in 1958⁴ until present where the birth and death rates were relatively low. From 1958 to 2010, CBR decreased from 43.3 to 17.5 whilst CDR decreased from 11.0 to 4.8 for the same period. IMR

³ 1911 Census covers Federation of Malaya only

⁴ Figures for 1958 covers Peninsular Malaysia only

decreased from 79.6 to 6.8, U5MR dropped from 111.2 to 8.5 while MMR dropped from 2.8 to 0.3 per 1,000 live births for the same period.

Greater access to health facilities led to the decline in CDR, resulting in improved life expectancy from 63.1 years for males and 66.0 years for females in 1966 as compared to 71.9 years for males and 77.0 years for females in 2010.

Total Fertility Rate (TFR) was 6.3 in 1958 and dropped to 2.2 in 2010. The decline in TFR was evident by the increase in mean age at first marriage. Statistics showed that mean age at first marriage has increased from 21.6 years (1970) to 25.7 years (2010). This was due to the trend of women getting married at a later age.

Trend in Live Birth Order (LBO) is also closely related to the decline in TFR. Percentage of fourth and subsequent live births dropped from 28.2 per cent (2001) to 21.4 per cent (2008). The percentage of second and third births showed a stable trend while that of the first live births increased from 28.5 per cent to 35.8 per cent for the same period. This is evident from fewer couples having more than four children, thus causing a continuous decline in family size from 5.2 (1980) to 4.3 (2010).

The demographic transition from stage two to stage three is closely related to the policies introduced by the government on economy, education, health and employment. These policies transformed Malaysia's economy from agricultural based to industrial. This created job opportunities that did not exist in the two previous demographic transition stages. Simultaneously the introduction of Education Act in 1961 emphasised the need for compulsory education for all. As a result, the number of women participating in labour market has increased and became significant to the Malaysian economy as a whole. In 1970 the Labour Force Participation Rate (LFPR) of women was 37.2 per cent increased to 47.9 per cent in 2011.

The National Family Planning Program was introduced by the Government in 1966. Under the programme, contraceptive method received a wide acceptance across Asia and this had great impact on reducing the fertility rate (Bloom & Williamson, 1997).

The Changing Roles of Women

One of the effects of Demographic transition is on the roles of women. The transition provided the preconditions for women to move from the private sphere and constant childbearing to the public domain and the expanding industrial work force. This is due to increased opportunities for women to pursue higher education, participate in the labour market and take part in social mobility. This section will discuss several factors namely government policies particularly women-related policies, participation in labour market and education that contribute to the changing roles of women and its consequences such as the rise of mean age at first marriage and the decline in fertility.

Women-related Policies

i. National Family Planning Programme, 1966

Prior to 1966, family planning services in Malaysia were provided by the various states Family Planning Associations, and were largely confined to large urban centres. With the launching of the National Planning Programme in conjunction with the First Malaysia Plan in 1966, family planning has become an official policy. One of the main objectives of the program was to improve maternal and child health and decelerating the rate of population growth from 3.0 per cent (1966) to 2.0 per cent (1985) by setting target to increase the number of family planning acceptors.

Table 1 shows the Contraceptive Prevalence Rate (CPR) across ethnic groups and level of education. CPR for Malays has always been lower than the other main ethnic groups especially the Chinese. In 2004, the CPR for modern methods was 28.2 per cent for Malays, 45.6 per cent for the Chinese and 32.2 per cent for the Indians. Level of education has positive impacts on CPR. CPR for modern methods was 30.6 per cent for women with none/primary education, which is the lowest compared to women with secondary education (35.0%) and post secondary education (37.4%).

Table 1: Contraceptive Prevalence Rate by Selected Variables, Peninsular Malaysia, 1988, 1994 and 2004

	Any Method			Modern Method		
	1988	1994	2004	1988	1994	2004
	(%)					
Ethnic group						
Malays	39.8	45.9	43.0	24.8	22.4	28.2
Chinese	67.2	72.8	67.0	49.6	47.0	45.6
Indians	57.7	64.1	54.7	39.0	33.2	32.2
Education						
None/Primary	50.6	55.0	48.5	34.1	31.5	30.6
Secondary	51.8	55.2	52.6	32.8	29.5	35.0
Post Secondary	50.9	50.9	54.7	33.7	27.5	37.4

Source: Annual Report, National Population and Family Development Board, various issues

Between the periods of 1969 to 2010, NPFDB reported that the number of new family planning acceptor has increased from 69,416 to 88,768. This programme has enable family and women in particular to decide on the number and timing of births. It also aims at raising the quality of life, including health, welfare and improving the status of women, particularly rural women.

ii. The 70 Million Population Policy, 1984

The policy on fertility has been revised from family planning to family development and quality population. In reviewing the population policy in 1984, the government called for a major shift to achieve an ultimate population of 70 million by 2100 with TFR of 2.1 or an average of two children per woman during their childbearing period (15-49 years). That became an official policy in the Midterm Review of the Fourth Malaysia Plan (1981-1985). As the fertility rate is approaching replacement level, the government's view on fertility has changed from too high in 1996 to satisfactory in 2007.

iii. National Policy on Women (NPW), 1989

Malaysia's commitment and dedication to the advancement of women is evident in many of its programmes and policies. In 1989, the government formulated the National Policy on Women as a guide for women's participation in the development process. The policy helps to enhance women's quality of life by overcoming challenges through poverty eradication and education. The NPW's primary objectives provide the basis for integrating women's contributions in all national development efforts, with the aim of focusing on areas where support facilities have not yet been adequately provided and the role of women not yet fully acknowledged.

Role of Education

Women nowadays are empowered with education and have better prospect in the labour market through better access to education. Their advancement in education is linked to the correlates of Demographic Transition. These include the age of marriage, contraceptive prevalence practices and access to health facilities.

Apart from acquiring commendable position in the society, education also empowered women in decision making roles. The knowledge and access to health facilities have enabled women to seek appropriate health services and henceforth, contribute to improved family wellness and development.

The opportunity to pursue higher education has lead to a delay in marriage thus reducing a woman's childbearing period as revealed in a study done by Syed Abd. Razak and Mustafa (2007). For the period of 1990 to 2010 the percentage of female graduates has increased from 38.8 per cent to 47.6 per cent. Concurrently, the TFR has decreased from 3.5 to 2.2 per 1,000 populations.

Table 2: Percentage of female graduates and TFR, 1990-2010

Year	Female graduates (%)	TFR
1990	38.8	3.5
2000	41.9	3.0
2010	47.6	2.2

Source: Authors' calculation, Statistics of Graduates in the Labour Force, Malaysia, 2011

Based on the Table 2, it is found that women's education is inversely related to fertility. The more educated women are, they are likely to have fewer children. According to Weeks, J R. (2002), data from various health survey done in 1991 in United States of America shows that, women with higher educational level have fewer children.

Participation in Labour Market

Women participation in labour market has increased since the last three decades. The Labour Force Participation Rate (LFPR) for women showed that the percentage increased from 47.4 per cent in 1985 to 49.6 per cent in 2010. This percentage continued to increase to 51.1 per cent in 2011 (Table 3). It shows an inverse relation with the TFR. The declining TFR in less developed nation is affected by the age at first marriage, education level and social mobility among women while in developed nation; it was caused by the strong women participation in employment (Arshat et al., 1988). Working women also have less time to raise children which contribute to the decline in TFR.

Table 3: Women Labour Force Participation Rate (LFPR) and Total Fertility Rate (TFR), 1985-2011

	1985	1990	1995	2000	2005	2010	2011
LFPR ^a	47.4	49.7	47.1	49.6	48.6	49.6	51.1
TFR ^b	4.0	3.5	3.3	3.0	2.4	2.2	-

Source: Authors' calculation

^a Labour Force Survey Report, various issues

^b Vital Statistics, various issues

Note: Figures are for women in 15-49 age groups

Women's labour force participation and employment over the life cycle show relatively high rates in young adulthood before marriage and childbearing, followed by a significant decline in a childbearing and childrearing years.

Women age-cohort labour force participation profile shows a single peak at 20-24, shifting upward to 25-29 from 2001. The shift in the peak of women from 20-24 to 25-29 is likely the outcome of increase participation in tertiary education and delayed marriage. The exit from the labour market for women from the 25-29 to 30-34 and the 34-39 age groups is most likely linked to marriage, childbearing and childrearing. This is in contrast to the situation of many industrialised countries where women either do not leave the labour force during childbearing or re-entered once their childbearing has been completed (Table 4).

Table 4: Women Labour Force Participation Rate by age group, 1990, 1995 and 2000-2008

Year/Age Group	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	54-59	60-64
1990	47.8	33.8	63.3	53.3	50.4	48.9	50.1	50.3	43.1	33.1	27.0
1995	44.7	26.8	61.1	52.8	49.0	49.2	47.6	45.3	36.9	27.4	21.5
2000	47.2	22.1	63.1	61.2	53.5	51.0	52.1	49.3	40.2	28.3	22.1
2001	46.8	20.6	60.7	61.1	54.7	53.1	52.9	48.4	40.9	28.8	21.3
2002	46.7	19.4	59.4	62.6	54.8	52.6	52.3	50.3	40.4	29.2	21.2
2003	47.7	18.5	61.8	64.2	56.7	53.1	52.5	52.0	42.5	30.8	21.6
2004	47.2	18.0	56.8	64.1	58.1	54.2	52.3	52.1	43.6	32.4	22.0
2005	45.9	16.4	56.2	64.3	57.5	52.7	51.4	49.3	39.9	28.5	19.3
2006	45.8	14.5	56.1	65.4	58.5	52.6	50.9	48.4	40.9	27.7	19.5
2007	46.4	14.0	54.6	66.2	59.0	54.7	52.6	49.8	43.9	28.0	20.0
2008	45.7	14.6	53.4	65.5	59.2	54.1	52.4	48.2	42.1	26.8	18.1

Source: Labour Force Survey, Time Series Data, 1982-2010

A good and affordable child care facilities are important to encourage working women or those who wants to re-enter the labour force. In early 2007, the Government provided a subsidy of RM180 per child to civil servants whose monthly household income was below RM2,000; this was extended in 2009 to those whose monthly household income was RM3,000.

To provide a more conducive working environment for women, flexible working hours was introduced under the Employment Act 1955 (Amendment 1998). Women in the public sector were also accorded maternity leave up to 90 days (from 60 days) for up to 300 days of their service period. In 2003, paternity leave was extended from three to seven days.

In tandem with the sectoral change of the economy, the composition of employed women by occupation has also changed markedly. This trend can be seen in almost all occupational categories with the exception of the agricultural and related occupational

categories. By 2000, women employed as agricultural workers declined to 14.8 per cent from 42.5 per cent in 1980. On the other hand, the proportion of professional, technical and related workers increased to 13.5 per cent in 2000 as compared to 7.7 per cent in 1980. The first three occupational categories tend to employ better educated workers (Table 5). Thus, for the same period, the proportion of women in these occupational categories rose sharply from 18.8 per cent to 33.2 per cent.

Table 5: Percentage Distribution of Employed Women by Occupational Categories, 1980-2000

Occupational Categories*	1980	1991	2000
Professional, Technical & Related Workers	7.7	13.1	13.5
Administrative & Managerial Workers	0.4	1.4	2.2
Clerical & Related Workers	10.7	16.4	17.5
Sales & Related Workers	8.4	8.9	12.1
Service Workers	11.1	12.1	17.4
Agricultural Workers	42.5	21.9	14.8
Production & Related Workers	19.2	26.2	22.6
All categories	100	100	100

Source: Population and Housing Census, 1980, 1991 and 2000

*Dictionary of Occupational Classification (DOC)

Strong participation of women in political decision-making processes can enhance women's empowerment. Since Independence, the number of women candidates elected to political positions has increased moderately. In 1990, only 5.3 per cent of Parliament elected members was women. This proportion doubled in 1999 to about 10 per cent and remained at the same level in the subsequent two elections, while the proportion of women elected to State Assemblies more than doubled between 1990 and 2008. By contrast, in the Senate where members are appointed to represent various groups of the society, the proportion of women senators has increased sharply from 18.2 per cent in 1990 to 26.7 per cent in 2008 (Table 6).

Table 6: Women's Representation in Politics, 1990-2008

	1990	1995	1999	2004	2008
		(%)			
Elected Members of Parliament	5.3	7.3	10.4	9.6	10.4
Appointed Members of House of Senate	18.2	16.2	22.6	33.3	26.7
Elected Members of State Legislative Assembly	3.4	4.8	5.6	6.9	8.0

Source: Statistics on Women, Family and Community, 2003 and 2008

Mean Age at First Marriage

In general, the opportunities for women to pursue higher education empower them to participate in the labour market. *“Simultaneously, expanded education and career options for women increased economic independence. One result is that more women voluntarily chose singlehood and liked it”* (Lamanna & Riedmann, 2005).

Marriage undoubtedly has an effect on the overall fertility levels and thus on the size and age structure of the population. It is observed that change in household size is closely related to marriage trends and marital status of the population. (Mat & Omar, 2002)

Mean age at first marriage is one of the demographic indicators that have strong correlation with fertility level. There are changes in the trend of marriage for the last few decades. In a community where almost all births occur in marriage, the age at first marriage would have a strong influence on the level of fertility which in turn will affect the age structure of the population. In 1970, the mean age at first marriage was 25.6 years for men and 21.6 years for women. Subsequently, the mean age at first marriage increased over the years to 28.0 years for men and 25.7 for women in 2010. The later age of marriage contributed to the decrease in TFR due to a shorter reproductive period (Table 7).

Table 7: Mean Age at First Marriage by Sex, 1970-2010

Year	Males	Females	Total
1970	25.6	21.6	23.8
1980	26.6	23.5	25.0
1991	28.2	24.7	26.4
2000	28.6	25.1	26.9
2010	28.0	25.7	26.9

Source: Population and Housing Census, various issues

The decline in TFR can also be attributed to the increasing number of women in the never married category. In 1970, never married women were 26.0 per cent as compared to 32.2 per cent in 2010. Meanwhile, currently married women recorded a marginal decrease from 61.0 per cent in 1970 to 59.4 per cent in 2010.

Changes in the Structure of Household

There are five types of household composition i.e single member households, unrelated member households, nuclear family households, extended family households and other related member households. For this study this paper will focus on nuclear and extended family households. A nuclear family household is consisted of members

related by blood, marriage or adoption. An extended family household is consisted of nuclear family together with blood relatives, often spanning three or more generations.

For the period of 2000-2010, the number of households has been growing at a faster rate of 3.1 per cent per annum from 4.8 million to 6.4 million as compared to a population growth rate of 2.0 per cent per annum. This resulted in an overall reduction of the average household size from 4.6 persons in 2000 to 4.3 in 2010. The shift towards smaller households is the result of out-migration and fertility decline (Ariffin & Tey, 2008).

The number of nuclear family and extended family households has increased from 1.4 million to 3.1 million and 0.7 million to approximately 1.0 million respectively for the period of 1980 to 2000. However, the nuclear family households grew at a faster rate (4.3 %) than the extended family households (1.8 %).

In terms of the average household size, nuclear family has declined from 4.9 to 4.5 persons during 1980 to 2000. Similarly, the average household size for extended family has become progressively smaller, decreasing from 7.1 to 6.2 persons in the same period.

Access to contraceptive prevalence practice, education, employment opportunity and cost of child-minding facilities contribute to the differences in the average household size between urban and rural areas. On the average, urban household size is smaller as compared to rural. The average household size for both urban and rural is decreasing from 5.1 to 4.2 persons and from 5.2 to 4.7 persons respectively for the period of 1980 to 2010 (Table 8).

Table 8: Average household size, Malaysia, 1980-2010

Average Household Size	1980	1991	2000	2010
(Persons)				
Total	5.2	4.8	4.6	4.3
Urban	5.1	4.8	4.5	4.2
Rural	5.2	4.8	4.8	4.7
Nuclear Family	4.9	4.8	4.5	n.a
Extended Family	7.1	6.5	6.2	n.a

Source: Population and Housing Census, various issues

Note: n.a. Not available

Conclusion

Changes in fertility and mortality rates defined the stages of demographic transition. Malaysia is currently at stage three of demographic transition where both birth and death rates are low. From 1958 to 2010, CBR decreased from 43.3 to 17.5 whilst CDR decreased from 11.0 to 4.8. The shift from high to low birth and death rates in the case of Malaysia could be inferred to as impact of government policies on education, employment, health, family planning and economy in general.

The declining TFR in Malaysia can be attributed to education advancement, increasing participation in labour force, public acceptance towards family planning which is brought about by the government policies, and late age at marriage. As the economy transform from agricultural to industrial, opportunity for education and employment resulted in changes in mind-set towards marriage and childbearing. Currently, the TFR is 2.2 and expected to reach replacement level of 2.1 in 2015.

Fertility decline would have an impact on future labour supply of the country. If TFR further drops below replacement level, it will lead to a shrinking population, a threat to many industries that rely on population growth. As the larger group born during stage two ages, it creates an economic burden on the shrinking working population. United States, Italy, and Japan are example of countries that have TFR below replacement level.

Apart of the above study of changing roles of women, it is encouraged that further research be done on the economic burden on the shrinking working population as a result of fertility decline.

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