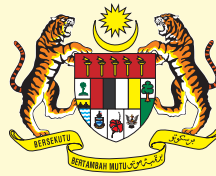


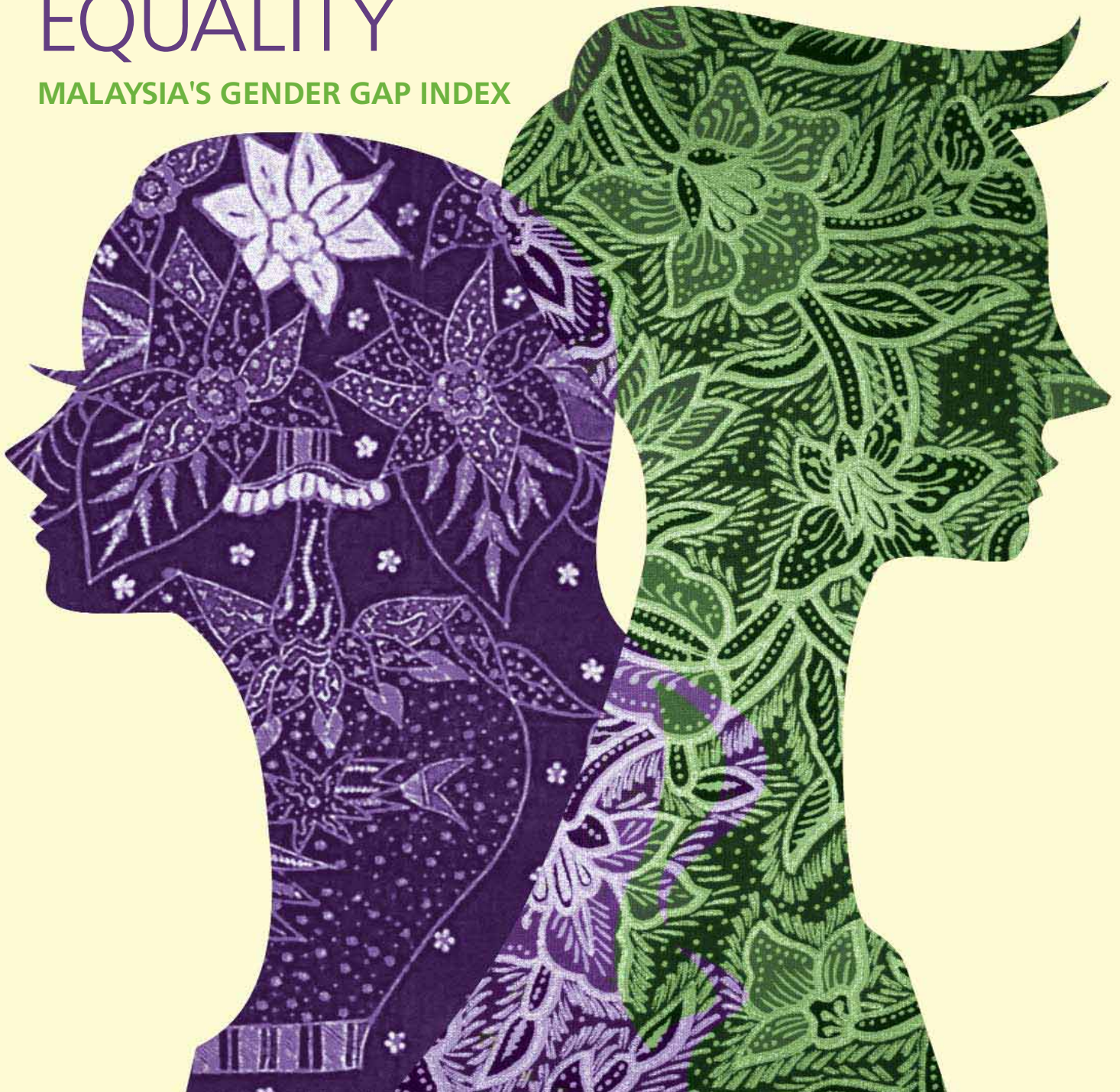


Ministry of Women,  
Family and Community Development  
Kementerian Pembangunan Wanita,  
Keluarga dan Masyarakat



# MEASURING AND MONITORING GENDER EQUALITY

MALAYSIA'S GENDER GAP INDEX



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Ministry of Women,  
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Kementerian Pembangunan Wanita,  
Keluarga dan Masyarakat



# MEASURING AND MONITORING GENDER EQUALITY

MALAYSIA'S GENDER GAP INDEX



## FOREWORD



The Government of Malaysia recognizes the important role women play in contributing to the development of the nation. The full commitment of the Government to achieve gender equality is reflected in the formulation and adoption of numerous policies and measures taken to promote women's development and address gender issues, including the establishment of a Cabinet Committee on Gender Equality in 2004. This Cabinet Committee is the highest level of institutional mechanism and provides policy direction as well as monitors the implementation of strategies and programmes for women and family development.

Considerable progress has been made in gender equality and women's empowerment in Malaysia. Gender disparities in the country have declined with gains in health, education, economic activity, and the empowerment of women. Improvements in social infrastructure, accompanied by rapid economic growth, have also provided the enabling environment for the decline in gender disparities.

To further advance equality between women and men, it is imperative to generate accurate and relevant data that capture gender-related changes in society over time. Such gender-sensitive data not only make gender biases more visible but also provide a more accurate measure of gender inequality, thereby facilitating the formulation of more effective policies aimed at integrating women's perspective in the development process.

In order to track gender-related changes in Malaysia over time, the Ministry of Women, Family and Community Development (MWFCD), in partnership with the United Nations Development Programme (UNDP), has constructed a gender-related development index, referred to as Malaysia's Gender Gap Index (MGGI). Designed to measure and monitor the extent of gender inequality in Malaysia, the MGGI comprises four component sub-dimensions covering the areas





of health, education, economic activity, and the empowerment of women. It is hoped that the trends and changes in gender disparities measured by the MGGI will lead to the development of strategies that will ensure both men and women receive equal access to resources in health, education, and economic activity as well as enjoy equal opportunity for political growth.

The successful completion of the MGGI Project would not have been possible without the valuable support and constructive input of many organizations and individuals. We are very grateful for the assistance extended by the United Nations Development Programme (UNDP) towards the development of the MGGI. We would also like to thank the members of the Steering Committee for their ongoing support and monitoring of the project. The generosity of the members of the Technical Committee, especially the Department of Statistics, in sharing their data and in offering technical guidance and advice is also deeply appreciated. Last but not least, we would like to thank the many unnamed individuals in government, civil society, and the private sector who have contributed directly or indirectly to this report.

We hope that the findings and insights gained from the experience of reducing gender inequalities presented in this report will be of genuine interest and use to planners and policy-makers in their efforts to mainstream gender throughout government. Those who are interested in finding out more about the concept and methodology of the MGGI are welcome to contact the Ministry at [info@kpwkm.gov.my](mailto:info@kpwkm.gov.my).

**DATO' SRI SHAHRIZAT ABDUL JALIL**

Minister of Women, Family and Community Development  
Malaysia

April 2007



## PREFACE



Gender equality, equity, and the empowerment of women are fundamental to human development. They are basic human rights, as well as being important ends in themselves. They are also essential to the achievement of social, economic, and political development. Reflecting increased political will, successive Malaysian development plans have placed greater emphasis on mainstreaming women in national development through affirmative multi-sectoral policies and programmes. And the efforts of government have been complemented by the active advocacy and campaigns of women's non-governmental organizations (NGOs).

This publication quantifies the progress that Malaysia has made in achieving gender equality over the span of a generation, and the challenges ahead. It shows that gender inequality declined markedly over the period 1980–2004. This improvement stemmed from the improved health status of women and the increased levels of girls in post-secondary and higher education. Investing in girls' education provides them with social and economic opportunities and choices throughout their lifetime. Reductions in gender inequality have also come about as Malaysian women have benefited from modern sector employment opportunities. One challenge, however, is to increase the proportion of women in higher professional positions. Another relates to increasing the participation of Malaysian women in political life at all levels—a challenge that even the most mature democracies still face.

The Ninth Malaysia Plan (2006–2010) [9MP], which is much bolder than previous 5-year plans in terms of its targets for gender equality and women's empowerment, proposes new policies and strategies to deepen the mainstreaming of women in development. These include, *inter alia*, equipping women with necessary skills and knowledge to enable them to be more competitive and versatile to meet the challenges of a knowledge-based economy; reviewing the legal and institutional constraints that inhibit women's greater participation in the



economy; and perhaps, most critically, setting a target of 30 per cent of women in decision-making positions in government.

The United Nations Development Programme (UNDP) is pleased to have partnered with the Ministry of Women, Family and Community Development (MWFCD) in developing the Malaysia's Gender Gap Index (MGGI). The MGGI makes extensive use of Malaysia's sex-disaggregated data. Its primary purpose is to monitor gender disparities between men and women in development outcomes and to track changes over time. It provides a broad measure of gender equity that supports monitoring progress towards the achievement of the Third Millennium Development Goal (MDG)—promoting gender equality and empowering women (MDG3).

I would like to thank Dato' Sri Shahrizat Abdul Jalil, Minister of Women, Family and Community Development, for her leadership in promoting women's rights, including reproductive and sexual rights, campaigning against gender-based violence, as well as her unrelenting commitment to women's empowerment. I would also like to recognize and thank the Project Team for their good work in supporting the development of the MGGI, especially Ms Margaret Ho Poh Yeok from the MWFCD for heading the project; Ms Laura W. Y. Lee from UNDP Malaysia for her various inputs; and Mr Kwok Kwan Kit for creating this new index. Thanks are also due to members of the National Steering Committee and Technical Working Committee for their support and guidance. I sincerely hope that the MGGI will be widely used in Malaysia, and globally, as a tool to help advance gender equality and women's empowerment.

**DR RICHARD LEETE**

UNDP Resident Representative for Malaysia, Singapore and Brunei Darussalam

April 2007





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## ABBREVIATIONS

AIDS	acquired immune deficiency syndrome
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
DOS	Department of Statistics, Malaysia
GDP	gross domestic product
GNP	gross national product
HAWA	Secretariat for Women's Affairs
HDI	Human Development Index
HIV	human immunodeficiency virus
ICT	information and communications technology
ILO	International Labour Organization
INTAN	National Institute of Public Administration
LFPR	labour force participation rate
MCA	Malaysian Chinese Association
MDGs	Millennium Development Goals
MGGI	Malaysia's Gender Gap Index
MIC	Malaysian Indian Congress
MQLI	Malaysian Quality of Life Index
MWFCD	Ministry of Women, Family and Community Development
NAM	Non-Aligned Movement
NCWO	National Council of Women's Organizations
NGOs	non-governmental organizations
9MP	Ninth Malaysia Plan (2006–2010)
NPW	National Policy on Women
PPP US\$	purchasing power parity in US dollars
SMEs	small and medium enterprises
U5MR	Under-5 mortality rate
UMNO	United Malays National Organization
UN	United Nations
UNDP	United Nations Development Programme



# ***INTRODUCTION***

## INTRODUCTION



Since independence in 1957, Malaysia has made remarkable progress in poverty reduction and human development. By 2005 it had achieved all the Millennium Development Goals (MDGs), except that relating to halting and reversing the spread of HIV/AIDS (human immunodeficiency virus/acquired immune deficiency syndrome). Throughout much of the post-independence era, Malaysian women and girls have enjoyed equal opportunities with men and boys in access to basic social services. Women have been increasingly mainstreamed into development processes, and by playing a variety of roles at the family, community, and society levels, they have been able to contribute to national development and prosperity.

Much progress has been made to ensure women's advancement in Malaysia, particularly since the early 1990s. Successive national development plans have included major policy initiatives for the advancement of women in almost every sector. Of particular note are the higher levels of educational attainment of women, their increased labour force participation in higher paying occupations, their greater involvement in business activities, and their improved health status.

At the same time, special social, economic, and training programmes have been implemented by the Government and non-governmental organizations (NGOs) to reduce poverty rates among women, especially for single mothers. These include provision of micro-credit, information and communications technology (ICT), and skills training. Moreover, the establishment in 2001 of the Ministry of Women, Family and Community Development (MWFCD), and, in 2004, the Cabinet Committee on Gender Equality, has provided greater coherence to policies for mainstreaming women in development.

Investments in girls' education and women's health lead to high returns in a broad range of sectors that contribute towards national development. However, eliminating gender disparities in education and health is a necessary but not sufficient condition for eliminating other gender



inequalities. For example, gender inequalities still exist in the economic and political spheres. The empowerment of women, through increased political representation, and through a greater proportion of positions in higher paying jobs, will further reduce gender gaps.

In general terms, the evolution of female employment has followed the structural changes in the Malaysian economy. As the economy has shifted from its reliance on agriculture to an emphasis on industry and services, so, too, has the distribution of female employment changed from a predominance in the agricultural sector to the secondary industrial sector. Since 1990, there has been a particularly rapid increase in the share of female employment in the wholesale and retail trade, hotels, and restaurants sector and the financial services sector. Women's participation in the labour force rose steadily from 44.7 per cent in 1995 to 47.3 per cent in 2004.

In 2004, the MWFCD, in partnership with the United Nations Development Programme (UNDP), initiated a project on gender mainstreaming. One component of the project was the development of a Malaysia's Gender Gap Index (MGGI) as a tool for monitoring trends in gender disparities over time, for evaluating the effectiveness of interventions aimed at the integration of women into the development process, and for advocacy purposes.

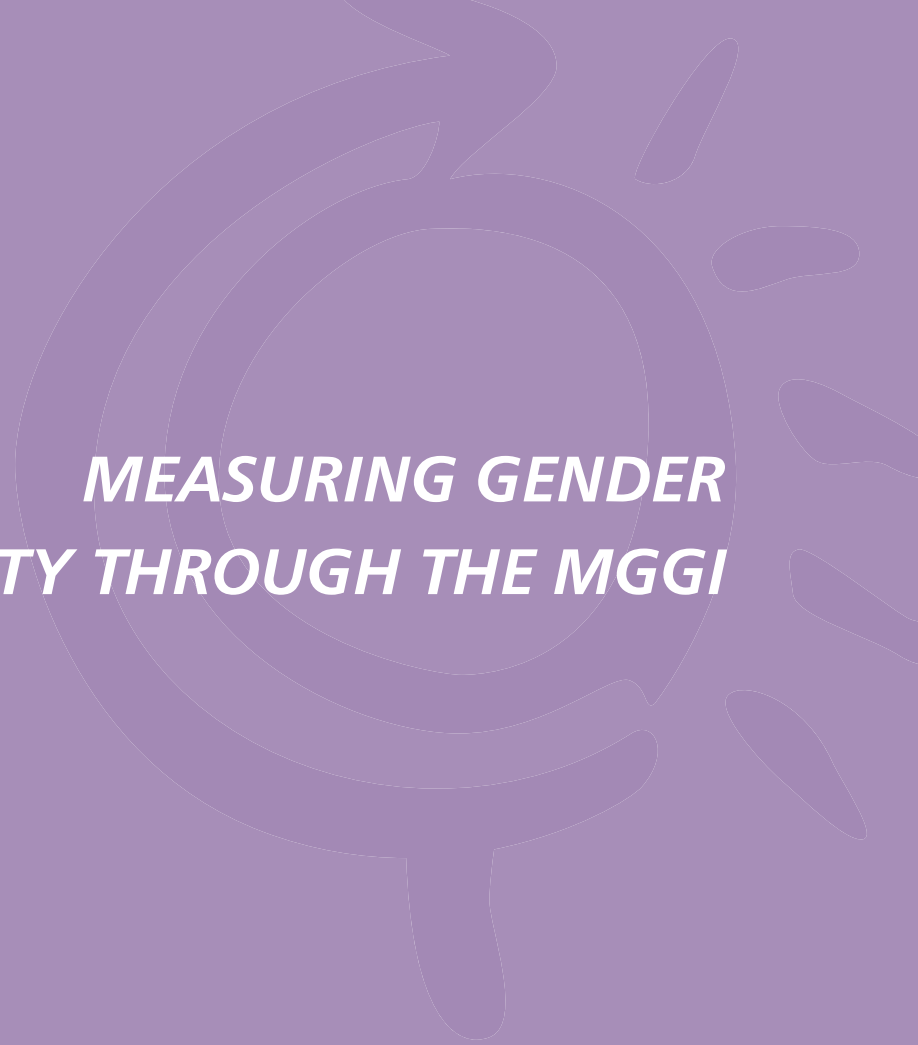
This report presents the conceptual and methodological framework of the MGGI. It consists of four parts. Part 1 gives an overview of how to measure and monitor gender equality through the MGGI. Part 2 presents trends and patterns in the four sub-dimensions of the MGGI—health, education, economic activity, and women's empowerment. Part 3 outlines key policies and programmes that have contributed towards achieving gender equality in Malaysia. Part 4 identifies insights gained from the experience of reducing gender inequality and examines future challenges. Methodological details of how to construct the MGGI, together with sample worksheets, are given in Annexes 1 and 2.





# 1

## *MEASURING GENDER INEQUALITY THROUGH THE MGGI*





## MEASURING GENDER INEQUALITY THROUGH THE MGGI

The MGGI is a new index designed to measure and monitor the extent of gender inequality in Malaysia. It is a summary measure of gender inequality—a multi-dimensional concept, taking into account health, education, economic activity, and political and economic empowerment. Each of these four sub-dimensions is given equal weight in the computation of the MGGI, much like the sub-dimensions of UNDP's Human Development Index (HDI). When there is no gender inequality in a society, the MGGI takes on a value of 0, and when gender inequality is at a maximum, it takes on a value of 1.

The MGGI thus comprises four sub-dimensions, covering the areas of health, education, economic activity, and the empowerment of women. These four sub-dimensions of the MGGI, and the related statistical data, are shown in Box 1.1. The indicators were selected based on (a) international best practice, (b) relevance to the Malaysian situation, and (c) availability of data. Details of the methodology used to construct the MGGI are given in Annex 1.

BOX 1.1	Data Required for Measuring Gender Inequality through the MGGI
<b>INDICATORS REQUIRED BY SEX</b>	
1. <b>Health Dimension</b>	
(a) Life Expectancy at Birth	
(b) Under-5 Mortality Rate (U5MR)	
2. <b>Education Dimension</b>	
(a) Adult Literacy Rate	
(b) Combined Gross Enrolment Ratio (Primary, Secondary, and Tertiary Levels)	
3. <b>Economic Activity Dimension</b>	
(a) Labour Force Participation Rate (LFPR)	
(b) Proportion of Persons Engaged in Non-Agricultural Employment	
4. <b>Empowerment of Women Dimension</b>	
(a) Political Representation	
(i) Percentage Share of Elected Parliamentarians	
(ii) Percentage Share of Appointed Senators	
(b) Percentage Share of Legislators, Senior Officials, Managers, Professionals, Technicians and Associate Professionals	

Like any summary measure, the MGGI may not be able to reveal the full extent of the complex reality of gender inequality. Information on the level of female and male achievements, as well as the extent of gender inequality, is needed. For example, the level of gender inequality may be similar in two situations, but in one, levels of achievement are rising while in the other they are falling. Moreover, the MGGI does not take into account factors such as laws and regulations or gender-based violence. Therefore, for it to provide meaningful insights, the MGGI needs to be analysed together with its sub-dimensions and selected indicators.

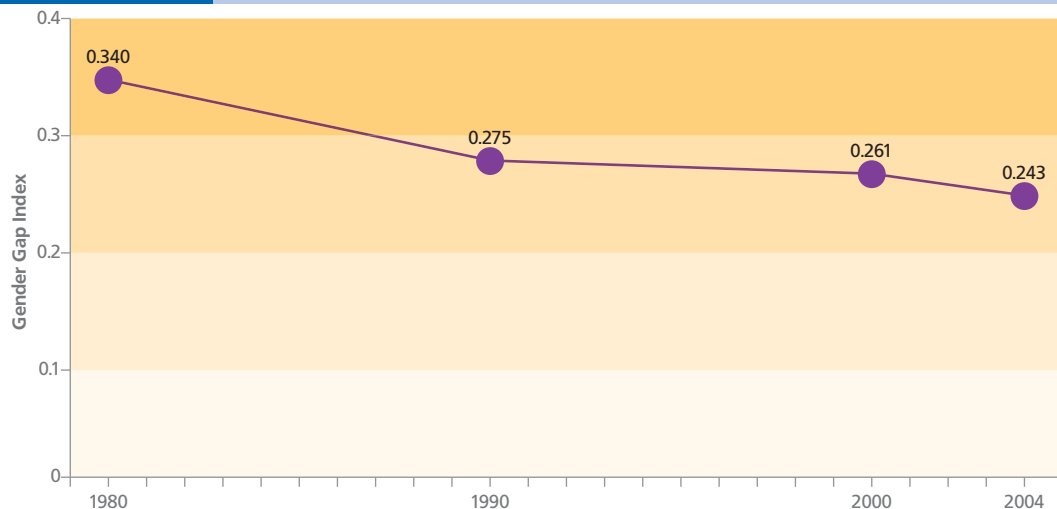


This report does not attempt to measure directly the welfare implications arising from gender equalities, but this can be done through making explicit use of a social welfare function.\*

## Trends in the MGGI

Trends in the MGGI show that the level of gender inequality in Malaysia declined sharply over the period 1980–2004 (Figure 1.1). Gender disparity was at a moderately high level in 1980 when the MGGI registered a value of 0.340—falling subsequently such that by 2004 the MGGI was just 0.243—a relatively low level. The MGGI fell by 1.9 per cent per annum between 1980 and 1990, more moderately over the next 10 years at 0.5 per cent per annum, but during the first four years of the current decade, the rate of decline rose to 1.7 per cent per annum. Improvements in the MGGI were accompanied by sustained economic growth, of about 7 per cent per annum, over the period 1980–2004. Going by the experience of many countries, as the gross domestic product (GDP) per capita increases, the level of gender equality, in many spheres of life, tends to rise.

**FIGURE 1.1** The Malaysia's Gender Gap Index (MGGI), 1980–2004



\*Sources of data: Malaysia, Department of Statistics, 1980, 1990b, 1991a, 1991b, 2000a–2000e, 2001, 2004.

Note: Data from the Population Census 1991 are used as proxy for 1990.

The MGGI measures the level of overall gender inequality, a result of inequalities arising, on the one hand, from areas where women are relatively disadvantaged compared to men, and vice versa. The contribution to overall gender disparity from these two sources of inequalities is shown in Figure 1.2.

\* This approach was pioneered by Atkinson (1970) and details are given in Deaton (1997). In the case of gender disparity, the index of social welfare  $W$  is written as a non-decreasing function of the achievement of women ( $X_f$ ) and men ( $X_m$ ), so that

$$W = V(X_f, X_m).$$

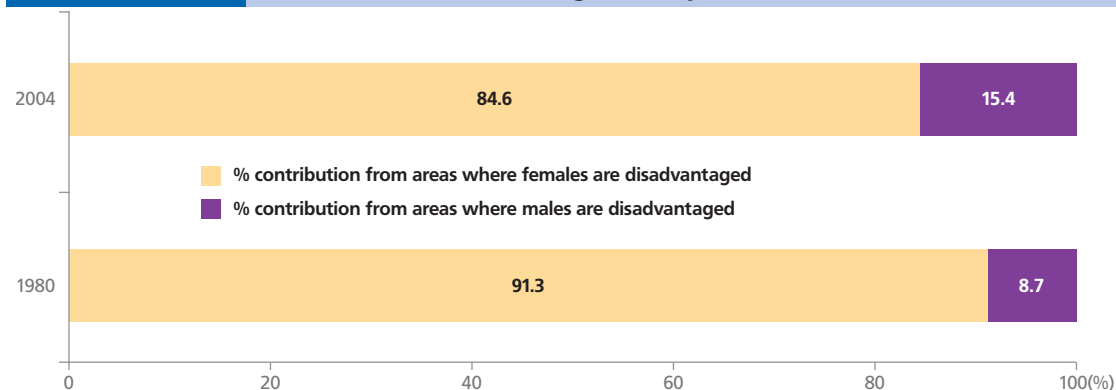
If the function  $V$  is homogeneous of degree 1, we can decompose changes in  $W$  into changes in the mean level of achievement and changes in a suitably defined measure of inequality like the MGGI as

$$W = \mu (1 - \text{MGGI}),$$

where  $\mu$  is the average level of achievement. Thus  $W$  is at a maximum when it takes on the value of  $\mu$  when MGGI equals 0, while  $W$  is 0 when MGGI equals 1.



**FIGURE 1.2** Percentage Contribution to the MGGI from Areas Where Females and Males are Disadvantaged, Malaysia, 1980 and 2004



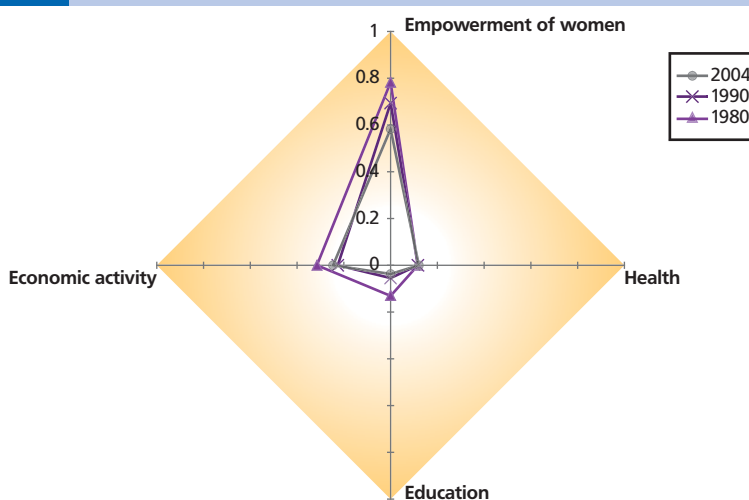
Sources of data: Malaysia, Department of Statistics, 1980, 2000 & 2004.

As expected, the main contribution to overall gender disparity in Malaysia comes from components where women are relatively disadvantaged. This contributed 85 per cent to overall gender inequality in 2004, which represented a decline from the 91 per cent in 1980. Correspondingly, gender disparity arising from components where men are relatively disadvantaged rose from 9 to 15 per cent. This increase resulted from women's better health status, higher enrolment in post-secondary and higher education, and higher proportions in non-agricultural jobs.

### Sub-dimensions of the MGGI

The MGGI is the average of the four component sub-dimensions, and differences in the trends in these component sub-dimensions change the composition of the MGGI. These changes are highlighted in Figure 1.3.

**FIGURE 1.3** The MGGI and Sub-dimensions, Malaysia, 1980, 1990, and 2004



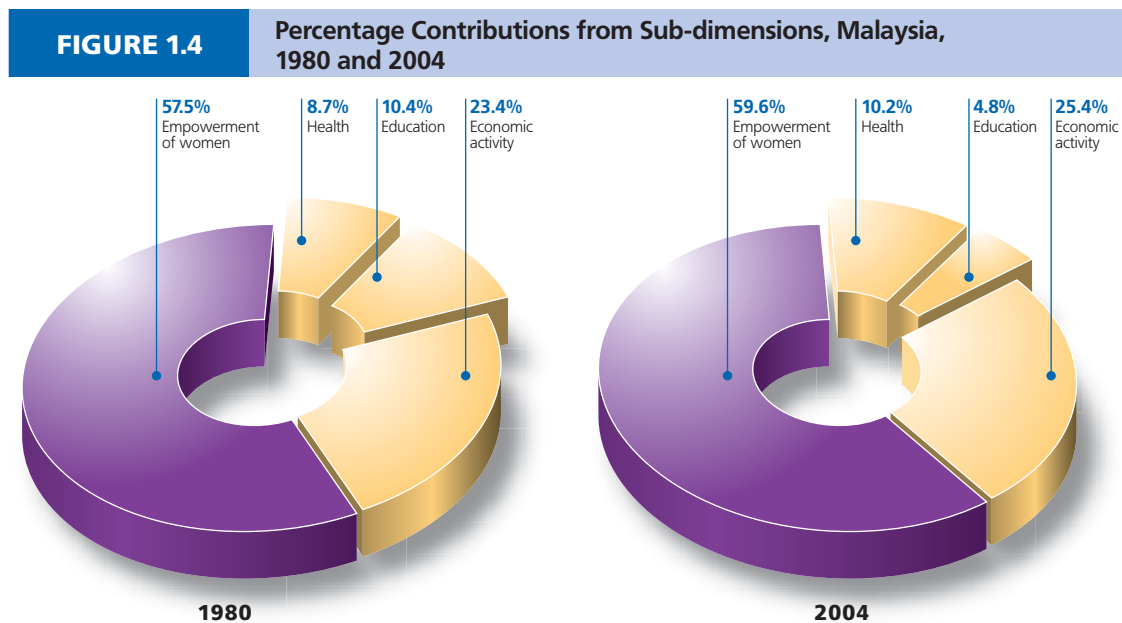
Sources of data: Malaysia, Department of Statistics, 1980, 1990b & 2004.



Each of the four sub-dimensions is represented by a corner of a square. If all four sub-dimensions are similar in value, the resultant figure will be in the form of a square. For the MGGI, this is of course shown not to be the case. For 1980, the four sub-dimensions form a trapezoid (a four-sided figure) with the highest level of gender disparity in the empowerment of women, followed (to a much lesser extent) by economic activity, education, and health. The decline in the level of gender inequality in the country since 1980 is shown by the diminishing sizes of the trapezoids.

The marked decline in the level of gender disparity that occurred in 1990 is shown by the second trapezoid, which is significantly smaller in size. A comparison of the two figures shows that decreases in gender disparities were largest in education, followed by economic activity and the empowerment of women. There was little change in health status. The third trapezoid shows the situation in 2004, which is quite similar to that for 1990, indicating a moderate decline since 1990.

Figure 1.4 shows in greater detail the actual percentage contributions to overall gender inequality of the four sub-dimensions for 1980 and 2004. The largest contribution comes from the empowerment of women, forming 57.5 per cent and 59.6 per cent in 1980 and 2004 respectively. The second largest contribution comes from the dimension for economic activity, with 23.4 per cent and 25.4 per cent in 1980 and 2004. The last two sub-dimensions of education and health form the two smallest components.



Sources of data: Malaysia, Department of Statistics, 1980 & 2004.

As noted above, gender inequalities in Malaysia declined in an environment of economic and social development. Gender inequalities and socio-economic development are likely to be linked in a two-way relationship. Probably, the relationship between development and gender inequality is more direct and is observable from macro-data. The second, linking gender inequality to development, is more indirect and is more difficult to observe without micro-data.





## Relationship Between Gender Equality and Development

In general, women's achievement in education, health, and earning capacity has an impact on future generations and can accelerate socio-economic development. Higher educational attainment increases women's income-generating capacity and is linked to reductions in maternal and child mortality. Educated girls are more likely to delay marriage and childbearing and, instead, seek ways to improve their economic prospects. This, in turn, leads to better health and education for the next generation. Thus, overall, it can be expected that reduction in gender disparities can contribute to the well-being of the population.

Figures 1.5(a) and 1.5(b) attempt to show these relationships. Figure 1.5(a) shows the relationship between the Malaysian Quality of Life Index (MQLI) and the MGGI. Figure 1.5(b) shows the relationship between the MGGI and the Human Development Index (HDI). (See Box 1.2 for the definition of HDI and MQLI.)

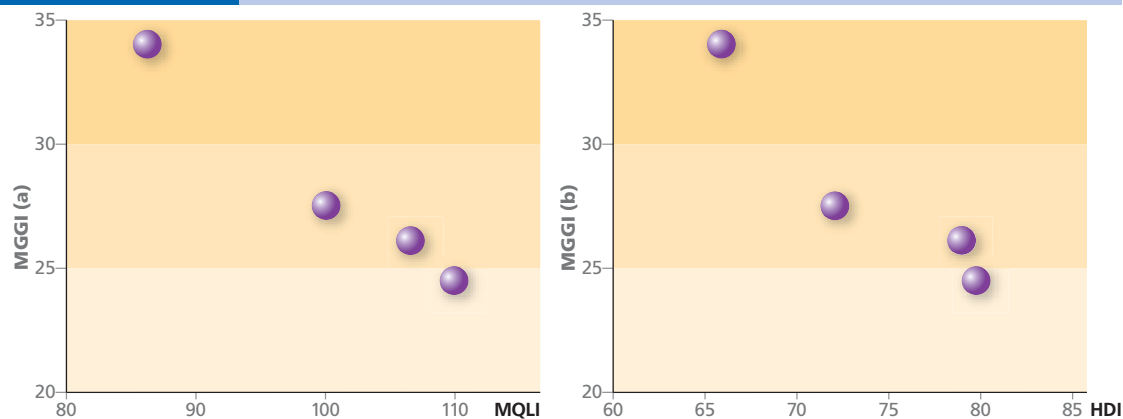
### BOX 1.2 Definition of HDI and MQLI

The **Human Development Index (HDI)** is a composite index that measures the average achievement in a country in three basic dimensions of human development: (a) a long and healthy life, (b) knowledge, and (c) a decent standard of living.

The **Malaysian Quality of Life Index (MQLI)** measures the quality of life and well-being of the population. It is based on 10 selected areas, namely, income and distribution, working life, transport and communication, health, education, housing, enrolment, family life, social participation, and public safety. The quality of life encompasses economic development and other aspects of development—social, psychological, cultural, political, as well as the environment.

Figure 1.5(a) shows that as the MGGI decreases, the well-being of the population, as represented by the MQLI, increases. Figure 1.5(b) shows that as the level of development rises, as represented by the HDI, gender disparities tend to decrease. This relationship supports the historical trends of the MGGI which will be analysed in greater detail in the following sections.

**FIGURE 1.5** Relationship Between (a) the MGGI and the MQLI and (b) the MGGI and the HDI, 1980–2004



Sources of data: Malaysia, Department of Statistics, 1980, 1990b, 1991a, 1991b, 2000a–2000e, 2001, 2004; Malaysia, Economic Planning Unit, 2004.

# 2

## *TRENDS AND PATTERNS IN HEALTH, EDUCATION, ECONOMIC ACTIVITY, AND WOMEN'S EMPOWERMENT*



## TRENDS AND PATTERNS IN HEALTH, EDUCATION, ECONOMIC ACTIVITY, AND WOMEN'S EMPOWERMENT

What are the levels and trends in gender inequality of the four sub-dimensions of the MGGI? Analysis of these trends helps us to understand better the overall trend in the MGGI. In turn, the trends displayed by the indicator series included in each of the sub-dimensions assist in understanding the movements in the sub-dimensions. For example, convergent trends in female and male achievements result in less gender disparities, while divergent trends lead to the opposite results.

### Health

This sub-section examines the levels and trends in the health status of women and men. It also gives a brief account of the public health programme in Malaysia. The trends in gender disparity in health status are then discussed.

A long and healthy life is one important dimension of human development. Historically, increases in life expectancies in developing countries have been mainly due to decreases in infant and child mortality. Therefore, the health dimension of the MGGI includes two important indicators disaggregated by sex: (a) life expectancy at birth, and b) under-5 mortality rate (U5MR). The definitions of these indicators are given in Box 2.1.

#### BOX 2.1

#### Indicators of Health Status

- (a) **Life expectancy at birth** is the expected number of years lived, on average, of a baby born subject to the same age-specific death rates of the current population.
- (b) The **under-5 mortality rate (U5MR)** is the probability (expressed as a rate per 1,000 live births) of a child dying before reaching its fifth birthday.

Over the 24-year period, the child mortality rate for both girls and boys fell sharply, and life expectancy at birth increased steadily. The U5MRs for girls and boys were 28.5 and 34.3 per 1,000 live births respectively in 1980, but these declined markedly to 7.1 and 8.3 in 2004 (Table 2.1), similar to levels currently prevailing in the industrialized countries.

Life expectancy for females and males increased by 5.1 and 5.2 years respectively over the corresponding period. The combined life expectancy for both sexes in Malaysia is now among the highest in the medium human development countries, but is still below the highest in the world, which is around 80 years.



TABLE 2.1	Life Expectancy at Birth and Child Mortality by Sex, Malaysia, 1980–2004							
	1980		1990		2000		2004 <sup>(p)</sup>	
	Female	Male	Female	Male	Female	Male	Female	Male
1. Life expectancy at birth (yrs)	71.0	66.5	73.7	69.2	75.0	70.2	76.1	71.7
2. Under-5 mortality rate (deaths /1,000 live births)	28.5	34.3	15.2	18.3	8.3	10.0	7.1	8.3

Sources of data: Malaysia, Department of Statistics, 1990b, 2000e & 2001.

<sup>(p)</sup> Preliminary

Health and development are jointly related: economic growth leads to improved health status of the population, while better health can contribute to economic growth. Past experience has, however, shown that improvements in health status do not necessarily follow from economic growth. Specific health intervention programmes are necessary to initiate, and to accelerate, the reduction and elimination of specific diseases.

The improvement of the health status of the population has been one of the main goals of national development in Malaysia. Public expenditure on health, just as on education, has been considered as an investment in human capital. Public sector expenditure on health, as a proportion of development expenditure, increased from 2.8 per cent in 1970 to 8.1 per cent in 2004. A sizeable proportion of this was spent on improving rural health services. In Malaysia, health services are provided free or at very low costs so that they are accessible to the poor.

A range of specific health interventions have been implemented to combat especially the infectious childhood diseases, emergent malaria and tuberculosis, and to reduce maternal mortality. For example, measures to reduce child mortality included medical advances, such as vaccines and oral rehydration for diarrhoea. These have been made widely available even in rural areas through the primary health care system.

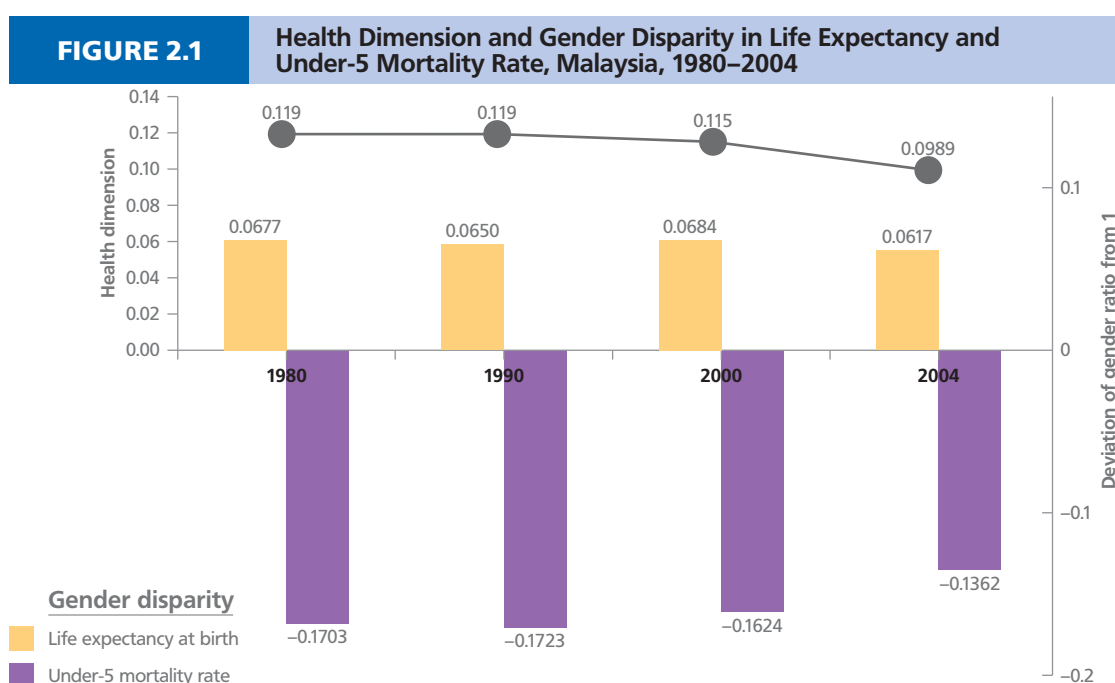
Maternal mortality was reduced through a comprehensive programme which focused on (a) expanding health care services, including family planning, especially in the rural areas, (b) upgrading the quality of obstetric care in district hospitals, (c) improving the efficiency of referral and feedback systems, (d) increasing the skills of trained delivery attendants, (e) implementing a monitoring system, and (f) better integration of health workers with communities they work in.

The development of social infrastructure, such as provision of clean water, improved sanitation, and better nutrition has also enhanced the effectiveness of health interventions. The increase in literacy, especially among women, and reduction in poverty also improved access to health facilities. Health sector programmes have been integrated with the programmes of other sectors to increase their effectiveness.



In addition to successfully combating childhood and maternal mortality, Malaysia has also been successful in virtually eliminating malaria in urban areas, and has achieved a notable reduction in the incidence of the disease in the 1990s. However, HIV/AIDS and tuberculosis remain as current challenges.

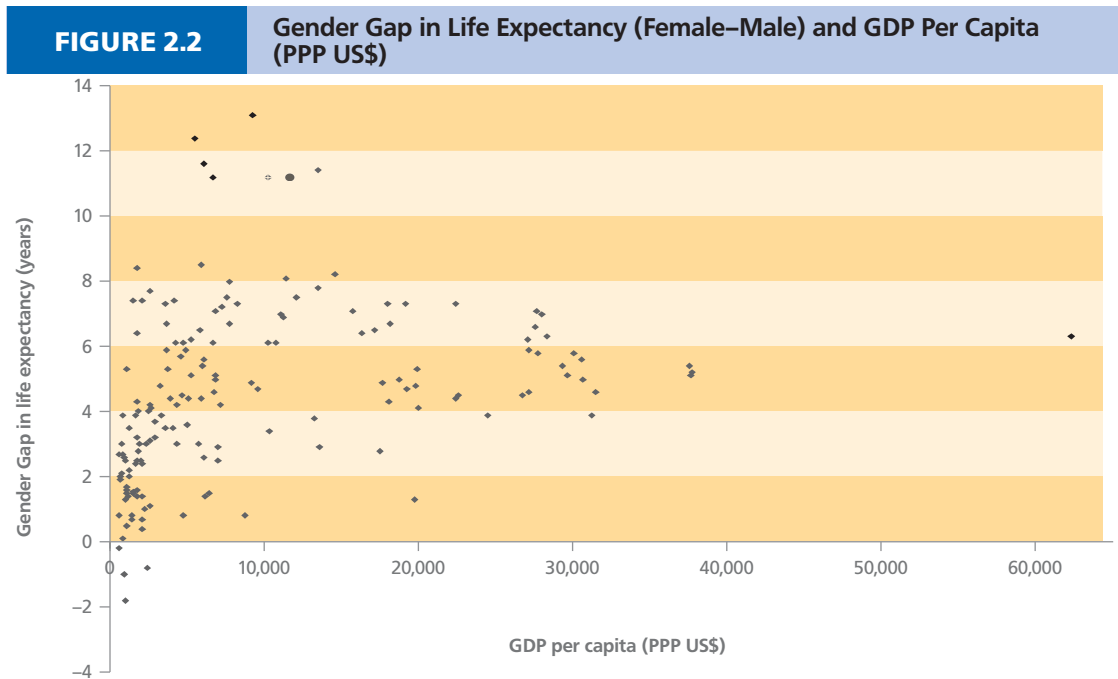
Figure 2.1 shows the trend in the health dimension in the form of a line graph and gender disparities in life expectancy and U5MR in the form of bar charts. Gender disparity in health has remained largely static during 1980–90 but it declined to 0.115 in 2000 and 0.0989 in 2004. This decline in the gender gap was due mainly to an improvement in the male U5MR. Gender disparity in life expectancy also decreased.



Sources of data: Malaysia, Department of Statistics, 1990b, 2000e & 2001.

Three features in the reduction of gender disparity in health are noteworthy. First, health status is the only area where women have a clear advantage over men. Second, the gender gap in life expectancy from 1980 to 2004 has been about 4.6 years in favour of females. This gender gap has persisted in spite of a significant increase in life expectancy for both women and men. There is evidence that women live longer than men given comparable care, and in most industrialized countries, women outlive men by 6–8 years. Third, despite the impressive growth in per capita income in the period under review, the gender gap in life expectancy has remained largely unchanged.

The relation between per capita income and the gender gap in life expectancy is further explored by means of cross-country data. Figure 2.2 demonstrates the gender gap in life expectancy and per capita GDP (PPP US\$) for countries with these data published in the *Human Development Report 2005* (UNDP, 2005).



Source of data: UNDP, 2005.

Figure 2.2 shows that the relationship between the gender gap in life expectancy and per capita GDP (PPP US\$) is curvilinear. The first part of the plot shows a positive relationship. As per capita GDP increases up to US\$10,000, the gender gap increases, mainly highlighting the decline in maternal mortality levels, and an improvement in female life expectancy. Then the gender gap remains at about 4–7 years for countries with per capita GDP higher than US\$10,000. The seven countries with very large gender gaps of over 10 years are all from the former Soviet Union.

## Education

In Malaysia, women have made considerable progress in education. Education gives women opportunities and enables them to make better choices. This is recognized by parents all over the world, and they try to obtain as much education as possible for their children.

This sub-section traces past trends in female and male achievements in education in Malaysia. In particular, the focus is on the adult literacy rate and on gross combined enrolment ratios for primary, secondary, and tertiary levels. Finally, the level and trend in gender disparity in education are examined.

The education dimension of the MGI measures the level and changes in achievements in education. It includes two indicators disaggregated by sex: (a) the adult literacy rate, and (b) the gross combined enrolment ratio at primary, secondary, and tertiary levels. The definitions of these two indicators are given in Box 2.2.




**BOX 2.2** Indicators of Educational Achievement

- (a) **Adult literacy** is usually defined as the ability to read and write a simple statement for persons aged 15 and over. But data based on this definition are only available from the 1980 Census. The later Censuses and Labour Force Surveys do not collect information on literacy directly. Following the 1991 Census, persons 15 years and over who have ever attended school are classified as literate.
- (b) The **combined gross enrolment ratios** presented in this report are based on the number of persons aged 6–24 years who were currently attending school and other institutions of higher learning at the time of the Censuses and Labour Force Surveys. The data for 1980, 1991, and 2000 are from the Censuses while data for 2004 are from the Labour Force Survey. Thus, to the extent that eligible respondents have been enumerated in the Censuses and Surveys, the figures include enrolments in both government-assisted and private schools as well as public and private institutions of higher learning. Students studying abroad but who were in Malaysia at the time of the Censuses and Labour Force Surveys would have been included.

Female literacy in Malaysia increased sharply by 36 per cent between 1980 and 2004. From a low level of 65 per cent, female adult literacy rates rose rapidly and reached 88 per cent in 2004. By contrast, the adult male literacy rate increased by 15 per cent to 95 per cent in 2004, from a much higher level of 82 per cent in 1980 (Table 2.2).

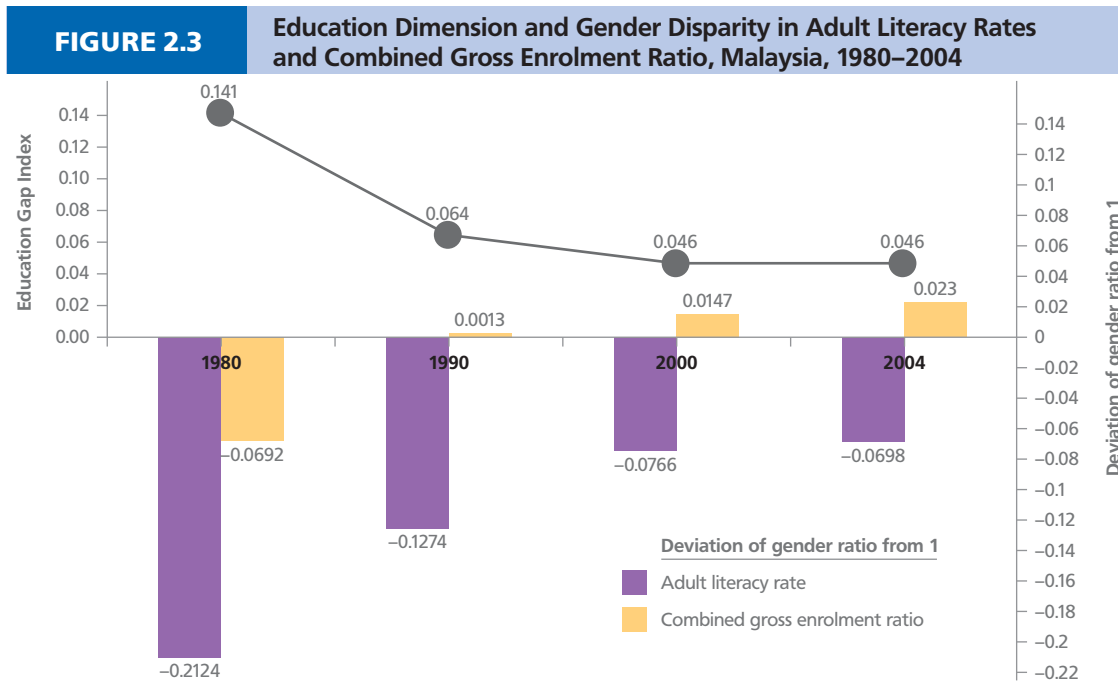
**TABLE 2.2** Adult Literacy Rate and Combined Gross Enrolment Ratios (Primary, Secondary, and Tertiary) by Sex, Malaysia, 1980–2004 (%)

	1980		1990		2000		2004	
	Female	Male	Female	Male	Female	Male	Female	Male
1. Adult literacy rate (15 years and over)	64.7	82.1	77.3	88.6	86.6	93.8	88.1	94.7
2. Combined gross enrolment ratio (primary, secondary, and tertiary)	53.0	56.9	64.1	64.0	65.3	64.3	67.2	65.7

Sources of data: Malaysia, Department of Statistics, 1983a, 1983b, 1991a, 2000b, 2000c & 2004.

With the rapid expansion in educational opportunities in Malaysia, enrolment in primary, secondary, and tertiary levels increased rapidly. Female enrolment rates reached 67 per cent in 2004 from a base of 53 per cent in 1980, which represents an increase of 27 per cent. Male enrolment rates increased by 15 per cent from 57 per cent in 1980 to 66 per cent in 2004.

Gender inequalities in education reduced dramatically between 1980 and 1990, and then remained at a low level. Between 1980 and 1990, the education dimension of the MGGI fell by 5.5 per cent per annum, and by only 2.8 per cent per annum in the 1990s (Figure 2.3).



Sources of data: Malaysia, Department of Statistics, 1983a, 1983b, 1990b, 1991a, 1991b, 2000b, 2000c, 2000e & 2004.

The overall declining trend in gender disparity in education conceals a pattern of contrasting changes in gender disparities in adult literacy and enrolment. Figure 2.3 shows the disparities in the form of a bar chart, where bars below the zero line indicate disparities in which females are disadvantaged, while those above the zero line are in favour of females. Even by 2004, there were relatively more illiterate females than males. More detailed data show that literacy rates are similar for both sexes at younger ages, and substantially lower rates for women are only found in the older age groups. The gradual replacement of the older groups by younger groups over time contributes to the reduction in overall gender disparity.

Women's position in school enrolment is, however, quite different. The female enrolment ratio was 93 per cent of that of males in 1980, but this disadvantage reversed in the early 1990s. The gender gap in enrolment has since been increasingly in favour of females.

There has been a dramatic increase in the demand and supply of school places in all developing countries. Moreover, developing countries are characterized by large wage differentials between occupations requiring different levels of skill and education. This reinforces the awareness that education and income are highly correlated, which further increases the demand for school places. Most governments in developing countries take cognizance of this demand, and they increase the supply to meet this growing demand.

The situation in Malaysia is no different. A main goal of development planning in Malaysia has been the provision of universal access to education, regardless of gender. Changes and



improvements to the education system have also been implemented to adapt education to national development needs, in particular, national unity, economic growth, poverty reduction, and human resource development. Improving labour productivity has always been recognized as vital to achieving sustained economic growth.

Following this objective, the education system has been expanded in a consistent manner. First, places for primary education were increased to cater for the growing number of children of school-going age. As primary enrolment increased, secondary education and then tertiary education were expanded. The Federal Government expenditure on education as a percentage of total development expenditure increased from 6.1 per cent in 1970 to 15 per cent in 2004.

The increasing job opportunities for women in the fast expanding manufacturing and service sectors in the 1980s and 1990s have also encouraged girls to enrol and to stay in school. Econometric studies (see, for example, Psacharopoulos and Patrinos, 2002) on returns to investment in education show that the rates of marginal returns from education from each additional year taken to achieve the next level are, on average, higher for females than for males, thus possibly encouraging females to remain longer in school.

Table 2.3 shows one set of results obtained from the 1997 Household Income Survey. Out of five levels of education, female marginal gross returns for three levels, i.e. from no certificate to lower secondary, from lower secondary to upper secondary, and from upper secondary to pre-university, are higher than those for males.

The lower female marginal returns from the highest level (from pre-university to tertiary) are, in part, due to females restricting themselves to certain courses and later to a few occupations, thus driving down returns.

<b>TABLE 2.3</b>		<b>Marginal Gross Returns to Successive Levels of Education, Malaysia, 1997 (%)</b>				
	<b>NoFEd-NoCert</b>	<b>NoCert-LowSec</b>	<b>LowSec-UppSec</b>	<b>UppSec-PreUni</b>	<b>PreU-HighEd</b>	
<b>Female</b>	6.2	6.2	15.7	23.2	16.4	
<b>Male</b>	7.4	3.7	12.0	21.8	21.8	

Source of data: Chung, 2003.

NoFEd = No Formal Education  
UppSec = Upper Secondary

NoCert = No Certificate  
PreUni = Pre-University

LowSec = Lower Secondary  
HighEd = Tertiary



## Economic Activity

The average person spends a large proportion of his or her adult life in work to earn a livelihood. The changes in supply and demand of labour and how they interact to generate different levels of gender inequalities over time are discussed below.

In particular, the level and trend in the economic activity dimension, together with its two indicators disaggregated by sex, namely (a) the labour force participation rate (LFPR) and (b) the proportion of non-agricultural employment, are examined. The definitions and data sources for the two indicators are given in Box 2.3.

### BOX 2.3 Indicators of Economic Activity

(a) The **labour force participation rate (LFPR)** is defined as the percentage of the working age population, i.e. those aged 15-64 years, who are either employed or unemployed. The employed are defined as those who had worked during the reference week of the Labour Force Survey for at least one hour for pay, profit, or family gain, or those who did not work because of illness, injury, disability, bad weather, vacation, labour dispute, and social or religious reasons but had a job, farm, enterprise or other family enterprise to return to. Also included are those on temporary layoff with pay who would definitely be called back to work.

The unemployed include both the actively and inactively unemployed. The actively unemployed include all persons who did not work during the reference week, but were available for work and were actively looking for work. Inactively unemployed persons include the following:

- (i) those who did not look for work because they believed no work was available or that they were not qualified;
- (ii) those who would have looked for work if they had not been temporarily ill or if the weather had not been bad;
- (iii) those waiting for answers to job applications, and
- (iv) those who had looked for work prior to the reference week.

(b) The **proportion of non-agricultural employment** is the proportion not employed in agriculture, forestry, livestock, and fishing.

The size of the labour supply available in the labour market is determined by the LFPR and the population aged 15–64. This measurement of labour supply is restricted to only a count of the number of workers. To go beyond this would encounter the difficult problem of measuring the quality of labour. Similar to the conventions used in the calculation of the gross national product (GNP), the estimates of labour supply and demand are based only on the numbers engaged in economic activities, or activities related to the market place.

The second indicator, the proportion employed in non-agriculture, shows the demand for and the distribution of labour in the modern sectors of the economy. Most people in less developed countries work in agriculture, but the proportion in agriculture declines with economic growth, while the proportion in industry and services rises.



The distinguishing feature of the Malaysian female LFPR is its relatively slow growth. It rose from 44 per cent in 1980 to 48 per cent in 1990, but has since remained around 47 per cent (Table 2.4).

	1980		1990		2000		2004	
	Female	Male	Female	Male	Female	Male	Female	Male
1. Labour force participation rate (%)	44.0	85.9	47.8	85.3	47.2	83.0	47.3	80.9
2. Proportion of non-agricultural employment	0.56	0.66	0.75	0.74	0.86	0.79	0.89	0.83

Sources of data: Malaysia, Department of Statistics, 1980, 1990a, 2000a & 2004.

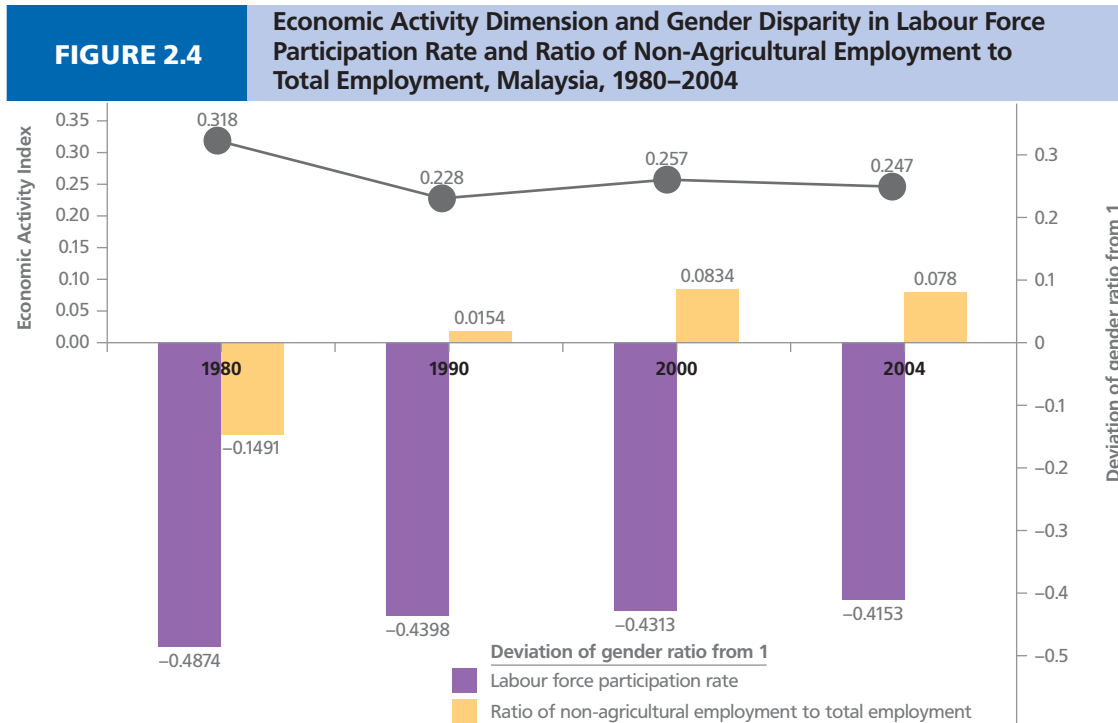
However, the data do support the expected rise in female labour force participation following the high economic growth rates of the 1980s and 1990s, and the larger number of women workers with more schooling. But current levels are lower than the rates of the top 10 countries with high levels of human development, which averaged 53.5 per cent in 2003.

More Malaysian women are likely to work, given the rising trends in female enrolment. To enable more women to participate in the labour force, there is a need to reduce their combined burden of work, childcare, and household duties. Several measures which employers can implement to achieve this include better childcare facilities and more flexible working hours. Male participation rates have declined slightly from 86 per cent in 1980 to 81 per cent in 2004, reflecting the higher retirement rate as the population ages.

Labour demand has grown strongly in the period 1980–2004. The unemployment rate fell from 5.7 per cent in 1980 to 3.5 in 2004. Full employment has been attained since 1992 when the unemployment rate fell to 3.9 per cent.

In addition to the increase in the demand for labour, the distribution of this demand by broad industrial sector has also changed. The proportion in non-agricultural employment increased for both sexes, but the female proportion has increased faster. Since 1990, the proportion of female workers in non-agriculture has been higher than that for males. The most remarkable change took place in the 1980s with the sizeable growth of employment in manufacturing, services, wholesale and retail, hotels and restaurants, which boosted the demand for women workers.

As a result of growth and changes in the labour market, gender inequalities, as measured by the economic activity dimension, declined significantly from 0.318 in 1980 to 0.228 in 1990. It rose slightly in 2000 to 0.257, in part, due to the higher proportion of women compared to men in non-agricultural employment. This increase was followed by a slight decline in 2004 (Figure 2.4).



Sources of data: Malaysia, Department of Statistics, 1980, 1980a, 1991, 2000a & 2004.

In 1980, women were at a disadvantage in terms of employment in non-agriculture, but this gender gap has been in favour of women since 1990. Gender disparities in labour force participation have decreased only slightly, reflecting the slow increase in the female rate.

## Women's Empowerment

Women's empowerment can be greatly enhanced by strong participation in political decision-making processes. The empowerment of women dimension of the MGGI measures the extent of women's participation in political decision-making and in administrative and managerial decision-making in the public and private sectors. It has two indicators: (a) political representation and (b) percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals. The indicator for political representation includes two statistical series: (a) percentage share of elected parliamentarians, and (b) percentage share of appointed senators.

**TABLE 2.5****Percentage Share of Elected Parliamentarians and Appointed Senators and Percentage Share of Legislators, Senior Officials, Managers, Professionals, Technicians and Associate Professionals, Malaysia, 1980–2004**

	1980		1990		2000		2004	
	Female	Male	Female	Male	Female	Male	Female	Male
1. Percentage share of elected parliamentarians	4.5	95.5	6.3	94.7	10.4	89.6	9.6	90.4
2. Percentage share of appointed senators	9.5	90.5	16.1	83.9	29.7	70.3	33.3	66.7
3. Percentage share of legislators, senior officials, managers, associate professionals, and technicians	26.8	73.2	33.2	66.8	32.2	67.8	35.0	65.0

Sources of data: Unpublished data from Malaysian Parliament; Malaysia, Department of Statistics, 1980, 1990a, 2000a & 2004.

Women's share of seats in the House of Representatives (elected parliamentarians) increased steadily from 4.5 per cent in 1980 to 10.4 per cent in 2000, but fell slightly to 9.6 per cent in 2004 (Table 2.5). Becoming an elected member of parliament is the culmination of a long process which begins with becoming a member of a political party, holding a post, gaining nomination for the country's general elections, and finally, winning the contested seat. Women's membership in the three major component parties of the National Front (Barisan Nasional) has steadily increased. By 1983, women constituted 54 per cent of members of the United Malays National Organization (UMNO). The national women's wing (Wanita MCA) of the Malaysian Chinese Association (MCA) was established in 1975, and this was followed by the women's wing of the Malaysian Indian Congress (MIC). In 2000, 36 per cent of MCA's members were women. Each of the major political parties is currently focusing on the recruitment of young women supporters.

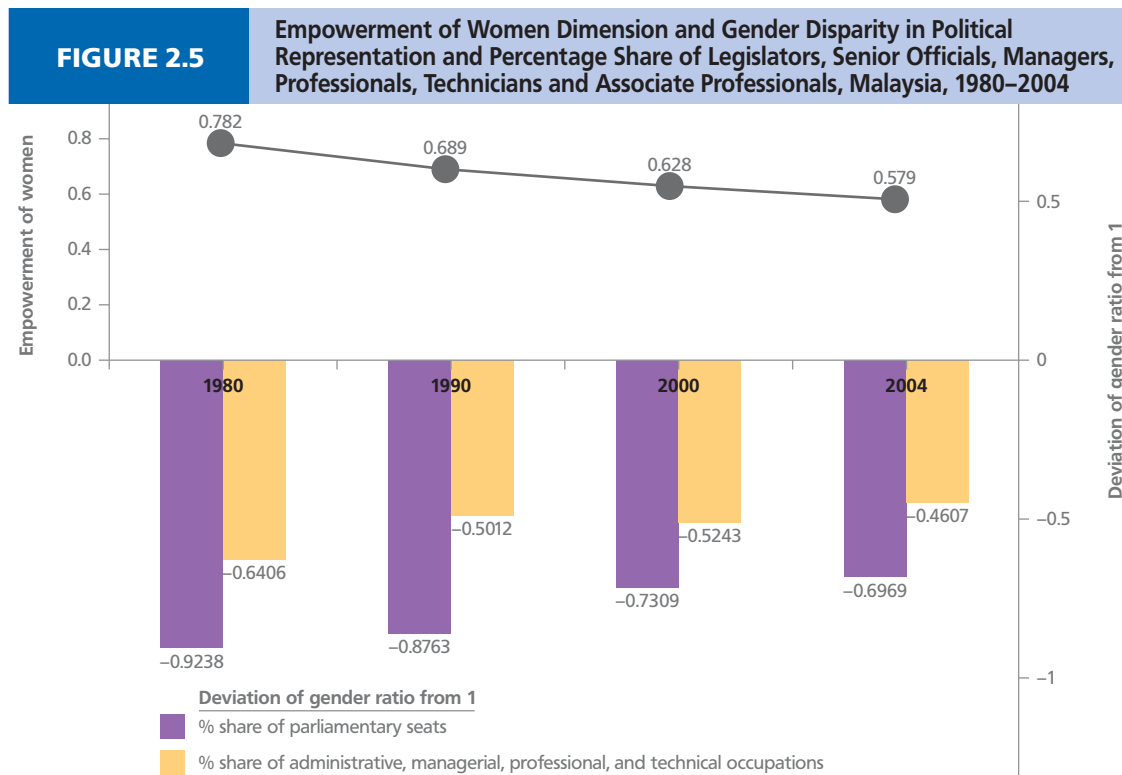
Women's share of elected parliamentarians is one of the indicators of a country's commitment to women's empowerment. Currently, Malaysian women have not been able to attain the target of 30 per cent of elected parliamentarians as stated in the Beijing Declaration and Platform for Action (1995), which is considered a critical level before women can have an impact on political decision-making.

The Legislature in Malaysia consists of the House of Representatives and the Senate. Senators are appointed by the Yang di-Pertuan Agong (the Malaysian King) based on their experience and representation of professional, commercial, and other groups, including minority groups. Other senators are elected by the State Legislatures, each state returning two senators. Women's share of senators has increased sharply over time from 9.5 per cent in 1980 to 33.3 per cent in 2004—nearly a four-fold increase.



Women's share in the occupational category of legislators, senior officials, managers, professionals, technicians and associate professionals has also improved. The percentage of women in this group increased from 26.8 per cent in 1980 to 35.0 per cent in 2004. Reflecting the trends in the above indicators, the MGGI dimension for empowerment of women declined from 0.782 in 1980 to 0.579 in 2004. However, it remains the largest component of disparity of the MGGI.

Figure 2.5 shows that gender disparities in both indicators—political representation and decision-making in managerial and administrative positions—are not in favour of women, though these disparities decreased over the period under review.



Sources of data: Unpublished data from Malaysian Parliament; Malaysia, Department of Statistics, 1980, 1991a, 2000a & 2004.





# 3

## *POLICIES AND PROGRAMMES TO ACHIEVE GENDER EQUALITY*



## POLICIES AND PROGRAMMES TO ACHIEVE GENDER EQUALITY

Against the backdrop of economic growth and structural transformation, national policy-makers have given increased emphasis to gender issues. Specific programmes have been established to ensure women are mainstreamed into the development process, including improving the national machinery for incorporating women in development, reviewing laws affecting women, and improving access to education, training, and health care. Over the past few decades, substantial progress has been made, as was shown below, in narrowing the gender gap in Malaysia in most spheres of development.

### Policies

Women's advancement in Malaysia can be viewed in the context of the country's overall development as well as in relation to plans and policies specifically aimed at women. Gender as a development focus was first mentioned in the Third Malaysia Plan (1976–1980), which encouraged the active participation of women in development and their contribution to the economy. Subsequent five-year development plans have given greater prominence to gender issues, and since the Sixth Malaysia Plan (1991–1995), a full chapter has been devoted to policies and programmes that promote women in development. The inclusion of a chapter on women in development was a direct outcome of the National Policy on Women formulated in 1989.

The National Policy on Women (NPW) was a major initiative affecting gender equality and women's empowerment. Its contents were incorporated into the Sixth Malaysia Plan and have formed the basis for many subsequent policies and programmes. The NPW's primary objectives are to ensure equitable sharing in the acquisition of resources and information, opportunities, and benefits of development for men and women; to integrate women in all sectors of national development in accordance with their capabilities and needs in order to eradicate poverty, ignorance, and illiteracy; and to ensure a peaceful, harmonious, and prosperous nation. The main areas covered in the NPW are health, education and training, law, employment, power sharing, sports, media, religion, and culture. Subsequent five-year national plans have incorporated additional initiatives to empower women (Box 3.1).

Policies and programmes designed to support the advancement of Malaysian women have been heavily influenced by the ever-growing number of NGOs. The women's movement has worked closely with government to improve the rights and socio-economic status of women.



**BOX 3.1**

**Policy Thrusts for Women and Development in the Ninth Malaysia Plan, 2006–2010**

During the Eighth Malaysia Plan (2000–2005) period, significant progress was made in contributions towards the social and economic development of the nation. Women attained higher levels of education, increased their participation in the labour force, and were involved in various business activities.

In the Ninth Malaysia Plan (2006–2010) period, the Government will undertake the following efforts to ensure women's full participation in the country's development.

**Participation in the labour force.** Family-friendly workplace practices and the provision of appropriate training programmes will be introduced to ensure a greater involvement of women in the labour force. Measures will also be undertaken to ensure women in the informal sector have better access to social protection.

**Business and entrepreneurial activities.** Financial programmes will be created to enable women to obtain loans to enhance their participation in businesses. Women entrepreneurs will be encouraged to network with organizations both locally and abroad.

**National machinery and institutional capacity.** Efforts will be undertaken to meet the 30 per cent quota for women in decision-making positions in the public sector.

**Laws and regulations.** Existing laws will be reviewed to prohibit all forms of sexual harassment and to ensure women are not discriminated against.

**Education and training.** More education and training opportunities will be provided to work towards a knowledge-based economy. More females will be encouraged to enter into the science and engineering sectors. Programmes in computer literacy and applications will also be conducted.

**Health status and well-being.** Efforts to promote the health of women and their families will be continued. As women's HIV infection rates are on the increase, awareness and education programmes will be further promoted.

**Violence against women.** Awareness and training programmes relating to gender roles will be implemented to prevent violence and abuse.

**Poverty and quality of life.** Programmes will be established to ensure poverty amongst women, in both rural and urban areas, is reduced. Special emphasis will be given to single mothers

**Issues pertaining to women at the international level.** The Government, the private sector, and NGOs will continue to participate in international forums to ensure women's advancement.

Source of data: Malaysia, Economic Planning Unit, 2006.



## Malaysia's International Commitments

A major stride taken to improve the situation of Malaysian women was the presentation of a national report to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in May 2006 (Box 3.2). CEDAW, adopted in 1979 by the United Nations General Assembly, is often described as an **international bill of rights for women**. It consists of 30 articles and defines what constitutes **discrimination against women** and sets up an agenda for national action to end such discrimination. CEDAW defines discrimination against women as 'any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field'.

By ratifying the Convention, States commit themselves to undertake a series of measures to end discrimination against women in all forms, including the following:

- to incorporate the principle of equality of men and women in their legal system, abolish all discriminatory laws and adopt appropriate ones prohibiting discrimination against women;
- to establish tribunals and other public institutions to ensure the effective protection of women against discrimination; and
- to ensure elimination of all acts of discrimination against women by persons, organizations, or enterprises.

Other important steps taken include accepting the 1995 Beijing Platform for Action and the formulation of the 1997 Plan of Action for the Advancement of Women. Malaysia is also party to the Convention on the Nationality of Married Women and the International Labour Organization (ILO) Convention No. 100 (on equal remuneration for men and women workers for work of equal value).



**BOX 3.2**

**Convention on the Elimination of All Forms of Discrimination  
Against Women (CEDAW)**

The Government confirmed its commitment to women's rights by ratifying CEDAW in 1995. In May 2006 a major step towards women's empowerment in Malaysia took place when the Government presented its national report to CEDAW in New York.

A CEDAW Steering Committee, chaired by the Secretary-General of the Ministry of Women, Family and Community Development (MWFCD), was established to monitor the implementation of CEDAW and to prepare the report. The Committee comprised members from relevant ministries and government agencies and the National Council of Women's Organizations (NCWO). NCWO is the umbrella body of women NGOs in Malaysia. As a result of the submission of the national report, Malaysia decided to withdraw some of the reservations it had upon ratification. It is now considering making further withdrawals.

CEDAW commended Malaysia for achievements in the field of women's education; the establishment of a Cabinet Committee on Gender Equality and gender focal points in various ministries; its amendments on various laws; efforts to establish legal reforms on violence against women and its current initiatives to amend the Domestic Violence Act, the Employment Act, the Industrial Relations Act, and the Occupational Safety and Health Act.

The United Nations CEDAW Committee also made the following recommendations:

- Increase the representation of women in elected and appointed bodies in all areas of public life, including at the international level
- Intensify equal opportunities for men and women in the area of employment
- Enact legislation criminalizing marital rape
- Enact laws and establish procedures to safeguard the rights of migrant workers, including migrant domestic workers, and adopt laws relating to the status of asylum-seekers and refugees
- Implement measures to change stereotypical roles of men and women, including awareness-raising and educational campaigns
- Ensure that the Convention and its provisions are incorporated into national law and become fully applicable in the legal system

Source: UN (2006), *Concluding Comments of the Committee on the Elimination of Discrimination Against Women: Malaysia*, New York.



## Non-Aligned Movement (NAM) Ministerial Meeting on the Advancement of Women

In 2005, Malaysia hosted the Ministerial Meeting on the Advancement of Women. Some 380 delegates attended the meeting where ministers from 79 countries held discussions to chart new ground on enhancing gender mainstreaming at all levels and in all sectors in a coordinated, effective, and sustained manner. The objectives of the meeting were to share experiences among NAM countries on best practices, achievements, gaps, and challenges in empowering women and achieving gender equality, peace, and development, and to identify specific and practical projects and programmes that NAM, as a group, could implement to help promote the advancement of women in NAM countries.

One of the main outcomes of the NAM Ministerial Meeting was the establishment of a NAM Institute for the Empowerment of Women (NIEW). The Institute will serve as an international institution dedicated to women's development and empowerment through a lifelong learning approach.

## National Machinery for the Advancement of Women

During the Eighth Malaysia Plan (2000–2005) period, the Government established the Ministry of Women, Family and Community Development (MWCFD) to address all issues relating to women and to promote gender equality and women's empowerment throughout government.

To further strengthen the national machinery, a Cabinet Committee on Gender Equality was established in 2004 to provide policy direction and monitor activities affecting women and family development. Gender focal points were appointed in all ministries and selected agencies to ensure integration of a gender perspective in the formulation and implementation of policies and programmes and the removal of any form of discrimination against women.

## Laws Affecting Women

**Gender equality.** As a result of the ratification of CEDAW, one of Malaysia's major achievements has been the inclusion of the principle of non-discrimination as enshrined in CEDAW into the Federal Constitution. In 2001, Article 8(2) of the Constitution was amended to include 'gender' as one of the prohibited grounds for discrimination. Consequently, a number of laws were amended and many are currently being reviewed.

**Protection against violence.** An important legal landmark for women in Malaysia was the Domestic Violence Act 1994. What commenced as a campaign to raise public awareness on violence against women in 1985 by the Association of Women Lawyers in Malaysia culminated a decade later in legislation which allowed for cases of domestic violence to be dealt with as criminal offences with appropriate penalties.

Programmes are in place to train support personnel such as police and hospital staff dealing with cases of abuse. One-stop crisis centres have also been set up in a number of government hospitals with the cooperation of women NGOs.



**Employment rights.** To provide a more equitable and conducive working environment for women, a number of new laws, as well as amendments to existing laws, have been made. At the workplace, women have had to overcome several constraints to achieve equal status with men. Prior to 1966, women civil servants were not accorded permanent status and appointments of married women were on a monthly basis. A woman was also not eligible for pension even if she was appointed to an established post. In the early 1960s, women's groups, led by the Women Teachers' Union, began to lobby for equity at work. The Government adopted the principle of equal pay in 1967 and in 1971 permanent employment tenure was accorded to women employees.

The Income Tax Act 1967 was amended in 1971 to allow women wage earners to elect for separate tax assessments, unless they chose not to be assessed separately. In addition, provisions were also made for tax deductions to be provided to employers for the purpose of establishing childcare centres near or at the workplace.

In 1999, the Government launched the Code of Practice on the Prevention and Eradication of Sexual Harassment at the workplace. The Code contains guidelines to employers on the establishment and implementation of in-house preventive and redress mechanisms to prevent sexual harassment. Prior to this, women workers who faced sexual harassment at the workplace had no means of recourse under the law.

The Employment Act 1955, a major law which regulates all labour relations in the private sector, was amended in 1998, providing among others, flexible working hours. In the public sector women are also accorded maternity leave of 60 days (from 42 days) for up to a maximum of five births. In 2003, paternity leave was extended from 3 to 7 days. Malaysia is, however, one of a group of 20 out of 152 countries which currently provide maternity leave of less than 84 days.

**Economic protection.** To ensure the economic protection of women, the Pensions Act was amended to allow widows of workers in the public sector to receive pensions even after they have remarried. The Land Act 1960 was also amended to entitle both husband and wife to have rights to the land in a group village development scheme run by the Federal Land Development Authority (FELDA), thereby providing security to women, who have worked on the land alongside their men.

**Guardianship rights.** The Guardianship of Infants Act 1961 was amended in 1975 to allow both parents to be the legal guardian; previously, the law only recognized the father as the legal custodian of a minor. In 2000, the law was subsequently amended to enable mothers to sign all documents involving their under-aged children.

## Health Care for Women

Women's health, in particular their reproductive health (including maternity care), has long been given priority, especially in the rural health network of clinics. The rural health service infrastructure has provided a comprehensive range of services and information for women, with





a special focus on maternal and child health services even to the more remote and disadvantaged groups. Access to family planning services has enabled women to choose freely the number and spacing of their children. Health care for women has now been expanded beyond health concerns of women in the reproductive age to include broader aspects, such as early detection of cancer, menopause, health needs of working women, and environmental issues affecting women. In addition, gender-based programmes targeting women and children, in particular the Prevention of Mother-to-Child Transmission of HIV Programme, have improved the chances of HIV-positive mothers delivering healthy babies.

## Gender Analysis Training and Sensitization

**Policy makers and programme implementers.** Gender-sensitization training and programmes have been provided to government officers since 1990 to ensure that women are mainstreamed into development. The first gender-sensitization training, which was held in 1990, was followed subsequently by a number of ad hoc courses organized by the Secretariat for Women's Affairs (HAWA) for various groups of civil servants at all levels of seniority. Today, the National Institute of Public Administration (INTAN), a national civil service training institute, integrates gender perspectives into all training course modules and provides specific courses in gender sensitization and gender analysis. In addition, gender-awareness training today incorporates religious perspectives so as to further align it with religious beliefs. A gender expert roll has also been prepared by the MWFCDC as a point of reference for trainers in both public and private institutions that intend to include gender analysis and gender sensitization training in their courses.

**Gender budgeting.** Gender budgeting is led by the MWFCDC with technical and financial assistance provided by the UNDP. The aim of gender budgeting is to promote gender mainstreaming within government. Gender-responsive budgets will assist in monitoring and evaluating government expenditure against gender and development commitments made at the national, regional, and international levels. A pilot project has been completed which focused on training budget officers in five pilot ministries in gender budget analysis skills and developing gender-sensitive budget statements.

**Law enforcers.** As violence against women increases, there is a necessity to create gender-sensitive officers of the law such as police officers and other enforcement officers. Progress has been evident in this regard with gender-sensitization courses incorporated into their training. In 2002, for example, the Judicial and Legal Training Institute started introducing gender-sensitization courses in its modules.

**Bridging the digital divide.** Efforts have been made to improve women's access to information and communications technology (ICT), as well as to bridge the digital divide between women and men. A working group on women and ICT was established to design strategies and programmes on ICT for women aimed primarily at rural women and urban poor women, single mothers, disabled and older women, as well as women who are involved in small and medium enterprises (SMEs).

# 4

## *INSIGHTS AND CHALLENGES*



## INSIGHTS AND CHALLENGES

Gender inequalities, as measured by the MGGI, have decreased from 1980 to 2004 in an environment of increasing levels of achievement for both women and men. The level of gender inequality in 2004 was about 71 per cent of the 1980 level.

The rate of decrease has not been uniform in the four dimensions of the MGGI. Gender inequalities in Malaysia remain highest in the empowerment of women, followed by inequalities in economic activity, health, and lastly education. The decrease in gender disparity in education has been the most significant; the level in 2004 was only one-third of the 1980 level (Table 4.1).

	1980	1990	2000	2004
MGGI	0.340	0.275	0.261	0.243
Health	0.119	0.119	0.115	0.099
Education	0.141	0.064	0.046	0.046
Economic activity	0.318	0.228	0.257	0.247
Empowerment of women	0.782	0.689	0.628	0.579

Sources of data: Figures 1.1, 2.1, 2.3, 2.4, & 2.5.

The process of change in the level of gender disparities highlights the importance of the initial expansion of the education system, which provided for school places for both boys and girls. This pool of educated Malaysian women provided the labour needed in the expansion of the manufacturing and service sectors during the boom years of the 1980s and 1990s. Thus, gender inequalities decreased, in part, because of improvements in social infrastructure, especially education, strong macroeconomic growth, and the structural transformation of the economy.

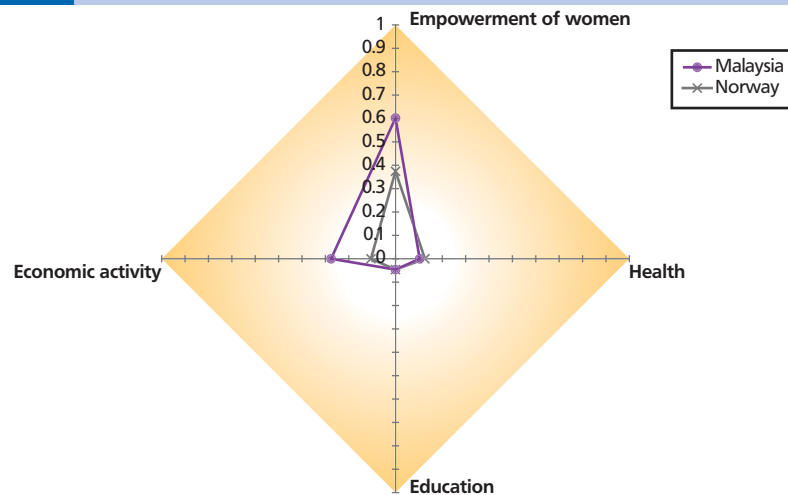
Women's progress in participating in the development process was also facilitated by the increasing interest in gender issues, and by pragmatic policies and programmes to mainstream women in development. While substantial progress has been made in reducing gender inequalities, more remains to be done to maintain the momentum. Gender inequalities are still relatively high in the area of empowerment of women. Empowerment of women through better political representation, as well as by enabling more women to hold decision-making positions, will improve their well-being.

While Malaysia has made significant progress in reducing gender inequalities, this level of gender inequality is, however, still high compared to some of the high human development countries. Figure 4.1 compares the four sub-dimensions of the MGGI with those calculated for Norway in 2004. The gender gap index for Norway is only 0.153, which is some 37 per cent



smaller than that for Malaysia. Gender inequalities are quite similar in health and education, but Malaysian gender inequalities are considerably higher in economic activity and the empowerment of women. Nonetheless, even for a country like Norway, which has consistently achieved the highest level of human development and has a long history of democracy, gender inequality still exists.

**FIGURE 4.1** The MGGI and Sub-dimensions, Malaysia and Norway, 2004



Sources of data: Malaysia, Department of Statistics, 1991, 2004 & UNDP, 2005.

Key challenges for Malaysia are thus to reduce further gender inequalities in economic activities and in empowerment. Female labour force participation can be expected to increase in the future since Malaysian women seeking first-time employment are more educated than in the past.

The Ninth Malaysia Plan's (2006–2010) proposals to introduce measures that will encourage family-friendly workplace practices, including flexible working arrangements, community childcare and nursery centres, and retraining opportunities, should help boost women's labour force participation as women can better balance their work, childcare, and household duties.

Malaysian women's share of elected parliamentarians at 9.6 per cent is low, and far from the target of 30 per cent, which is considered a critical level before women can make an impact in political decision-making. Increased efforts to meet the 30 per cent quota for women in decision-making positions will undoubtedly contribute towards women's empowerment. Beyond this measure, the MWFCD, NGOs, and the private sector will need to maintain advocacy and promote new policy initiatives to ensure further gains are made in the area of empowerment of women.

## ANNEXES

### ANNEX 1 Calculating the MGGI and Its Sub-dimensions

This Annex outlines the methodology of the Malaysian Gender Gap Index (MGGI), and shows the steps taken to calculate it and its related sub-dimensions. The information on the types of data used and their sources is also given. A final sub-section provides some suggestions on updating the MGGI and its sub-dimensions.

#### Concept and Methodology of the MGGI

The MGGI is a composite index, which provides a summary measure of the level of gender disparity in Malaysia. It is based on the absolute value of a relative gender gap. The MGGI takes on a minimum value of zero when there is no gender disparity, and a value of one when there is maximum gender disparity.

The definition and calculation of the MGGI and its sub-dimensions can be shown concisely in notation. If we denote the level of female achievement, or in short, the female score as  $X_f$ , and the corresponding male score as  $X_m$ , the MGGI is defined as

$$(1) \quad \left| \frac{X_f - X_m}{X_m} \right|$$

where  $X_f - X_m$  is the gender gap, which is the difference between the female score and the male score. The MGGI is the absolute value of the ratio of the gender gap and the male score. It also has two desirable properties of a measure of inequality: (a) mean or scale-independence, and (b) principle of transfers.<sup>†</sup>

Formula (1) is equivalent to

$$(2) \quad \left| \frac{X_f}{X_m} - 1 \right|$$

<sup>†</sup>Mean-independence or scale-independence requires that the inequality measure should not change if all incomes increase or decrease in the same proportion, while principle of transfers requires that the inequality measure decreases if some amount of income is transferred from a richer person to a poorer person without altering their relative positions.





We call the ratio  $X_f/X_m$  a gender ratio. Formula (2) shows that the MGGI is the absolute difference between the gender ratio and 1.

When  $X_f = 0$ , the MGGI takes the value of 1. When  $X_f = X_m$ , the MGGI takes a value of zero. When  $X_m = 0$ ,  $X_f/X_m$  is not mathematically defined. However, when  $X_f/X_m$  is greater than 1, we take the upper limit of this ratio as 2. First, the upper limit of 2 is convenient, because in this case the MGGI takes the value of 1 and secondly, most gender ratios computed from data do not exceed 2. A gender ratio based on  $X_m/X_f$  will not work since this will frequently be greater than 2.

In practice, sub-dimensions for the four areas of concern—(a) health, (b) education, (c) economic activity and (d) empowerment of women—are calculated first. The sub-dimension for the  $h$ th area is

$$MGGI_h = \frac{1}{k_h} \left| \sum_{i=1}^{k_h} \frac{X_{fhi}}{X_{mhi}} - 1 \right|$$

where  $k_h$  is the number of indicators included in the  $h$ th sub-dimension,  $X_{fhi}$  is the female score for the  $i$ th indicator selected for the  $h$ th area, and  $X_{mhi}$  is the corresponding male score.

The MGGI is the average of the sub-dimensions as shown below:

$$MGGI = \frac{1}{4} \sum_{h=1}^4 MGGI_h$$

### Calculating the MGGI and Its Sub-dimensions, 2004

The steps taken to calculate the MGGI and its sub-dimensions for 2004 are described and shown below. Definitions of the selected indicators, descriptions of the types of data used, and their sources are also provided.



## 1 Health

The worksheet for the health dimension is shown in Annex 2d. The first column shows the two selected indicators for this area: (a) life expectancy at birth and (b) U5MR.

- (a) **Life expectancy at birth** is defined as the expected number of years lived, on average, of a baby born subject to the same age-specific death rates of the current population. This figure is obtained from current or period life tables.

The second column in the worksheet shows the value of the selected indicator for females and males, or the female and male scores. For 2004, the life expectancy for Malaysian females is estimated to be 76.1 years, while for males it is 71.7 years. This figure can be obtained from the abridged life tables compiled by the Department of Statistics (DOS).

The third column shows the value of the gender ratio for the selected indicator. The gender ratio is the ratio of the female score to that for males. For life expectancy at birth, the ratio is the life expectancy of females divided by that for males, that is, 76.1 divided by 71.7 giving a value of 1.0617.

The fourth column shows the deviation of the gender ratio from 1.0 which gives a value of 0.0617. The deviation is converted to an absolute deviation in column 5, that is, the negative sign for a negative deviation in column 4 is ignored and all deviations in column 5 are assumed positive.

There is considerable evidence that the maximum potential life expectancy for women is greater than that for men. Therefore, in measuring gender disparities in life expectancy, a case could be made for making an adjustment to the observed differences. In the MGGI, a simplifying assumption is made whereby gender inequality in life expectancy is recognized where male and female life expectancy is not the same.

- (b) The **U5MR** is the probability (expressed as a rate per 1,000 live births) of a child dying before reaching its fifth birthday.



This indicator is not directly available from DOS publications. However, we can compute this indicator from the number of infant and toddler deaths published by DOS in its Vital Statistics Bulletin, as shown below:

$$\text{U5MR} = \frac{\text{Number of infant deaths} + \text{Number of toddler deaths}}{\text{Number of live births}} \times 1000$$

Infant deaths are deaths below one year of age, and toddler deaths are those between one and four.

The estimated female and male scores for the U5MR are 7.1 and 8.3 per 1,000 live births respectively in 2004. These are shown in column 2. The gender ratio, deviations of gender ratio from 1, and the absolute deviation are calculated in columns 3, 4, and 5. Note that for the U5MR, the deviation of the gender ratio from 1 is  $-0.1362$ , and the negative sign is ignored in calculating the absolute deviation in column 5.

The sub-dimension for health of 0.0989 is calculated in column 6. It is the average of the two absolute deviations of 0.0617 and 0.1362 shown in column 5.

## 2 Education

The two indicators selected to represent the area of education are (a) adult literacy rate, and (b) the combined gross enrolment ratio for primary, secondary, and tertiary levels.

- (a) In both the 1991 and 2000 Censuses, estimates of the literacy rate are based on the proportion of persons who had ever attended school. This information is also available from the Labour Force Surveys. The term 'literacy' was based on whether a person could read a letter or newspaper, and write a simple letter in the censuses before the 1991 Census.

Thus, the adult literacy rate for the MGGI is based on the proportion aged 15 and over who have ever attended school.





- (b) Estimates of the combined gross enrolment ratio for primary, secondary, and tertiary levels for 1980 and 1990 are from the 1980 and 1991 Censuses. The estimates for 2000 and 2004 are from the Labour Force Surveys. This ratio has to be estimated in two steps: (i) finding the number of persons enrolled and (ii) the number of persons aged 6–24 years.

The number enrolled is based on the number of persons aged 5–24 years who were reported as currently attending school or other educational institutions. The denominator is based on the population aged 6–24 years. This is calculated by subtracting the number of persons aged 5 years from the number aged 5–24 years. We did not adjust the number of persons aged 5–24 years who are currently attending school because the 1991 Census shows few persons at age 5 attending school, and single-year data for persons currently attending school are not available from other sources.

Once the values of the two selected indicators for females and males are calculated, the gender ratios are then calculated. Then the deviations of the gender ratios from 1 are computed followed by the calculation of the absolute deviations. The education sub-dimension is computed as the average of the two absolute deviations.

### 3 Economic Activity

Two indicators are also selected to represent economic activity. These are (a) labour force participation rate (LFPR) and (b) the proportion of non-agricultural employment to total employment.

- (a) The **LFPR** is defined as the percentage of the working-age population, i.e. those aged 15–64 years, who are either employed or unemployed. The employed are defined as those who had worked during the reference week of the Labour Force Survey for at least one hour for pay, profit, or family gain, or those who did not work because of illness, injury, disability, bad weather, vacation, labour dispute, and social or religious reasons but had a job, farm, enterprise, or other family enterprise to return to. Also included are those on temporary layoff with pay and who will definitely be called back to work.



The unemployed include both the actively and inactively unemployed. The actively unemployed include all persons who did not work during the reference week, but were available for work, and were actively looking for work. Inactively unemployed persons include the following:

- (i) those who did not look for work because they believed no work was available, or that they were not qualified;
- (ii) those who would have looked for work if they had not been temporarily ill or if the weather had not been bad;
- (iii) those waiting for answers to job applications, and
- (iv) those who had looked for work prior to the reference week.

Data for these indicators are from the Labour Force Survey Reports published by DOS.

- (b) The proportion of non-agricultural employment to total employment is

$$\frac{\text{Number employed in non-agriculture (15–64)}}{\text{Total employed (15–64)}}$$

The values of the two selected indicators are shown in column 2. The gender ratio, deviations from 1, and absolute deviations are then calculated. The economic activity sub-dimension is calculated as the average of the two absolute deviations.

#### 4 Empowerment of Women

The two indicators are (a) political representation and (b) percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals. These indicators show the extent of empowerment in decision-making. Unlike the other selected indicators, political representation is made up of two sub-indicators: (i) percentage share of elected parliamentarians, and (ii) the percentage of women senators.

The first sub-indicator is computed as

$$\begin{aligned} \text{Percentage of female elected} &= \frac{\text{Number of female elected parliamentarians}}{\text{Total number of parliamentarians}} \times 100 \\ \text{parliamentarians} & \\ \text{and} & \\ \text{Percentage of male elected} &= \frac{\text{Number of male elected parliamentarians}}{\text{Total number of parliamentarians}} \times 100 \\ \text{parliamentarians} & \end{aligned}$$



The second sub-indicator is computed as

$$\text{Percentage of female share of senators} = \frac{\text{Number of female senators}}{\text{Total number of senators}} \times 100$$

and

$$\text{Percentage of male share of senators} = \frac{\text{Number of male senators}}{\text{Total number of senators}} \times 100$$

The information on the first sub-indicator is obtained from the Malaysian Election Commission, and the second from the Parliamentary Secretariat.

The second indicator—percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals—is obtained from the Labour Force Surveys, and is computed for females and males separately as

$$\frac{\text{Number of legislators, senior officials, managers, professionals, technicians and associate professionals (15–64)}}{\text{Total employed persons (15–64)}} \times 100$$

The calculation of the empowerment of women sub-dimension is different from that for the other sub-dimensions because the first indicator, political representation, is made up of two sub-indicators, i.e.

- (a) percentage of female share of elected parliamentarians, and
- (b) percentage of female share of senators.

First, the gender ratios of (a) and (b) are calculated; then the deviations of (a) and (b) are calculated in column 4, and the absolute deviations in column 5. Next, the average of the deviations of (a) and (b) are entered in column 5 as the absolute deviation for the indicator, political representation, which is  $-0.6969$  for 2004. The calculations for the percentage share of legislators, senior officials, managers, professionals, associate professionals, and technicians are similar to those for the other indicators.

The sub-dimension for empowerment of women (0.5788) is the average of the absolute deviations of political representation (0.6969) and the absolute deviation for the percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals (0.4607).



From 2001, the coding of occupations is based on the *Dictionary of Occupational Classification 1998*, while for earlier years, the coding of occupations was based on the *Dictionary of Occupational Classification 1980*. Because of a substantial difference in the two classifications for the group 'legislators, senior officials, managers, professionals, technicians and associate professionals', data for this indicator for 2000 are based on information from the Labour Force Survey 2001, which, like the 2004 Labour Force Survey, uses the new classification. The data for 1980 and 1990 for this occupational group have been approximately adjusted to reflect this change in classification.

The MGGI for 2004 is calculated as the average of the four sub-dimensions, and the value is entered in column 6. For example, the MGGI for 2004 is calculated as

$$\frac{0.0989 + 0.0464 + 0.2467 + 0.5788}{4} = 0.2427$$

Column 7 shows the calculation for the percentage contribution of each of the sub-dimensions to the total gender disparity measured by the MGGI. The percentage contribution from a sub-dimension is calculated as

$$\frac{\text{MGGI}_h}{4 \times \text{MGGI}} \times 100$$

For example, the contribution from the health sub-dimension is

$$\frac{0.0989}{4 \times 0.2427} \times 100 = 10.2\%$$

The percentage contributions for the other sub-dimensions shown in column 7 are computed in a similar way.

Finally, we note that the overall gender disparity measured by the MGGI can be the result of two types of gender disparities: (a) where females are disadvantaged compared to males, and (b) where males are disadvantaged compared to females. The percentage contributions from these two types of disparities are calculated in column 5 at the bottom of the worksheet.



First, we calculate the gender disparity where females are disadvantaged compared to males. The absolute deviations of the indicators that show negative values in column 4 are added, with the exception of the negative value shown for the UM5R, because a negative value for this indicator shows that female mortality rates are lower than those for males, and thus they are better off. For all other indicators, a negative deviation shows that females are worse off. For example, for 2004, the following absolute deviations for those indicators showing negative values (with the exception of the U5MR) are summed up. This gives a value of 1.6428 and is shown as (A).

Secondly, to obtain the contribution from areas where males are disadvantaged, we sum up all absolute values of positive deviations and the deviation from under-5 mortality. This adds up to 0.2988 and is shown as item (B).

The total of the two quantities (A) and (B) is 1.9416.

The percentage contribution to total disparity from areas where females are disadvantaged compared to males is

$$\frac{1.6428}{1.9416} \times 100 = 84.6 \%$$

The percentage contribution to total disparity from areas where males are disadvantaged is

$$\frac{0.2988}{1.9416} \times 100 = 15.4\%$$

### Updating the MGGI and Its Sub-dimensions

The MGGI and its sub-dimensions have been calculated for 1980, 1990, 2000, and 2004. The current series of indices will need to be extended as more current data become available. The steps to be taken, as well as some suggestions for the future, are given below.

The first step is to obtain the relevant data to compute the required indicators selected for the MGGI and its sub-dimensions. For the health dimension, life expectancy at birth and U5MR are the selected indicators. The first indicator can be obtained from DOS. DOS does not publish the U5MR and to calculate this, we need data on the number of infant and toddler deaths, and the number of live births. The computations required for these two indicators for the health dimension are given in Annexes 2a–2d.



For the education sub-dimension, the two indicators are (a) the adult literacy rate, and (b) the combined gross enrolment ratio. Data for both are from the Labour Force Surveys of DOS. This information is not published and special tabulations have to be obtained from DOS. The details of the computation of these two indicators, like those for the health dimension, are given in Annexes 2a–2d.

The LFPR and the proportion in non-agricultural employment are the selected indicators for the economic activity sub-dimension. The data for both are published in the Labour Force Survey Reports of DOS, and the calculations are given in Annexes 2a–2d.

The dimension of empowerment of women has two indicators: (a) political representation and (b) percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals. The indicator 'political representation' is, however, made up from two statistical series: (i) percentage share of elected parliamentarians, and (ii) percentage share of senators. This information is made available by the Election Commission and the Parliamentary Secretariat. The second indicator is obtainable from the Labour Force Survey Reports of DOS. The calculations are given in Annexes 2a–2d. Once the raw data are obtained, the selected indicators are then calculated, and the computations of the sub-dimensions and the MGGI are carried out as given in Annexes 2a–2d.

To avoid publishing random fluctuations displayed by annual indices, it is recommended that the indices be computed each year, but only the average of the indices for two consecutive years be published. For example, after the 2005 index has been computed, the average for 2004 and 2005 should be published.

It is also recommended that both the Technical and Steering Committees be retained. The first can provide technical guidance on the calculation of the MGGI, and also promote cooperation among the various agencies that supply the required data. The Steering Committee will provide guidance to the Ministry in the interpretation of the results and their publication.

## ANNEX 2a Worksheet for Calculating the MGGI for 1980

	Value of selected indicator	Gender ratio (female score / male score)	Deviation of gender ratio from 1	Absolute deviation	Sub-dimension	% contribution
<b>Health</b>					<b>0.1190</b>	8.7
Life expectancy at birth						
Female	71.0	1.0677	0.0677	0.0677		
Male	66.5					
Under-5 mortality rate (U5MR)						
Female	28.4787	0.8297	-0.1703	0.1703		
Male	34.3240					
<b>Education</b>					<b>0.1408</b>	10.4
Adult literacy rate						
Female	64.6820	0.7876	-0.2124	0.2124		
Male	82.1266					
Combined gross enrolment ratio (primary, secondary, and tertiary)						
Female	0.5297	0.9308	-0.0692	0.0692		
Male	0.5691					
<b>Economic activity</b>					<b>0.3182</b>	23.4
Labour force participation rate (LFPR)						
Female	44.0488	0.5126	-0.4874	0.4874		
Male	85.9279					
Proportion in non-agricultural employment						
Female	0.5624	0.8509	-0.1491	0.1491		
Male	0.6610					
<b>Empowerment of women</b>					<b>0.7822</b>	57.5
Political representation						
(a) Percentage share of elected parliamentarians						
Female	4.5	0.0471	-0.9529	0.9529		
Male	95.5					
(b) Percentage share of appointed senators						
Female	9.5238	0.1053	-0.8947	0.8947		
Male	90.4762					
Percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals,						
Female	26.4377	0.3594	-0.6406	0.6406		
Male	73.5623					

MGGI FOR YEAR 1980

0.3401

100.0

(A) Total of all absolute values of negative deviations (except for under-5 mortality ratio) 2.4824

(B) Total of all absolute values of positive deviations plus deviations for under-5 mortality ratio 0.2380

% contribution where females are worse off than males 91.2525

(A) / (value of total absolute deviations)

% contribution where males are worse off than females 8.7475

(B) / (value of total absolute deviations)



## ANNEX 2b Worksheet for Calculating the MGGI for 1990

	Value of selected indicator	Gender ratio (female score / male score)	Deviation of gender ratio from 1	Absolute deviation	Sub-dimension	% contribution
<b>Health</b>					<b>0.1187</b>	10.8
Life expectancy at birth						
Female	73.7	1.0650	0.0650	0.0650		
Male	69.2					
Under-5 mortality rate (U5MR)						
Female	15.1583	0.8277	-0.1723	0.1723		
Male	18.3143					
<b>Education</b>					<b>0.0643</b>	5.9
Adult literacy rate						
Female	77.2831	0.8726	-0.1274	0.1274		
Male	88.5630					
Combined gross enrolment ratio (primary, secondary, and tertiary)						
Female	0.6408	1.0013	0.0013	0.0013		
Male	0.6400					
<b>Economic activity</b>					<b>0.2276</b>	20.7
Labour force participation rate (LFPR)						
Female	47.7700	0.5602	-0.4398	0.4398		
Male	85.2800					
Proportion in non-agricultural employment						
Female	0.7474	1.0154	0.0154	0.0154		
Male	0.7361					
<b>Empowerment of women</b>					<b>0.6887</b>	62.6
Political representation						
(a) Percentage share of elected parliamentarians						
Female	5.3	0.0560	-0.9440	0.9440		
Male	94.7					
(b) Percentage share of appointed senators						
Female	16.0714	0.1915	-0.8085	0.8085		
Male	83.9268					
Percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals,						
Female	33.2788	0.4988	-0.5012	0.5012		
Male	66.7212					

MGGI FOR YEAR 1990

0.2748

100.0

(A) Total of all absolute values of negative deviations (except for under-5 mortality ratio) 2.0125  
 (B) Total of all absolute values of positive deviations plus deviations for under-5 mortality ratio 0.2540

% contribution where females are worse off than males 88.7924  
 (A) / (value of total absolute deviations)

% contribution where males are worse off than females 11.2076  
 (B) / (value of total absolute deviations)



## ANNEX 2c Worksheet for Calculating the MGGI for 2000

	Value of selected indicator	Gender ratio (female score / male score)	Deviation of gender ratio from 1	Absolute deviation	Sub-dimension	% contribution
<b>Health</b>					<b>0.1154</b>	11.0
Life expectancy at birth						
Female	75.0	1.0684	0.0684	0.0684		
Male	70.2					
Under-5 mortality rate (U5MR)						
Female	8.3361	0.8376	-0.1624	0.1624		
Male	9.9525					
<b>Education</b>					<b>0.0456</b>	4.4
Adult literacy rate						
Female	86.5756	0.9234	-0.0766	0.0766		
Male	93.7588					
Combined gross enrolment ratio (primary, secondary, and tertiary)						
Female	0.6526	1.0147	0.0147	0.0147		
Male	0.6432					
<b>Economic activity</b>					<b>0.2573</b>	24.6
Labour force participation rate (LFPR)						
Female	47.2000	0.5687	-0.4313	0.4313		
Male	83.0000					
Proportion in non-agricultural employment						
Female	0.8596	1.0834	0.0834	0.0834		
Male	0.7934					
<b>Empowerment of women</b>					<b>0.6276</b>	60.0
Political representation						
(a) Percentage share of elected parliamentarians						
Female	10.4	0.1161	-0.8839	0.8839		
Male	89.6					
(b) Percentage share of appointed senators						
Female	29.6875	0.4222	-0.5778	0.5778		
Male	70.3125					
Percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals,						
Female	32.2347	0.4757	-0.5243	0.5243		
Male	67.7653					

MGGI FOR YEAR 2000

0.2615

100.0

(A) Total of all absolute values of negative deviations (except for under-5 mortality ratio) 1.7631

(B) Total of all absolute values of positive deviations plus deviations for under-5 mortality ratio 0.3288

% contribution where females are worse off than males 84.2811  
(A) / (value of total absolute deviations)

% contribution where males are worse off than females 15.7189  
(B) / (value of total absolute deviations)



## ANNEX 2d Worksheet for Calculating the MGGI for 2004

	Value of selected indicator	Gender ratio (female score / male score)	Deviation of gender ratio from 1	Absolute deviation	Sub-dimension	% contribution
<b>Health (*)</b>					<b>0.0989</b>	<b>10.2</b>
Life expectancy at birth						
Female	76.1	1.0617	0.0617	0.0617		
Male	71.7					
Under-5 mortality rate (U5MR)						
Female	7.1407	0.8638	-0.1362	0.1362		
Male	8.2662					
<b>Education</b>					<b>0.0464</b>	<b>4.8</b>
Adult literacy rate						
Female	88.0703	0.9302	-0.0698	0.0698		
Male	94.6812					
Combined gross enrolment ratio (primary, secondary, and tertiary)						
Female	0.6717	1.0230	0.0230	0.0230		
Male	0.6566					
<b>Economic activity</b>					<b>0.2467</b>	<b>25.4</b>
Labour force participation rate (LFPR)						
Female	47.3000	0.5847	-0.4153	0.4153		
Male	80.9000					
Proportion in non-agricultural employment						
Female	0.8936	1.0780	0.0780	0.0780		
Male	0.8289					
<b>Empowerment of women</b>					<b>0.5788</b>	<b>59.6</b>
Political representation						
(a) Percentage share of elected parliamentarians						
Female	9.6	0.1062	-0.8938	0.8938		
Male	90.4					
(b) Percentage share of appointed senators						
Female	33.3333	0.5000	-0.5000	0.5000		
Male	66.6667					
Percentage share of legislators, senior officials, managers, professionals, technicians and associate professionals,						
Female	35.0345	0.5393	-0.4607	0.4607		
Male	64.9655					

MGGI FOR YEAR 2004

0.2427

100.0

(A) Total of all absolute values of negative deviations (except for under-5 mortality ratio) 1.6428

(B) Total of all absolute values of positive deviations plus deviations for under-5 mortality ratio 0.2988

% contribution where females are worse off than males 84.6120  
(A) / (value of total absolute deviations)

% contribution where males are worse off than females 15.3880  
(B) / (value of total absolute deviations)

\* Preliminary estimates from DOS.



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