Socio-economic and Demographic Indicators: A Comparison of ASEAN Countries

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Introduction

While supervising trainee teachers in Singapore schools teaching social sciences, one of my concerns was the inadequate use of socio-economic and demographic statistics about Singapore and the ASEAN region. Statistics of one's own country and of neighbouring countries interest children to a great extent. Usually, children not only have a curiosity to know that how their own country is placed comparatively with their neighbours but they also have a desire to learn whether they are better off or worse off. This may help children in setting their goals and being competitive and may also provide them with some context to communicate with their peers and, possibly, enhance their critical thinking. Contrary to this, during my recent visit to a secondary school to supervise trainee teachers for social sciences, I noticed inadequate use of statistics by the trainee and other teachers in classroom teaching on Singapore and ASEAN. Even while explaining health and living conditions there was very little use of statistics. It would have helped if examples were given.

Use of statistics has become integral part of classroom teaching in Geography particularly at secondary and tertiary levels. Although, both physical as well as human geographers make use of statistics to interpret various issues related to physical as well as human issues, these are human geographers who use statistics to demonstrate the behaviour of a phenomenon and to present a comparative picture of the phenomenon across space. The latter situation allows the understanding of a phenomenon at a point in time and also provides a comparison across space. For example the teaching of the health status of people will include information on a range of issues such as
expectation of life at birth. A higher expectation of life at birth would suggest a good health and a low expectation of life at birth would mean poor health conditions. A teacher can make the above point by mentioning that Singapore has a higher life expectancy than Indonesia and thus a better health situation than the latter. But the same can further be reinforced by presenting a table that compares life expectancy between Singapore and Indonesia for the whole population as well as for males and females. This would provide a visual resource and much better comparative picture for the class and would also allow a further debate on a few hidden issues such as living conditions, food intake, cleanliness and so on.

Aims

In this paper, I do not intend to argue a case for the inclusion of various statistics in the secondary school curriculum on ASEAN countries, what I wish to put forward is some statistics on social, economic and demographic variables for Singapore and ASEAN countries that may be used by secondary school teachers in their classroom teaching. Thus the main aim of this paper is to provide data on various social, economic and demographic issues and present a comparative picture of ASEAN countries. These aims are realized by analyzing and presenting data on a range of social, economic and demographic issues in ASEAN countries.

Indicators of social development

Various indicators of social development taken into consideration in this paper are: adult literacy, percentage of children admitted in the first grade who complete primary school, secondary school enrollment ratios, percentage of population that has access to safe water, percentage of population that has adequate sanitation, percentage of population that has access to healthcare facilities, and number of persons per doctor. These indicators reflect the quality of social life.

Literacy and education is considered one of the main indicators of social development. This variable not only indicates the quality of
human resources in an area or a country but high literacy level is also associated with a high level of child survival and low level of mortality (see Caldwell et al., 1979). The variable percentage of children enrolled in grade one completing primary education reflects the school retention situation. A high rate in this regard would suggest that a larger number of children who are enrolled in the primary school would complete the primary education.

In total, over 90 per cent children in the developing world start schooling but in many countries, poor quality of the education combined with limited job opportunities and the need for children to help their families in fields and homes, means that large numbers of them drop out of school before completing even one or two years. The greatest educational priority for the 1990s is therefore to ensure that all children not only start school but remain there long enough to acquire literacy, numeracy and basic attitudes and skills which will help them to improve their circumstances and cope with the many changes that lie ahead.

In ASEAN countries, there are stark variations in the primary school completion rate for children. Whereas in Singapore all the children enrolled in primary school complete schooling, in Thailand more than 40 per cent children do not complete the primary school education. Among other ASEAN countries too not all the children enrolled in the primary school complete the schooling but the rate for these countries are not as bad as in Thailand (Table 1).

Secondary school enrollment rates are the ratios of children enrolled in secondary schools and number of children completing primary schools. A relatively higher secondary school enrollment rate would suggest that a greater proportion of children that complete primary school enter secondary schools. This means that education is being given considerable importance to create educated and trained work force. Thus, where primary school education provides basic literacy, secondary school education provides functional and skilled literacy (Singh, 1985).

Many children do not continue their education beyond the primary level. Secondary school enrollment largely depends on the availability of schools, importance and affordability of education and government
legislation about education. Many children do not enroll into the secondary schools because there are either no schools in their residential vicinities or schooling is far too expensive. Children either have to travel a considerable distance to attend a school or make arrangements to live either in the student hostel or in a private accommodation. This can be expensive and not all parents have the ability to pay for the education of their children. Furthermore, elementary education in many countries is compulsory and all the school-age children are required to attend the schools but elementary education only includes primary education. Thus, secondary education becomes an optional issue and only those children are enrolled whose parents can afford to meet their expenses to attend this type of school.

Secondary school retention rates in ASEAN countries are very low as compared to the developed countries and range between 33 per cent in Thailand to 74 per cent in Philippines. Singapore has a retention rate of 70 which shows that more than one quarter of the Singaporean children do not go to secondary school after completing primary school.

Adult literacy is the function of education. As mentioned in the preceding sections, one of the greatest needs for 1990s is the achievement of universal literacy rates for all adults throughout the world. There are however still many illiterates in ASEAN countries. The lowest literacy rate is found in Malaysia (78 per cent) followed by Indonesia (82 per cent), Singapore (83 per cent) and Philippines (89 per cent) whereas Thailand has the highest literacy rate of 93 per cent. Although these figures do not suggest universal literacy, there is a hope that these may be achieved by the early twenty first century which is also a target set by the many countries.

Access of population to adequate and safe drinking water is important to maintain a healthy population (Singh, 1992). Diseases caused and spread by the use of contaminated water are major killers of the majority of population especially in the developing countries. Therefore, a higher proportion of population having access to safe drinking water will mean a lower prevalence of infectious diseases. Approximately 1.2 billion people in the developing world do not have access to a bare minimum of safe drinking water. On present pattern of progress, an estimated 770 million people will still be without safe water by the end of the century.
Singapore is in one of the select band of countries that have adequate and safe drinking water for its whole population. Among other ASEAN countries, about half of the population in Indonesia and one fifth of the population in Malaysia and Thailand do not have access to safe drinking water (see Table 1).

Access to sanitation facilities is also important to develop pleasant living environment and maintain a healthy population. Where there are no safe sanitation facilities people defecate in the open areas or use service toilets. This leads to the contamination of surface and ground water which subsequently causes diarrheal disease and other illnesses.

Almost everyone in Singapore has access to adequate and safe sanitation but the situation in other ASEAN countries is very different. More than half of the population in Indonesia and 20-30 per cent population in other ASEAN countries still use primitive unsafe sanitation (see Table 1). This clearly causes a range of illnesses in these countries.

Availability of health care and access to these facilities is also important to maintain a healthy population. In many developing countries not only are there inadequate health care facilities but substantial population in these countries do not have access to them. A higher proportion of population having much access leads to a better health status of the population.

The population in ASEAN countries has relatively greater access to the health facilities than other developing countries but the situation among the various ASEAN countries does vary in this regard (United Nations Children Fund, 1994). Singapore again scores highly with the whole of its population able to access health facilities. About 25 per cent in the Philippines, 20 per cent in Indonesia and 10 per cent population in Thailand do not have access to the basic health facilities.

One other indicator of the health status of the population is the doctor-population ratio. This is measured in terms of number of persons per doctor. A low doctor-person ratio indicates a better health status. Singapore also scores highly for this indicator with 711 persons for each doctor. The worst doctor-patient ratio was measured for Indonesia.
Table 1

Some social indicators for Singapore and ASEAN countries

<table>
<thead>
<tr>
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<td>70</td>
<td>100</td>
<td>99</td>
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<td>711</td>
</tr>
<tr>
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<td>33</td>
<td>77</td>
<td>74</td>
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<td>4361</td>
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</table>

A Comparison of ASEAN Countries

(6786) followed by Thailand (4361), Malaysia (2410) and Philippines (1016).

**Indicators of economic development**

The most important measure of economic performance, usually known as economic development, is the per capita income which is often measured in terms of per capita GNP in US dollars. This measure, however, provides a misleading picture for comparing more than one country because of the differences in the local-purchasing power of a currency in a country. A better measure of the income thus requires the variable purchasing power of a currency to be taken into consideration. This concept is known as purchasing power parity (PPP). Further to this, ownership of a select commodity is also, quite often, used as a proxy indicator of the economic situation, for example percentage of population owning television. In this paper we include per capita GNP, PPP and number of television sets per thousand of population.

Per Capita GNP in the ASEAN countries ranges from US$610 in Indonesia to US$ 14210 in Singapore (1988). Inter-country variations in the per capita GNP are considerably high as the ratio between the highest and lowest is more than twenty times (see Table 2). The disparity in this regard becomes little less apparent when PPP is calculated, nonetheless, the ratio still remains about one to ten.

When a further measure of economic development, that is, the number of television sets per 1000 population is taken into consideration the disparity in the economic development remains considerably wide. As shown in Table 2, about 4 in 10 persons in Singapore own a television set whereas in Philippines only 1 in 20 persons have a television set.

On the whole, in terms of economic development, Singapore emerges as the most developed country followed by Malaysia whereas Philippines and Indonesia emerge as the least developed.
Table 2

Some economic indicators for Singapore and ASEAN countries

<table>
<thead>
<tr>
<th>Countries</th>
<th>GNP Per Capita</th>
<th>PPP</th>
<th>Television per thousand Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>610</td>
<td>3140</td>
<td>60</td>
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<td>Malaysia</td>
<td>2520</td>
<td>8630</td>
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<td>730</td>
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<td>Singapore</td>
<td>14210</td>
<td>20470</td>
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</tr>
<tr>
<td>Thailand</td>
<td>1570</td>
<td>6390</td>
<td>112</td>
</tr>
</tbody>
</table>


Indicators of demographic change

Demographic variables included in this paper are fertility, mortality and the health of children. Fertility is measured in terms of Total Fertility Rate per woman whereas the mortality is measured in terms of life expectancy at birth. The health of children is measured in terms of percentage of infants with low birth weight and the percentage of children aged 0-4 years who are underweight.

Total Fertility Rate (TFR) is the sum of Age Specific Fertility Rates over the whole range of reproductive ages for a particular period (usually a year). It can be interpreted as the number of children a woman would have during her life time if she were to experience the fertility rates of the period at each age (see Pressat and Wilson, 1985).

According to the demographic transition theory a high Total Fertility Rate is associated with the primitive, traditional and agrarian society where there is a low cost of child-bearing and rearing as compared to their benefits to their parents, whereas a low Total Fertility Rate is associated with urbanized and modern industrial societies.
where there is high cost of child bearing and rearing. Children in these latter type of societies are considered economic burdens as the cost of bringing up the children heavily outweights the benefits from them (Caldwell, 1976). Of all the ASEAN countries, Singapore has the lowest fertility (TFR=1.8) while the Philippines has the highest fertility (TFR=3.8).

Life expectancy at birth is a measure of mortality. It refers to the number of years a new born infant would live if the mortality conditions implied by a particular life table applied. The calculation of the expectation of life at birth is based on the mortality experience of the population of various ages at a point in time. A higher life expectancy at the time of birth suggests a low level of mortality, better health conditions, higher level of economic development and an affluent modern society whereas a low life expectancy at the time of birth is associated with high mortality level, poor health conditions, low level of economic development and a primitive traditional society.

Singapore has one of the best health care systems not only among the ASEAN countries but in the whole world. This is reflected in high life expectation at birth (see Table 3). On average, a baby born in Singapore can expect to live to his/her 74th birthday whereas in Indonesia a baby can only expect to live to his/her 63 birth days. Next, Malaysia has a life expectancy of about three years shorter than Singapore.

Singapore also has far lower child mortality rates than other ASEAN countries. Only 7 out of 1000 children aged 1-4 years died in Singapore in 1992 whereas in Indonesia the rate is about 111. Among other countries too, considerably more children die as compared to Singapore (Table 3).

Percentage of infants with low birth weight reflects the nutritional intake of mothers. Usually, in poor countries where a considerable proportion of population barely gets enough food women suffer most from the allocation of food and nutrition. If these women happen to be pregnant then they will more likely give birth to underweight babies. This situation further leads to an increased number of sick children and subsequently a higher infant and child mortality rate.
<table>
<thead>
<tr>
<th>Countries</th>
<th>Total Fertility Rate</th>
<th>Life Expectancy at Birth</th>
<th>Child Mortality Rate (&lt;5 YRS)</th>
<th>Percentage of Infants with Low Birth Wt.</th>
<th>Percentage of Children Suffering from Underweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>2.8</td>
<td>63.5</td>
<td>111</td>
<td>14</td>
<td>40</td>
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<tr>
<td>Malaysia</td>
<td>3.5</td>
<td>71.0</td>
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<td>10</td>
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<tr>
<td>Philippines</td>
<td>3.8</td>
<td>66.0</td>
<td>60</td>
<td>15</td>
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<tr>
<td>Singapore</td>
<td>1.8</td>
<td>74.5</td>
<td>7</td>
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</tr>
<tr>
<td>Thailand</td>
<td>2.1</td>
<td>68.5</td>
<td>69</td>
<td>13</td>
<td>30</td>
</tr>
</tbody>
</table>

Sources: 1. Economic and Social Commission for Asia and the Pacific (1994)  
Singaporean children are among the best nourished and have the least problem of being underweight. In 1992 only 7 per cent babies were underweight in Singapore against the 15 per cent babies in Philippines and 13 per cent babies in Thailand. Among other countries Malaysia was the best placed with about 10 per cent babies being born underweight (see Table 3).

Underweight problem also affect children in the age group 0-4 years. While some of these children remain underweight because they are born underweight many more children who are born with a normal weight become underweight later. This acquired underweight syndrome is mainly caused by two reasons: (a) lack of food supplement during weaning; and (b) lack of food due to close birth spacing. Weight of infants and children is also associated with the socio-economic performance of a country. More affluent a country is a smaller proportion of infants and children have an underweight problem.

In terms of malnourishment, none of the children in Singapore were classified as malnourished whereas in Indonesia, Philippines and Thailand more than 30 per cent children were malnourished (see Table 3).

Conclusions

One of the most notable features of the above description is the outstanding position of Singapore among ASEAN countries in terms of various social, economic and demographic indicators. The country exhibits highly efficient social conditions supported by economic prosperity and development and the regulation of demographic behaviour. Among the five countries that are included in this paper Singapore is in its own class and other countries lag far behind in all areas of development. The gap between Singapore and its ASEAN counterparts is so large that these countries will have to improve at about twice the speed of Singapore just to catch up with her in the next fifteen years.

This paper has presented a comparative situation of social, economic and demographic situation in ASEAN countries and, while doing so, provided data on various indices that measure these issues.
It is hoped that teachers will find the statistics useful and will make use of these statistics in their classroom teaching.

References


