**FORUM**

Demographic Realities in South Africa
Department of National Health and Population Development

**Introduction**

One of the most pressing problems faced by the world today is the rapid population growth experienced by developing countries. A country’s ability to ensure an acceptable standard of living for all its people is closely linked to its ability to maintain a balance between the size of the population, its socio-economic capabilities and the extent, replaceability and renewability of its available resources. If the population outgrows its socio-economic capabilities, and if population growth is greater than can be sustained by natural and other resources, the quality of life of the inhabitants will inevitably suffer. Communities may become caught in the so-called poverty trap - a vicious circle of poverty and high fertility - which is found in so many developing countries around the world, and which is often accompanied by social instability.

In this article, the current and future demographic trends in South Africa will be analysed.

**The Demographic Transition model**

The model most frequently used to explain demographic changes in the world is known as the Demographic Transition model. This model assumes that all human populations move through the following three phases:

(a) the first or traditional phase where births (fertility) and deaths (mortality) are high and population growth is relatively low;

(b) the second or pre-modern phase with a constantly high birth rate but declining mortality rate. The difference between birth and death rates increases, resulting in rapid population growth; and,

(c) the third or modern phase which is characterised by low birth and death rates, and stabilising population growth rates, tending towards zero. (see below)

The model of Demographic Transition, based on historical population trends in Europe, North America and Australia, shows that population growth in all countries relates to the extent of socio-economic development and the degree of modernisation.

Demographic transition in Europe spanned two centuries. The gradual decline of mortality levels, which was
closely followed by a decline in fertility levels, was linked to gradual socio-economic development. By contrast, the development of medical technology, stimulated by World War II, caused a dramatic decline of mortality in the currently developing countries. Some developing countries reached certain low mortality levels within two decades which took the countries which are now developed almost half a century longer to reach. In the developing countries the gap between birth and death rates widened to such an extent that population growth rates rose to between 2% and 4%.

The challenge for developing countries is to move their populations through the pre-modern phase into the modern phase of demographic transition as fast as possible. This process, however, is complicated by the multi-dimensional problematic nature of development in these countries.

The demographic realities of South Africa

The South African population is currently growing at an average rate of 2.3% per annum. The country finds itself in a unique situation, demographically speaking, and that is that the various population groups are at different stages of demographic transition (phases of population growth). The current growth rates of the population groups are as follows:

<table>
<thead>
<tr>
<th>Population Group</th>
<th>1985</th>
<th>2000</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites High</td>
<td>4.8516</td>
<td>5.4126</td>
<td>5.9745</td>
<td>6.1707</td>
</tr>
<tr>
<td>Whites Low</td>
<td>4.8516</td>
<td>5.3066</td>
<td>5.6972</td>
<td>5.7540</td>
</tr>
<tr>
<td>Coloureds High</td>
<td>2.9516</td>
<td>3.8557</td>
<td>4.9467</td>
<td>5.6654</td>
</tr>
<tr>
<td>Coloureds Low</td>
<td>2.9516</td>
<td>3.8045</td>
<td>4.6813</td>
<td>5.2733</td>
</tr>
<tr>
<td>Asians High</td>
<td>0.8833</td>
<td>1.1081</td>
<td>1.3554</td>
<td>1.4789</td>
</tr>
<tr>
<td>Asians Low</td>
<td>0.8833</td>
<td>1.0956</td>
<td>1.3089</td>
<td>1.4104</td>
</tr>
<tr>
<td>Blacks High</td>
<td>25.9574</td>
<td>41.0439</td>
<td>72.9428</td>
<td>105.5656</td>
</tr>
<tr>
<td>Blacks Low</td>
<td>25.9574</td>
<td>40.9662</td>
<td>65.3083</td>
<td>81.9425</td>
</tr>
<tr>
<td>Total High</td>
<td>34.6439</td>
<td>51.4203</td>
<td>85.2194</td>
<td>118.8806</td>
</tr>
<tr>
<td>Total Low</td>
<td>34.6439</td>
<td>51.1729</td>
<td>76.9957</td>
<td>94.3802</td>
</tr>
</tbody>
</table>

The Components of Population Growth

The concept *demography* refers to the formal study of human structures and changes as determined by the three vital population processes, namely birth (fertility), death (mortality) and migration. These processes can be considered as the components of population growth.

In a closed society the growth of the population can only be determined by births and deaths. With reference to the Demographic Transition model the growth of a population can only be determined by the interaction between fertility and mortality, i.e. through natural increase. In the case of an open society it can also be influenced by migration.

A projected maximum population of...
80 million people, which Southern Africa could accommodate adequately, given the socio-economic realities, implies that the average number of children per woman (the so-called total fertility rate or TFR) may not exceed 2.1 children by the year 2010.

Total Fertility Rate (TFR)
According to the most recent statistics the TFRs for the different population groups in the RSA are as follows:

- Whites: 1.8
- Coloureds: 3.0
- Asians: 2.4
- Blacks: 5.0

From the above figures it is obvious that especially the Black population is still far from the set objective of 2.1.

Since 1970 the increasing use of modern contraceptives has played an important role in the rapid decline in the fertility rates of Whites, Coloureds, Asians and, to a lesser degree, of urban Blacks. This trend can be attributed to the change in living conditions which accompanied industrialisation in the developed sector of the country. In the underdeveloped rural areas, on the other hand, fertility rates are much higher. The fertility rate of Blacks, for example, is 5.7 in rural areas, while it is 2.8 in the metropoles.

Mortality
The mortality rate refers to the total number of deaths which occur in a given population annually. The rate is expressed as the number per 1 000 of the population.

Life-expectancy at birth (abbreviated as $e^0$) and child mortality (death of children under the age of five) are useful indicators of a population's general state of development. Improved living conditions and more effective health services will subsequently lead to a decline in child mortality resulting in an increase in life-expectancy. Under normal circumstances most deaths occur among young children and the elderly. Even in countries with low mortality levels, child deaths form the largest category of overall deaths. Normally high overall mortality rates go hand in hand with high child mortality rates. Improved health services and advances in the medical sciences led to a significant drop in general and child mortality rates as well as an increase in life-expectancy in all the regions of the world.

According to Mostert and Van Tonder the life-expectancy rates at birth ($e^0$) for the different population groups in SA were as follows in 1935 and 1985 respectively:

<table>
<thead>
<tr>
<th></th>
<th>1935</th>
<th>1985</th>
<th>Increase (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td>60.6</td>
<td>71.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Coloureds</td>
<td>43.3</td>
<td>60.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Asians</td>
<td>52.5</td>
<td>66.6</td>
<td>14.1</td>
</tr>
<tr>
<td>Blacks</td>
<td>39.3</td>
<td>61.6</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Infant mortality (IMR), i.e. deaths of children under the age of one year, is an internationally accepted indicator of the quality of life. The IMR forms the largest part of the total child mortality rate.

From 1940 to 1985 the following decline in the IMR occurred among the different population groups in SA:

- Whites: 90%
- Coloureds: 78%
- Asians: 93%
- Blacks: 40%

According to the Report of the President's Council on an Urbanisation Strategy for the RSA,
further urban growth will be
determined by the natural population
increase in existing urban areas as
well as the in migration from rural
areas (urbanisation).

The Population Development
Programme (PDP)

Due to the realities mentioned above
the SA government launched a
Population Development Programme
in March 1984. The main aim of this
programme is to establish a balance
between:

a) the availability and renewability
   of resources and the economic
   and social potential of the
country, and
b) population numbers.

According to Gouws7 (a) above can
be called the non-demographic and
(b) the demographic side of the
balance. The availability and
renewability of natural resources (a)
are to a large extent a given fact,
while the rest of (a) as well as (b) are
variables that can be influenced.

In the first place the PDP attempts to
improve the standard of living and
the quality of life of all the people in
SA through socio-economic
development. Studies have shown
that fertility rates decline when socio-
economic development takes place1.
The final objective of the PDP
concerning population numbers (b)
is to bring the TFR down to 2,1 for
all population groups by the year
2010. If this can be achieved the SA
population will stabilise at 80 million
people by the end of the next century.
Even if this objective has been
reached, however, only half the battle
has been won. Economic and social
development should still be
stimulated in order to accommodate

80 million people adequately. The
PDP also has the task of stimulating
this development.

To achieve the objectives of the PDP,
development in the following areas is
being stimulated at present:

a) Education
b) Development of manpower
c) Primary health care (including
   Family Planning)
d) Economic development
e) Housing

It is therefore obvious from the above
that a multi-disciplinary approach is
needed to achieve the objectives of
the PDP. Accordingly the Chief
Directorate: Population Development
was established within the
Department of National Health and
Population Development with the
following functions:

a) Marketing of the Programme
b) Co-ordination
c) Initiation
d) Advice
e) Research
f) Training
g) Monitoring
h) Reporting

Conclusion

The PDP, combined with other
development initiatives such as the
Urbanisation Strategy, the Regional
Development Strategy and the
Community Development Strategy,
illustrates the government’s
commitment to an improvement of
the quality of life of the people of
South Africa which will result in a
balance between population numbers
and resources.

References

1. Republic of South Africa. Report of
   the Science Committee of the
   President’s Council on Demographic
   Trends in South Africa. Cape Town:
2. Raubenheimer L P. Demografie en
   Bevolkingsontwikkeling. 'n Werkboek
   Stellenbosch: Universiteitsuitgewers en
   Boekhandelaars, 1986.
3. Central Statistical Service. RSA
   Report S-158. Projections of the South
5. Raubenheimer L P. Demografiese
   Patrone. Die Suid-Afrikaanse Situasie.
   Stellenbosch: Universiteitsuitgewers en
6. Department of National Health and
   Population Development. Population
   Development Programme. Progress
7. Gouws N B. Paper delivered at the
   Congress on Urbanisation, organised
   by the Demographic Association of
   Southern Africa, Stellenbosch, July
   1987.
   delivered at the Congress on
   Urbanisation, organised by the
   Demographic Association of Southern
9. Republic of South Africa. Report of
   the Committee for Constitutional
   Affairs of the President’s Council on
   an Urbanisation Strategy for the
   Republic of South Africa. Cape Town: