Brain-power: our most valuable resource

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New growth theorists claim that the engine of growth is the accumulation of human capital. They say that different standards of living in nations are mainly because of differences in human capital.

The world's major growth industries, such as micro-electronics, biotechnology, and telecommunications, are brain-power industries. Knowledge is the only asset that gains value. Other assets such as buildings, plant and equipment will depreciate sooner or later.

Fear can be a trap

Despite advances in technology, our entry into the new millennium is clouded by fears of the millennium bug, environmental or ozone depletion, world recession, AIDS and war. We are likely to be trapped by technologies of creative destruction and zero economic growth.

We have to look at ways to improve our productivity. According to the Population Census 1996, there are only 13,7 million economically active people in the 15 to 65 years age bracket, out of a total population of 40,5 million. Only 9,1 million are employed, and the unemployed come to 4,6 million. Nearly 2,6 million are disabled Nearly 4 million have had no schooling (19,3%).

The many threats to productivity include:

- poverty
- C HIV/AIDS
- □ lower life expectancy
- an ageing workforce
- lack of qualified workers

- rising wage and benefit costs
- misallocation of human resources
- □ inadequate training
- □ lack of motivation
- □ ineffective management support
- no incentives
- fall in productive population
- low incomes
- Jow standard of living

Fig 1. Threats to labour productivity in South Africa

Demography of provinces

Province	Poverty	HIV	0-14 yrs 15	-64 yra	Disabled
Northern	69 3%	8,2°e	43 1	53 2	11 17%
Eastern Cape	64 0°°	12 6%	37.9	56 8	17 39%
KwaZulu Natat	50 0%	25 9%	37 1	58 7	18 83%
Northern Cape	48 0%	86%	31 1	63 9	1 76°•
Free State	47 14	47 1%	32 8	63 2	9 60%
Mpumalanga	45 1%	22 6° o	370	59 6	7 97%
North West	41 3%	18 1°c	34 6	613	10 51%
Gauteng	21.1%	17 1%	27 Q	68.2	17 14%
Western Cape	17.9%	6 3%	28.3	66.2	5 47%

Poverty

Poverty is a denial of opportunities and choices that are basic to human development. Poverty denies people the choice to

- lead a long, healthy and creative life,
- maintain a decent standard of living,
- enjoy dignity, self-esteem, the respect of others and things that people value in life (Human Development Report, 1998).

South Africans living below the income poverty line, defined in terms of \$1 a day, for

1989 to 1994, is 23,7% compared to 0,1% in Thailand and 5,6% in Malaysia, 34% in Botswana, and 84,6% in Zambia. About 18 million South Africans live in the poorest 40% households, and 10 million people live in the poorest 20% of households. A natural consequence of poverty is poor health.

South Africa should acquire the necessary knowledge for global competition to ensure that globalisation and technological change do not marginalise its low-skilled workers. The ultimate objective of productivity improvement is to raise the standard of living and to increase the quality of life of people, since man is both the 'end and an agent of production' (Marshall, 1890)

Living shorter lives

The life expectancy of the South African population could drop from 65 years to 55

years in 1998 due to AIDS. In 1998 the population growth rate would have been 3,2% without AIDS, but only 2% with AIDS. By 2010, life expectancy would drop by 20 years with a population growth rate of 0,4%

Other threats

Global warming threatens to spread infectious diseases and cause the extinction of some species. Environmental challenges and the year 2000 problem stem from affluence in the North, People in these countries lead longer and healthier lives which present their countries with fiscal challenges such as financing public pensions

A downward pressure on living standards could be evident by 2010 when the percentage of the employed population is projected to fall, thus leaving fewer tax payers.

How HIV/AIDS lowers productivity

AIDS is a major threat to the economy By 2000, 20% of South African workers will be HIV positive. There are 3,2 million South Africans living with AIDS, and another 550 000 are infected each year. The most devastating aspect of the epidemic is that it threatens human achievement, sinco it affects people in their most productive years.

AIDS has a huge Impact on productivity because it.

- reduces life expectancy and increases child mortality,
- creates skilled labour shortages;
- defeats all efforts to investment in training and education.
- leads to absentoeism and reduced outputs,
- increases health care and funeral costs and low investments.
- Increases dependency and early retirement due to III health

Adequate spending on preventing the spread of HIV can save millions of lives. Moreover, scarce resources could be diverted to improve people's quality of life.

AIDS and our children

It was estimated that 16,01% of the women who attended antenatal clinics were HIV-infected at the end of 1997. The figure was 10,4% in 1995 KwaZulu-Natal has the largest number of cases where HIV prevalence increased from 19,9% to 26,9% between 1995 to 1997. In the Western Cape the HIV infection rose from 3,09% to 6,29% during the same period. The age-specific HIV provalence Indicates that in 1998 the highest incidence (17,74%) occurred in the age group 20 to 24, followed by 15,33% for the 25 to 29 years.

By 2005 to 2010, 61 out of every 1 000 South African bables are expected to die before their first birthday. Without AIDS, inlant mortality would have been 38 per 1 000.