



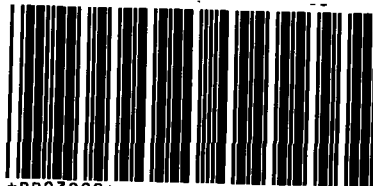
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Poverty, employment and wealth distribution

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Co-operative HSRC Research Programme:
Affordable Material Provision

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The emphasis in the programme is on discovering affordable alternatives in the main fields of social policy, namely income maintenance, health, human settlement, employment creation and social welfare. In this report the focus is more specifically on developmental strategies that would decrease poverty, unemployment and the wide socio-economic gaps between different groups in South Africa.

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Die verslag bestaan hoofsaaklik uit 'n beredenering van die verskillende faktore wat met armoede, werkloosheid en ongelyke welvaartverspreiding in Suid-Afrika te doen het.

Ruim gebruik is gemaak van literatuur en amptelike dokumentasie wat wêreldwyd oor die onderwerpe verskyn het.

Die ontwikkelingsbenadering wat as strategie aanbeveel word is gebaseer op die beginsels van omskepping ("transformation"), aanpassing en bemagtiging, eerder as op die beginsel van liniêre en direkte behoeftebevrediging.

ABSTRACT

The report consists mainly of a discussion of the different factors related to poverty, unemployment and uneven wealth distribution in South Africa.

Ample use was made of literature and official documentation that had appeared on the subject worldwide.

The development approach recommended as strategy is based on the principles of transformation, adaptation and empowerment, rather than on the principle of linear and direct need satisfaction.

TABLE OF CONTENTS

INTRODUCTION AND DEFINITIONS	1
INTRODUCTION	
DEFINITIONS	
Poverty - Employment and the fourfold structure of the economy - Wealth creation - Wealth distribution	
SECTION I: THE SITUATION	5
GLOBAL POVERTY	5
SUB-SAHARAN AFRICA	6
SOUTH AFRICA IN AFRICA	7
POVERTY IN SOUTH AFRICA	8
Recent history of poverty in South Africa - Present levels of poverty in South Africa - The plight of the aged - The fate of the young	
UNEMPLOYMENT IN SOUTH AFRICA	10
Employment in the public sector - Labour unions and employment - Small business and the informal sector	
THE CAUSES OF POVERTY	14
Population growth - Biological carrying capacity - Conclusion	
SECTION II: THE CHALLENGE	17
INTRODUCTION	17
HOUSING AND BASIC INFRASTRUCTURE	17
Backlogs and future demand - Site and service - Spatial distribution - Electrification	
EDUCATION	20
Technical education - Educational integration - The cost of normalising education - Tertiary education - Education reform initiatives - The need for fundamental reform	
HEALTH CARE	23
Private health care - State health care - The disabled and the elderly - Health and development - A note on AIDS and poverty - Conclusion	

AGRICULTURE, FOOD PRODUCTION AND THE LAND ISSUE	26
A global perspective - The South African situation - The land issue, farm labour and the rising levels of poverty - The issue of land redistribution - Land reform	
SECTION III: THE LINEAR RESPONSE	29
INTRODUCTION	29
THE COST OF EQUALISATION	30
A note on affirmative action (AA)	
REDISTRIBUTION AND THE ECONOMY	33
Borrowing and printing money - Taxation - Reduce spending - Nationalisation - Privatisation	
CONCLUSION	36
SECTION IV: A TRANSFORMATIONAL RESPONSE	37
INTRODUCTION	37
Limitations of the linear response - growth and development - The cost of job creation - The informal sector - The present role of the financial institutions - The constitution: the decentralisation imperative	
THE NEED FOR A TRANSFORMATIONAL RESPONSE	43
THE ELEMENTS OF A TRANSFORMATIONAL RESPONSE	44
Effective decentralisation - Liberation Management - The notion of empowerment - The Theory of Public Choice - Informatics: the key to the information society	
COMMUNITY BASED DEVELOPMENT ORGANISATIONS: POWER TO THE PEOPLE	47
Involving the youth - A new role for the financial institutions	
CONCLUSION	51
Informatics and higher education - Informatics and health services: telemedicine - Informatics and agriculture - Final remark	
BIBLIOGRAPHY	53
DIAGRAMMES	57

ACRONYMS

AA	Affirmative Action
ANC	African National Congress
CASE	Community Agency for Social Enquiry
CDU	Community Development Unit
CIS	Commonwealth of Independent States
COSATU	Congress of South African Trade Unions
CUP	Committee of University Principals
DBSA	Development Bank of Southern Africa
DET	Department of Education and Training
EAP	Economically Active Population
HDI	Human Development Index
HMO	Health Maintenance Organisation
IDC	Industrial Development Corporation
IDU	Investment Development Unit (of the LOA)
IDT	Independent Development Trust
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IPA	Independent Practice Association
LOA	Life Offices Association (see: IDU)
MLL	Minimum Living Level
NASASA	National Stokvel Association of South Africa
NGO	Non-Governmental Organisation
NMC	National Manpower Commission
PAC	Pan Africanist Congress of Azania
PDL	Poverty Datum Line
PDP	Population Development Programme
SADCC	Southern African Development Co-ordination Conference
SADF	South African Defense Force
SAIRR	South African Institute of Race Relations
SANCO	South African National Civics Organisation
SBDC	Small Business Development Corporation
SSA	Sub-Saharan Africa
TBVC	Transkei - BophuthaTswana - Venda - Ciskei
VAN	Value Added Network

POVERTY, EMPLOYMENT AND WEALTH DISTRIBUTION

INTRODUCTION AND DEFINITIONS

INTRODUCTION

Decades of international experience with anti-poverty programmes have shown that there is no bureaucratic solution to the problem of persistent and rising levels of poverty. The "wars on poverty" have fed the 'warriors' not the poor. The succession of development strategies after 1945 have not succeeded in reducing, let alone eliminating poverty. The figures in the section on global poverty bear this out. Coming to grips with the rising levels of poverty in South Africa (and elsewhere in the world) is the first theme of this report.

The global development agencies and some governments have become acutely aware of this dilemma. This awareness has led to the insight that development means first and foremost development of people. A people-centred development strategy can only succeed in an economic and socio-political environment empowering both the individual, the family and the community which forms the immediate environment of the individual. This is the second theme of this report.

In addressing poverty, the present government and the economic establishment emphasise the importance of economic growth. The emphasis of their negotiating partners is on redistribution and affirmative action. Economic growth on its own will not solve the poverty issue; it will have to be sustainable economic growth with redistribution. Redistribution and affirmative action without vigorous economic growth will ruin the economy. Wealth creation, or economic development with equitable distribution, is the key for coming to grips with poverty, providing employment, redressing historic inequalities and maintaining political and social stability. Addressing the "how" of sustainable growth, development of people and fair and effective redistribution is the main theme of this report.

DEFINITIONS

The issues of poverty, employment and wealth distribution are strongly interconnected.

Poverty

The World Bank defines poverty as "the inability to attain minimal standards of living". The term "minimal" can be interpreted in a variety of ways. Minimal standards of living in Germany can hardly be equated with those in the Sudan. Poverty, like deprivation is thus a relative concept.

Gharajedaghi defines poverty in terms of five elements: powerlessness, incompetence, meaninglessness, exploitation and conflicting values. These attributes could equally apply to a wealthy person and fall short of a clear definition.

The Human Development Index (HDI) consists of the following indicators: life expectancy at birth in years; adult literacy rate in %; mean years of schooling; literacy rate index; real GDP per capita (see "Human Development Report 1992, United Nations Development Programme, p.127). The HDI divides nations in those with high, medium and low human development. Canada's HDI is 0.982, that of Guinea 0.052. In 1990, South Africa, with an HDI of 0.674 is ranked number 70 out of 160 countries, below Thailand. There is evidence that South Africa has dropped lower since. The HDI does not define poverty, it measures it.

The profile of human development adds a number of criteria which further measure levels of poverty. These are: percentage of population with access to health services; percentage of population with access to safe water and sanitation; daily calorie supply as a percentage of requirements; combined primary and secondary enrolment ratio. South Africa was again ranked 70 in 1990.

The poverty datum line (PDL) is not a definition but a moving yardstick below which people are considered to be poor. Statistical averages, however, do not define the predicament of the poor individual. If poverty is relative then there must be gradations. Poverty can range from a pensioner, residing in an affluent suburb, who cannot meet the essential bills anymore to the destitute street dweller who does not know where the next meal will come from.

Edward de Bono, a world authority on creative thinking, maintains that poverty is not just economic but has a strong psychological dimension. When visiting South Africa he stated: "If people don't have expectations, they *feel* they can't take decisions, they *feel* they can't do things, they just have to drift along". He explains: "In Venezuela, when we taught the youngsters thinking, they developed greater self-esteem, they believed they could think about things, make decisions, find alternatives. That's very powerful. That is the basis of economic development - giving people a sense that they can take charge".

For the purpose of this report we correlate poverty with choice. Poor people have little choice, whether real or perceived. The poverty trap is the near complete absence of choice: choice where to live, what to eat, what to do, how to protect oneself. There is utter despair, based on the feeling that there is simply no way out. In contrast the monastic vow of "poverty" is an act of choice and thus not poverty. As long as there are choices there is a way out of the trap. Fighting poverty is providing people with choices.

Employment and the fourfold structure of the economy

The Bureau for Economic Policy and Analysis of the University of Pretoria defines unemployment as comprising all persons who are able and willing to work but who are not gainfully employed. Unemployment under this definition provides an indication of the difference between the demand and supply in the labour market. This definition is too narrow and relates mainly to the formal economy. It is a poor reflection of the real employment situation in developing countries. Developing countries (and some developed ones) have a strong informal sector, absorbing a substantial portion of those who cannot find work in the formal sector. Once the informal sector cannot anymore absorb the numbers seeking work, like in South Africa at present, the unemployment situation becomes critical.

In the South African context we distinguish between four layers or spheres of economic activity. Each layer differs in social organisation, nature of work performed, skill levels required and resources employed.

- 1 The subsistence sector is fluid and loosely organised, in which people perform (predominantly) unpaid work aimed at securing survival. Skills are basic and traditional and mainly simple tools and human and animal power are employed. Access to finance and markets is limited. In the African context most work in this sector is performed by women. This sector operates outside the tax structure.
- 2 The informal sector is more structured. The business unit is very small in which people perform unskilled to semi-skilled tasks and render personal services on a small scale. Low to intermediate technology is employed and the sector is labour intensive. Access to finance is mainly through money lenders and NGOs providing minimal financial and training support. This sector operates mainly outside the tax structure.
- 3 The formal sector is highly structured, in which people perform work ranging from unskilled to highly skilled, specialised, managerial and professional tasks using medium to advanced technologies. The formal sector provides society with advanced products and services. The formal sector in South Africa has gradually become more capital intensive and has ceased to meet the demand for work of a growing population. This sector is the main source of tax revenue.
- 4 The advanced sector is again more informally structured, in which people perform highly specialised and advanced tasks using state-of-the-art or experimental technology. This sector drives research, sets policies and develops new products, new materials and new services.

The spread of these four sectors over the total South African working population is probably 20% subsistence, 25% informal, 50% formal and 5% advanced sector. The SBDC (Economic Research) quantified the composition of the private economic sector in 1993 as follows: 85 holding companies, 654 listed companies, 175 000 registered unlisted companies, 240 000 closed corporations, 430 000 sole proprietors and partnerships, and 2 500 000 informal sector actors. It is at the bottom end of this pyramid, that the jobs will have to be created. The DBSA Policy Model states, however, that the main platform for the future prosperity of the people should not be sought in these informal activities: "...useful as they are as an adjunct to the formal economy, the road to prosperity lies in greater gainful participation in the formal economy" (DBSA, 1993, p.6). We do not agree with this assessment, mainly on the ground that the cost of job creation in the formal sector is prohibitive in terms of the numbers that are presently unemployed and the numbers that enter the labour market every year. A strengthening of the informal economy through Community Development Units and community empowerment, as proposed in this report, seems to us a more viable and realistic policy.

A viable employment strategy will have to address the specific needs of each sector and aim at opening the sectors to each other in terms of economic advancement over the whole spectrum. Applying the rules of the formal and advanced sectors to the subsistence and informal sector could lead to undesired

outcomes. A case in point is the application of formal labour legislation and conditions to those employed in the informal sector.

Wealth creation

To define the state of "wealth" is as problematic as defining poverty. Nations that were once wealthy, as was Spain four centuries ago, or Iran a few decades ago, fell back into a considerably less affluent state. Britain's economic supremacy in the last century was based on coal. Today's dilemma is whether to keep the coal mines open or not. The impoverishment of the Third World is partly due to the shift of advanced nations towards information or post-industrial societies and the subsequent shrinking demand for and falling prices of basic commodities.

According to Gilder "wealth consists in assets that promise a future stream of income". Such assets would include natural and human resources, capital and technology. For the purpose of this report we define the creation of wealth as the process in which the will and ability to add value are being applied. The "will" is the entrepreneurial and moral (work-ethic) dimension of wealth creation, and the "ability" is the reservoir of knowledge and skills embodied in the human resource. South Africa is lacking in both aspects.

Work as human action does not by itself create wealth. It does so only if it adds to the productive assets of the community. Creating wealth is not restricted to material wealth. Aesthetics is an important and often neglected part of the development process. The arts, good design, innovation, transferring knowledge and values, education and training, keeping a population healthy are all asset creating processes.

In addition to will and ability, there are two further aspects determining the wealth creation process, namely risk and opportunity. In the formal sector (excluding government, where risk is largely absent) it is the employer or entrepreneur who sees opportunities and is prepared to take the risks involved in pursuing these. The employee is the person who depends on someone else to create the job-opportunity and carry the risk. In the informal sector and in self-employment the aspects of will, ability, opportunity and risk are usually welded together. These distinctions shed a different light on the concept of unemployment and on the critical importance of the informal economy for the creation of jobs and the elimination of poverty.

Wealth distribution

The distribution of wealth is one of the three core themes of this report. The current debate on the pros and cons as well as the means and ends of wealth distribution will be addressed in the various relevant sections. For the present purpose we are interested in a definition for a distribution mechanism which is not a zero-sum game. Any distribution system which is not linked to a wealth creation system will inevitably lead to general impoverishment. Poverty and inequality cannot be overcome solely by the redistribution of wealth in the form of physical assets. Since development is in the first place development of people, education and training are the two key instruments of wealth distribution. Providing people with knowledge and skills takes nothing away from those who have already acquired these. The challenge then shifts to designing policies and an environment in which people can turn such knowledge and skills into wealth

creating processes. The initiative to turn knowledge and skills into action must be perceived as possible and rewarding.

SECTION I: THE SITUATION

In this section we will briefly investigate the global, African and South African situation of poverty and how it affects the various segments of the population. Present levels of employment and unemployment in the various sectors of the economy will be discussed. Finally we will look at some of the causes of poverty.

GLOBAL POVERTY

Poverty is endemic in the developing world. According to the World Bank more than one billion people out of a global population of 5.5 billion are destitute and are struggling to survive on less than US\$370 a year. A further 3.2 billion must be considered poor. At best the poverty levels will not rise, except in sub-Saharan Africa, where the number of destitute may rise from 75 million to 150 million, whilst the number of the poor would constitute some 80% of the total sub-Saharan population. In a global context, slower growth in the industrial countries, higher interest rates and a smaller than expected rise in the terms of trade could combine, as it did in the 1980s, to pose further obstacles to the reduction of poverty. (World Development Report, 1990)

During the 1990s, 100 million people will be added annually to the global population. The majority of these 1 000 million will be living in the Southern hemisphere and in Asia and will be poor. The burden of poverty is unevenly spread over the regions of the world and among countries within the regions. Nearly half the world's poor live in South Asia, a region that accounts for roughly 30% of the world's population in 1990.

The Human Development Report, 1992 states that 94.4% of world income is earned by the richest 40% of the world population whilst the poorest 60%, or 3.3 billion people, earn the remaining 5.6%. The ratio of income between the bottom 20% and the top 20% of income earners has deteriorated from 1:30 in 1960 to 1:59 in 1990. Such gross inequality *within* a domestic economy is dangerous and destabilising; it remains to be seen what the destabilising effect will be on a global scale. Some observers state that the widening North/South income gap is the successor to the East/West conflict. As Sauvy, the French demographer put it "if wealth does not go where the people are, people naturally go where the wealth is". (Quoted in Davidson and Rees-Mogg)

High levels of poverty are not restricted to the developing world. The former Second World (the region of the former Soviet Union and its Eastern European satellites), is experiencing an unprecedented rise in impoverishment in the wake of the painful restructuring from a centralised command economy to a free market system. Estimates from various sources indicate that aid and investments in the region of US\$3 trillion would be required to redress 70 years of political oppression and economic mismanagement. The former German Democratic Republic alone will require an annual injection of US\$100 billion for at least a decade to achieve present West German standards. There are signs that poverty is also on the rise in Europe and in the Americas.

High global poverty levels pose a grave threat to the environment. Advancing the retarded economies to the levels of the present advanced nations without at the same time introducing unprecedented environmental controls - and therefore costs - could collapse the already stressed global ecosystem. The challenge is thus a double one: to eliminate poverty, create work for billions entering the global labour market *and* to prevent ecological collapse in doing so. Poor nations cannot afford to put caring for the environment before fighting poverty. In the words of Lester Brown, President of the Worldwatch Institute:

Charting the deterioration of the earth the past nine years, we can see that "business as usual", with an adjustment here and there, will not reverse the decline. Already the degradation of the planet is damaging human health, slowing the growth in world food production and contributing to falling incomes in many countries. Building an environmentally sustainable future depends on restructuring the global economy. It also calls for major shifts in human reproductive behavior and dramatic changes in values and lifestyles. Doing this quickly adds up to a revolution, one defined by the need to restore and preserve the earth's environment. The agricultural revolution began about 10 000 years ago, while the industrial revolution has been underway for two centuries. But if this new revolution is to succeed, it must be compressed into a few decades. (New Scientist, 22 February 1992)

SUB-SAHARAN AFRICA (SSA)

Sub-Saharan Africa is in a far worse shape than South Africa. The world community is gradually directing its attention elsewhere. There are at least 22 global crisis areas and Africa figures somewhere at the bottom of the list. Developments since the publication of the World Bank's seminal report of 1989 "Sub-Saharan Africa: from crisis to sustainable growth" have been extremely disappointing. Private investors rate Africa low, because operating costs in African countries are on average 50% to 100% higher than in South Asia, where returns on investment are up to nine times greater. According to world development indicators absolute poverty in SSA will increase from 180 million in 1985 to 265 million by the year 2000. By that time SSA will account for more than 30% of the developing countries' poor as against 16% in 1985. AIDS, recurrent droughts and civil wars could render these forecasts a gross underestimate.

SSA's 1992 external debt has risen 19-fold since 1970 and stood at US\$183.4 billion. This is equal to 109% of its GNP, making the region the most heavily indebted one of all. School enrolments are dropping, nutrition levels are worsening and infant mortality continues to rise. Open unemployment in the towns, especially amongst the youth, is also on the rise. Institutional decay is symbolised by the poor conditions of once world class universities, the disintegration of paved highways and other infrastructure and the collapse of the judicial and the banking systems. Overstaffed and poorly managed bureaucracies are deadweights on the disintegrating productive sector. Many governments are wrecked by corruption and are increasingly unable to command the confidence of the population at large. With few exceptions, recent developments towards multi-party democracy and free market policies have either been short-lived or have failed to deliver tangible results.

SSA's economic growth rate of 1.5% is the lowest in the world. Between 1960 and 1989, SSA's share of the world's GNP dropped from 1.9% to 1.2%. Food

production is 20% lower in 1990 than it was in 1970, when the population was half the present size. Some populations are still growing at 3.3% annually and there are no indications that famines, wars and AIDS will halt, let alone reverse this fatal trend. Those who survive famines or childhood diseases are often stunted for life. Their ability to make social or economic contributions is thus severely constrained.

There are sentiments amongst the international donor and lending organisations that a democratic South Africa could well form a viable conduit to (Southern) Africa for whatever international development aid would be forthcoming. South Africa (still) has the technological and financial infrastructure to make a more effective use of such aid. A pre-condition for such aid would be that a new representative government be in power. Forging such a cooperation on a regional level will raise a number of legal, economic and constitutional challenges. The reasons for success and failure of the many regional models for cooperation in Africa would require deeper analysis.

Fortunately not all of Africa is gloom. Hundreds of millions survive in a "scramble for existence" by ignoring the state and its corrupt institutions. The poor have started to look after themselves in an informal economy of great variety and an amazing ingenuity. Whatever the future of SSA, South Africa will of necessity have to share this future, since the country is an inextricable part of the continent.

SOUTH AFRICA IN AFRICA

There has been a deep suspicion in the SADCC that the economic might of South Africa constituted a permanent threat of regional dominance. While the GDP of South Africa is three times the GDP of the ten members of the SADCC combined, South Africa's economy is strong only in a regional context. The South African economy with 40 million people is equal to that of the State of Maryland with 4.5 million people (SA Foundation Review, March 1992). However, South Africa, in the words of minister Keyes could become "the economic flywheel for sub-Saharan Africa". As Leistner observed: "the SADCC clearly hopes that the eleventh member will largely make up for the shrinking overseas aids funds, and that South African domination can be forestalled by putting in place an appropriate organisational structure before the country gains admission" (Africa Insight, vol.22, No1, 1992).

There are a number of strong arguments, why regional cooperation is essential. We mention three:

- 1 If South Africa were to succeed in developing a constitutional dispensation and an economic policy which would promote economic growth, achieve gradual modernisation and integration of the present disenfranchised section of the population, as well as address the problems of poverty, employment and wealth distribution, then such a development could be in jeopardy if the economies of our neighbouring countries would continue to deteriorate. A prosperous South Africa needs prosperous neighbours.
- 2 AIDS is ravaging the continent and our neighbours are some three to five years ahead in the progression of the pandemic. Stronger economic and social linkages will accelerate the spread of AIDS in South Africa. A regional strategy to combat AIDS is therefore imperative.

- 3 The economic and technological logic of the provision of bulk infrastructure such as electricity, water, transport and telecommunications require a regional approach for their solution. This has been recognised by Eskom who have developed plans for an integrated power grid from the Congo to the Cape. Similar cooperation is necessary for a regional satellite service and regional road and rail grids. The recent devastating drought calls for an integrated strategy of water provision.

Transforming the regional infrastructure and creating an environment for the advancement of a population, more than half of which is illiterate and unskilled, will require large scale investment. Calls for a "Marshall Plan" for Southern Africa have been made recently. Such calls require much further thought and qualification. When George Marshall made his famous speech on the 5th of June 1947 at Harvard University, much of Europe was in ruins. The plan worked, because there was the will to work and repair the war damage. But, more importantly, there existed a large pool of skilled people of both sexes. These conditions are all but absent in most of Southern Africa. Unless such investment is first and foremost directed at the development of people, such investment may share the same fate as past injections into Africa: it will be wasted.

POVERTY IN SOUTH AFRICA

Recent history of poverty in South Africa

The two main research projects into poverty in South Africa are the First and Second Carnegie inquiries. The first investigation was initiated during the Great Depression, when "large numbers of whites, uprooted from the land during the previous generation by war, drought, pestilence, population growth and the capitalisation of agriculture, were pouring into the cities to live, ill-equipped for modern industrial society, in dire poverty" (Wilson and Ramphela, 1989). "The failure of the Commission lay in the extent to which the limitation of its concern to whites only meant that its findings were used to promote strategies for improving the position of poor whites, often at the expense of poor blacks."

For a number of reasons, but not least to redress an imbalance, the centre of gravity of the Second Inquiry had to be black rather than white. Also the Second Inquiry was designed as an open-ended ongoing process rather than as a once-off initiative. Wilson and Ramphela's book (1989) is the essential summary of this major research project. It would be futile to attempt to compete with this vast body of evidence, save to say that the present sustained deterioration of the economy, the rising levels of unemployment and the endemic violence are having a devastating effect on members of all population groups. At present the total population is affected and the purpose of this report is to present policy options which address the issues of poverty, employment and wealth distribution for the whole nation.

Present levels of poverty in South Africa

According to the Reserve Bank the average level of living of all South Africans has dropped by at least 20% per capita and has reversed to 1971 levels. According to the World Bank's Development Report for 1993, SA was the 85th poorest nation in the world, trailing behind Lithuania, Hungary, Venezuela and Brazil. (In 1990 South Africa was graded the 90th poorest nation.) South Africa's infant mortality rate is 73 per 1000 live births, 38 above the world average.

(Interestingly the IMR is 80% higher among children of mothers without education, than among those whose mothers had achieved Standard 8 or higher.) The main reasons for South Africa's recent impoverishment are nearly five years of recession, a turbulent political process, a drop in international commodity prices, a world recession, and the combined effects of sanctions and the drought.

Yach of the Medical Research Council states that while the percentage of the population living below the absolute minimum living standards has decreased from 50% in 1980 to 42% in 1990, the absolute numbers have increased from 14.7 million to 17.1 million. Eleven million of the 17.1 million live in rural areas, the remaining six million almost equal the present number of squatters. According to the DBSA (October 1993), 18 million people in South Africa currently exist below the accepted "minimum living level" of R750 per month per household. Of these 18 million, 17.1 million are Africans. "Between eight and nine million of the population are regarded as completely destitute, depending on social grants and support schemes." (DBSA, p.4) There are indications that the situation has deteriorated during 1992/1993, and that the present number of the poor and the very poor could approach 20 million.

In 1989 the distribution of those earning more than R2 000 per month was Africans 2.4%, coloureds 12.5%, Asians 26.8% and whites 65.8%. While household income for Africans was increasing faster than that for whites, the absolute gap was widening. The IMF concluded that the income levels of the black population in South Africa, coupled with other socio-economic indicators are comparable to those of the poorer countries bordering on South Africa. Consumer indebtedness rose from 18.5% of take-home pay in 1987 to 28.5% in 1990.

The burden of poverty is not equally spread over the total population. Women and the very young as well as the old are most severely affected. Operation Hunger estimates that two million children suffer from malnutrition. African women, mainly as mothers, suffer most from the effect of poverty. They are the principal producers of food in the rural areas, the managers of dwindling household resources and the custodians of whatever remained of a healthy family life. Women and children suffer most from widespread family break-up in the townships and from the exodus of able males and young females from the rural areas. Many of the single mothers face the need to start work in mid-life, at which point they experience a loss of whatever formal skills and education they previously possessed.

The plight of the aged

The South African Council for the Aged estimates that in 1992 there were close to a million people over the age of 65 who are living below the breadline and find themselves in a desperate financial situation. Some 130 000 white elderly (38% of total), 65 000 coloureds (16% of total), and 700 000 African (90% of total) "are battling to stay alive". In the Asian population most of the elderly are absorbed in the extended family system which is still functional.

The fate of the young

David Everatt and Mark Orkin of the Community Agency for Social Enquiry (CASE) conducted country-wide research, including the TBVC states among a

sample of 2 200 young people of all races between the age of 16 and 30 years. The findings have been both devastating and encouraging and many stereotypes about South Africa's youth have been refuted.

The frightening statistic was that there are about 3 million African youths in the age category between 16 and 30 years - 50% of all African youths in this age group - that are unemployed and in need of urgent attention. Some 450 000 are unemployed for six years and more. We will return to these findings in Sections III and IV.

UNEMPLOYMENT IN SOUTH AFRICA

The results of the study "Poverty: some views on contributing factors and solutions" (Snyman, 1993) "revealed the awareness among 800 black respondents of particularly unemployment, but also poor educational facilities and discriminatory practises as factors associated with poverty. Their solution also centred around the creation of work and of training opportunities for work and entrepreneurship". Direct or indirect contributions in cash, food and dwellings was also seen as a solution to the most severe forms of poverty.

The Reserve Bank in its latest annual report estimated that 46% of the economically active population was either unemployed or employed in the informal sector. Between 1983 and 1991 employment grew by only 0.5% and dropped to a negative annual 1.5% thereafter. Nearly 286 000 jobs were lost in the non-agricultural formal sector between 1989 and 1992. The National Manpower Commission estimated the EAP in 1993 at 12.7 million, of which 7.8 million are employed in the formal sector and 4.9 million are unemployed or engaged in the informal sector. Servaas van der Berg of Stellenbosch University estimates the total labour force at 14 million, of which 8 million are employed in the formal and between 2.5 and 3 million in the informal sector. One million are engaged in subsistence agriculture and the remaining 2.5 million are unemployed.

As far as the black workforce is concerned, the DBSA estimates that only 4.8 million or 41% of the potential black labour force is employed in the formal economy, 3.7 million are making a living in the informal sector, 1.2 million in subsistence agriculture and 2.1 million are altogether without employment (DBSA, 1993, p.6). We are not in a position to say which analysis of the job market is the most accurate one, save to say that the reality is always more complicated than the statistics indicate. The MERG report "Making Democracy Work" of December 1993 stated: "Rather than undertaking regular and detailed surveys of workers in the unenumerated sector, where the majority of people are engaged, the size and features of this sector are usually estimated as a residual from the little that is known about the enumerated or formal sector" (p165).

It has long been evident that the present levels of unemployment are of a structural nature and therefore largely beyond the reach of traditional economic and fiscal policies. The Labour Absorption Capacity (LAC) of the formal sector has shown a dramatic decline. In the period 1965 - 1970 some 73.6% of all work seekers could be accommodated in the formal sector. During 1975 - 1980 this percentage fell to 35.4%, between 1985 - 1990 to 12.5% and in 1992 to one percent (Ligthelm, Kritzingler & Van Niekerk in Development Southern Africa. 7.(4), 1990).

This drop in the LAC needs to be held against the fact that 400 000 enter the job market each year. In 1993 close to 360 000 will write matric and seek either continuing education or work. This will swell the numbers of the unemployed youth mentioned in the previous sub-section. Business failures, retrenchments and the drought add daily to the pool of the unemployed. Recent estimates indicate that unemployment is rising by 1 350 people per day or almost half a million per year. Once sanctions are lifted, industry may have to retool which will again substantially increase capital intensity in that part of the formal sector. The LAC of this sector will therefore remain negligible for some time to come. This will not be the case for government, and for some service industries, notably tourism.

This forecast corresponds with the employment figures by economic sector provided by the Central Statistical Service. Between 1980 and 1988 growth was recorded in distribution and hotels (+3.3%), agriculture (+10.4%), local administration and homelands (+39.1%) financial services (+40.6%) and central government (+57.4%). Decline was recorded in manufacturing (-3.8%), construction, and mining (each -5.4%), Provincial administration (-8/6%) and transport and communication (-9.2%). Figures for these trends after 1988 are not available, but should show a decline in agriculture, and a stronger decline in construction and mining.

The most vulnerable sectors of employment are households, commercial farming and construction. Employment in construction is highly volatile, temporary and often unprotected. Subsistence farming is the most vulnerable sector since there are no reserves, no capital, far away markets and ever smaller plots. As a result there are fragmented employment patterns and it is difficult for workers to build a track-record or a credible job history. The largest instability is experienced in the workforce over 45 and under 30 years of age. (Snyman, *Afford-ability* Aug/Sept 1993)

Job prospects for South Africa's graduates in 1993 are dismal. The Johannesburg Chamber of Commerce expects that less than one out of every 100 pupils who pass their matric examination in 1993 will find work, down from seven in every 100 school leavers in 1992. Almost 600 000 young people just out of high school and university - some of them highly qualified - cannot find work. There are no indications that this trend will be reversed in the short term. As stated above the formal sector will continue to become more capital-intensive, especially if industry is compelled to retool in order to remain competitive internationally and to keep up with advancing technologies. Massive youth unemployment, particularly if prolonged, has the potential to threaten the total fabric of society for decades to come.

Similar trends are developing in advanced nations. In the European Community unemployment stands at 12% or 23 million (1993). Continuing education is seen as deferred unemployment, and Europe is now speaking of its own 'lost generation'. In South Africa the cost of continuing education, in particular university education, is presently rising by 15% per year. For the majority of the population only those with access to loan finance or bursaries will be able to afford tertiary education. Alternative and more affordable systems of continuing education and training as well as new employment opportunities need to be created. We will return to this critical issue in the sections on community based development organisations (CBDOs) and informatics and higher education.

Employment in the public sector

Between 1980 and 1992 public sector employment increased from 1 284 519 to 1 681 776 or by 31% (15% of the EAP). This was an annual increase of 2.3%, compared to an increase of 0.6% in private employment over the same period. Between 1991 and 1992, however, public sector employment remained static. Compared to certain African countries South Africa's numbers employed in the public sector per 100 of the population in non-agricultural employment is still modest, probably 25, compared to Tanzania 78, Zambia 81, Kenya 39, Uganda 42 and Ghana 74.

Number of public sector employees (excluding TBVC) 1991-1992

	1991	1992	+/-%
<i>Exchequer personnel</i>			
General affairs departments	374 483	369 768	(1%)
Own affairs departments	189 498	182 752	(4%)
Provincial Administrations	219 512	228 781	4%
Total public service	783 493	781 301	(0.2%)
Non-independent homelands	207 202	235 578	14%
Parastatals	20 993	23 555	12%
Universities and technikons	55 885	57 881	4%
Total other exchequer personnel	284 080	317 014	12%
Total exchequer personnel	1 067 573	1 098 315	3%
<i>Non-exchequer personnel</i>			
Local authorities	228 139	224 078	(2%)
Agricultural marketing boards	2 843	2 759	(3%)
Public corporations	374 332	356 624	(5%)
Total non-exchequer personnel	605 314	583 461	(4%)
Grand total public sector	1 672 887	1 681 776	0.05%

Source: SAIRR, Fast Facts, No4/1993

Educators constitute 28% of exchequer personnel, labourers 23%, police and other services 16%, and nurses 9%. Approximately 10% of exchequer personnel can be termed 'bureaucrats' (SAIRR). Projections of the growth of the public sector over the next five years can only be of a speculative nature. The rationalisation achieved by the abolition of the Tricameral system as well as by the potential re-incorporation of the six self-governing homelands and some or all of the TBVC governments will probably be overcompensated for by the creation of nine new regional governments in a federal dispensation and by affirmative action in the public service.

Such affirmative action will be directed in the first place at posts with an income above R29 000 per annum. Of the approximately 100 000 public servants in this category, 80.5% are white, 8.6% coloured, 6.4% Asian and only 4.3% African. A change to 50/50 white/black over the next five years would imply the training of 30 000 high level public servants over that period. If the ratio were to reflect the racial population distribution, 65 000 would need to be trained.

In 1992 employer contributions from taxation to state and parastatal pension funds was R11.8 billion. This figure is more than six times the employee contribution. (In the private sector the ratio employer/employee contribution to pension funds is 1.5). The total deficit of the five state pension funds is estimated at R29 billion, the result of the buy-back system and low returns on investment in the past. There is evidence that thousands of public servants in South Africa and in the homelands are cashing in on their pensions while either remaining in or re-entering the state pay-roll on five year contracts. The HSRC calculated that if 20 000 public servants with an average of 30 years service were to leave the service prematurely, their one-off gratuity payouts would amount to R4 billion and their pensions to about R17 billion. Needless to say that this practice is reducing the tax substance available for social investment.

Labour unions and employment

Research conducted by Econometrix points to a widening gap between families trapped in abject poverty and families that can depend on breadwinners whose powerful trade unions ensure that pay-packets keep growing. In the midst of a prolonged recession, trade unions continued pressing for wage increases, usually exceeding those of productivity. Econometrix also found that buying patterns have broken all the normal rules of economics. A deeper analysis reveals obvious evidence of a dramatic spread of utter poverty among the jobless, reflected in a dramatic decline in the purchase of food, normally the last item to be trimmed. At the same time we witness higher spending levels on relative luxuries by those fortunate enough to be inside the safety net of (relatively) secure employment. The extension of the influence of the labour unions to domestic workers and farmworkers and the attempt to amalgamate all public service unions has the potential of splitting the country into "haves", protected by union power, and "have-nots" left to fend for themselves. It is unlikely that the unemployed and those employed in the subsistence and informal sectors would come into the labour union network. To design a social security system for these neglected categories under the present economic circumstances will pose a major challenge to the incoming administration.

The role of the trade unions in shaping future economic policy and defining the parameters of reconstruction should not be underestimated. There can be no creative solution of the poverty, employment and wealth distribution problems without the constructive cooperation of the labour unions, notably COSATU. Elements of the COSATU reconstruction programme are job creation, human resource development, a social wage, effective delivery of social services such as education, health, housing, electricity and water, and the empowerment of civil society and unprotected workers, notably rural women. The Macroeconomic Research Group (MERG) took these objectives - and others - as their starting point. "The aim of the MERG framework is to secure a rapid improvement in the quality of life of the poorest, most oppressed and disadvantaged people in South Africa" (p.2). We will comment on the MERG recommendations at the appropriate sections of the report.

To what degree the labour union movement will influence economic policy will largely depend on how the relationship between the ANC and COSATU develops during and after the elections. Organised labour, though not monolithic in outlook, is probably one of the best organised and thus strongest political constituencies in South Africa.

Small business and the informal sector

There seems to be general agreement that promoting small businesses and strengthening the informal sector is at present the only avenue to reduce unemployment and absorb future work seekers. Small businesses provide 38% of all job opportunities. There are, however, varying views on how this is to be achieved. The SBDC estimates that there are between 1.4 and 1.6 million businesses of which 980 000 (70%) are in the informal and 420 000 (30%) in the formal sector; 1 200 000 (85%) are small businesses. The estimates of contribution to GDP by the informal sector vary from 10% to 35%. These variances are probably caused by the blurred boundaries between the informal sector and small business. Another factor is that the informal sector activities are dominated by services and trading that do not add much material value.

The SBDC, one of the major instruments of creating small businesses, has recently come under criticism, notably by the National African Chamber of Commerce. The main criticism is that the SBDC is Afrikaner dominated and does not give enough attention to the lower end of the small business spectrum. In other words the SBDC is too formal. The SBDC claims that it is run according to business principles where risks need to be traded off against results. That there is a need to extend the activities to micro-businesses (annual turnover less than R250 000 and not more than five permanent workers) is acknowledged, and R88 million has been allocated for that purpose. Due to financial constraints the SBDC estimates that loan approvals for 1993/94 may be forced to remain at 1992/93 levels unless new sources of finance are produced. The SBDC estimates that in 1992 the contribution to South Africa's GDP was as follows: general government 16%, public corporations 13%, large private formal businesses 25%, small and medium formal enterprises 29% and informal and micro enterprises 17%. Such a breakdown requires further analysis in terms of the capacity of each sector to add value, since the contribution to GDP on its own does not measure real economic value. E.g. the value of the production of a battle tank cannot be equated with the monetary equivalent in tractors.

We will return to the informal sector, small business and job creation in sections III and IV.

THE CAUSES OF POVERTY

The global literature on the causes of poverty is vast and cannot be reviewed in the present context. In addition to the more direct and obvious reasons, poverty is influenced by cultural factors, attitudes, preferred lifestyles and climatic conditions. Harsh climates require a.o. protective shelter, stocking food and generally promote hard work for sheer survival. Only very recently have advanced nations created lifestyles which shelter humans against nature, make food available around the year and around the clock in unlimited quantities and in unprecedented variety. All this, of course, at a price.

Population growth

Dostal suggests that past and future population growth is one of the major causative factors of poverty. She argues that a fast growing population implies that the economy, employment opportunities, income, infrastructures, etc. have to grow at the same rate as populations in order to maintain the status quo. For an improvement in living standards to be achieved, these growth rates have to exceed the population growth rate. (Some future trends on poverty and population growth, Institute of Futures Research, 1985?)

The argument seems logical enough but is not supported by Wilson and Ramphela (1989)... "in a country which for the past hundred years has drawn a large proportion of its industrial labour force from beyond its political boundaries, it is difficult to sustain the argument that too rapid a population growth has been the cause of poverty" (p.244) and "contrary to the often made assertion, demographic issues are not central" (p.245). Finally (quoting Cassen) "of course population growth is not...responsible for unemployment in the Third World. That responsibility lies with inadequate access to public services, education and productive assets; with technological choices, fiscal policy and pattern of demand for goods and services. These in turn depend on power structures, income distributions, the role of multinational corporations, the International Economic Order, etc."

The theory of demographic transition seems to indicate that decline of population growth to replacement levels usually follows development. The relative security achieved in affluent nations with a highly developed social security system obviates the need for a large offspring to safeguard old age. The cost of children in a developed society is an effective deterrent to having large families. Be that as it may, in the South African context high population growth amongst the poorer sections of the community has made the task of economic development considerably more difficult. It should be remembered, however, that section of the population was already poor when their numbers were relatively small.

According to the latest figures from the Unisa Bureau of Market Research the total population in 1993 is 39.2 million, with an average annual growth rate of 2.46% in the past two years. This amounts to an increase of 1 560 000 since 1991. This figure is distributed as follows: RSA 20.9 million, the six self-governing homelands 11.3 million and the TBVC countries 7.1 million. If there are no changes in the total fertility rate, estimates are that the population will grow to 47 million by the year 2000, to 79 million by the year 2020 and to 138 million by the year 2040.

Simkins argues that considerable savings to the economy can be achieved if the targets of the Population Development Programme (PDP) are achieved, i.e. replacement fertility of 2.1 by or before the year 2010. He states that (in 1987/8 prices) the difference between the PDP target and the HSRC low forecast between 1985 and 2010 would save the country R189 billion; the difference between the PDP target and the HSRC high forecast would save R272 billion (in Schrire: Critical Choices for South Africa, 1990, p.228). Such calculations seem to assume that the numbers added would only consume and make little or no contribution to the economic substance. Whether such a contribution is made or not depends in part on how the policy issues listed by Cassen are managed.

The main factors that will curb population growth are accelerated development, urbanisation, the free and abundant availability of contraceptive devices, effective perinatal care and immunisation programmes, and higher levels of education, in particular for women. All these factors require urgent attention if the quality of life of the poor majority over the next 10 to 20 years is to be improved.

If we average the urbanisation forecasts by Spies and Simkins, then the urban population will rise from 15.7 million in 1980 to 43.8 million by the year 2010. This would amount to an urbanisation rate of close to one million a year. The savings achieved by reduced population growth through urbanisation will be overshadowed, however, by the cost of establishing accommodation and services for 28 million new urbanites over 30 years. The vicious circle between population growth and development needs to be broken. The historic evidence shows that this will not happen using the traditional economic and fiscal policies, designed for the management of a First World economy.

Biological carrying capacity

Carrying capacity is a theoretical measure of the *potential* of the land resources in a region to carry a specific population. The evaluation of carrying capacity is based on information from soil-maps seen together with climate-data. Carrying capacity is not a static. With increasing scientific knowledge and technological application, the carrying capacity of a given land can be extended (Business Futures, 1991, Institute for Futures Research, Business School, University Stellenbosch).

We will deal with this parameter in the next section when discussing agriculture and food production in South Africa. At this point we wish to mention that in Hong Kong 6.5 million live on 1m hectares, much of it rock. To achieve a similar population density, the South African population would have to grow to 793 million. Yet Hong Kong is a highly developed society, with an HDI of 0.913, 23rd from the top. Hong Kong creates sufficient wealth to compensate for the lack of those resources which depend on the size and the quality of the land. In a global economy which is increasingly interconnected and interdependent, South Africa could overcome the constraints of carrying capacity by developing its human and beneficiating its mineral resources. While the comparison with Hong Kong may be flawed, it nevertheless points in the direction of non-linear solutions.

Conclusion

The impoverishment of South Africa over the last decade cannot be traced to a single cause, such as apartheid. Comparable developing nations without apartheid also display high levels of poverty. Population growth, wasteful agricultural policies, apartheid and discriminatory legislation favouring the white population, a prolonged domestic and global recession, fluctuating commodity and gold prices, international isolation and sanctions, the flight of brains and capital, defence expenditure on avoidable border wars, economic policies and investment decisions based on the total onslaught ideology, political violence and high levels of criminal activity, and a large unwieldy and stifling bureaucracy have all contributed to the extreme and unacceptable poverty and unemployment levels South Africa is experiencing today.

If South Africa is to succeed to effectively address the issues of poverty, employment creation and a more equitable distribution of wealth the lessons from

the mistakes of the past will have to be learned. One of the main fears in the private sector is that the new government will succumb to the temptation of easy job creation in the public sector. As Leistner pointed out, this would be a certain route to economic decline. We would soon join sub-Saharan Africa in its predicament.

On the positive side the recession seems to be bottoming out in 1993, inflation has reached a single digit level, sanctions and isolation are a thing of the past, discrimination is on the way out and a new government will be in power within six months. It will now depend on the policies adopted by the new administration whether South Africa will join the fate of sub-Saharan Africa or whether it will become the engine for regional recovery. The potential for both scenarios unfolding is still there. Before we develop the linear options (Section III) and the transformational options (Section IV), we will explore and quantify the backlogs and inequalities in a number of critical areas of society and the economy.

SECTION II: THE CHALLENGE

INTRODUCTION

Many attempts have been undertaken to quantify the cost of economic reconstruction and service equalisation over a given period of time. Prof. Lombard has calculated these costs for the Development Bank of Southern Africa, as a basis for a five year draft human development plan, which was tabled in October 1993 and will be discussed in various parts of this report. After debate, this plan will be presented to the World Bank and the IMF and other major funding and donor organisations. The MERG report, released December 3, 1993, "Making Democracy Work: a Framework for Macroeconomic Policy in South Africa" is plainly critical of IMF and World Bank prescriptions and has developed its own policy framework on how to meet the development and reconstruction challenge. In this section we will attempt to critically assess the backlogs and future demands in the main socio-economic areas. This will then serve as a basis for a critical analysis of new policies needed to achieve equity over an acceptable period of time. We can, of course, not provide a full picture in each area. We only highlight some of the most relevant statistics and briefly outline the key problem areas.

HOUSING AND BASIC INFRASTRUCTURE

Backlogs and future demand

Backlog estimates vary. The government: 1.1 million units, the DBSA: 1.2 million units, the Urban Foundation: 1.5 - 2 million units and the Housing Trust 3.4 million units. This would average to a 1993 backlog of 2.1 million units. An additional 2.9 million units are needed to accommodate urbanisation and population growth up to the year 2000. In total a building programme of five million units over seven years, or 2 000 units every day. At an average cost of R20 000 per unit such a programme would require an investment of R100 billion over the period, which is clearly impossible. The De Loor report (1992) calculates a need for 328 000 new units per year over the next decade. Even half this number, given the present funding mechanisms, seems out of reach. The history of low-cost housing construction over the past decade indicates that none of these targets will be achieved without a completely new housing strategy.

Site and service

Instead of subsidising housing construction, the Urban Foundation, the Independent Development Trust, the Nedcor/Old Mutual scenario and the SYNCOM/HSRC Housing Report favour the policy of making a serviced site available to eligible prospects at an average estimated (1992) cost of R7 700 per site. The Nedcor/Old Mutual scenario proposes making 400 000 serviced sites available per year at a total cost of R2.4 billion (R6 000 per site, 1990 prices). It deserves consideration to add the cost of an electrical connection, on average R3 000, to this subsidy. This would eliminate the recovery of domestic electrification schemes through increased user charges. Such a subsidy scheme does not by itself resolve the housing crisis. Strong community involvement and job creation focused on housing and related activities require local institutionalisation. This report considers housing as one of the critical areas of activity for the proposed community based development organisations. Housing *policy* may be centralised, but *delivery* should be decentralised.

Making sites available on such a scale raises the issue of suitable land in the right quantities and the right locations, a problem that has not yet been resolved. According to MERG there are over 360 000 hectares of vacant or developable land in the six metropolitan regions. Theoretically this is enough land to accommodate 10.8 million units. In practice, existing red tape, a tradition of separate urban development, and the fragmentation of the housing provision sectors can turn this programme into a bureaucratic nightmare. Problems are not made easier by the endemic and growing squatting problem. At present eight million South Africans are 'housed' in substandard dwellings. At the time of the 1991-census 2 832 046 people, i.e. 9% of the population were found to be living in the destitution of shacks. These are distributed across the length and breadth of the country (Epidemiological Comments, vol20, no8, August 1993). Since the 200 000 units per year to absorb future demand are not nearly being built, the number of squatters will increase over the next few years. Severe drought and retrenchments in agriculture, mining and the construction industry are compounding the problem.

The De Loor Commission on housing recommended the establishment of a Housing Finance Corporation to provide loans for land, bulk infrastructure and short-term development finance. Based on the freehold asset of a serviced plot, the financial institutions would be enabled to finance bonds. The De Loor report recommended that state spending on housing should be increased from R1.6 billion in 1990/91 to R3.5 billion by 1995, or from 2.1% of GDP to five percent.

The MERG report is critical of the De Loor report and recommends that the state take full responsibility for housing through a unitary national housing authority with corresponding institutions at lower tiers of government. Such a housing authority will be responsible for urban and regional planning, the provision of infrastructure, the coordination of all aspects of housing delivery, formulating and monitoring planning regulations, and facilitating the release of land for housing. The housing market and the supply of building materials are to be regulated. MERG formulates as a central goal "that the number of formal houses completed rises from 38 000 to 350 000 per year by the turn of the century. Of these, 180 000 will be provided by the public sector, rented at half imputed costs, at an overall cost of R32 000 per unit in 1992 prices". (p94) MERG also recommends "to change the structure of banking and encourage financing of priority sectors,

which should not include the traditional mortgage sector" (p286, our italics). MERG clearly favours central control and planning and strict regulation of the total housing effort. This would include an access and feeder road building programme of R3.2 billion per annum and a water supply programme of R1 billion per annum with recurrent expenditure rising to R600 million per annum within ten years.

Whilst MERG sees no role for the banks in mortgage lending in the low-cost housing sector, Careen Engelbrecht, a consultant to SANCO, believes that "red-lining" - the refusal by banks to lend in areas that are going "grey" - will be one of the most critical problems facing a new government after April 1994. She recommends the adoption of the American Community Reinvestment Act (CRA) as a counter to red-lining. CRA-ratings would inform the public as to which banks have the best record of developing local economies or providing housing finance. This would then be a cue to many institutional investors to give preference to banks with good CRA-ratings.

We suggest that community banking through the proposed community based development organisations would be a more constructive approach. The present risks of financing and developing low cost housing are not the fault of the financial institutions. Many scenario planners and economists see housing as an area to kick-start the economy, considering the multiplier of 1.8 per Rand invested. Housing is labour intensive, has a low import content, creates assets and ownership, is highly visible and helps restoring family and community life.

Spatial distribution

Urban sprawl or the present spatial organisation of black housing will be very difficult and costly to change. As a consequence the cost of transport for African workers often exceeds 10% of monthly income, quite apart from time and energy wasted on cumbersome commuting. A viable urban strategy would have three main components: the early identification of suitable land; the increase in variety and density of shelter; bringing work opportunities to the people and creating economic substance and cashflows in backward communities.

Electrification

Housing is only one aspect of community development. In addition investment is needed in road and transport infrastructure, clinics, schools, community buildings, water reticulation and sewage and waste removal systems. Above all, to be viable, the existing and the new communities need to be electrified. At present 58% of all households are without electricity. This affects the daily lives of 23 million South Africans who have no electricity in their homes. The DBSA states that present electrification covers 29% of black urban, 10% of peri-urban, and 13% of rural homes. The latter are largely confined to white farming areas (DBSA, 1993, p.9). Eskom estimates that electrification of 2.1 million additional dwellings could be completed by 1997 at a capital cost of R6.3 billion, or R3 000 per household. We suggested above that this capital sum is included in the once-off subsidy to deserving families.

The University of Cape Town-based Energy Policy Research and Training Project (Epret) recommends that the rate of annual connection be increased from the 1992 level of about 200 000 houses to 500 000 within three years. This would increase access to electricity from the present level of 42% of all homes to 70%

by the year 2000. By 2010 the Epret team believes that 90% of households could be connected. Access to electricity is a highly visible benefit which can be realised within reasonable timeframes. In addition to improving the quality of life, electrification opens the avenue for informatics, linking the communities and institutions in a satellite-based telecommunications system. The advantages of electrification are many: communication, learning, entertainment, reduced pollution levels and a market for manufactured goods. Electrification also stimulates economic activity.

The direct returns from electrification are only a fraction of the total returns. The MERG report makes the important observation that "Eskom needs to initiate and support the economic activities that spin off from the availability of electricity." and "It is crucial that the institutions be developed to harness electrification into a positive and broader developmental programme, and that Eskom be used and transformed along these lines." (p133) We fully support these recommendations and suggest that the community based development organisations could become the grassroots agencies to develop and promote such spin offs and integrate these into community life. Eskom would develop the policies and strategies, the CBDOs would implement them.

The total investment requirement for housing and infrastructure including electrification can be estimated at R20 billion per year, sustained over ten years, if squatter areas are to be upgraded, backlogs eliminated and future demand met. The literature abounds with similar calculations and forecasts. It is difficult not to conclude that these targets and calculations are unrealistic and will not be realised in this linear manner. There is certainly no historical precedence of this having been achieved under comparable socio-economic conditions. A transformational approach, involving and mobilising the energies in the communities directly, needs to be developed.

EDUCATION

If the housing problem is challenging, the education crisis is daunting. According to calculations by Azar Jammine of Econometrix, equalising all education to the present white standard would absorb 50% of the public budget over ten years, compared to the 21.4% allocated at present. (This would presuppose that emulating white education is a desirable goal.)

The failure of the education system as a whole, held against the substantial amounts invested, is hard to contest. Thirty percent of the labour force has no education, 35% only primary education, 31% some secondary education and only 3% higher education. According to the NMC, 53.9% of the population have attained standard 4 level or lower, and have thus reverted to illiteracy. Some 35% of the economically active population is functionally illiterate. African primary education is of poor quality due to under-qualified teachers, unequal spending, lack of electricity - 50% of schools have no electricity - and inadequate teaching materials and facilities. Drop-out rates are still high and attendance levels poor. In 1989 some 11% of African children of school-going age were not attending school. Poverty is by far the major reason (65%) why so many African children drop out of school, followed by pregnancy (13%) and poor health (5%).

Technical education

Technical subjects are held in contempt. Only one percent of African school pupils are in technical and vocational streams, against 10% of whites. Higher grade maths and science is taken by less than 2% of African pupils, whilst only 0.2% of African high school graduates are qualified to enter higher technical training. The picture is slowly improving. In 1987 black students constituted only 12% of the student corps of technical colleges and technikons; by 1992 the figure had risen to 25% (DBSA, 1993,p.7).

Educational integration

Integration is seen by some as a remedy for all educational ills. Schlemmer, however, calculates that only some 2% of all African pupils will be accommodated in "white schools". Thus 98% will remain in exclusively black schools. This picture may change over time as residential mixing proceeds.

The cost of normalising education

Another consideration, often overlooked, is the cost of normalising the *existing* system. If compulsory education up to ten years of schooling were introduced and enforced, if drop-out rates were drastically reduced, and, pro rata, as many African as white pupils make it to matric, the cost implications would be an increase of present spending levels by at least 50%, not counting the cost of training and employing the additional teachers needed. MERG proposes the training of 16 000 additional teachers for 1994, rising to 34 000 by the year 2000, a total of 175 000 teachers in addition to the 291 000 existing teachers. Assuming the cost of training a new teacher from scratch to be R40 000 and the average annual remuneration of these new teachers to be R30 000, this programme would require R25 480 million in *additional* funding. Building an additional 140 000 classrooms at a cost of R4 100 million, electrifying all schools, and equipping the total system with libraries, laboratories and other basic equipment seems beyond the fiscal capability of the South African economy. Our conclusion is that the linear expansion of the present system is both unaffordable and undesirable. A transformational response is needed. One of the key elements in such a transformational model is the use of informatics in formal and non-formal education. We will discuss the implications in the final section of this report.

Tertiary education

Tertiary education is also beset by institutional and financial problems, as the 1989 investigation of the Committee of University Principals (CUP) into tertiary education clearly spelled out. The situation has deteriorated since. Cuts in subsidies and rising costs have placed university and technikon education out of reach for most. Only the affluent and those who get bursaries or loans can afford to study. Serious backlogs in tuition fees are commonplace in some universities, a sensitive problem. If present cost trends persist then savings for higher education will virtually have to start at birth. According to the Education Renewal Strategy the annual cost to the State for keeping one student at university or a technikon is R8 000. The cost to parents (or providers of bursaries) is at least another R10 000 per year. The cost of tertiary education is rising by 15% per year.

This is however only part of the problem. There is a clear mismatch between technical and academic education. This mismatch is now being rectified through

preferential funding for Technikons, who in future also can offer degree courses. The aim is clearly to reverse the ratio university/technikon attendance. In Australia 800 000 are enrolled in technical education. The corresponding figure for South Africa is 60 000, with double the population. In Germany 60% of school-leavers opt for a technical career, in South Africa a mere 11%.

We mentioned earlier that 360 000 youngsters wrote matric in 1993. Only a fraction will qualify for entrance in tertiary institutions. The fact that school-leavers cannot find employment will put pressure on post-secondary institutions to be more flexible in their admission criteria. Such flexibility, under the present system, can only lead to lowering of standards and/or to protracted and expensive bridging courses, which is not the primary duty of over-extended tertiary institutions. The CUP estimates that by the year 2000, some 1 300 000 will want to receive tertiary education. Neither in terms of infrastructure and finance, nor in terms of the availability of teaching staff is the present system able to absorb these numbers. If an economic upswing were to occur, many highly qualified academic staff may consider a move to the private sector, given the poor remuneration prospects in academia. This would force universities to more seriously consider electronic distance teaching as proposed in the section on informatics.

Education reform initiatives

There is no simple way out of the education crisis. The Nedcor/Old Mutual scenario proposes compulsory free primary education, a government/private partnership for post-primary, skill-orientated education, and vouchers for tertiary education. (The various proposals for establishing a job corps will be discussed in sections III and IV). A large number of organisations are addressing the education crisis. The Joint Education Trust has voted R500m; the IDT and the Urban Foundation have made substantial contributions towards funding facilities and supporting community based structures; a large number of NGOs, some with substantial domestic and/or overseas financial support, such as the Kagiso Trust, (others with the scarcest of resources), are addressing the issues of remedial, adult and community education; the Education Foundation is doing valuable research, developing data bases and establishing community colleges right across the country. Universities and professional associations address specific problems in education. In addition, there is evidence that more overseas funds will become available for educational purposes.

The need for fundamental reform

The question is whether these initiatives add up to a solution, or are merely remedial action. Clearly there are more fundamental issues at stake: a matric certificate is a paper of doubtful value; the present secondary school syllabus is largely irrelevant for a modern technological society; most of the subjects chosen in tertiary education are academic, for which there is a limited demand; life skills are not acquired in the formal schooling system. Above all, given the R27.4 billion that is presently spent on education, the value of the output is not commensurate with the expenditure. Under the aegis of the National Education Forum, an intense debate on education is set in motion. Education reform is without doubt the most critical issue today. There is not a single problem in the country which cannot be related, directly or indirectly, to education or the lack of it. The outcome of this debate is therefore crucial for the future of the country. A fully developed transformational model of education still has to be developed.

HEALTH CARE

There are at present two health care systems in operation in South Africa. A private system serving 24% of the population and a public system serving the remaining 76%. Each system spends approximately an equal amount of R10 billion. As a consequence there is a substantial disparity in per capita spending between private provision and the services offered by the state through the provincial administrations, the homelands and the TBVC areas.

Private health care

Over the past five years, the private system has experienced a cost escalation of well over double the inflation rate. Medical scheme contributions are reaching the maximum of what can be afforded by employers and employees alike. Due to job losses many families have lost their medical cover. Price escalation for medicines has been especially steep, in compensation for the low prices achieved in the state tender system. Retail pharmacy has become a threatened profession, and the cost increase of general practice has exceeded remuneration increases of doctors. Recent deregulation has created competition in private health care and has triggered a number of initiatives to contain cost escalations. General practitioners are organising themselves in Independent Practice Associations (IPAs) of which there are presently 80 in operation, probably covering some 70% of all doctors in private practice. The stated aim of the IPAs is to reduce the cost of medicines through collective bargaining, to reduce referrals to specialists and limit hospital stay. Procedures are subject to peer review in order to identify and correct deviations. IPAs negotiate special deals with the medical schemes and have stated their intent to pass cost savings on to patients.

Medical schemes and other organisations such as labour unions and large employers are considering the establishment of Health Maintenance Organisations. HMOs would employ medical practitioners and other health professionals and contract directly with a patient population. Theoretically cost savings are a built-in incentive in HMOs. The HMO movement in the United States has been fairly successful, but has shown flaws as well. The main criticisms are lack of choice and deliberate underservicing. IPAs can be seen as an effort by the doctors to ward off HMOs, since medical doctors tend to jealously guard their clinical independence. The overall theme in the reorganisation of private health care is "managed care with competition".

State health care

State health care is in far worse shape than the private system. Lack of funds, exodus of staff to the private sector, near burnout of many of those remaining in the public system, and escalating demands by a growing population of indigent patients, are the critical issues. Extreme fragmentation is adding to the problems. In spite of many policy declarations, primary and preventive/promotive care is only receiving 5% to 7% of the state health budget. The past investment by the provinces in very large hospitals, which are underutilised in the white and over-extended in the black sector, must be considered a serious misallocation of resources. Following World Health Organisation standards, there would be an immediate need for 3 000 additional small and well spaced primary clinics. As

long as these clinics are not available, large numbers of patients will end up in expensive acute care hospitals: the mentally ill, the elderly, the chronically ill and the victims of violence and accidents. Deep rural areas, squatting areas and most townships are seriously underserved or not serviced at all.

The disabled and the elderly

In 1986, 12.7% of the South African population were disabled, requiring specialised attention. As a consequence of violence, crime and accidents this percentage may well have risen to 15% in 1993. The large numbers of the disabled are a burden mainly to the state, or receive no attention at all, since private cover is not available to the majority of them. The elderly, who generally consume four to five times as much health care as the middle aged and the young, are in a particularly vulnerable position, as we pointed out in the section on Poverty in South Africa.

Health and development

Health is a key determinant of development. Unless development strategies are specifically designed to improve housing, access to safe water and other basic services, health, education and job creation, the poor will not benefit. Economic and infrastructural development must also be looked at from the health impact point of view. At present the health care system is at the receiving end of the failures in all other sectors of socio-economic development. In the words of Dr Yach of the Essential Health Research Group of the Medical Research Council: "Clean water before international airports; rural development before sports stadiums; good basic education, especially for girls, before grandiose tertiary institutions". Clearly, the battle for setting the priorities is on also in the field of health care. The MERG report states that "South Africa requires a unitary national health service available to all citizens without user charges and based upon a rolling programme of basic health services, that will be extended over time to include more services as well as specialist treatment at higher levels on a selective basis." (p122) MERG acknowledges that in the interim, services will depend upon a mix of private and public provision. No attempt has been made to calculate the ultimate cost of such a universal and free system. The international experience has shown, that wherever universal free care was attempted, there seems to be no limit to its utilisation. The capacity of people to consider themselves unwell is unlimited, and demand rises almost automatically to the level of (free) supply.

A note on AIDS and poverty

We noted earlier that the AIDS pandemic in the countries to our north is about three to five years ahead of South Africa. Estimates as to the number of people who are HIV-positive in 1993 vary from 400 000 to 500 000 or more. Official statistics published monthly by the Department of National Health and Population Development in Epidemiological Comments are certainly an undercount. The Centre for the Study of Health Policy at Wits University estimates that "perhaps as many as 90% of cases are not presently reported". Peter Doyle of Metropolitan Life estimates 50% underreporting. As on 19 February 1993, 1 803 AIDS cases were officially reported. In terms of mode of transmission the following breakdown is provided: homo-/bisexual 406; intravenous drug abuse 2; heterosexual 973; paediatric 372; haemophiliac 22; transfusion 23. The largest future increase will be in heterosexual and paediatric transmission.

A workshop at the DBSA on the forecasts for AIDS by demographers, epidemiologists, economists and actuaries did not yield a satisfactory result. It was admitted by all present that the models are as weak or strong as their underlying assumptions. The key variable is the doubling time, which at present stands at 12 months and is possibly lengthening. The Wits study (July 1991), based on an actuarial model states the following:

On a pessimistic assumption that no behavioural responses will occur in the population as the epidemic spreads, the total HIV prevalence is predicted to reach a peak in the year 2005, and then to level off at approximately 25 to 30% of the total population. By the year 2000, it is estimated that there will be 5.2 million HIV infected individuals, and cumulative AIDS deaths of 667 000. By 2005, HIV infected individuals are predicted to reach 7.4 million and cumulative AIDS deaths to be in the order of 2.9 million.

Dr Evian of the Johannesburg City Council has developed a model showing the strong correlation of the spread of AIDS and the poverty syndrome. Unemployment, slum conditions, disrupted family life, migrant labour, violence and bloodshed, the rising incidence of rape, drug and alcohol abuse are conducive to sexual behaviour patterns which promote the spread of HIV. At present the threat of AIDS has not yet fully manifested. Once the number of diseased will be very large, and once it becomes clear that there are insufficient funds and facilities to deal with the incidence effectively, serious economic and social disruption seems inevitable. South Africa has at most two years to create the low-cost infrastructure and train the staff to deal with AIDS in the manner in which Hospice has dealt with terminal cancer. AIDS is not a notifiable disease. Of the notifiable diseases, tuberculosis, with a reported incidence of 36 169 cases between January and June 1993 gives cause for concern. Tuberculosis has always been perceived as a disease of the poor.

Conclusion

Equalising health care provision for the total population to the present levels of private care would more than double the present expenditure of R22 billion (R12.9 billion in the budget) to R45 billion. Sustained over ten years this would constitute extra expenditure of R230 billion in constant prices. This calculation is based on the fact that 24% of the population consumes R11 billion, or 50% of all health expenditure. This calculation is, of course, as unrealistic as the one made for housing and education. It is a linear model based on the assumption that the present private system is worth emulating. It can hardly be claimed that the South African white population shows a good health profile. A "more of the same" model will not meet the demands of an effective, affordable and equitable health care system, in which health promotion and preventive care are central.

AGRICULTURE, FOOD PRODUCTION AND THE LAND ISSUE

A global perspective

Globally food production is under pressure. According to the Worldwatch Institute in Washington, the available area for cropland has peaked at 735m ha in 1981 and is now static at 695m ha. The global fish catch is also static at just under 100m tons, if stocks are not to be depleted. What is not static, of course, is population growth. Every year there are close to 100 million new mouths to feed. World grain production per person has declined by 6% between 1984 and 1992. So has the use of fertilisers. A few more droughts and crop failures in the US wheat belt could trigger mega-famines. The Worldwatch Institute suggests that humans need to move down the food-chain and consume less meat. In land use terms, a non-meat diet is between 2 and 3 times more efficient. A non-meat diet is, of course, inconceivable for most South Africans.

The South African situation

Agriculture in South Africa on the whole is inefficient measured against present international standards. Land appreciation often replaces production as a source of profit. According to the DBSA, white commercial farming output is R1 298 per worker and R119 per hectare; African output is R65 per worker and R35 per hectare (1988). South Africa is a dry country and food production is vulnerable to periodic droughts. Water has been identified by the Science Committee of the former President's Council as the single overriding constraint on population growth. Its (subsidised) use for agricultural purposes could be restricted in the years to come, unless additional regional water schemes are developed at great cost.

A considerable part of agricultural activity is of the subsistence variety, and land erosion through drought and overgrazing has reached critical proportions. Soil erosion is posing a serious threat to the future of South African agriculture. Only 3% of South Africa's surface is high potential agricultural land, whilst South Africa is losing 300 million tons of top soil a year through erosion. The current rate of soil loss is 30 times the rate of soil formation.

At present some 58 000 white farmers own 85 million hectare farmland. Land owned by Asian and coloured farmers is negligible in comparison. In 1991, 81% of land in the white designated area was suitable for farming, but only 16% was potentially arable. In the homelands, 93% of the land was suitable for farming but only 12% was potentially arable. The accumulated farm debt has reached R18 billion. The servicing alone of this debt is equal to 17% of the value of total agricultural output for 1989/90 and twice the total agricultural budgets for all 15 departments. Since government subsidies - except disaster relief - are coming to an end, thousands of high risk farms will face sequestration. The average debt load now represents 23 - 24% of assets. Bankorp proposed to eliminate this debt by large scale debt-equity swaps. Joint ventures would thus be formed in which indebted farmers would become shareholders equal to the residual value of their farms. The proposal makes sense to economists but may not go down well with farmers. The MERG report recommends that "in some areas it may be cost-effective for the state to foreclose on these debts and acquire some of this land for redistribution programmes designed to benefit the poorest rural households." (p214) This proposal will no doubt meet with even fiercer resistance and MERG

acknowledges that "measures would have to be taken to avoid 'violent coalitions' of white farmers aiming to disrupt rural development initiatives."

The land issue, farm labour and the rising levels of poverty

Between 1968 and 1988 the total number of farm employees declined by 30% from 1.6 million to 1.1 million; the decline for Africans was 35%. The present drought has the potential to further remove 100 000 to 300 000 farm labourers, who thus far lack the legal protection enjoyed by other workers. The current (and future) wave of dismissals and farm closures are adding these workers and their families to the pool of urban and peri-urban unemployed. Many lack the physical means to search for alternative employment, virtually trapping them in a grim rural survival situation.

Of the 17 - 20 million poor a large proportion are living in rural areas. The Urban Foundation estimates that two thirds of the black poor live in rural and one third in urban areas. In the chapter on "rural development and food policy", MERG identifies the elimination of poverty and extreme inequalities as the central goal of the economic policy of the Democratic Movement. MERG states further: "the evidence is overwhelming that it is the rural sector which contains the largest relative proportion of poor people, as well as the largest absolute number of people struggling to survive on low incomes, nutritionally at risk, poorly educated, and without sufficient access to the sanitation, health and other services necessary for leading a productive, let alone dignified life." (p205)

Rural females are identified by the MERG report as the most neglected segment of the population, and subsequently receive most of the attention in the land reform and rural redistribution proposals. Considering the COSATU origin of much of the policy thinking in the report, it comes as no surprise that MERG states: "if the proposals for a minimum wage, land reallocation, nutritional interventions, public works employment and training for females are to be implemented effectively, then rural women will need external support, not only in the form of enabling legislation, the National and Sectoral Wages Boards, *but more directly to develop and strengthen trade unions of farm workers and other nationally powerful rural women's organisations/associations through which they can demand their rights.*" (p217, our italics)

It is hard to argue with the *intentions* of the MERG recommendations, but the *means* to achieve these require close scrutiny. We stated earlier that in a global context agriculture in South Africa is on the whole not competitive. State interventions skewed towards white farmers contributed to this situation. Reverse intervention, however, unless supported by an immense training and agricultural extension effort, could ruin the agricultural sector for decades to come. Under a deteriorating situation, the exodus of farming skills to South America, Zambia and other destinations could take on threatening proportions.

Rural reform should also take note that some one million South Africans urbanise per year, a trend which will be hard to stem let alone reverse. This rural exodus could reach a critical mass, leading to effective rural collapse and to urban chaos simultaneously. The near famine situation in some neighbouring countries aggravates this development in that large numbers are crossing our borders in search for food and work. According to Ina Perlman of Operation Hunger, only 8% of rural Africans are self-sufficient. The remainder depend on remittances from wage earners in the cities. Recent retrenchments (one worker supports on

average six dependants) further erodes the subsistence base of rural Africans. According to Operation Hunger, 40% of children in rural areas have diagnosable malnutrition and an estimated 90% of black rural families exist beneath the poverty line.

The issue of land redistribution

As we could see from the MERG proposals, land and its future ownership occupy a central position in the general redistribution debate. The land issue is sensitive, emotional and historically loaded. The repeal of the acts governing the distribution of land in 'white' South Africa has created an open situation. It is essential that the future food supply for a doubling population is secured and the progressive erosion of scarce arable land halted and reversed. The policies of the new government will have to keep these two key factors in mind.

The ANC has called for a "fundamental redistribution" of land, not by nationalisation and seizure (the PAC would only compensate for development on the land), but by using vast tracts of under-utilised land. Some propose that the 13 million hectare of state-owned land (40% belongs to the SADF) could be distributed among people who previously had no access to land. During the apartheid period nearly 3.5 million people have been removed from land they had occupied for generations. The two critical questions are: [1] will there be enough land available (state-owned or from willing sellers) to satisfy the land hunger of millions; [2] will these millions make a better use of such land given their limited financial means and low agricultural skill levels?

In terms of Act 70, of 1970, agricultural land cannot be subdivided into units smaller than the Department's "economic unit", using a minimum net income of about R45 000 a year as a guideline. Some believe that this limit should be reduced to R10 000 per year. Research by the Department claims that subdivision of land has been one of the biggest contributors to problems in agriculture, because the land is overworked in order to meet essential costs. It is claimed that there is an inverse correlation between the size of the farm and soil degradation. This finding does not seem to agree with the experience in the Middle and Far East as well as in the former Soviet Union, where peasants on plots smaller than a hectare are self-sufficient and produce surpluses to sell. For such comparisons to be meaningful, climatic and soil differences as well as prevailing farming skills, cultural differences and differences in land-use system would have to be taken into account.

The DBSA recommends an additional recurrent expenditure of R1 174 million and an additional capital expenditure of R 9 575 million over the next five years to accommodate 157 000 new farmers and provide these with land, technical assistance and other support programmes. We estimate that probably double that number of new black small farmers need to be accommodated, given the inability of the formal sector to provide work and the expected further mechanisation of white farming. Agricultural extension in the form of continuous training and management support to these 300 000 new farmers would be one of the major applications of a satellite based informatics system. Increasing the efficiency of the agricultural sector is as important as arriving at a more just distribution of land to the total population willing to farm.

Land reform

The World Bank produced a report on land reform and tabled the following recommendations.

- 1 Judicial settlement of claims to specific plots by groups evicted from the land (so-called 'black spots');
- 2 Market assisted land reform where the poor are given government grants and Land Bank loans to buy commercial farm land from willing sellers;
- 3 Government repeal all distortions favouring the commercial farmer in the form of tax-breaks, Land Bank credit, agricultural marketing boards and access to services and technology. These distortions have made the commercial farming of large tracts of land seem more productive than it really is. It would make small-plot farming more viable in many areas.

The report estimates that land reform could create a million rural jobs within five years at R12 800 per job or R12.8 billion over five years. This projection is 30% higher than the one given by the DBSA model. If 30% of present farm land is transferred (DBSA, 10%), the capital requirement would be R16 billion in 1993 prices. The fiscal cost would be much less due to tapping other sources of credit, as well as grants. The authors conclude that failure to initiate viable land reforms could lead to a "decade of poor peasant insurrection". (See our note on the 'unionisation' of the rural poor.) The World Bank recommendations have not been particularly well received by the conservative farming community. MERG is critical of the World Bank report for different reasons: "The criteria for targeting suggested by the Bank exclude those who currently have access to very low incomes, no collateral and poor organisational capacity to represent themselves. The issues of poverty and gender are not taken seriously. Rather, the vision is of a package of state subsidies to a class of male black rural capitalists." (p214)

Land reform and securing the food base are critical issues. The land hunger of millions of desperately poor and deprived people is, however, an easy target for political exploitation. In designing viable policies, the interests of the people must be matched by the agricultural and environmental interests of the country. A strong and vibrant agricultural sector will not only alleviate widespread poverty, but also radiate positively into the total economy. As in so many other areas, education and relevant skills are critical elements in agricultural reform. The global spread of the Australian system of Permaculture - also in South Africa - demonstrates that high returns can be achieved even from marginal lands, provided the human skill component is able to create sustainable man-made ecosystems. Given the extremely small base of agricultural expertise compared to the numbers farming, only satellite based informatics can bring this expertise into every corner of the country.

SECTION III: THE LINEAR RESPONSE

INTRODUCTION

In the previous section we have made a summary analysis of four critical areas: housing and infrastructure, education, health and agriculture. Space did not allow us to include areas such as social and physical security, welfare, telecommunications (penetration of telephones), transport, the arts, culture and

sports, all areas of deprivation for the poor. It is our contention, though, that education and training hold centre stage. If we succeed in designing an equitable and effective education and training dispensation for the whole country, then the other problem areas may be that much easier to resolve. We have called this section "The Linear Response" for a reason. Because most proposals for equalisation of state contributions to the main areas under review take the view of a linear expansion of services for the underprivileged to the present white levels. This view makes two questionable assumptions: that such expansion can be afforded and that such linear expansion is desirable. We will first deal with the affordability aspect and deal with the desirability aspect in section IV of this report.

THE COST OF EQUALISATION

The Chapter on Fundamental Rights in the Interim Constitution attributes a commanding place to the concept of equality. According to Etienne Mureinik, professor of law at the University of the Witwatersrand, the Bill "guarantees not only just equality before the law, but equal protection of the law; and not just against the State, but, potentially, against private individuals. The Bill puts an arguably looser rein on affirmative action than even the ANC's Bill of Rights". The point is that equalisation may now become an entitlement under the new constitution. It appears that a constitutional court will become the most powerful arbitrator in the new South Africa. The Democratic Movement, not entirely happy with this, makes certain that redistribution should at least be constitutionally entrenched. The adherence to centrally set standards, or the failure to do so, could serve as a potential curtailment of regional powers.

We mentioned earlier that many attempts have been and are being made to calculate the cost of redressing the social and economic injuries of the past. Most analysts understand that such an equalisation and redistribution process will require time for its implementation. Unfortunately, this fact will not be readily understood by the masses, once a new government is voted into power. The Freedom Charter and the spate of promises that will accompany the elections of April 1994 are bound to create expectations which the incoming administration will find hard to fulfil. What are these costs? If we take a 10 year period for equalisation the following rough figures (1993) emerge: housing and basic infrastructure R200 billion; health services R230 billion; education R365 billion;* land redistribution R100 billion. If we estimate the cost of equalisation programmes for the remaining areas at R105 billion, we arrive at a figure of R1 000 billion over ten years, or R100 billion per year *additional* spending, or 80% of total government spending for 1993/94. To put such a figure in perspective: R100 billion, spread over 33 million South Africans in need of social and economic advancement, works out at a mere R3 030 per person per year.

* The calculation for education is based on the following: This year's spending on education is R27.4 billion, representing 21.4% of total government expenditure. Jammie estimated that 50% of government spending would be required to equalise education in all aspects. This would raise the budget to 63.8 billion, a difference of R36.5 billion for the year, or R365 billion over ten years in constant prices.

These calculations only serve to illustrate that a linear model, even if scaled down to half or even a fifth of the above figure of R100 billion, is certain to fail. Whilst appealing and creating the illusion of a solution, sums of this nature carry

the danger of creating the impression that the problems of eliminating poverty and unemployment and redressing the glaring inequalities in society are merely a question of 'creating' additional funds. The harsh truth is that what can be afforded *in a linear model* depends entirely on future economic performance in the formal economy and on sustainable fiscal policies. Both these sources have clear limitations. *In a transformational model*, however, the productive potential of the total human resource is systematically developed and harnessed.

The (draft) macro-economic policy model for human development in South Africa, released in October 1993 by the DBSA arrives at an additional spending amount of R90 billion over five years, of which recurrent expenditure is R33.8 billion and capital expenditure R56.8 billion. Basic education and adult education and training (R21.4 billion), housing and infrastructure (45 billion) and rural development (10.7 billion) are the main items in the programme. The average annual additional spending proposal of R18 billion is an undercount since the programme does not address important spending areas such as secondary and tertiary health care, tertiary education, job creation in the formal sector and the additional cost of regional government. Taking these into account the average annual funds needed would be closer to R30 billion, or 30% of our theoretical calculations.

The elements of both the "production function" and the "investment constraint model", underpinning the policy model of the DBSA, are based on the change in value added GDP as a measure of economic growth, as well as other variables applicable exclusively to the formal sector of the economy. This model is therefore linear and will lead to fiscal and debt stresses in future budgets. Expenditure by general government has already increased from around 30% of GDP to its present level of 34%. The programme proposed by the bank would stretch fiscal resources to the limit as this ratio would increase to 38% (DBSA,p.41). For the current budget the excess of expenditure over revenue is estimated at 30%.

The "Framework for Macroeconomic Policy in South Africa" put forward by the Macroeconomic Research Group (now: National Institute of Economic Policy), focuses on policy over a wide range of social, institutional and economic areas. It does not arrive at a total reconstruction figure, but mainly spells out targets and priorities. The MERG model simulations provide employment projections, as well as projections on expenditure on education, health services and housing and infrastructure investment over the period 1990 - 2004. The estimate of the effects of phased increase in tax revenue between 1993 and 2003 seems reasonable. The grand total of all revenue is projected to nearly double from R88 895 million in 1993 to R164 633 million in 2003. Of interest is a capital gains tax, which would contribute 3.13% of total revenue in 2003, from nil in 1993. A land tax and a wealth tax, although proposed in the text, is not included in these projections. We have included some of the more pertinent MERG observations and recommendations in the relevant sections of this report. A full analysis is, however, urgently needed in view of the fact that much of what is recommended stands a good chance of becoming the official policy of the incoming administration.

We stated earlier that the intentions of the MERG recommendations are on the whole laudable and deserve support. They aim at resolving the three core problems of the South African society: poverty, unemployment and racially based inequity. These happen to be the three main subjects of this report. Whilst we

share the intentions, the means differ. Given the experience in centrally planned economies and more recently in welfare states, serious doubts must be expressed as to the economic potential of state intervention through centralisation and pervasive regulation. Many of the proposed measures do not conform to the decentralisation imperative of the interim constitution but require a strong central government with wide original powers for their implementation. It is the ideological bias of the report which constitutes its major weakness. MERG, as much as the (very different) Normative Economic Model, the programmes of the DBSA and the World Bank are all linear models based on outdated macroeconomic theories. The future economic debate will have to reach beyond the tenets of supply side economics versus demand led growth. Transformational economics taps the vast human potential for positive creative action, given an environment of empowerment of individuals, families and communities. Reconstruction has to evolve from the bottom up and cannot be dictated and planned from the centre.

A note on affirmative action (AA)

AA aspires to deliver equality by undoing inequality. The constitutional entrenchment of AA as "measures *aimed* at the *adequate* protection and advancement of persons disadvantaged by discrimination in order to enable their full and equal enjoyment of all rights and freedoms" is unenforceable, since the terms '*aimed*' and '*adequate*' lack sharp definition, let alone quantification. The ANC, in a more realistic vein, wishes constitutional protection only for measures *designed* to produce the advancement of men and women who in the past have been disadvantaged by discrimination.

These approaches to AA not only raise expectations, but turn them from demands into entitlements. By posing an end result: equality, the fact is ignored that you can only move from where you are; individuals and communities can only be advanced from where they are *now*. The slow and painstaking process of advancement is lost in the ideal goal. Schlemmer: "perceptions of relative deprivation are not necessarily softened by incremental improvements. In fact, once a new official goal of parity becomes established as a standard of judgment, perceptions of the unfairness of the differences which remain could well become more acute" (Schrire (ed.) *Wealth or Poverty*, 1992, p.565).

Similar to setting attainable business goals, AA would be better served if it were defined in operational terms. E.g. "Over the next five years the ratio white/non-white of public servants earning more than R30 000 per year must move from the present 80/20 to 50/50. This will require the training of 30 000 persons for these posts over five years." It is now possible to calculate the cost in money and manpower and establish whether the goal is realistic or not. Similar concrete targets could be set for health services, education and any other area of disparity. It would soon become clear whether such targets can be achieved or not and the essential process of setting priorities would start.

AA in the workplace is already now showing signs of reverse discrimination. According to Dr Linda Human of Stellenbosch University's Business School "business is trampling on white aspirations and destroying black sensitivities. Business now wants blacks in management no matter what their skills". Duncan Innes: "The biggest threat is to the white up-and coming executive with the potential of reaching senior management. Companies will put incompetent black

people above them and this will not only be demoralising, it could lead to an exodus of skills." (Innes Labour Brief)

Reverse discrimination will not be restricted to business. In Zimbabwe the gap between rich and poor has widened since independence, because redistribution measures have been directed mainly to 'deserving friends' of the new power elites. Iden Wetherell: "The last thing South Africa needs is a new generation of official gatekeepers, a politically well connected business elite, charging for admission to a growing field of opportunities. That will distort business, empower the already powerful and provide an environment in which impoverishment becomes further institutionalised". (Weekly Mail & Guardian, 24 Sept.1993)

REDISTRIBUTION AND THE ECONOMY

We stated in various parts of this report that any form of sustainable redistribution needs to be compensated by a growing economy. Unfortunately, South Africa's economic performance over the past decade leaves no room for such redistribution. The growth rate in GDP per capita between 1981 and 1987 has been -2%, compared to Germany +2% and South Korea +7.3%. Performance between 1987 and 1993 has been worse, bringing us back to where we were in 1971. Since the increase in labour productivity is low, less than 1%, compared to the UK 5.8%, and since the recession is only hesitantly starting to bottom out, prospects for sustained economic growth are not good. Over the last decade industry has hardly invested in new plant. South Africa is slowly eating into its capital, not to mention capital outflow of R5.4 billion in the first half of 1993 alone. If an upswing comes, retooling will absorb substantial amounts of foreign currency and make industry more capital intensive than it already is to date. It is for this reason that MERG sees economic growth up to the year 2000 mainly led by public sector investment. Whilst public investment and a shift from current to capital expenditure is necessary, industry must be left to make its own decisions on how to remain competitive in a globally merging economy.

According to Jammie "many of the causes of decline in economic growth and productivity would appear to be linked directly and indirectly to the increasing proportion of economic activity taken up by government spending in recent decades". (McGregor: Economic Alternatives, 1990, p.100). The recent Lebowa incident puts a serious question behind the homeland support provided by South African taxpayers. In 1992/93 this support amounted to R6.2 billion for the TBVC states (+21%) and R10.6 billion for the 6 self-governing homelands (+22.1%). It is not difficult to produce a whole list of misspending by government, such as Mossgas, whose economic life for depreciation has been reduced from 40 to 12 years, or the Atomic Energy Corporation producing enriched uranium at twice the world market price. It seems more important to reduce the role of government in the economy, in order to safeguard wiser investment decisions in the future.

"Any analysis of the macro-economic forces perpetuating poverty has to consider carefully the sources of economic growth. Unfortunately, despite much effort, economists have not really been able to penetrate the mystery of that magic combination of circumstances which enables an economy to grow very rapidly" and "the magic how they (the key elements) come together in just the right way to make an economy hum, eludes us." (Wilson and Ramphela, 1989, p.249)

What then are the options for finding the extra R20 to R30 billion per year needed to get a redistribution programme started at a fifth to a third of the calculations

made earlier? If substantial economic growth eludes us in the short to medium term, then only three other avenues are open: borrowing, printing money, and/or additional taxation.

Borrowing and printing money

Before we rejoice about the doors of global credit opening for South Africa, let us consider that interest on the *present* public debt is the second largest item of the budget, but the fastest growing one: 21% per annum since 1990. What makes matters worse is that the largest part of this borrowing was used to cover current expenditure, not investment. The temptation for the next government to borrow itself out of otherwise seemingly unresolvable problems will be very strong indeed.

Printing money is clearly the easiest way to spend yourself out of the economic pit. The price to pay is runaway inflation. The most recent example is provided by the Ukraine. To meet its promises, the government printed cash: the money supply rose over 40% in June 1993 alone. Real GDP fell 20% between the first quarter of 1991 and the first quarter of 1992, and another 10% since. Hyperinflation, with monthly inflation rates of 50% and above, has begun. At the end of August the currency collapsed, falling from 6 000 to the dollar in the middle of August to 19 000 at the start of September 1993. Ukraine's economy is collapsing because nationalists secured their country's independence by co-opting, not overthrowing, the local communist elite who have blocked the swift and public sell-off of state property, *while quietly stealing the best bits for themselves*. (The Economist, 4 September, 1993) Are there lessons for South Africa?

Taxation

Whilst excessive borrowing and printing money in a stagnant economy have to be rejected on solid grounds, there still remains the tempting option of increasing taxation. The vicious circle is now complete: high taxation has contributed to low economic growth, the flight of capital and high inflation compared to our main trading partners. The fact that present inflation is single digit is as much a result of strict monetary policies by the Reserve Bank as it is a consequence of business selling goods at reduced profit margins (or below cost) to maintain cash flows for survival. The World Bank's Marsden observes: "countries with lower taxes experienced higher overall economic growth, a better employment performance and superior growth in fixed investments and productivity than countries with higher tax regimes."

In South Africa, between 1980 and 1990 taxes as a percentage of GDP have grown from 18% to 27%. Government revenue from gold mines has decreased from 27.2% in 1980/81 to 0.7% of overall revenue in 1993/4. Tax on individuals and GST (now VAT) have risen over the same period from 15.6% to 41.0% and 12.4% to 26.6% respectively. The contribution from company tax has declined from 18% to 12.6%. Companies have most of the options for tax-avoidance and generally pay tax 20% below the nominal rate (Econometrix). South Africa's tax base is small. About 20% of (mainly white) income earners account for 60% of all income earned, whilst 40% of the bottom income earners (mostly black) account for 10% of all income earned. Broadening the tax base is thus more important than to tax higher income earners into extinction.

New taxes under consideration are a once off levy, a land tax, a wealth tax, a capital gains tax, higher tax for top income earners and companies and a higher tax on alcohol and cigarettes, the so-called sin tax. By raising government expenditure over a period of five years from the present 30% of GDP to 35% and tax revenue from 27% to 30% of GDP the ANC expects to achieve R58 billion extra income of which R40 billion is through taxation. Such a policy is in direct opposition to Marsden's observations quoted above.

Reduce spending

There is another, often mooted alternative for creating funds: to reduce spending. Various calculations as to the potential for savings have been made, but these have all been rather disappointing. Reducing the size of government, eliminating wasteful duplication, cutting support for homelands, further reducing defence budgets and the like would in combination not make more than R10 billion available for development. At the same time such measures would increase unemployment and reduce GDP. Reducing wasteful spending is of course necessary, but remains part of the linear model (more or *less* of the same) and for that reason has limited potential.

Nationalisation

The ghost of nationalisation, it seems, has finally been put to rest. Nationalisation *without* compensation is confiscation. It would fly in the face of global trends, would immediately put a stop to foreign investment, lead to large-scale disinvestment and, in the end, to the collapse of the economy. Nationalisation *with* (fair) compensation would require R682 billion. This amount is calculated as follows: the major banks R276 billion; mining sector R100 billion; the four major holding companies R106 billion; all agricultural land R60 billion; the insurance industry R150 billion. At 10%, the annual interest would amount to R68 billion per year. As Jammie put it: "It would be a tragedy for the South African economy to have to endure a repetition of the socialist exercise in order for the new incumbents in power to have to go through the entire learning curve of their apartheid driven predecessors, before recognising the futility of too much government direction of economic activity." MERG is ambiguous on nationalisation in general but is quite specific as far as parastatals and the Reserve Bank are concerned. The financial institutions would be brought into line by regulation as far as the banks are concerned, and the reintroduction of prescribed assets as far as the life offices are concerned.

Privatisation

Expecting the incumbent government to move from reluctantly abandoning nationalisation to embracing privatisation is expecting too much. Yet this is precisely the policy the next government should pursue with vigour. Critics of privatisation say that selling off public assets is like selling the furniture in order to pay the rent. This is indeed the case if the proceeds of privatisation are used to cover current expenditure instead of being re-invested in essential infrastructure. So why sell public assets in the first place? There are many reasons. The one that concerns us here is that privatisation means reducing the role of government in the economy. Privatisation turns tax consumers into tax producers, broadens the tax base and reduces the overall need for taxation. Lower taxes lead to higher economic growth *and* to a larger tax-base.

Another reason to look at state assets critically is their degree of underutilization. Central to the idea of privatising public assets is the principle of ownership. Public ownership is usually diffuse and impersonal and does not normally generate the urgency needed for the best utilisation of assets. Private ownership in business incurs a direct liability to shareholders or other owners to make the best possible use of the assets of the business. The underutilization of fixed state assets is denying the country potential benefits and obscures the opportunities resulting in additional taxation. Assets turn into liabilities.

The principle here is that privatisation of assets and services does not imply that the state relinquishes its financial obligation towards essential services. Therefore, the allocation of whatever source of public income in the form of blockgrants to decentralised service structures and vouchers to individual consumers, say, of tertiary education, is perfectly justified, provided such privatisation leads to overall savings derived from greater efficiencies.

Privatisation (for which we once had a Minister!) has been put on the backburner because it became a contentious issue in the already delicate negotiation process. It must be assumed however, that dropping privatisation from the current agenda also satisfied an already restless bureaucracy, who saw their jobs and pensions on the line. (see Pierre Hugo: Whites in the South African public service: angst and the future, in Redistribution and Affirmative Action, 1992).

We take up the privatisation debate in Section IV by demonstrating that privatisation could become the key element in community empowerment. (For a full discussion of privatisation we refer to the World Bank's technical papers nos. 88, 89 and 90: Techniques of Privatisation of State-Owned Enterprises. Volume 1 Methods and implementation; vol 2 Selected Country Case Studies; vol 3 Inventory of Country Experience and Reference Materials). The case study of the Chilean privatisation programme described in vol.2 is particularly instructive for the South African situation.

CONCLUSION

Our conclusion is that there is no linear solution to the structural challenges of poverty, employment and wealth distribution. In other words the solution to these problems is not simply a matter of more money. The second conclusion, stated in the first sentence of this report is that there is no bureaucratic solution to the problem of poverty. The Sunnyside Group report stated that experience in the US showed that 80% of welfare spending is absorbed by civil servants employed to dispense money to the poor. The report believes the same may apply to South Africa. The report argues for the removal of regulatory barriers to employment such as business licensing laws, tax laws which prevent the accumulation of capital, labour laws which impose minimum wages, zoning and health laws and financial regulations which prevent the poor from access to finance. Finally the report states: "government has to tread a careful path between apparent neglect of suffering people and the creation of an ever-growing dependent population which is supported by a diminishing number of productive self-supporting citizens" (Sunday Times, 3 October 1993). It seems that the "how" of future spending is much more important than the "how much".

SECTION IV: A TRANSFORMATIONAL RESPONSE

INTRODUCTION

Limitations of the linear response

In the previous section we stated that the linear response to the challenges of poverty, employment and the more equitable distribution of wealth has a limited capacity to provide lasting solutions. More or less of the same, incrementalism, redistribution, equalisation are all concepts within this linear approach. They have failed in the past and they will do so in the future. They need to be replaced by a dispensation of direct democracy, in which the state empowers people and communities to manage their own advancement.

There are deeper reasons why linear systems are failing us. Global society, according to Lewis Mumford, is presently experiencing its most fundamental transformation. The agricultural revolution took 10 000 years, the industrial revolution 200 years. The present transformation into a post-industrial or information society will have to be completed in a few decades. The speed at which societies change is catching most of humanity off-guard. Culture shock is following future shock. Some societies absorb the new principles, others remain behind and the gap between them is widening. Technology is providing humankind with new options for which it is as yet ill-prepared in terms of outdated institutions and obsolete mindsets.

We mention two: [1] informatics, the linking of telecommunications, computers and multimedia (the potential for social reconstruction will be described below); [2] molecular nanotechnology, developed presently at the Massachusetts Institute of Technology and other high-tech centres, which will give thorough control over matter on a large scale at low cost, surmounting a whole set of technological, economic and ecological barriers. Nanotechnology allows for the specific creation of new materials and products with clearly specified characteristics. These two technologies will render a whole set of other technologies obsolete. The full implications of nanotechnology for the mining industry, are only beginning to unfold.

The new technologies are evolving now and nothing will stop these developments. Aspects of society such as international finance, networks of international scientific cooperation, as well as advanced corporations are adapting to and using the emerging digital highways to good advantage. The question is whether these advanced technologies are relevant for developing nations, such as South Africa, struggling to come to grips with the fundamental issues of poverty, unemployment and environmental degradation. We believe that these technologies are not only highly relevant in our present transition, but their application absolutely essential for resolving the social and economic backlogs and developing the full potential of all citizens. They are part of the transformatory arsenal which can break the deadlock imposed by the linear response. South Africa in particular is in the fortunate position that the political and social forces after apartheid are such, that a viable solution *must* be found, lest society explodes. The North/South conflict, the conflict between rich and poor in a global context, is unfolding *within* this country.

Growth and development

Growth is not by implication development. Growth as measured by GNP is a linear concept, development a transformational one. GNP only measures output but is uncritical and insensitive to the nature, the composition or the quality of that output. As a yardstick GNP has become deficient to measure the social and economic well-being of a nation. Yet: "obsolete economic and industrial ideologies (are) still pervasive among development officials in the majority of aid and lending agencies, whose over-aggregated macroeconomic models still predominate, even as they become little more than statistical illusions" (Henderson, 1991):

There are other aspects to consider. Too much growth without development; as presently experienced in Beijing China, can overheat an economy and feed the boom/bust cycle. The same can be said about certain "kick-start" proposals, such as a massive housing scheme: it would overheat the engine, which would soon run out of fuel. Unless the people who have to live in these houses and have to pay for them are *concurrently* developed, such schemes make no sense. Similarly, electrification without income-creating community-based development will only lead to an increase of the already substantial backlog in payments. Millions of small scale efforts, involving the recipients of essential services, is a better approach than attempting to do things for "the people" on a grand scale.

Increasing social spending (from 31.3% of total government spending in 1985/86 to 44% in 1992/93) is part of the linear response and has not resolved either the housing, nor the education and health crises. On the contrary, these have worsened. It seems that the "how" of spending is more important than the "how much". We will return to this point when discussing the Community Development Unit concept in Section IV.

Bureaucracies, whether domestic or international, have a predilection for grandiose linear projects, which then fail to materialise. The World Health Organisation's call for "health for all by the year 2000", and the IMF and World Bank prescriptions for sub-Saharan Africa are cases in point. The health status of the world population as a whole is deteriorating, and sub-Saharan Africa is facing disaster. The 1994 "State of the World's Children" report by Unicef states that Africa has begun sliding backwards into poverty. More than 220 million Africans live in absolute poverty, unable to meet their most basic needs. About three-quarters of all cultivable land was affected by soil erosion and at least 30 million people are under almost constant threat of starvation. On current trends the sub-Saharan population is projected to rise from the present 640 million to 1.6 billion by 2030. Zaire, Somalia, Sudan, Angola and Liberia have ceased to exist as viable states. The transformational direct democracy model proposed in this report could radiate out into Southern Africa and sub-Saharan Africa, reinforcing the continent-wide call for democracy. If the South African reconstruction programme fails, the continent may well be doomed.

The cost of job creation

The structural problem of unemployment dictates that we must find new ways to create work. Creating jobs cost money, but productive work adds value and creates wealth. What comes first? In the linear model the spectrum of the cost to create one job ranges from R500 lent by the Get Ahead Foundation to buy welding equipment for making window frames, to R63 million for each direct job

at Mossgas. IDC's chairman Christo Wiese estimates the average cost of a job in the formal sector to be at least R200 000. In a linear model to provide work for the 400 000 annual work seekers in the formal sector would require an investment of R80 billion per year. Not surprisingly the formal sector has ceased to function as a source for new work. To create a job in the small business sector now costs between R8 000 and R10 000. This would reduce the bill to R4 billion per year, still a substantial expenditure. We mentioned earlier that the World Bank report on land reform estimated that one million jobs can be created in small scale agriculture at a total investment of R12.8 billion. Various calls for state-led job creation schemes in the field of basic infrastructure have serious drawbacks. These initiatives represent linear thinking and do not provide lasting solutions for the unemployed. Such schemes need to be relegated to the community levels and combined with training for lasting employment.

The informal sector

In a transformational model jobs would be created as a community response to satisfying their own needs. The fact that 60% of our population is in need of all the basics: shelter, food, clothing etc. can be turned into the engine driving the creation of work. This requires a change of perspective: this vast need must be seen as an *opportunity* instead of as a *cost* to the nation. In economic terms the *need* must be turned into *demand*. Spaza shops are a case in point: without spending capital, 66 000 home shops, open 12 to 16 hours every day, create income for the same number of families, while rendering a cost-saving service. According to the managing director of Project International, Bridget Mosepe, spazas have a total turnover of about R5 billion. Similar initiatives exist in the fields of workshops, crafts, hawking, hairdressers, tailors, curtain makers, shebeens and subletting space. Without these initiatives society in Africa would grind to a halt.

The funds circulating in African townships fuelling the informal sector are difficult to estimate but could exceed R15 billion per annum. This money is changing hands as cash, not as an electronic entry by a financial institution. Introducing these vast cash-flows into the formal financial system would require the restoration of trust in the formal economy by those who have so far been neglected - if not ignored - by the formal financial sector. It would also require the creation of new banking mechanisms such as the People's Bank proposed by MERG or Community Banking spearheaded by Bob Tucker and Helen Kuzwayo.

A special role is played by stokvels, a type of credit club in which a small group of people contributes a fixed amount of money to a community fund on a periodic basis. Money is drawn by members in rotation or if a special need arises. Andrew Lukhele, president of the National Stokvels Association of South Africa (NASASA), stated that there are 800 000 stokvel groups nationwide (SAIRR, Spotlight No2/93, p21). Markinor calculates that there are some 50 000 stokvels formed in metropolitan areas with a combined membership of 1.9 million. Major financial institutions have shown interest in stokvels recently, as we will discuss in the following section.

MERG does not consider stokvels to be the main institutions for contractual savings, nor an effective instrument for mobilizing savings for productive investment (p276). One must agree that stokvels cannot match the universal capabilities of financial institutions. However, they meet the perceived needs of closed groups of people in the form of a mutual support arrangement. As such

stokvels are an instrument of direct democracy since the members themselves decide how the money is spent. In a community based development organisation context, the stokvels system could be broadened to meet the requirement expressed by MERG that such savings should also serve productive investment, albeit of a local nature, and subject to local decision making and priority setting.

The present role of the financial institutions

The total assets of the Life Offices are R150 billion and that of the banking sector R276 billion (1993). It is no surprise that the ANC, and more recently COSATU, are reflecting on the possibility to tap these resources for social investment. We already demonstrated that the total or partial nationalisation, even with compensation, is a non-solution. In addition to the prohibitive cost, nationalised financial institutions tend to encourage government borrowing, fuelling the growth of the public sector. In India state borrowing from the financial institutions it controlled rose from 17% to 56% over the eight years after nationalisation.

If the MERG recommendations are accepted, the authorities could now consider directing investment to targets of *their* choice by re-introducing investment in prescribed assets by certain financial institutions, notably the Life Offices. Prescribed assets have two major drawbacks: they earn a below market return and they direct resources from productive investment into public sector consumption. Therefore introducing prescribed assets amounts to partial confiscation of savings or to additional taxation. Social investment channeled through three tiers of government can absorb up to 80% by the bureaucratic infrastructure. For these two reasons prescribed assets are an inefficient allocation of resources in terms of achieving targets of social advancement. It is part of the linear response, and puts spending control in the hands of central government.

Banks are criticised for favouring large borrowers over small ones and for showing an urban bias in their lending patterns. Controlling interest rates is a linear response and therefore does not achieve the intended results: artificially low interest rates redirect savings from the institutions towards hard assets, often of an unproductive nature; subsidising interest rates diverts funds from productive investment to wasteful consumption. For an economy to function effectively the financial system needs to be efficient and competitive and allowed to respond to the varied needs of society through the market. The idea that controls and regulations can improve on the market is an illusion. Most regulatory interventions, even those with the best of intentions, create new distortions. Modern theories on the behaviour of complex systems and the phenomenon of the spontaneous emergence of order on the "edge of chaos" prove this point scientifically.

Redistribution is mainly the function of the tax system not of the financial market. The real challenge is not to *prescribe* investment, but to make investment into nationally and socially desirable targets such as education and health care competitive to other investments such as equity, shopping centres and office blocks. The only way in which this can be achieved is to channel private funds *directly* into integrated community development budgets, where these funds are welded together with public funding and donor and grant moneys. The spending and priority decisions then rest with the community and not with a remote bureaucracy.

There are indications of an intention to also use pension and provident funds for social investment by government. COSATU's Naidoo: "In worker's pension and provident funds alone, there is more than R200 billion, mostly going into speculative investment. A move away from speculative investment, white elephants, wastage, corruption, and unproductive bureaucracy will unlock the necessary funding for social investment". This "move away from" follows the same linear line of thinking which lurks behind prescribed assets. It leads to the type of bureaucratic investment decisions that Naidoo wants to avoid. The destruction of the pension system by sub-optimal investments puts the very people at risk COSATU professes to help. The intentions and the means do not match.

It is valid criticism that the formal financial sector, as it is presently structured, is ill-suited to serve the informal sector or the population at large, including the poor. Banks, however, are planning to develop community banking systems, using stokvels and other community organisations. "In December 1991 NASASA announced that it was planning to divert a sizable portion of stokvel savings from commercial banks into unit trusts. The proposal was prompted by the realisation that group savers were unable to collateralise their deposits for the benefit of individual members (SAIRR, Spotlight, No2/93,p.21). This is an example of the many attempts to bridge the informal and formal financial sectors. The Life Offices have formed the Investment Development Unit (IDU) in order to be able to act as an industry in terms of investing in socially desirable goals, such as electrification and housing. This is a very encouraging development in line with our proposals for integrated community funding. We will return to this important initiative later.

The MERG report states that "all South Africans, including the poorest, must be able to keep their money safely in a bank, earn interest on it, and use the bank to make the payments they wish...". To meet this demand MERG proposes the establishment of a People's Bank along the lines of European giro banks, operated through the Post Office system and owned by the Post Office, that is the state. The assets of the bank should be invested in "marketable state securities and eligible securities determined by the state." And: "the rationale for such a People's Bank is that existing banks are not well able to provide cheap money transfer arrangements for the majority of the population" (p272/3).

On a more menacing note MERG recommends that "in order to transfer the ownership of wealth to the majority, measures will be taken to establish compulsory funds that are able to purchase majority or controlling stakes in quoted companies including mining finance houses, mines and financial institutions" (p281). Where such 'compulsory funds' will draw their capital from, or whether such measures amount to nationalisation, is not clearly spelled out. What is clear, however, is that the financial institutions will have to direct their full attention to the problem of social investments if they want to ward off direct interventions in their operations and investment decisions.

The constitution: the decentralisation imperative

The current constitutional negotiations would have been a unique opportunity to design a truly modern constitution which would be conducive to a transformational process. The two key elements in such a transformational constitution would have been small government and community empowerment

through decentralisation. This has not (yet) happened. Whilst acknowledging the historical, political and time constraints under which the negotiations had to unfold, the actual outcome of the debate took a different direction. Power and its distribution became the central issues. The fact that the ANC (possibly not COSATU and the SACP) has moved from a position favouring a unitary state with strong central controls to agreeing to a dispensation that has at least some, if not all, of the elements of federalism is no minor achievement. It remains to be seen whether these concessions represent a change of tactics or a change of heart. (The recommendations of the MERG report, although not yet ANC policy, are predominantly dirigist, centralist and interventionist). The relative autonomy of the regions would be guaranteed by an independent constitutional court. Equal representation for each region in a Senate would also aim at regional interests being protected and heard.

It is questionable, however, whether these safeguards and checks and balances for a federal dispensation will hold out under the combined pressures of unrealistic expectations and demands and the inability of the new administration to meet them. Given the inequality between the regions, it would not be difficult to turn the enforcement of centrally set standards and programmes of redistribution into a mechanism to move the powers back to the centre. All it would require is one referendum by a disenchanted new voters corps. Since 85% of all taxation presently accrues to the central coffers, those who control the purse strings would be in a position to dictate economic policy.

Ann Bernstein: "the debate about the 'regional question' has been a discussion confined to the political parties and their constitutional advisers who are mainly drawn from the legal profession, at the expense of addressing the country's future socio-economic development. This is the more remarkable since the incoming government will be judged primarily on what it can deliver in terms of the massive development expectations of the majority of its voters" and "one of the great dangers that must be avoided in the country's rush to create regional governments, legislatures and bureaucracies, is the concomitant notion of a very large and inflexible army of officials that believe that they 'know' what is best for South Africans" (The Regional Question, Development and Democracy, July, 1993).

The Forum has now negotiated a quasi federal structure, in which essential powers are delegated to regional structures. The regional formula is useful for accommodating the existing civil service and satisfying some - if not all -- of the present regional power elites. Nine *new* regional governments, complete with a premier, a ten member executive council (or cabinet) and an own legislature with between 30 and 100 seats, will over time increase the size of overall government. These regions will have at least 20 concurrent competencies with the central Parliament giving rise to a plethora of regional legislation and new bureaucracies to administer these.

The ANC and its allies, however, wish to establish and maintain a strong centre from which redistribution strategies can be enforced. As we stated before, delegated and/or concurrent powers would be returned to the centre once it became clear that regional authorities do not meet the equalisation targets in health services, education etc., or, worse, wish to perpetuate separate development policies under a different guise. The underlying assumption of these strategies remains that government knows best and that a dirigist bureaucracy,

centralised or decentralised, is the preferred instrument for pulling South Africa out of its present predicament.

Rightwing Afrikaners still opts for full autonomy in an own state; a loose confederation would probably receive consideration, provided it can exercise original powers over virtually every aspect of public life. Regional and tribal leadership, with little or no hope for a meaningful central role, support the confederal option for obvious reasons. In all aspects of the current debate the notion of 'power' is the central issue. Ten different shades of power are being discussed: concurrent powers, delegated powers, entrenched powers, exclusive powers, original powers, ordinary powers, overriding powers, residual powers, sovereign power, specified powers! Fortunately, the presently negotiated constitution is an interim constitution. In other words, the *real* constitutional design process will start in May 1994, unless one party would obtain a two thirds majority vote.

The crucial role of local government still needs to be defined. The Local Government Transition Act is a complex document, in part aiming to secure the participation of rightwing elements in local government. This process can take two main directions: the one sketched above, in which power is re-centralised under the pressures of failed redistribution and equalisation programmes, or the insight that direct democracy, and the full empowerment of individuals and communities can lead the whole nation to freedom and prosperity. The remainder of this report will be devoted to outlining the second option.

THE NEED FOR A TRANSFORMATIONAL RESPONSE

In complex modern societies and economies everything is connected to everything else. No problem can be resolved in isolation, without creating a new problem, often worse, in another part of the system. Even the best models have shown to be inadequate to simulate the complexities of a modern society. The theories of chaos and complexity, self-organisation and emergence of order in nature and society are gradually developing our understanding of how complex systems interact. Complex systems appear to be most innovative and creative (or destructive!) at "the edge of chaos", a term which would well describe South Africa's present position. For interventions in complex systems to be therapeutic, such an understanding is essential. All the other worn-out and discredited interferences actually *create* the distortions and social problems they pretend to resolve. Change is linear, gradual, reversible and mostly slow; transformation is non-linear, fundamental, irreversible and usually fast. In this perspective the opportunities in South Africa for fundamental transformation are unique. They can, however, also be missed.

Transformation in nature (metamorphosis) takes a given organism, a caterpillar, builds a protective cocoon around it and then proceeds to melt down all its components with a view of re-assembling these components in such a way that a butterfly emerges. Crawling has turned into flight, into a new dimension of freedom. There are many indications that modern social organisation is in the throws of such a transformation. Systems are breaking down and disintegrating, governments are losing the confidence of their citizenry, traditional economic rules cease to make sense, reductionist ideologies have shown their limitations. There is a clear need for a response which is adequate to the challenge of transforming society. The "new" South Africa should offer something better than exchanging one oppressive system of patronage and corruption with another

one. This will require a new value system and the restoration of values that have tended to disintegrate in modern society, notably those of the family, but also civility, honesty, tolerance and courage.

In 1990, (when the economic situation still looked better compared to 1993) the Nedcor/Old Mutual scenario stated: "no country in modern times has made a successful transition starting from a position like South Africa: ten years of economic decline; significant and rising violence; commitment to change a political system by a fixed date." In the minds of many, who observe the social and economic disintegration as reflected in massive unemployment and widespread destitution, the thought takes root that there may be no solution to the South African crisis. Restoring hope in individuals and confidence in businessmen and women is therefore a critical component of reconstruction.

THE ELEMENTS OF A TRANSFORMATIONAL RESPONSE

Effective decentralisation

In a previous subsection we briefly outlined some of the strategies which dominate the present constitutional debate. The agendas for redistribution have been discussed in other sections. What concerns us here is that the accommodation of social and cultural diversity requires effective decentralisation. Not delegation that can be revoked at will, but effective decision making at the local or community level. Modern nation states have lost much of their relevance and appeal. They have become too small to resolve global problems of trade, finance, the ecology, or even regional security. At the same time they have become too large and bureaucratic to resolve the basic problems of their citizens.

The Soviet Union has broken up in the CIS and a host of other independent states, previously governed from Moscow. Now the CIS is under threat by the centrifugal powers of ethnicity, fundamentalism, extreme nationalism *and* claims for local autonomy. In Yugoslavia the conflict is overlaid by a long history of violence and shifting allegiances and, most dangerously, religion. Harvard's Samuel Huntington: "we are moving out of the era where the nation state is the central focus" and "the conflict among civilizations will be increasingly central: the West and Islam, Islam and Hindu civilizations in India, Islam versus the slavic Orthodox civilization, China and Japan as civilizations" (Time, June 28, 1993). Unless we develop a global civilization *in combination with community autonomy*, new conflicts will arise with a viciousness and fanaticism rarely seen before. Carl Jung, when asked how the phenomenon of Nazism could be averted in the future, answered: community autonomy!

Liberation Management

Businessmen, not politicians, are the last revolutionaries and innovators. Initially, to match bigness in government, businesses became big too. Some corporation's assets exceed those of many nation states. In the process these corporate giants have developed their own brand of bureaucracy. Organisation charts were strictly hierarchical, reporting was vertical and decisions took months if not years. Informatics has changed all that. According to a recent analysis of the most advanced business organisations, Tom Peters has described completely novel principles of organisation, which he termed "Liberation Management". These principles are:

- 1 small, highly efficient central structures;
- 2 delegation with empowerment in network organisations;
- 3 outcontracting of all non-essential production and service functions;
- 4 effective knowledge management systems;
- 5 access to career-long training, retraining and advancement.

These new principles, adopted by corporations like Turner's KN, Barnevik's Asea Brown Boveri, Ross Perot's Electronic Data Services, are now being emulated by most transnational corporations. They create a new business culture, in which the empowerment of the individual and universal access to information (informedness) are central.

There is no reason why the principles and practices of liberation management should not be successfully applied to future systems of governance. This will, however, pose serious initial problems in the new South Africa. The new cabinet and parliament will be representative and enjoy legitimacy, but the attitudes of the majority in the civil service will still reflect the mindset of the past. This may create a conflict between the intentions of the executive and the capacity of the civil service to frustrate these. The mindset of the civil service will thus have to be changed from the traditional authoritarianism, secrecy, insensitivity and arrogance to one of openness, accountability and transparency. Much of the spectacular economic successes of the Asian tigers can be attributed to the singlemindedness of government, business and the populace. Unless the political will of the new government can flow uninhibited through the whole system, and enlist the full cooperation of the private sector, reconstruction could be in danger.

Communities will have to play a much more direct role in the reconstruction processes. This is well reflected in Bernstein's comment that "it is not the bureaucrats who should decide what the people of Kayelitsha, Soweto, or New Brighton want with their allocation of public expenditure - it is the community itself that should decide what it needs first and how that money should be spent". The function of governance will always remain an essential ingredient of modern society, as long as it does not absorb functions for which it is manifestly unsuited and for which there are better instruments. Governments as universal providers have been a total failure. The central issue is not power but empowerment. Empowerment of communities establishes direct democracy. "Direct democracy has the advantage that both the government and also the elite are held accountable to the people" (Norman, 1975).

The notion of empowerment

Before we give the term empowerment substance and meaning, it is useful to look at its opposite: victim consciousness. The Nedcor/Old Mutual scenario listed the following characteristics: family breakdown, low job-participation, high alcohol and drug abuse, low performance in all spheres of life, high crime rates and endemic violence, proliferation of criminal gangs, acceptance of victim-image (despair). We would add: loss of a sense of belonging or alienation, the breakdown of any form of authority, disruptive behaviour, a distorted perception of reality, intolerance, insensitivity, even extreme cruelty.

Empowerment, in contrast, is synergistic and mutually enhancing. It provides people with a challenge, with personal worth, dignity and a desire for growth, learning, participation, a sense of belonging, respect, recognition. In every aspect the empowered individual is the opposite of the victim.

Empowerment is not a concept but a process. The process of empowering individuals and communities requires the creation of an enabling environment in which decision making is delegated to the lowest responsible level. "The aim should be to empower ordinary people to take charge of their lives, to make communities responsible for their development, and to make governments listen to their people" (World Bank). Empowerment can only function if the requisite tools are provided to apply these new freedoms and responsibilities. The critical tools are access to funds and access to skills and information.

The Theory of Public Choice

Modern societies are too complex to be managed from the top, and public demand too varied to be met from central administrations. The theory of public choice is providing the alternative. Central features of this theory are democratisation, decentralisation and privatisation.

Democratisation means the empowerment of individuals by affording them a direct say in matters affecting their day-to-day lives.

Decentralisation means the empowerment of communities to take charge of their own affairs as far as welfare functions are concerned - education, health, housing, job creation, culture, religion, sport and recreation. This implies removing superfluous bureaucratic layers between communities and central authorities.

Privatisation means enabling communities to take responsibility for these functions through delegated powers, equal financial inputs, and through appropriate education and skill formation (capacity building).

Neither of these three components can be actualised in isolation; they are completely interdependent. There is a fundamental contradiction in present forms of government-driven development. Whilst claiming to act in the interest of "the people", real decision making remains centralised, and privatisation is resisted by the vested interests of the respective bureaucracies. In the process, direct democracy perishes. Many governments, faced with sheer insoluble structural problems, are attempting to decentralise decision making and accountability to regional and local levels. No government, however, has yet been able to provide adequate tools and create the skills needed to do so effectively. Decentralisation without providing the necessary tools, the financial means and the requisite skills is merely an abdication of responsibility. Reaganism and Thatcherism are cases in point; they have failed because they represented Public Choice in name only. They remained centralist and dirigist in nature.

Knowledge, skills and entrepreneurship, not money, are the primary tools for wealth creation in the information age. No government can employ enough civil servants to achieve the communication and learning needed among whole populations for self-sustaining development. The information age and the extraordinary potential of interactive, digital technologies for assisting in the

communication, learning, management and development processes needed for local level empowerment provide a solid basis for effective decentralisation.

Informatics: the key to the information society

All digital technologies are part of the same family. They can all be linked to form a single system. Integrated systems, combining computing, storage, broadcasting, and presentational technologies are already in use in commerce, in industry and in the military. So far the potential of these systems has not been applied to the social service sector on a large-scale, organised basis. The poor have not constituted a market for the technology; the essential communication processes needed to develop people, communities and civic institutions have had little place in macroeconomic planning.

Digital systems can deliver data and software for information, learning, management support or entertainment instantly and on demand. They permit two-way communication between everyone with access to those systems. Digital material can be treated like water or electricity. A single digital delivery system - a digital highway - can operate like an electricity or water supply system. The projections for digital systems are that they are highly profitable. Being profitable, digital utilities can, for the first time, link the communities into the delivery of public services on a large scale. In the Southern African setting a satellite based digital utility will enable government departments to extend their services directly to all citizens without large and expensive human extension systems or unwieldy bureaucratic intermediaries. This will render public extension and support services considerably more cost-effective.

Informatics, the merger of telecommunications, computers, multimedia, print and value added networks in a universally accessible utility is the one essential tool which turns empowerment as a concept into the capacity to deliver all development functions tailored to the unique requirements of each community. Information is an abundant resource, not a scarce commodity. There is in principle no barrier to the multiplication and dissemination of knowledge. The other essential requirement is a novel way in which funding is disbursed at the community level. We will deal with this critical aspect in the final section.

COMMUNITY BASED DEVELOPMENT ORGANISATIONS: POWER TO THE PEOPLE

Key decision makers in development are acutely aware that failure to deliver tangible results after April 1994 could trigger a hostile response from constituencies who have voted a new government into power, promising to relieve the plight of the poor and the disadvantaged majority. Prof Wiseman Nkuhlu, Chairman of the IDT and the Development Bank stated that it will be necessary to involve the communities in the development processes in order to create a direct awareness of the scarcity of resources and of the time it takes to eliminate the severe backlogs in virtually every area of social and economic service. Prof. Lombard observed that "the primary task of the central government, therefore, is to find the strength to force through changes in its society which are necessary for the emergence of private initiatives and even collective initiatives by the people concerned" and "unfortunately, the entire idea of democracy through the right to vote has been made meaningless in respect of most issues

which really matter in the daily lives of people" (Freedom Welfare and Order, 1978).

This report recommends that a community based development organisation (Trust or Corporation) be established in each of the 266 Magisterial Districts in South Africa. These CBDOs, in cooperation with strong (but small) local government and strong (but small) central government could become the centre piece of a future dispensation of direct democracy, based on the framework of the information or learning society.

The community based development organisation is the key structure in the development network, responsible for the delivery of a number of essential services. The CBDO is managed according to the principles of "liberation management": minimal overhead structures; multifunctional employees who are empowered and informed to make decisions. Education, health services, financial services, housing development, water and energy reticulation, job creation, eliminating poverty in its boundaries and all other aspects of community development can now be decentralised and prioritised locally. This arrangement, made possible by informatics and funded *directly* through blockgrants from the central coffers, is the most cost-effective route to eliminate backlogs, use scarce resources and achieve development with equity. In the same process, jobs are diverted from remote regulatory bureaucratic structures to effective local delivery units, where value is added, visible to all. What does this mean in terms of a new constitution?

South Africa is a highly diverse society. The main failure of apartheid was that it attempted to manage (or manipulate) this diversity through domination and division. A federal arrangement with strongly entrenched regional powers would go some way towards accommodating regional diversity. It should be realised, however, that each region will still have to manage the conflict potential of its diverse constituencies, albeit on a smaller scale. Strong regionalism in the South African context is bound to give rise, over time, to strong regional differences and inequalities. This will provide new conflict material, plus the trend to re-centralise the society.

In a modern technological society, decisions on securing the power and water supplies, on establishing and maintaining transport and telecommunications infrastructure, on providing disaster relief and managing epidemics can only be taken on a national, and sometimes even international level. These matters, as well as setting the standards for social services are best addressed by central government. The *actual delivery* of the basic development functions and social services in terms of programmes and projects in a highly diverse and unequal society can best be delegated to the community level, the smallest socio-political unit.

Whilst the gradual transformation of black civic organisations from resistance to reconstruction will still contain much fuel for conflict, such conflict can best be addressed and resolved by the involvement and the empowerment of the people themselves. The essential fact in this arrangement is the separation of the policy and regulatory level from the operational and delivery functions in each area of technological and social service. The arrangement of a strong centre and strong autonomous communities offers the best prospect of managing potential conflict and of advancing people. Informatics and its interactive training tools will be able

to resolve one of the most difficult tasks, to build effective capacity at the community level.

Involving the youth

On page ten we mentioned the research carried out by David Everatt and Mark Orkin of CASE into the predicament of the youth in South Africa. The findings came as a surprise in relation to certain widely held negative stereotypes. The age group targeted was 16 - 30 year olds. The total number of young people in that age group is 10.7 million, of which 8.2 million are African youngsters. It was found that 20% of Africans, 34% of coloureds, 41% of Asians and 45% of whites were "FINE"; 44% of Africans, 46% of coloureds, 45% of Asians and 41% of whites were "AT RISK"; 30% of Africans, 18% of coloureds, 13% of Asians and 12% of whites felt "MARGINALISED"; 6% of Africans, 2% of coloureds, 1% of Asians and 2% of whites were considered "LOST".

The various adjectives chosen by the young people were mostly positive, such as: ambitious, happy, caring, confident, honest; only a minority used: confused, frustrated, angry, violent. Some 40% of African young people are formally affiliated to a church. Everatt and Orkin found in the unemployed black youth a well of frustrated ambition and self-confidence, coupled with a surprising lack of vindictiveness despite the violence they had seen and suffered. Given these findings one should heed the words of Sheila Sisulu, Director of the Joint Enrichment Programme: "Don't ever call kids 'the lost generation'. They are not lost. They are the new majority. People over 30 are the minority". Melvyn Freeman, head of the Mental Health Programme at Wits University Centre for Health Policy: "...helping to start a process in which the youth see themselves as socially significant and in which their natural regenerative power is channelled towards the development of a new social order, will be one of the most important tasks confronting South Africa during the next decade".

In order to harness the positive energies of the youth, some 120 organisations formed the National Youth Development Forum (NYDF), aimed at combating the marginalisation of South Africa's youth. At the forum it was agreed that a pilot programme would be launched in February 1994. By the end of 1994 some 50 000 young people are to be involved in this initiative. The proposals identified 11 areas in which youth service programmes can be launched. These include social welfare (working with old people and street children), health (assisting in hospitals and clinics) environmental conservation (cleaning rivers and assisting in community clean-ups), peace work, rural development, education and training (teaching, literacy, educare and voter education) and housing and infrastructure (building houses, electrification and roads). (Weekly Mail & Guardian, October 1 to 7, 1993).

Proposals by the Minister of Home Affairs as to the formation of a "Youth Battalion", loosely based on the one launched in the depression by President Roosevelt, should be ignored. These programmes of the Works Progress Administration of the 1930s, aimed at providing ghetto youth with public sector jobs outside the ghetto at sub-minimum wages. Apart from its military overtones, such top-down initiatives must be considered insulting to young people, many of whom have a professional education and skills, and whose predicament is not of their own making.

Instead, we propose that the initiatives to establish community based development organisations or Corporations put forward in this report, and the Joint Enrichment Programme and other youth initiatives, are welded together. If the key objectives of this crucial youth initiative are re-integration into the community, development of self and society, then the vision of CBDOs and those of advancing the youth seem perfectly aligned. CBDOs would also develop the means, the development priorities and the target areas in which youth can be most profitably employed and advanced.

The World Development Report 1993 of the World Bank, which examines the interplay between human health, health policy and development, contains a disturbing statistic: 53% of South African children aged between two and five are stunted. This is the result of chronic protein deficiency. The nutritional deprivation of these children will have detrimental implications for their ability to be educated and make productive contributions to their communities. A massive programme to remedy this fatal trend is required with the utmost urgency.

A new role for the financial institutions

We mentioned earlier that the financial institutions have been called upon to invest in development. Such investment can only be sustained if the return on such investment is market related. Such a return cannot be achieved if funds are allocated *in isolation* for projects and purposes that provide a return only over time, such as education. We envisage the community based development organisation to be the instrument in which funding from a variety of sources can be integrated into one budget. This allows for prioritising and coordination which is manifestly impossible if each development function is managed by an isolated bureaucratic hierarchy. The funding components are:

- 1 Dedicated blockgrants from the central coffers calculated per service function according to an equitable formula based on demographic data. This would immediately equalise funding *input* for the total population, without taking responsibility for equal *outputs*. These are the responsibility of the community. Blockgrants do not need to earn a return on investment. There would be few strings attached except an auditing function.
- 2 Funds from development agencies, domestic and overseas, which would partially have to earn a return, partially would be allocated as donations or grants. (DBSA, SBDC, Housing Trust, IDT, Kagiso Trust, Open Society Foundation, etc.) These sources would provide the critical extra funds required to overcome historical backlogs.
- 3 Funds received from local taxes and user charges. No return is expected from these sources of income.
- 4 Funds received from financial institutions such as the Investment Development Unit of the Life Offices Association. These investment would generate a market related return or better. They would thus compete with alternative investments such as equity or real estate.

The critical aspect of this formula is the integration of free contributions with commercial investment in one locally established budget, which is managed according to the best principles of liberation management. CBDOs should also be the beneficiaries of privatisation in that they acquire or partly be allocated stock in

all public and semi-public corporations and institutions who render essential services, such as Eskom, Telkom, Spornet, Water Boards, the Housing Trust, the DBSA, the SBDC and the IDT. If CBDOs (that is the people) have ownership in Eskom, electricity bills will be more readily paid. If Local Education and Health Authorities will own the schools and clinics, they will look after them. We mentioned in a previous section that the state employs 262 300 educators, 90 700 nurses and 254 300 labourers. These would all be employed by CBDOs and the local service organisations. By eliminating most intermediary levels of bureaucracy between the front line delivery agencies and the central authorities very substantial savings can be achieved. The output in tangible services per Rand spent would increase visibly. But - most importantly - the real limitations of what can be achieved in a given period of time will be directly experienced by the people themselves, and cannot anymore be blamed on government.

CONCLUSION

This is not the place to go into meticulous detail as to the functioning of CBDOs and the Informatics Utility. This will be done in two separate reports which are in preparation. A response is first needed from those who presently negotiate the country's common future, and other stakeholders in the proposed Informatics Utility and CBDOs. Basic details on how informatics operates and relates to health services, education, agricultural extension, financial services, housing and infrastructure will be provided in these reports. The substantive differences in development problematique between rural, urban and metropolitan environments need to be considered. In the context of this report, a few examples must suffice.

Informatics and higher education

We mentioned that the cost of campus based tertiary education is rising by 15% per year and will soon be beyond the reach of most citizens, whilst the numbers requiring professional education will increase at least sixfold over the next two decades. Only electronic distance education through informatics can meet this demand by creating the 'corporate student'. E.g. a person who wishes to enter a professional career will join a company or an institution as an 'academic apprentice'. The Informatics Utility will instal a digital learning centre in the company with dedicated interactive workstations linked through a Value Added Network or a satellite service. The universities/technikons generate the interactive multimedia course ware and provide a tutor and back-up material. Students would study in the morning and work in the afternoon, to gain a practical perspective on their subject. Corporate students will earn a small salary and receive a study voucher from the Department of National Education, finetuned to the skills and professional needs of the country. The cost per student to the state would be reduced from R10 000 per year to between R3 000 and R5 000 per year, depending on the study direction chosen. More importantly, the cost to the parents will virtually be reduced to nil. There are fully functional electronic distance teaching universities operative around the world. There is no limit to access. This is equal opportunity in action.

Within the next decade all schools would be linked in one network. The complete syllabus is available on interactive multi-media. Teachers will become facilitators, tutors, and educators. Quality of materials is universally high and properly evaluated. Modules are available in all the required languages. Testing is continuous and built into the modules. The present number of teachers can

absorb double the present number of pupils. This obviates the need for the training of 175 000 additional teachers. The direct savings in teacher training and remuneration alone are in the region of R25 billion over ten years. A complete informatics system would cost approximately R18.6 billion over the same time span. This is roughly calculated as follows: Four geostationary satellites: R1.6 billion; ground stations and connective infrastructure: R4 billion; One million workstations: R8 billion; multimedia software development over ten years R5 billion. The complete system could be paid for from savings in formal education alone. Since the Informatics Utility services many other development areas and is targeted at the whole of Southern Africa, substantive investments from donor organisations can be expected. With the exception of the satellites most components of the system will be manufactured locally, revitalising the electronics and software industries.

Informatics and health services: telemedicine

Informatics can link all health service points in the country through a 90 cm satellite dish, or a connection through a VAN or a fibre optics linkage. A rural clinic can electronically transmit an X-ray to a radiologist on duty in an academic centre and receive a diagnosis with instructions within minutes. Doctors in IPAs (see section on health) can render home health services by giving diagnostic support to visiting nurses equipped with video cameras. Specialist services, now mainly concentrated in the cities, can be accessed throughout the country. The field of telemedicine is rapidly expanding because the cost savings are considerable and quality of service is vastly improved. The principle of telemedicine is that information travels not people. The total health care infrastructure, and not only the academic hospitals, become learning points for all health professionals.

Informatics and agriculture

South Africa will have to re-allocate land. Possibly 300 000 new small African farms will be established over the next five to ten years. With informatics the Department of Agriculture can deliver an electronic extension service via rural community centres, providing assistance to these new farmers in terms of agricultural practice, soil analysis, marketing information and technical assistance. These services can be rendered at a fraction of the cost of human extension. Rural finance organisations, the Post Office, Eskom's Agrelek, and organised agriculture would supply additional support services via the same network.

Final remark

There is not a single economic or social function in which informatics can not render a cost-effective, up to date and immediate service at a fraction of the cost of the present delivery system. The chances for it to work in South Africa are better than anywhere else in the world, because South Africa will experience the immense pressure of a new voting population, forcing the authorities to deliver on their promises. South Africa is in the unique position that it can make a technological quantum leap, enabling the country to deal with the structural and environmental problems of late industrialism. Making knowledge and skills available to the total population on a lifelong basis is the purest form of redistribution and affirmative action. It is the only way to alleviate poverty, create employment and equitably distribute wealth.

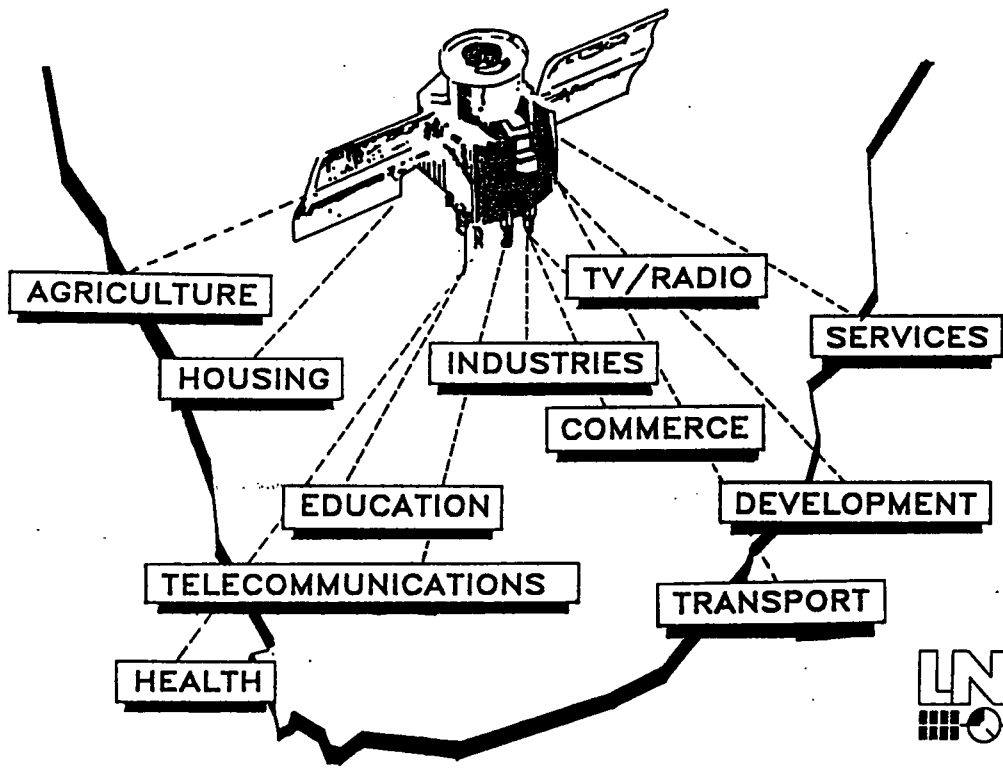
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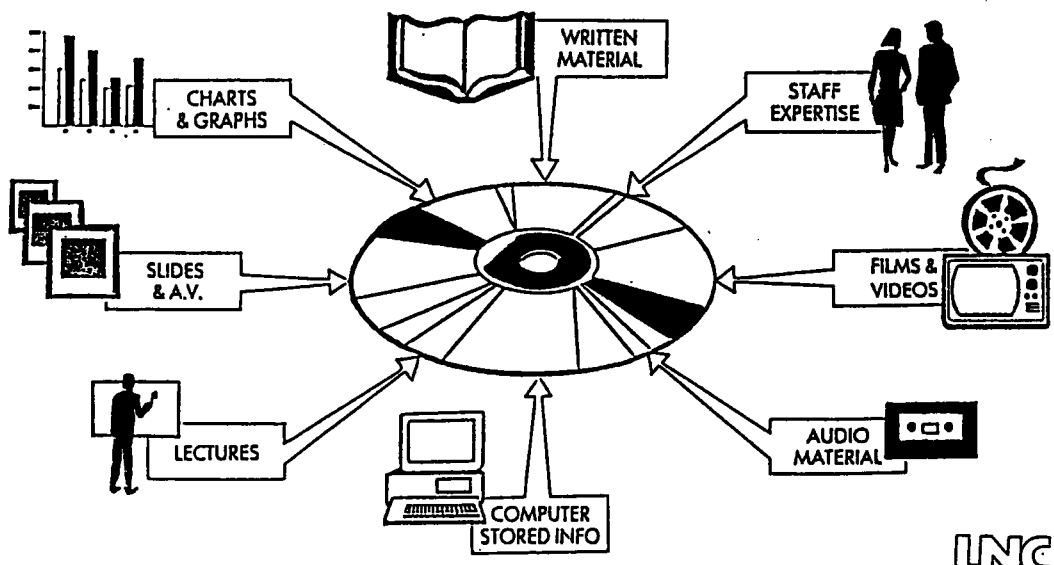
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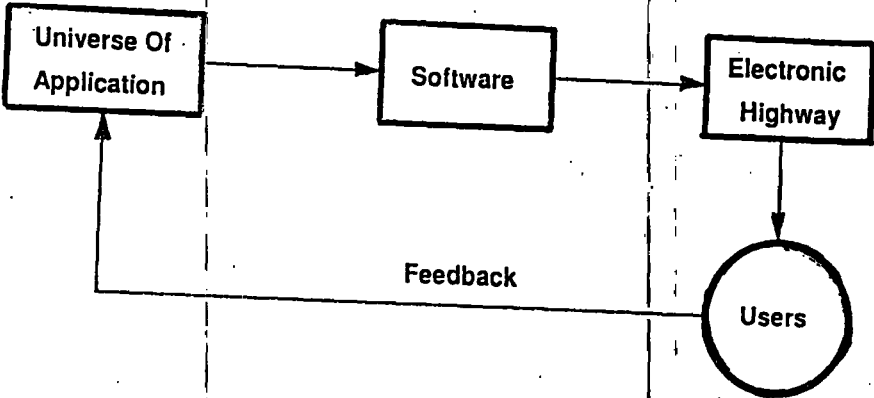
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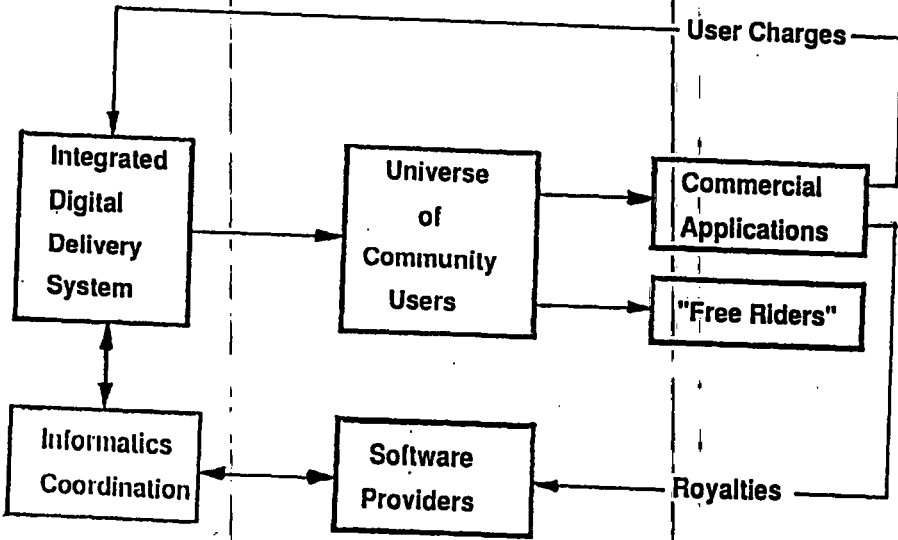
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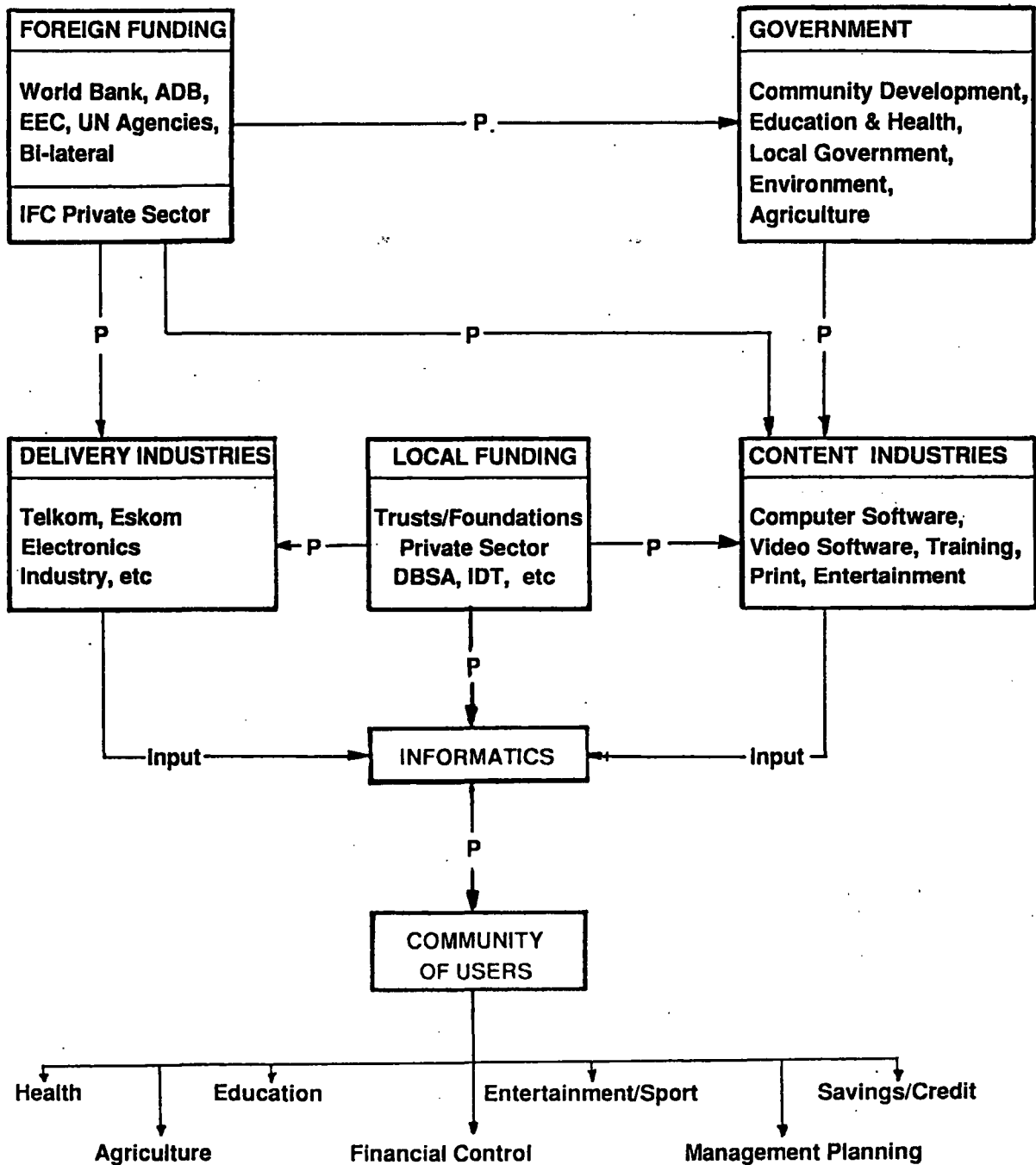
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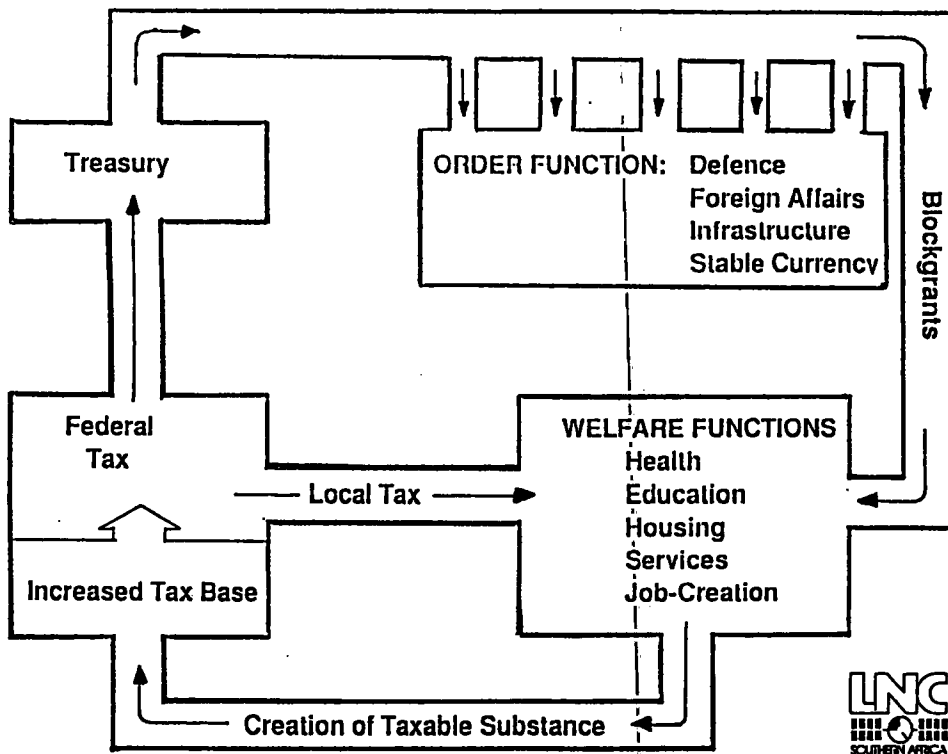
PLANNING & FUNDING FOR A REGIONAL INFORMATICS SYSTEM



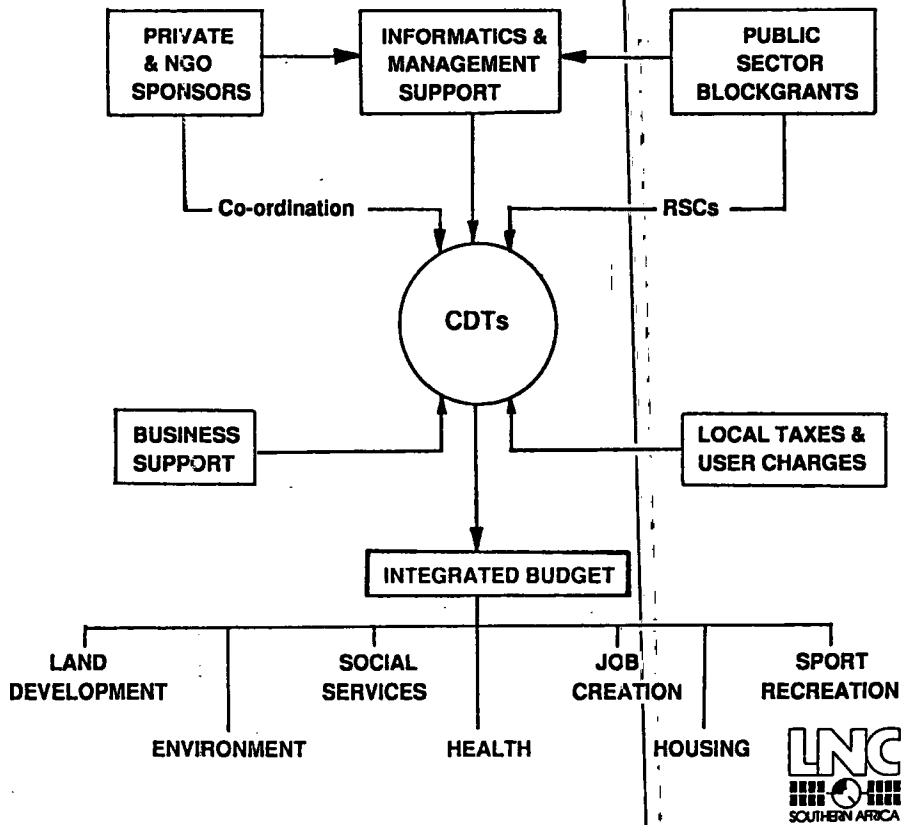
P = Planning, Quality, Standards, Research, Evaluation by CSIR, Universities, Private Sector, etc requiring coordination/planning/foreign input through INFORMATIX (PTY) LTD



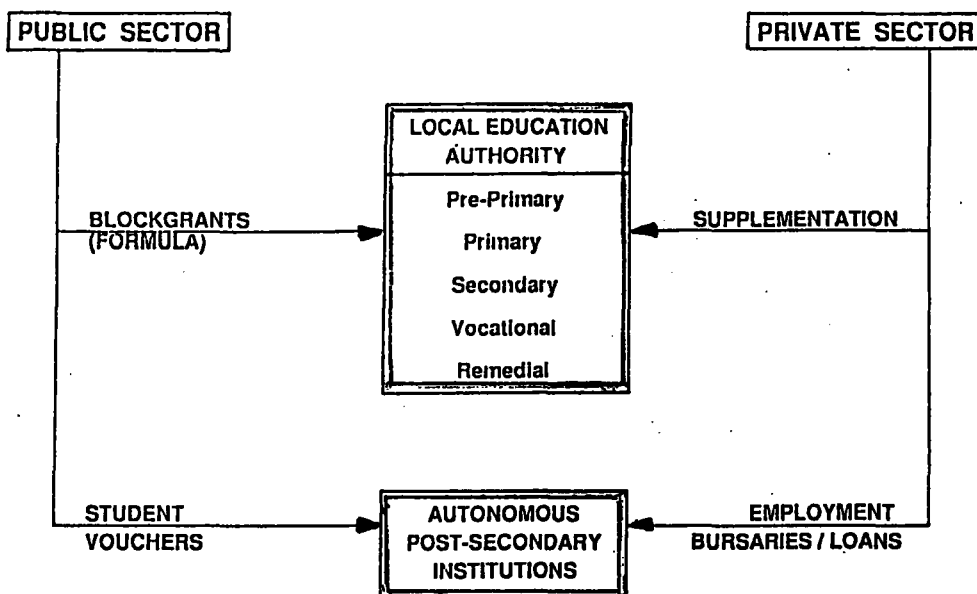
FLOW OF FUNDS: DECENTRALIZED MODEL



COMMUNITY DEVELOPMENT TRUSTS



EDUCATION FUNDING I



EDUCATION FUNDING II

