

METROPOLITAN PLANNING: THE PRIMATE REGIONAL PLAN

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In die lig van die belangrikheid van hierdie gebied as die vernaamste ekonomiese kompleks op die subkontinent, word die plan vir die Pretoria-Witwatersrand-Vereenigingstreek (P.W.V.) krities geëvalueer met betrekking tot: die onderliggende veronderstellings, die tegniese voorspellings en die ontwikkelingstrategie.

Daar word aangevoer dat:

- die fisiese vorm gebiede duidelik behoort af te baken wat inherent onge-

skik vir stedelike ontwikkeling is en waar stedelike ontwikkeling verbied behoort te word om sodoende die onvermydelike groeiproses van 'n aanlopende agglomerasie te verhoed;

- die ernstige onnoukeurighede in die voorspellings na alle waarskynlikheid verreikende sosiale en ekonomiese gevolge sal inhou, omdat
- toenemende verstedeliking onvermydelik sowel as wenslik is, en omdat
- 'n stelsel van "aansporingsmaatreëls"

verkieslik bo en meer doeltreffend as onbuigbare kontrole is om ekonomiese dekonsentrasie of desentralisasie aan te moedig; en

- hierdie desentralisasie in elk geval na die onderontwikkelde plattelandse en verarmde stedelike gebiede gelok behoort te word.

Die plan word geresenseer in terme van: (1) die ruimtelike strategie, (2) die tegniese voorspellings, (3) die ondeliggende sosiale en (4) ekonomiese veronderstellings en (5) die sintese.

INTRODUCTION

In view of the importance of this area as the prime economic complex in the subcontinent, the plan for the Pretoria-Witwatersrand-Vereeniging (P.W.V.) region is critically appraised with regard to: the underlying assumptions, the technical forecasts and the development strategy.

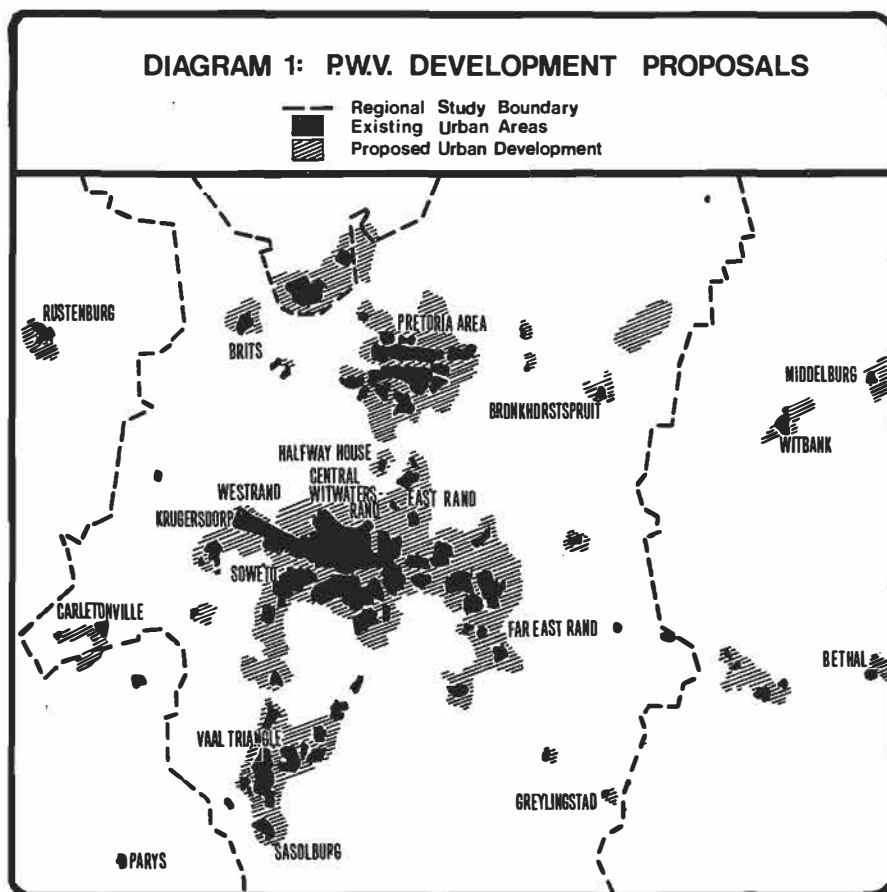
It is argued that:

- the physical form should clearly demarcate areas inherently unsuitable for urban development, or where urban development should be prohibited in order to prevent the inevitable growth of a continuous agglomeration,
- the serious inaccuracies in the forecasts are likely to have severe social and economic consequences, as
- increasing urbanisation is both inevitable and desirable, and as
- a system of inducements is preferable to, and more effective than, rigid controls as a means of inducing economic deconcentration or decentralisation; and
- in any event this decentralisation should be attracted to the underdeveloped rural regions and impoverished urban areas.

The plan is reviewed in terms of: (1) the spatial strategy, (2) the technical forecasts, (3) the underlying social and (4) economic assumptions, and (5) the synthesis.

1. THE SPATIAL STRATEGY

In 1974, the Department of Planning and the Environment published the



'Proposals for the Pretoria-Witwatersrand-Vereeniging (P.W.V.) Complex' (D.P.E. 1974). The following year the "Amended Proposals" were circulated (D.P.E. 1975). Recently the plan was revised, updated and in 1981 the Office of the Prime Minister released the "Draft Spatial Development Strategy

for the P.W.V. Complex", for public comment (O.P.M. 1981). In view of the importance of the P.W.V. as the major economic concentration in sub-equatorial Africa, the reports merit serious consideration. The strategy is reviewed in terms of (1) the proposals themselves and (2) comments thereon.

1.1 The Proposals

All three reports propose the development of a massive urban agglomeration, which includes Pretoria, the Witwatersrand, and virtually joins up with Vereeniging in the South. As the Midrand was inadvertently omitted in the recent report, the pattern of development is consistent in both the initial and the recent report. (See Diagram 1: Development Proposals).

In terms of the recent proposals, the major growth in the regional economy and the population, will be concentrated in all the major urban areas, with the exception of the Central Witwatersrand. Between 1978 and 2000, the population of Metropolitan Johannesburg will be restricted to a 5% increase, while the other major urban areas are expected to grow dramatically: Pretoria (94%), the Vaal Triangle (94%) and the East Rand (86%).

An innovation in the strategy was the proposal to "deconcentrate" some industrial employment within the region to the adjacent towns of Rustenburg, Brits and Bronkhorstspuit, which will become satellites of Pretoria. The deconcentration within the P. W. V. region is, however, relatively small.

The growth of the agglomeration will be encouraged by two factors. Firstly, the planners have concentrated the economic and urban development, in and around, the agglomeration. Secondly, the absence of a clearly demarcated regional open space system will encourage unrestricted urban expansion.

1.2. Comments.

Two comments on the spatial strategy immediately come to the fore, namely, the desirability of (1) the proposed agglomeration and (2) the destinations for the deconcentrated growth.

First, if one accepts the planners' aim of decentralisation then the proposed pattern of development is questionable, as it envisages the uninterrupted expansion of the largest urban agglomeration in sub-equatorial Africa. Also, it can be argued that insufficient consideration was given to other patterns of development. In this regard it is regrettable that areas unsuited to urban development (e.g. green-belts, nature areas, mountains or other natural features) were not clearly defined, so as to contain urban sprawl and guide the urban

growth. Conversely, the recent formation of the Midrand Municipality supports the trend towards unimpaired growth.

Secondly, scant attention was given to the question of encouraging any real *decentralisation*, outside the P.W.V. region, into the other seven less developed regions in the country (Lombard, J. A. 1980). Also, the emphasis fell on the minor re-allocation, or "*deconcentration*" within the region of 4% of the total employment in 2000, to the urban centres, at Rustenburg, Brits and Bronkhorstspuit. Under-developed sub-regions were ignored: as illustrated by the fact that the boundaries of the recent study were re-drawn to exclude the densely urbanised parts of Bophuthatswana and KwaNdebele. Despite being economically and spatially part of the PWV complex, these underdeveloped areas, which so desperately require economic development, are, thus, cut off from the benefits of industrialisation, infrastructure and capital for urban development. As such, the growth points selected in the PWV plan and the earlier 1975 National Physical Development Plan do not accord with the official "Regional Policy" to develop the under-developed sub-regions (viz., the National States).

In conclusion, a massive urban agglomeration, comprising Pretoria, the whole of the Witwatersrand and the Vaal, has little to commend it, as:

- this development pattern is quite contrary to the concept of decentralisation, which is the theme of the report;
- the proposed spatial development strategy impedes the industrial or economic development of: the poor, urban areas and the rapidly urbanising parts of the undeveloped regions of Bophuthatswana and KwaNdebele;
- little attention was given to the question of encouraging any real decentralisation outside the PWV region, into the other seven less developed regions in the country.

2. THE SOCIO-ECONOMIC FORECASTS

Underpinning the development strategy are the technical forecasts, which form an important part of the report. The emphasis falls on (1) the forecasts and (2) the consequences.

2.1. The Forecasts.

On appraising the accuracy of the forecasts, three limitations immediately come to the fore: (1) the assumptions, (2) the equilibrium model and (3) the employment ratios.

Firstly, any forecast will reflect the socio-economic policies, conditions and common assumptions prevailing at the time of its preparation. Consequently, it would have been of great benefit if the compilers of the report had:

- explicitly stated their general assumptions (e.g. socio-economic policies, rate of urbanisation, etc.)
- clearly indicated the reasons for assuming particular demographic, economic and urbanisation growth rates;
- prepared alternate forecasts, so as to accommodate: (i) the different growth rates; (ii) different socio-economic scenarios; and (iii) any inaccuracies in the basic data.

Nevertheless, given these reservations, the validity of the employment and demographic forecasts may be queried in terms of the particular technical framework, or model, adopted in the report.

Secondly, the employment forecasts rely on an *equilibrium model*, which presumes that: (a) the demand for, and supply of, labour will balance, given the assumed growth rate, and (b) the population growth is purely a result of employment opportunities.

Both these assumptions are questionable for at least two reasons. Throughout the world the total supply of labour exceeds the demand. Further, population growth is a function of:-

- natural increase, (which is hardly determined by employment opportunities) and
- the net rate of urbanisation (as Todaro showed, this reflects, among other factors, the perceived income differential, and not necessarily the real employment opportunities in different areas). In short, the population growth is only incidentally influenced by real employment opportunities.

To further invalidate the assumption of the model it can be argued that employment is a function of the population size. The more people there are living in a town, the larger is the demand for goods and services. In many third

world countries, the employment in the urban residential areas (schools, clinics, police, local authority, banks, shops, etc.) forms a major component of the total employment. The residential employment, thus, depends on the urban population size (and not vice versa). Similarly, the larger the urban population, the greater is the income in circulation, and the greater are the opportunities and pressures for informal employment. In other words, a natural consequence of urbanisation is for the job opportunities to grow accordingly.

Thirdly, the employment projections were prepared in terms of a particular set of socio-economic relationships, which may, or may not, be valid now, or in the future. For example, the assumed economic growth rate in the employment forecast depends on: (a) the type of technology; (b) the fiscal incentives for labour intensive means of production; (c) the incentives for small business; and (d) the opportunities for tertiary and informal employment. In short, the employment forecasts are likely to have understated the employment opportunities, by presuming an immutable pattern of technological relations, labour relations and urbanisation.

By way of illustration, the employment forecasts for 1978 and 2000 show the Black to White employment ratios actually declining for the Central Witwatersrand (i.e. Metropolitan Johannesburg) from 1,5:1 to 1,3:1, by the turn of the century. It is difficult to accept these projected ratios as an expanding economy is likely to employ more, not less, semi-skilled and unskilled labour. These ratios may be questioned when compared with those forecast for the whole region (which actually rise from 1,6:1 to 1,8:1 by the end of the century). Yet even the regional ratio is uncertain if one considers the national situation. Many economists accept that, increasingly, a larger proportion of the economically active will have to be drawn from the unskilled, or Black, labour force, if industrialisation and economic development is to maintain its pace. The average Black to White employment ratio for the RSA as a whole, is expected to rise to 7:1 by the turn of the century. As the PWV region is the industrial heartland of South Africa, one can expect that the employ-

ment ratios for the region in general, and Metropolitan Johannesburg in particular, will be considerably higher than the average. Accordingly, the employment estimates for the Central Witwatersrand may be understated by a factor of 5 or 10, given the national estimates.

2.2. Consequences of Inaccurate Forecasts.

The under-representation of the population has had, and will have, very serious social and economic consequences for at least two reasons. Firstly, inaccurate forecasts result in incorrect planning and budgeting, as is currently the situation. Vastly inadequate services are, and will be, provided for the rapidly urbanising poor and the less privileged sectors of the community. The situation will worsen in proportion to the inaccuracy of the forecasts. The shortfalls will manifest themselves in: insufficient houses, inadequate social facilities (for health, education, recreation), insufficient utilities (water, sanitation, transportation), etc. In effect, the urban living standards will fall drastically, and the social stability will deteriorate proportionally.

Secondly, unrealistic, or inaccurate, forecasts will misdirect the course of the economy. The demographic forecasts influence the private sector's: (a) planning and budgeting for new shops, branches, offices, (b) decisions on industrial location, employment requirements, labour training; or (c) increases in production to meet the expanding urban markets. Without proper forecasts these opportunities will be mismanaged or lost. Obviously this is to the detriment of the economy as a whole.

In conclusion, for these reasons a single projection cannot be received with confidence. To the extent that the socio-economic forecasts only represent one course: they are too circumscribed and probably unrealistic. A set of alternative forecasts will:

- allow for widely differing spatial and socio-economic scenarios;
- highlight the unstated assumptions, growth rates, and inaccurate data;
- provide for different socio-economic conditions (e.g. the increasing urbanisation of the total population);
- cater for new technological and labour relations; and

- avoid the complex and inaccurate relationship between population and employment, (which was inadequately expressed in the report on the employment equilibrium model).

3. THE SOCIAL IMPLICATIONS OF URBANISATION

A fundamental assumption underlying the technical forecasts is that the natural rate of urbanisation will be severely curtailed. While this was true a generation ago, this is unlikely to continue throughout the remainder of this century. The question of urbanisation is briefly considered in terms of: (1) the prospects for urbanisation and (2) its benefits.

3.1 Prospects for Urbanisation

The population projections are a major cause for concern. The report forecasts that the total regional population will number some 8,6 million at the turn of the century. This is a conservative estimate when compared with the 10,5 million predicted in the recent PWV transportation study. Yet even this is too low if one allows for the natural urbanisation, which will occur.

Leading demographers are of the opinion that considerable urbanisation is imminent in the coming two decades. The total urban population should rise from some 55-60% in 1980 to at least 75% of the total population of South(ern) Africa at the turn of the century. In other words, the total, urban population could range from 33 – 40 million. In view of the declining birth rate of the rich, urbanised population, the urban growth will come from the movement of the rural poor to the towns in general, and the PWV region in particular. The PWV's share of the total urban population may be expected to rise quickly, and could be between 15 and 20 million by the turn of the century. In other words, the population forecasts in the report may require expansion by a factor of 2 to 3.

Further, it may be expected that the rapid urbanisation will result in major changes to the composition of both the urban population and employment pattern. These changes are not shown in the PWV forecasts, which assume a relatively static relationship, until the end of the century. The static Black to White urban employment *and* population ratios are forecast at about 2:1

(and only rise by 2% and 1% respectively, between 1978 and 2000). In comparison, conservative estimates for 1980 to 2000 for the whole country, indicate that the average Black to White population ratios will rise from 3:1 to 5:1. Similarly the average Black to White employment ratio for the country is expected to rise to at least 7:1 by the turn of the century (with 2,3 million economically active Whites, out of a total of 19, 16 million in 2000). In short, it would appear that the Black population and employment figures are grossly under-represented in the report.

3.2 Benefits for Urbanisation

In the 1960's and 1970's in South Africa urbanisation was, and often still is, regarded as a reversible and undesirable phenomenon. Yet as a social process, urbanisation creates immense social and economic benefits for the country as a whole and the rural poor in particular. The advantages for the rural population lie in the opportunity to join a modern, urban society and economy, which offers the following benefits:

- in the modern economy, the economic output and, thus, incomes of the townsmen are considerably higher than their compatriots in the traditional, rural economy;
- the townsman benefits from the better social services, urban facilities and cultural opportunities, which are an integral aspect of western, urban life; and
- there is a general change in the new townsman's lifestyle and values: from a quiet, traditional, rural lifestyle to the active, western, urban lifestyle, as the people join the modern economy and western society.

By denying the rural poor their right to benefit from town life, their opportunities for socio-economic advancement are severely circumscribed and social disparities are maintained and magnified. Further, to the extent that part of society is prevented from developing, so the wealth, markets, culture and quality of life of the whole society suffer.

In common with virtually all capitalist and socialist economies throughout the world, the town has attained a prominent position within the na-

tional economy and society. Any attempt to curb the natural growth of the urban economy will of necessity: (a) cut down the economic growth rate and prosperity of the country as a whole (and particularly affect the people already living in the major urban areas) and (b) increase unemployment as the economy slows down.

Conversely, the undeveloped, overpopulated rural areas benefit by:

- reducing the population size and pressure on the land, which in turn introduces advances by,
- improving the agricultural and pastoral returns (by allocating more land per livestock or household), and by,
- decreasing the rural expenditure required for social services (due to urbanisation and the depopulation of the rural areas), more funds are freed for productive investment, better infrastructure, or newer technology.

In conclusion, urbanisation in itself is beneficial as it provides immense socio-economic opportunities for the townsman, and reduces the misery and starvation of the countryman, which arise from the overpopulation and underdevelopment of the rural areas. By not allowing for increasing urbanisation the forecasts fail to give an accurate picture of either the present or the future. Realistic socio-economic forecasts are essential, if the necessary services, facilities or utilities are to be provided for the rapidly expanding urban population. Without proper town planning and urban development, both social stability and the natural economic growth are jeopardised. The economic implications of such a scenario are considerable.

4. ECONOMIC IMPLICATIONS OF FORCED DECONCENTRATION

A second assumption underlying the report is that the use of economic constraints, or force, is an advantageous method of promoting decentralisation. Although this was the policy in the past, it is unlikely to remain unaltered in the future, in view of the fact that it introduces serious economic distortions, and it conflicts with the market approach which enjoys increasing support in official and academic quarters.

The consequences of the current method are briefly discussed in terms of: (1) economic costs and (2) desirable destinations for economic growth.

4.1 Economic Costs

The report emphasises the continued restriction and control of industrial activities. This has seriously retarded the national economy in at least three ways:

- In the past, the control of the supply of industrial land has distorted the economy through: inflated prices for industrial property (which, accompanied by increased production costs, accentuated the inflationary trends in the economy, and have impeded small businessmen from starting up in the most lucrative urban markets, where the prospects of surviving are greatest)
 - Placing reliance on land use controls and employment restrictions constrains the free interplay of market principles
 - The use of restrictive and biased employment ratios (to control the labour supply in terms of the Physical Planning Act) has resulted in:
 - (i) excessive mechanisation, given the size and level of development of the national economy; and, thus,
 - (ii) the creation of urban unemployment as jobs are lost or not even created; An unacceptable consequence of such an "industrial decentralisation policy" is that unemployment increases as a direct result of the excessive mechanisation and distortion of the economy and, thus, induces
 - (iii) the "decentralisation of unemployment to the rural areas", as the restrictions on the free movement of labour mean that as urban job opportunities are lost, or not created, the rural population is forced to remain unemployed, in the impoverished rural areas.
- In short, the restrictive decentralisation policies have penalised both large and small industries by: (1) impeding their expansion; (2) restricting their labour force; (3) forcing removals and relocation, and thereby (4) increasing nearly all the costs of production (through dislocation and relocation, training, transportation and other costs.)

4.2 The Undeveloped Regions and Urban Areas

The economic implications of the development strategy are in three respects particularly undesirable, if one considers who is *not* benefiting from the development.

Firstly by redrawing the boundary, the plan does not make any provision for the economic and industrial development of the undeveloped regions in Bophuthatswana and KwaNdebele. Any natural advantages that these regions offer are completely negated by (a) the preferences and incentives, or (b) the funds for infrastructure, that the designated, adjacent growth points in the PWV complex would enjoy. Consequently, the natural development of these poor regions is further endangered and impeded.

Secondly, one can question the desirability of a policy which misdirects industrial location to the developed, rich, local authorities instead of to the source of the labour in the poor, urban areas, which desperately need the industrial development as a tax base and economic base (e.g. Soweto).

Finally, one can question whether such rigorous "decentralisation" policies are justified, if in two decades only 4% of the total employment is likely to be transferred to the new growth points at Brits, Rustenburg or Bronkhorstspuit (which, in any event, lie in the "over-concentrated" P.W.V. region).

In conclusion, the industrial decentralisation policies are undesirable in that they unfavourably: (1) distort the free market economy by inflating property prices and factor costs and thereby, (2) retard the natural economic growth, and (3) induce excessive mechanisation, and thereby (4) create unemployment in the urban and rural areas, which has serious social consequences. Further such drastic policies are unjustified, in view of the fact that only 4% of the total employment is expected to be deconcentrated to growth points (which even lie within the PWV region). In short, the development strategy recommends the use of force to "concentrate" employment within the rich developed, PWV region, as opposed to attracting economic growth to the poor, undeveloped and overpopulated areas of Bophuthatswana, KwaNdebele or

Soweto.

5. SYNTHESIS

All three plans for the Pretoria-Witwatersrand-Vereeniging complex have consistently proposed the development of a massive agglomeration in the PWV region. This review has suggested that the assumptions, forecasts and strategy should be revised for at least four reasons.

Firstly, a fresh approach can adopt new objectives, so as to:

- (a) protect the urban form, by demarcating areas naturally unsuited for urban development and in which it should be prohibited;
- (b) curb the particularly severe environmental pollution in certain urban areas;
- (c) reduce travel distances from home to work for the lower-income urban workers;
- (d) eliminate the backlog in urban infrastructure and social facilities in the impoverished and under-developed areas; and
- (e) re-orientate public expenditure priorities and plans so as to provide the rapidly urbanising population with the basics (such as schools, health facilities, disease-free drinking water, proper sanitation and housing). The present situation is a matter of great concern.

Secondly, the urbanisation of the population should be accepted as inevitable, and likely to occur at an increasing rate. Throughout the world urbanisation has, and will, continue to occur, as some communist countries have discovered after trying to halt the process with scant success. The situation in Southern Africa is that Maseru is growing by some 7% annually, which is slow compared to 15% in Gabarone. To presume that the Central Witwatersrand, the economic heart of the sub-continent, will grow annually by 2,5% is, at the very least, questionable.

Thirdly, the complex and restrictive industrial decentralisation policies should be reevaluated and the Physical Planning Act should be thoroughly reviewed in view of –

- the considerable expense to the producer and consumer;
- the extra difficulties to the private

sector;

- the lost economic and employment opportunities;
- the undesirable and unjustified distortions to the market economy, particularly as
- only 4% of the total employment is expected to be deconcentrated to the new growth points, which actually lie within the PWV region.

A flexible policy based on market incentives (e.g. lower costs for energy, transport and other factor costs) is more likely to encourage decentralisation without promoting unemployment in the process. In addition, real regional development should be led by, and based on, the equitable decentralisation of the public sector (i.e. the civil service and the public corporations).

Finally, emphasis should be placed on promoting the proper socio-economic development of the underdeveloped sub-regions (e.g. in Bophuthatswana and KwaNdebele) and the impoverished and overcrowded urban areas (e.g. Soweto). This implies a review of the present policy which favours the rich developed (urban) areas, at the expense of the under-developed sub-regions and impoverished areas . . . in the towns and countryside.

Ultimately, the challenge facing both town and regional planners is the need to revise the outmoded priorities and values, to those more appropriate to the changing world of the late 20th Century. This is not an easy task, but it is a necessary prerequisite to formulating a new framework for long-range planning in South Africa.

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