



Planning for the rural -urban interface: A case-study of Transkei

David Dewar

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Development Bank of Southern Africa

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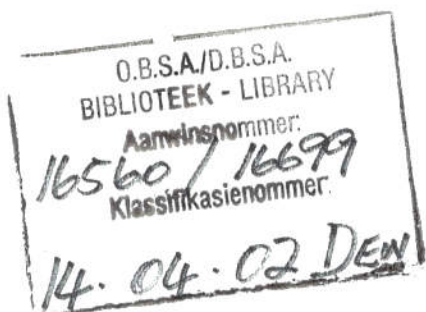
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David Dewar

University of Cape Town



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Corporate Affairs Division
PO Box 1234
Halfway House 1685
Telephone (011) 313-3911
Fax (011) 313-3086
South Africa

Preface

The spatial framework in South Africa has reinforced the exclusion of a large proportion of the population from exercising a free choice with regard to seeking optimal income and other opportunities.

Within this context an increasingly visible phenomenon in many of the peripheral areas of South Africa is settlements which do not fit easily into categorisations of either 'urban' or 'rural'. The Development Bank of Southern Africa annually receives many requests from communities living in settlements of this kind and there is no coherent, consistent approach on how these should be assessed. This study, undertaken under the aegis of the DBSA urban policy programme, seeks to throw more light on economic and spatial issues relating to the interface between urban and rural areas in the peripheral regions. The Transkei was used as a first-phase case-study to illuminate these issues.

The framework outlined in the paper aims to contribute to the transformation of South Africa's space economy in a way which will integrate disparate communities and open up economic opportunities through a greater mix of land uses and more effective use and provision of infrastructure, among other measures.

The goal is to create a society which is economically and socially sustainable for all its members. The transformation of the space economy is only one element in this process of reconstruction and development. What is critical is that the approaches to the rural-urban interface are informed by and support the broader objectives. It is hoped that this framework will contribute to this larger goal.

GJ Richter
General Manager
Policy and Information

J Kruger
Programme Manager
Urban Policy Programme

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1. Introduction

An increasingly visible phenomenon in many of the peripheral areas of South Africa is settlements which do not fit easily into categorisations of either 'urban' or 'rural'. The Development Bank of Southern Africa annually receives many requests from communities living in settlements of this kind and there is no coherent, consistent approach on how these should be assessed. This study seeks to throw more light on economic and spatial issues relating to the interface between urban and rural areas in the peripheral regions. The Transkei was used as a first-phase case-study to illuminate these issues.

Specifically, the consultant's brief was to:

- identify broad settlement types in the Transkei and conceptualise these in terms which are useful managerially
- attempt to understand the interrelationship between these
- identify the economic base of generic types
- understand the general pattern of relative growth and decline and the reasons for this
- identify possible economic support actions where appropriate, including services, and issues relating to these
- suggest appropriate management responses to these dynamics
- identify the institutional and financial implications of the suggested managerial responses.

It was determined by the Bank team that phase one, which is the subject of this summary, should comprise:

- pattern identification

- an explanation of processes
- an understanding of economic support systems
- establishment of a preliminary interventional approach for problems identified in the Transkei.

As the work proceeded, it became apparent that there were two distinct, though interrelated, parts to the problem. The first is the broader policy issue of how the development of the peripheral areas of South Africa should be approached in the short to medium term — an issue which will clearly emerge as being politically significant over the next few years. In relation to this, the Transkei is simply a case-study of a broader phenomenon. The second is the operational issue of how immediate investment in the peripheral areas should be viewed: specifically, the question is whether or not certain settlement forms are more appropriate receptors of infrastructural investment than others.

2. Analysis

2.1 Scale of analysis

The dynamics of settlement formation and the nature of the rural-urban interface were explored on two scales: the territory of the Transkei as a whole; and on a smaller scale, the rapidly growing peri-urban developments around the larger towns — here the largest town in the Transkei, Umtata, was used as a case-study.

2.2 Methods of analysis

A number of methods were employed: literature reviews; statistical analyses such as shift-share techniques and statistical correlations; field observations; and interviews.

Part A: The territorial scale

3. Analysis

A number of analyses were undertaken at the scale of the Transkei as a whole.

3.1 Economic context

Since it is impossible to understand settlement dynamics outside of the broader economic context, a review of the Transkeian economy and welfare profile was undertaken. A number of points emerged clearly from this analysis.

Firstly, poverty and unemployment are rife, with very many people having no direct access to means of production. The primary form of support in the territory is welfare payments. These are either remittances or South African government transfers, mainly for pensions and support of a bloated bureaucracy.

Secondly, to describe the Transkeian economy as a discrete territorial economy with a reasonable degree of autonomy is misleading since it is dominated by outside influences. There is no prospect of its being viable as an economic unit within the foreseeable future.

Thirdly, the welfare problems of the territory cannot be entirely resolved internally: a large net population transfer to other parts of the country is required for development of the territory in the longer term.

Fourthly, the economic sector with the potential to affect the greatest number of people is agriculture.

Fifthly, the fact that a primary form of welfare transfer is through support of an extensive civil service has had the effect of skewing both spatial and social patterns of infrastructural investment: spatially towards urban areas and the home areas of chiefs and other leadership forms, and socially towards established elites.

3.2 The territorial settlement pattern

A number of settlement types can be observed in the Transkei.

The basic settlement type is the traditional homestead.

In many cases, for agricultural and service delivery efficiency, homesteads have been rationalised into planned 'betterment villages' (alternatively known as denser settlements or location sections). The programme of relocation which this has involved and, in most cases, the lack of envisaged services have made the programme politically unpopular and it has now been suspended.

Similar in form, but quite different in planning intent, are the resettlement or closer settlements, created to house people who were involuntarily relocated from South Africa. In many cases people have neither arable land nor urban jobs, and service levels are ubiquitously poor. None of the categories identified thus far are urban.

Twenty-eight administrative centres of the magisterial districts have been designated as urban centres by the Municipalities Act of 1979. Although different in size and functional mix, these settlements have sufficient diversity of mix to be described as urban.

3.3 Major settlement dynamics

Underpinning the settlement forms are a number of dynamics.

Broader dynamics

At the level of the territory as a whole, three trends are observable.

The first is a high rate of natural population increase, which creates a continuing demand for land for settlement.

The second is out-migration to South Africa. The rate of this varies annually according to the general economic climate. The process primarily but by no means exclusively affects men of economically active age. Moreover, many who leave to earn cash incomes in the cities view the move as temporary and return frequently on an annual basis. This oscillating pattern, historically enforced through influx control, may be more entrenched than was previously considered the case by observers. There is no doubt that it is currently the intention of many people working outside the territory to return to the Transkei to live at some stage, even though they are no longer legally forced to by influx control measures. It is impossible to predict the longer-term dynamic. There is no doubt that the perception of the city as a place from which to escape is fuelled by appalling current conditions in the urban areas of South Africa: positive improvements in the urban areas would probably change the perception of many that the Transkei is a preferable place to live, but the possible extent of such change is unknown. In the meantime, the oscillating pattern has profound influence on the demographic pattern: it tends to keep fertility rates high; and it means that the population pyramid is skewed to very young people, old people and females.

The third dynamic is in-migration — people returning to the Transkei, particularly from South Africa. A common observation which emerged from discussions is that this tendency has increased recently, particularly as a result of large-scale retrenchments on the gold mines and in other industries, and political unrest. In particular, many families now living in the metropolitan areas are sending their children back to the Transkei to avoid disruptions in their schooling. A further wave of in-migration can be expected as political exiles return from other countries.

Internal dynamics

In addition to these broader dynamics a number of more localised processes can be identified.

Rural intensification. On balance, the combination of natural increase and in-migration is outstripping out-migration and the intensity of rural settlement is increasing, a tendency given particular expression by the

tribal system of land allocation. Frequently, the size of land parcel allocated is too small for agricultural viability. The greatest intensification of settlement is occurring in the areas peripheral to bordering towns in South Africa. The slowing, or even reversal, of this process of intensification depends on positive actions in South Africa which increase the absorptive capacity of the areas with the greatest comparative advantage nationally.

Drift to the towns. A combination of the fact that only the eldest son inherits his father's land and an almost total absence of income-earning possibilities in the rural areas means that there is a considerable displacement of rural people to towns. Although many migrate to urban areas in South Africa, a surprisingly large number gravitate to towns in the Transkei, particularly Umtata and Butterworth. The primary motive for this is a search for income-generating opportunities.

There is some correlation between rates of urban growth and settlement size. However, there is no correlation between settlement growth and number of economic functions. Demonstrably, people are not moving consistently into those urban settlements with the greatest opportunities for obtaining jobs, goods and services (with the exception of Umtata, Butterworth, Ezibeleni and one or two of the larger settlements) but are moving rather in the hope of better circumstances in any urban settlement. Discussions also indicate that there is a strong element of localisation: many move to the towns nearest to them in order to retain close ties with relatives and their home base.

An extensive analysis of the urban settlement system was undertaken in order to identify dynamics and to seek correlations between four variables (population size, growth rate, functional size and growth, and urban rank). The purpose of this was to determine whether clear groupings of settlements could be found which would lead to the possibility of valid generalisation. No such correlations were found. The main growth dynamics which emerged are:

- Umtata and Butterworth, the largest towns, are also the fastest growing.
- Excluding Umtata and Butterworth, the 13 larger settlements are growing faster than the 13 smaller ones.

- A greater increase in district populations relative to the territorial average has occurred peripheral to Umtata, Butterworth, Queenstown and in five other districts on the border with South Africa. This suggests that with the exception of Umtata and Butterworth the main growth dynamic is oriented towards towns in South Africa: population concentration is occurring along the territorial perimeter.
- A correlation exists between rate of growth and location on the major transport routes, but it is not an absolute one. Most of the fastest growing settlements are on the main east-west or north-south routes.
- Most rural districts peripheral to Umtata are experiencing growth rates slower than the national average, suggesting that people are moving from them closer to Umtata.
- This localisation effect can also be seen, but on a smaller scale, around other urban settlements. In all magisterial districts in which the main urban centre is growing faster than 4 per cent per annum, there is a population decline relative to the average Transkeian population growth rate. This indicates rural population decline and a drift to the larger urban centres.

Drift to the major roads. A subtler, but important, dynamic is a process of internal migration to roadside settlements. The regional road arterials play a vital role in rural life and there is considerable economic and social advantage (in access to services) in being located close to them. Importantly, there are indications that gravitation towards the major roads would be much stronger if it were not for the traditional system of land allocation in the territory in general. In effect, little 'natural' or spontaneous settlement system formation (that is settlement formation by individual responses to market forces and other factors of self-interest) has occurred. The part traditional, part 'modern bureaucratic' system of allocation is informed primarily by jurisdictional and land-related issues (for example soil quality). Very little attention is given to locational or other development issues and consequently the

settlement pattern is severely distorted. Nevertheless, even under this system, much recent land allocation has occurred in proximity to major transport routes.

3.4 Nature of the rural-urban interface

In order to gain insight into the nature of rural-urban linkage, particularly economic linkage, a functional analysis was undertaken of the economic base of settlements, focusing particularly on the 28 urban centres. The picture which emerges is probably almost unique internationally for rural areas in that there is almost no rural-urban linkage and what does occur is almost entirely unidirectional. There are a number of aspects to this.

Firstly, there is no widespread rural economy. Although the lifestyle of most of the population can be described as rural, the economic basis of that lifestyle cannot. Agriculture constitutes only 18,2 per cent of the gross domestic product of the Transkei. Most of commercial agricultural output results from a limited number of large nodal agricultural schemes. Agriculture plays a very minor role in rural households, even at a subsistence level. The rural economy is almost entirely a cash economy: basic needs are met through cash purchases and very little derives directly from the land. The cash too derives almost entirely from remittances from South Africa, in the form of partial wages or pensions, or from employment in Transkeian towns. Further, in the rural areas the purchase of the goods and services necessary to meet basic needs occurs locally to only a small degree: most purchasing is done in larger towns within the Transkei or South Africa. The food and basic commodity requirements of urban dwellers, and so also of rural dwellers, are imported from South Africa. Very few goods found in shops and markets are produced locally.

Secondly, the production sectors of the urban areas are hardly at all structured by rural needs. Many of the industries in these smaller settlements are concerned with exploitation of locally specific resources and the products are exported or they are directed towards larger local urban markets. The main functions supplied to the rural areas by these settlements are retailing, service provision and administration.

Thirdly, the urban economies are very weakly geared to meeting the needs of their internal local populations. Most needs are met through imports. A feature of these settlements, including the larger ones of Umtata, Butterworth and Ezibeleni, is that there is a very weakly formed informal production economy (as opposed to retailing) directed towards local needs.

Fourthly, most of the larger, high-employment industries found in Butterworth, Umtata and Ezibeleni use imported raw materials and are directed towards export markets, particularly South Africa.

In a real economic sense therefore the traditional categorisation of settlements from urban to rural according to their primary support base is misleading in the case of the Transkei. Here they are more accurately described as ranging from directly urban to indirectly or displaced urban settlements.

The only reverse linkage (from urban to rural areas) is a social one, but it is very strong. Attachment to 'a rural way of life' frequently emerged as a primary reason for staying in the Transkei and for living in peri-urban areas around the larger towns. The towns themselves become almost ghost towns at night and over the weekends in particular as people return to the rural areas.

Spatially, the areas where the interface between urban and rural areas is most strongly expressed is in the peri-urban areas of the larger towns and along the major transport routes which tie rural communities from further afield to the towns.

3.5 Conclusion

The settlement pattern in the Transkei is grossly distorted in that it has not been, and is not being, primarily shaped by economic forces as settlement systems usually are in most parts of the world. Rather it has been primarily informed by issues of historical administration, apartheid-enforcing policies and the traditional pattern of land allocation which ensures that people move not necessarily to where they most want to be, but to where they can gain the commitment of a headman and chief to the allocation of a land parcel.

The prime consequences of this distorted pattern are twofold: the settlement pattern is not integrated with the economic base and consequently does not generate the range of economic opportunities that it should; and the fragmented settlement system is highly inefficient in providing necessary utility and social infrastructure. In particular, it is almost impossible, when faced with this fragmented pattern, to adopt a rational approach to the provision of services: settlements operate as relatively discrete, isolated pockets with very little support or sharing of facilities from one settlement to another.

4. Policy implications

The primary issue raised by this analysis is how peripheral areas such as the Transkei should be viewed in the emerging post-apartheid South Africa. The issue hinges on the interrelated policy areas of defining a developmental path; moulding the emerging settlement pattern; infrastructural investment; and land allocation and tenure. Two points relating to the issue need to be made from the outset.

Firstly, the developmental and welfare problems of the area cannot simply be 'solved' internally: the area is grossly overcrowded relative to resources and requires a net outflow of people in the short to medium terms: an important part of improving the quality of life of Transkeians is maximising the absorptive capacity of those places with greater comparative advantage within the broader South African space economy and encouraging migration to these.

Secondly, it is nevertheless essential to begin the task of increasing the capacity of the Transkei to support people at an acceptable material quality of life: the region will remain the home of large numbers of South Africans within the foreseeable future.

4.1 A development path

Opportunities for employment creation and income generation should be sought multisectorally. Opportunities exist in the service and manufacturing sectors for small-scale activities directed towards the needs of the local market. There are also opportunities in the supply of innovative forms of utility

and social services — particularly water, electricity, education and health — to increase the developmental capacity of the territory while in the short-term generating the maximum possible employment.

The greatest potential employment multipliers, however, lie in stimulating agricultural productivity. There is much underused land that is suitable for agriculture and can be mobilised provided the land is brought together with other necessary productive conditions, particularly water and markets.

It is only by comparing the more common development paths of the world's agrarian regional economies with the Transkei's that the true nature and extent of settlement distortion in the Transkei can be understood. International evidence suggests that there is commonly an identifiable process of agricultural development over a long period of time (Haggblade et al, 1989). Initially agricultural homesteads are relatively self-sufficient in both agricultural production and support processes. Over time specialisation begins to occur as the population grows, a market is created and opportunities arise for trade, technology transfer, introduction of new crops, and different skill and resource endowments. Specialisation in turn brings increased productivity and higher incomes, which lead to diversification of consumer demand into non-farm goods and services. Initially, this is met by the farm-based homesteads but over time non-farm settlements arise to provide these functions, and certain farm-related activities and services are centralised in these settlements. As the settlements grow, additional functions and services arise to meet the needs of these people and this both increases levels of convenience in the rural areas and provides an additional market, thereby increasing rural incomes. Over time, agro-industries such as food processing and packaging may take root. Evidence from Africa and Asia suggests that farm to non-farm multipliers achieved in this way through increases in agricultural productivity are about 1:0,5 (Africa) and 1:0,8 (Asia).

Against this model the distinctiveness of the Transkeian situation becomes clear: a 'non-farm' settlement system has been imposed on an agricultural base of minimum productivity. This reverses the nature of the development

problem. Whereas normally increases in agriculture lead to non-farm settlement formation, in this case the existence of the fairly concentrated settlements must be used to stimulate increases in agricultural productivity which, over time, will lead to a strengthening of functional rural-urban linkages. The main Transkeian development problem is precisely that there is almost no functional rural-urban interface: the challenge and opportunity is to create this. Quite clearly, one of the resources which can be used to stimulate development is the concentration of non-locally served agglomerations of demand. Viewed in this way, the spatial areas of greatest potential for a strengthened rural-urban interface, through integrated rural development schemes and small-farmer support programmes, are those close to potential markets: the urban agglomerations and areas along the major transport routes which open up these markets. There is a direct relationship between this potential and distance from towns and also between it and the hierarchical order of the route.

The implication for settlement formation is that as far as is possible a more 'balanced' settlement system should be stimulated (not imposed), with growth being encouraged at places of superior resource advantage (for example water-abundant as opposed to water-scarce places) and of greatest economic potential. This issue of a more balanced settlement pattern has particular implications for three other important areas of policy: the nature of infrastructural investment, the pattern of that investment and land allocation.

4.2 Infrastructural investment

Given the massive shortfall of developmentally directed resources for investment relative to demand, the issue of how investment occurs in the peripheral areas is of vital importance. As a general principle the investments which are most productive for development are those which achieve the highest gearing, defined in the broadest sense: that is those which stimulate the greatest reciprocal investment in finances, resources or effort. The issue of investment is complicated by the fact that some investment projects may be (and should be) proactive (in that they seek to achieve objectives which go

beyond local interests) and that others may be reactive, in the sense that they simply respond to approaches from local interests.

A specific objective of the assignment was to investigate whether certain settlement forms offered better investment opportunities than others and whether a pro-forma typology could therefore be used to assess requests for assistance. Various settlement classifications were examined and correlations sought: none were found. The clearest point which emerged from the analyses was that the potential of settlements to respond to investment is strongly affected by accessibility of markets and other necessary inputs, and this accessibility in turn depends on proximity to larger towns and to higher orders of route.

It was concluded that a potentially far more promising classification concerned itself not so much with settlements as with the nature of the investment itself. The following criteria were identified as being important in evaluating investment projects:

Supply-increasing vs distribution-spreading

In resource-scarce regions, a fundamental distinction is drawn between supply-increasing and distribution-spreading investments. Investments which increase absolute levels of potential supply are of the highest importance — for example investments which interconnect water systems, thereby opening up to regions hitherto inaccessible sources of supply, or connections into the national power grid to create a regional potential for electrification.

Response-generating vs reactive response

Generally, historical settlement patterns are fairly resilient: although there is a constant dynamic of change, vestiges of historical patterns tend to endure. In this type of situation it is unlikely that service investment, as opposed to changes in the space economy, will radically alter the settlement pattern. However, certain services (such as water and schools) do have a greater power of attracting growth around them than others, such as electricity supply, sewerage or clinics, which essentially are a response to existing and expected demand. Obviously, the aim should

be to use potentially response-generating investments to encourage a more balanced settlement pattern (see 3.3).

Welfare vs productive services

A third basic distinction is between welfare and productive services. Generally, a higher gearing is obtained from productive services. However, two qualifications must be attached to this statement.

Firstly, the distinction between 'welfare' and 'productive' services is not always a clear one. There are two dimensions to this. On the one hand, certain services which may be regarded as 'welfare' in the short term (for example health care or water) are necessary conditions for sustained longer-term development. Judgements about investments of this kind need to be made in the light of other factors. A useful distinction is that between convenience-enhancing and opportunity-creating investments: the distinction between improving levels of welfare services — such as through the provision of water reticulation to each housing unit — and placing a hitherto non-existent service within feasible range of a large number of people.

On the other hand, certain services are potentially both welfare-oriented and production-oriented. For example, a water-retention facility may be used for human consumption and for localised irrigation. As a general rule, the most highly geared investments are those which have a dual potential. The issue also has implication for the form of service provision. Attention should constantly be given to promoting this dual function, even if it requires some additional expenditure. For example, the water-retention facility used in the previous example could achieve even greater impact if it was placed on a high point from which gravitational irrigation was possible, even if investment in a simple pump mechanism was required to achieve this. Similarly, the issue of disposal of wastes (particularly water and sewage) is as important as the supply of services since settlement wastes can (and should) be used for productive purposes.

Secondly, it is impossible in contexts such as the Transkei to ignore welfare investments entirely. Because of the distorted nature of the settlement system and the great poverty, large agglomerations of people exist without even rudimentary services. Their options of

voluntary relocation are minimal: on grounds of humanity certain basic needs investment is warranted. The determining issue therefore is scale of agglomeration.

Multiple resource mobilising vs single impact investment

An important approach to investment in the peripheral areas is to use it to mobilise potentially productive resources. Frequently, these resources will not be competitive in the broader space economy, but their local potential may be very significant. An important distinction is that between multiple resource mobilising and single impact investments. In some cases, the provision of services may have a single impact in its mobilising of productive capacity (for example the introduction of water supply may make possible the intensification of agriculture only). In other cases the potential impact may be multiple (the intensification of agriculture, the production of clay bricks and so on). Obviously, the greater the multiplicity of potential users, the higher the gearing of the investment.

An important part of resource mobilisation is resource conservation. Certain service investments may be made to conserve threatened resources (for example the provision of electricity in order to reduce fuel-driven pressures on unique or otherwise valuable forms of vegetation and the concomitant negative implications for soil erosion and river ecology).

Set-extending investments vs isolated events

A lesson which has emerged powerfully from the international developmental experience of the last decade is that failure of a great many investment programmes in rural regions has resulted from the fact that investments have occurred as single, isolated events (for example the provision of hospitals or schools without adequate power or water; the creation of water supplies without the power back-ups that would greatly increase the impact of the original investment; and so on). It is increasingly realised that the most highly geared investments are those which reinforce previous investments: that is set-extending investments.

Broad-based vs localised initiatives

An important factor in assessing investment applications is the degree to which initiatives have broad-based, grass-roots support and are compatible with local capacities. Development projects are frequently initiated by relatively vocal, localised community elites purporting to speak on behalf of the community at large. The projects then either flounder or are appropriated for their own interests by the elite. The success rate of projects which have the genuine endorsement and participation of the majority at grass-roots level is much greater.

Strong vs weak local organisational and decision-making capacity

Developmental experience also shows that the success of investment projects depends on there being strong community organisation, and decision-making structures and levels of sustainability and accountability within the community receiving the benefits of the investment.

Highly accessible settlements vs those which are trapped in space

The foregoing criteria for evaluating investment projects concern themselves with the nature of the project or service being undertaken. There is one further criterion, of considerable importance to the gearing rate of investments, which concerns the settlements for which the investment is intended.

The economic potential of settlements is powerfully affected by the accessibility of potential markets and sources of necessary inputs. As a general rule, a high degree of accessibility is a necessary but not a sufficient condition for service investment to promote economic development. Conversely, isolated communities are effectively trapped in space: any initiative is almost entirely limited to (and restricted by) its own resources: save in situations where there are untapped but potentially highly competitive local resources, investment gearing on service provision in remote communities will always be weak.

The degree of accessibility of any settlement depends on whether or not it is served by public transport and this in turn is informed by the surfacing and therefore by the order of the road.

A conceptual schema

These criteria can be brought into relation with each other by a conceptual diagram or 'thinking machine' (Figure 1): the higher the concentration of representation to the left of the diagram, the higher the gearing and potential success rate of the service investment; the greater the concentration to the right, the lower the potential gearing.

4.3 A spatial approach to more balanced settlement promotion

The current fragmented and dispersed settlement pattern makes it virtually impossible (and certainly highly cost-inefficient) to attempt to supply the majority of the population with adequate utilities (such as easily accessible potable water) and social services such as schools and health facilities. The pattern also inhibits the stimulation of a more vibrant agrarian economy: large numbers of these settlements are trapped in space, inputs and markets are inaccessible and the inhabitants spend most of their day attempting to gather the resources necessary to meet essential basic needs (particularly water and fuel) instead of being engaged in productive activities.

The question is, if improvements are to be achieved, albeit over a long period of time, what regional settlement pattern should be promoted and reinforced through response-generating investments?

An appropriate approach to the spatial organisation of settlements and services focuses primarily on routes and not nodal settlements as the basic organising elements of rural space.

To explain this, it is necessary to go into the question of spatial organisation in greater detail. The central task of spatial organisation in rural areas is to reduce conditions of spatial marginalisation – the inaccessibility and immobility of communities that contribute to their material impoverishment. Effectively,

each area takes on the form of an 'introverted' problem. It must seek to break out of a cycle of poverty, either by using local resources and markets which are by definition extremely limited because of existing patterns of poverty, or by seeking external resources.

Inevitably, however, because of their isolated nature, when external investment does occur, it has to be dedicated exclusively to, and must be embedded within, these communities. In these situations, the trickle-down benefits of investments are extremely weak.

Central to the question of spatial organisation therefore is increasing the relational interpenetration of essential territorial and rural elements and facilities. The implication of this is that the transport routes which link a number of local areas become the logical focus of an ordered strategy of rural investment: in effect, these routes should be seen as 'investment lines' and the issue of structure becomes the articulation of rhythms of public transport and of those elements which generate interaction in rural areas.

Clearly, there is a strongly hierarchical dimension to this concept, with larger territorial services and facilities gravitating towards higher-order territorial links and smaller facilities to lower-order ones. Viewed in this way, the problem of territorial and rural spatial organisation becomes one of promoting over time a hierarchical form of interlocking activity routes which systematically reduces spatial marginalisation, increases accessibility to all levels of service provision and provides a framework for reinforcing investment over time (Figure 2). It must be stressed that this approach cannot simply be reactive to existing routes. Part of the development planning challenge is to create routes where necessary in order to shrink space and to free those settlements which are trapped in space.

An important aspect of the approach is that sectorally different forms of investment (for example water, health, education and power) be considered in relation to each other, thus creating the possibility of initiating mutually beneficial relationships (the concept of 'setting'). Similarly, vertically linked forms of investment (for example different levels of health service) can logically be moulded into an interconnected accessible system to ensure that each level of service has appropriate back-up.

4.4 The allocation of land

The achievement of an efficient, more logical settlement pattern demands that people are able to move freely to places of perceived advantage (in particular closer to existing well-located settlements and major routes). This is not the case at present. The traditional tribal system of land allocation and tenure, which operates on the basis of allegiance and patronage, underpins the present fragmented pattern.

It is not necessary to change the entire tribal system in order to move towards a

developmentally more positive settlement pattern. Indeed, sweeping changes are probably politically infeasible currently, as there is an alliance of interest among many affected fractions to maintain the status quo in the short term. One possibility is the creation of 'zones of intensive settlement' around areas of preferred settlement – the most rapidly growing towns and the major routes. These could be removed from tribal control (with generous compensation to affected chiefs) and settlement within them governed by freehold systems, with accruing revenues being paid into a developmental fund.

Figure 1: Settlement characteristics in relation to investment and community characteristics

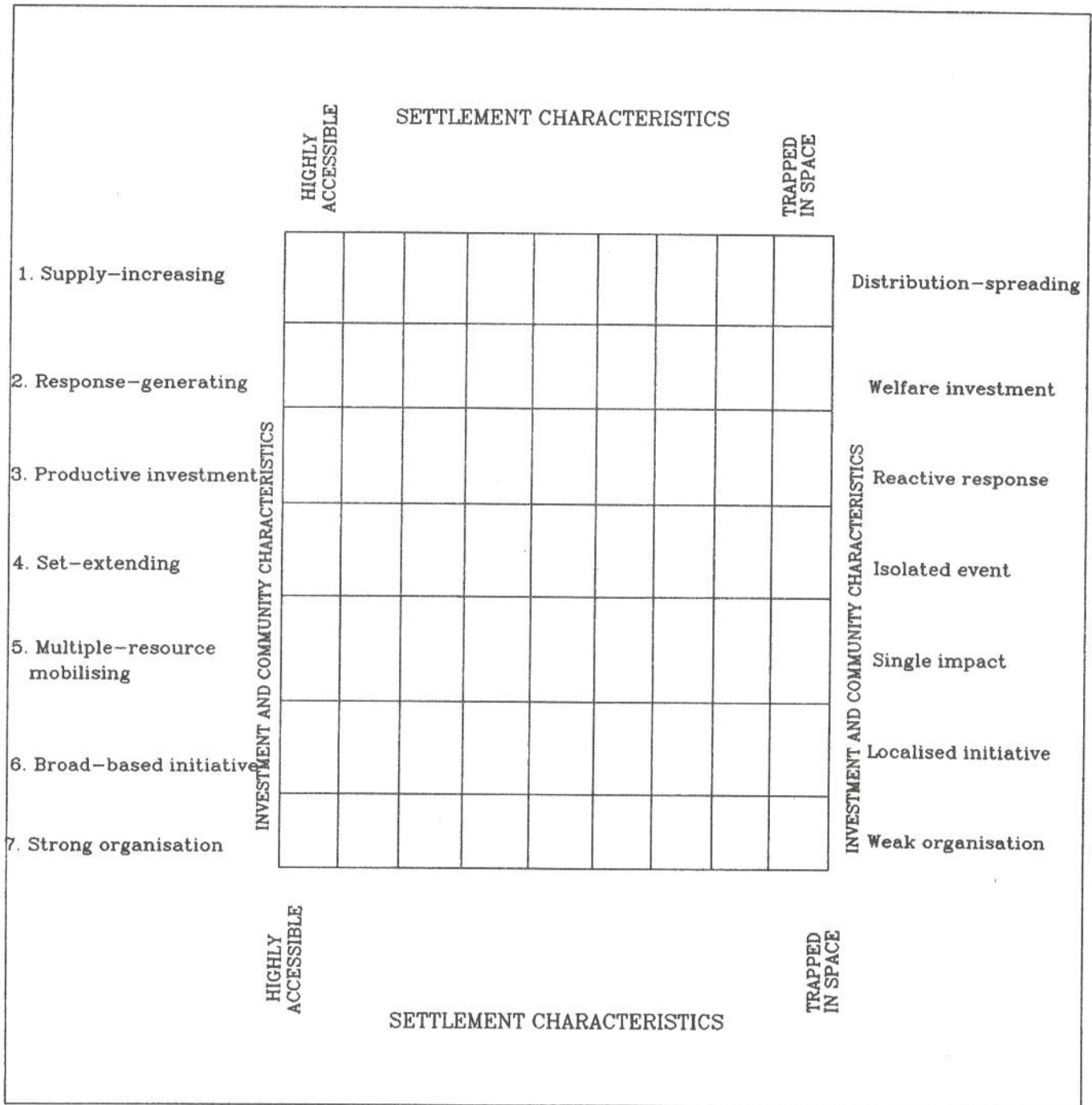
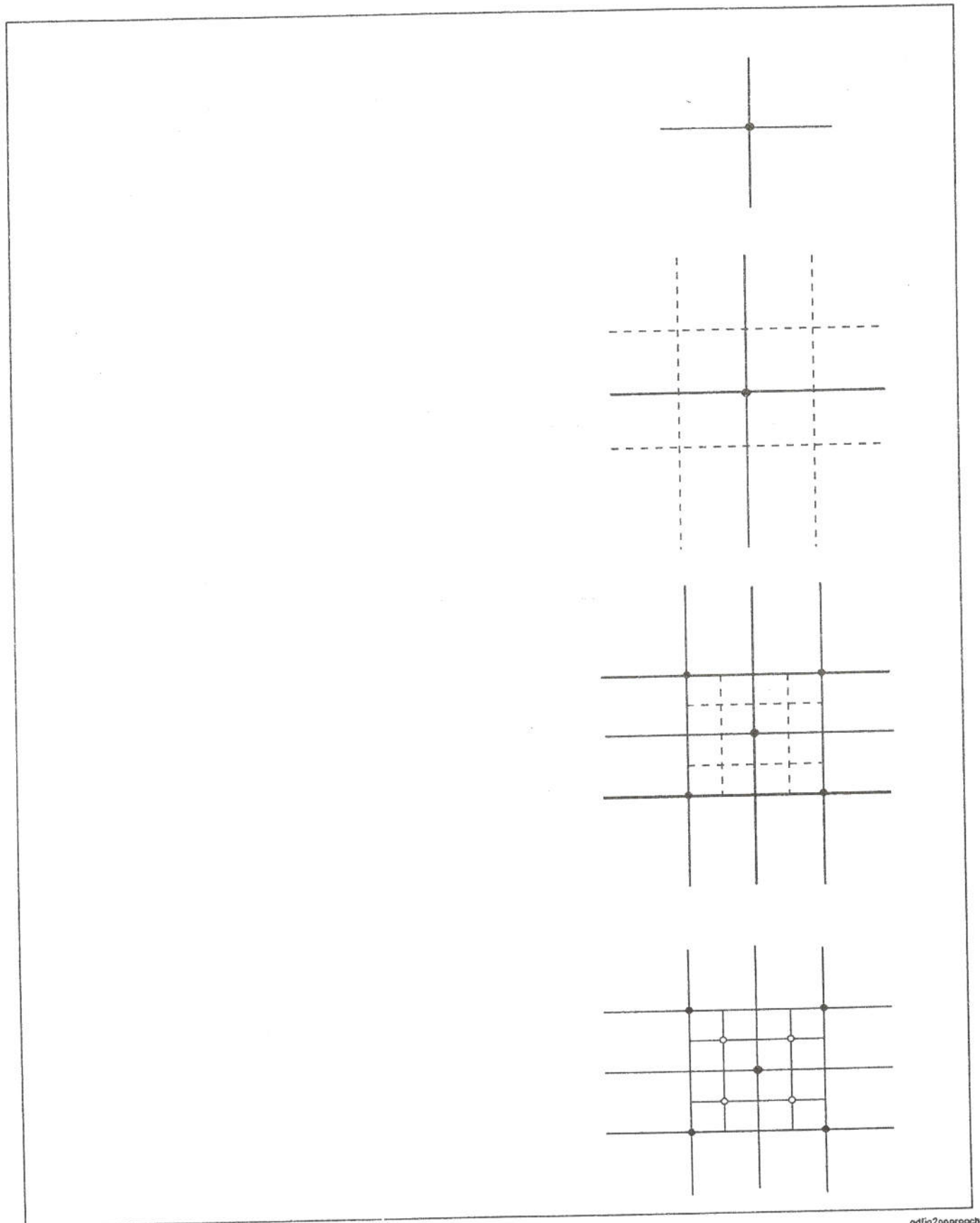


Figure 2: Conceptual approach to investment over time in rural facilities



Part B: The peri-urban areas of Umtata

An important dynamic identified in the analysis of the territorial settlement pattern was the tendency for new settlement to agglomerate around the major towns in a very loose, rural-feeling form suggesting a particular form of rural-urban interface. To understand this better, an analysis of peri-urban settlement around the largest Transkeian town, Umtata, was undertaken.

5. Analysis

5.1 The pattern of settlement in and around Umtata

The morphology of settlement in Umtata is primarily made up of a number of housing forms.

- formal, relatively high-standard, suburban housing within the municipal boundary
- lower-quality formal but fully serviced housing in the original black 'township' of Ngangelizwe, within the municipal boundary
- peri-urban areas beyond the municipal boundary, of which two forms can be identified: permanent areas where tenure is secure and housing units, though unserviced, are largely formal; and 'holding areas' where people are housed, with permission, in temporary structures while awaiting the allocation of permanent sites
- a limited though increasing amount of squatting, particularly around the municipal rubbish dump.

5.2 The pattern of peri-urban development

Accurately, the term 'peri-urban' development refers to a pattern of distribution of households which have a foot in both

urban and rural worlds. Colloquially, in the context of the Transkei, the term refers to settlement forms well beyond the municipal boundary which house people who have functional links with a major town (in this case Umtata) on a daily or at least a very frequent basis.

The pattern of this form of settlement around Umtata is widely dispersed, with a radius of well over 40 kilometres from the municipal boundary. The pattern is also highly fragmented: it occurs in discrete, relatively isolated pockets and no one spatial sector is strongly dominant, although there is a somewhat higher concentration along the major routes connecting with Umtata. The degree of scatter is unusual, particularly since there are very considerable amounts of unused municipality-controlled land within the municipal boundary (the area corresponding to the original commonage).

The peripheral areas house between three to four times the population of the municipal area and are growing very much faster (approximately 18 per cent as opposed to 10 per cent).

5.3 Processes of peri-urban growth

Entry into the peri-urban areas occurs in a number of ways:

- The most common way originally was for people moving to Umtata to stay within Ngangelizwe as lodgers. At a later stage, many of the people who could do so moved to their own places on the periphery.
- Many people who through tribal affiliations and contacts are accepted by a chief now move directly onto land in the peri-urban areas for which they have obtained a certificate of occupation.
- Some people who have not been allocated permanent land rights lodge (for a rent payment, but a much lower one than they would have to pay in Ngangelizwe) on the land of people who have permanent occupation rights.

- Many people who have houses in Umtata itself have rented these units out and have moved to the peri-urban zone.

5.4 Factors underpinning peri-urban settlement

There are three main factors underpinning the phenomenon of peri-urban settlement and its highly fragmented, dispersed form.

Different standards within and without the municipal boundary. Within the boundary, market prices prevail, sites are highly serviced, high building standards are maintained and rates are relatively high. In general, no low-cost housing is provided. In the peripheral areas, site and service charges are nominal, there are no building regulations and no rates. Because of the substantial price difference many property owners within the municipality are choosing to rent out their units and live in the peripheral areas.

The tribal system of land allocation. Again, the system depends on patronage and introductions, not individual preference: location is determined more by whom you know than precisely where you would prefer to be.

Institutional control over land allocation. Four different institutions administer Umtata and its environs. For example, growth within the municipal boundary is controlled by an urban-oriented institution; and that within the peripheral areas primarily by the Department of Agriculture and Forestry, a rurally oriented institution: consequently, what is functionally a form of urban development is controlled by rurally based criteria (such as the quality of agricultural land) and standards (basic plot sizes are a ridiculous 50 by 50 metres).

5.5 The rural-urban interface

Analysis of activity patterns reveals a number of features. The peri-urban areas supply almost nothing to Umtata except labour. Almost no locally generated agricultural surplus is directed to the urban market (although many people expressed an interest in doing this, provided water and transport to markets were available). Similarly, there is very little small-scale or informal manufacturing or service industry geared to supplying the needs of people in the peri-

urban areas or in Umtata: there is more economic activity in the higher-density area of Ngangelizwe, although even there it is lower than what would be expected.

The peri-urban areas are dependent upon Umtata for almost all services: the peri-urban areas are almost entirely unserved, with the exception of some scattered schools and clinics. The entire system is dependent upon an inordinate amount of movement but these areas are very poorly served by public transport.

The only reverse form of interaction is social: the quasi-rural lifestyle is highly valued and over weekends many urban dwellers move to the peri-urban areas to be with friends and family.

Application of the term 'peri-urban' to these areas is thus highly inaccurate. The phenomenon is in effect simply a badly distorted and fragmented form of large-lot sprawl.

5.6 Existing and emerging problems of peri-urban settlement

The sprawling, fragmented pattern of development is creating serious problems which will intensify as the scale of settlement increases:

- The sprawling pattern fails to create the conditions necessary for a vibrant local urban economy to emerge. In particular, it is almost impossible for small-scale operators to flourish.
- The pattern makes the widespread provision of essential services (such as water, electricity, garbage removal and so on) at affordable rates almost impossible. Particularly important is the fact that it is impossible to provide cheap, efficient public transport (an issue which will become of central importance in future years) under this settlement form.
- The pattern is promoting serious environmental problems such as erosion, litter and refuse.
- Lack of adequate services, particularly potable water, results in a high incidence of water-borne diseases.

- The process of settlement formation is promoting political conflicts between residents, headmen and chiefs; it threatens the hegemony of the chiefs, who none the less are almost obliged to go along with it because of their traditional responsibilities for accommodating people and for retention of their political clout, and financial advantage. Unquestionably this conflict will intensify as non-tribally based, populist political organisations strengthen their organisational structures in the area.
- As the high real costs of living in the peripheral areas are increasingly felt, tenure problems will intensify, with an accelerating rate of squatting (by land invasions) closer to town.
- Levels of services (both social and utility) would greatly increase and convenience would be maximised.
- Investments in services would become far more efficient and unit costs to consumers would be lowered.
- A climate which maximises small-scale economic activity (both urban and rural) would be created.
- Waste products (particularly water and partly treated effluent) generated by the urban area could be channelled onto the lands to productive ends, thereby using scarce resources as efficiently as possible.

In short, it is necessary to create a peri-urban system: to create a system in which 'urban' areas are far more urban than they are at present, and in which rural activities are intensified in the rural areas.

It is clear that for this to occur a number of changes in land allocation practices and urban management are necessary:

6. Policy implications

6.1 Necessary actions

It is apparent that management towards a more appropriate urban form and territorial settlement pattern is required as a matter of urgency. If this does not occur, the longer-term future of Umtata and its inhabitants will be bleak. Economically, two major underexploited opportunities exist in and around Umtata. The first is promoting small-scale manufacturing and service industries to meet the local needs of the population. The second is promoting intensive small-scale agriculture to meet the needs of the urban population. In both cases, there is a very real opportunity to compete effectively with imports from South Africa which currently support Umtata.

In both cases the urban structural preconditions for releasing this potential are the same: it is necessary to compact and intensify urban development (and thus the urban market) around public transport routes and to maintain a fixed edge between the urban agglomeration and agricultural land, so that there is enduring, easy access from one to the other: in short, to move from Figure 3 towards Figure 4.

A number of advantages would result from this:

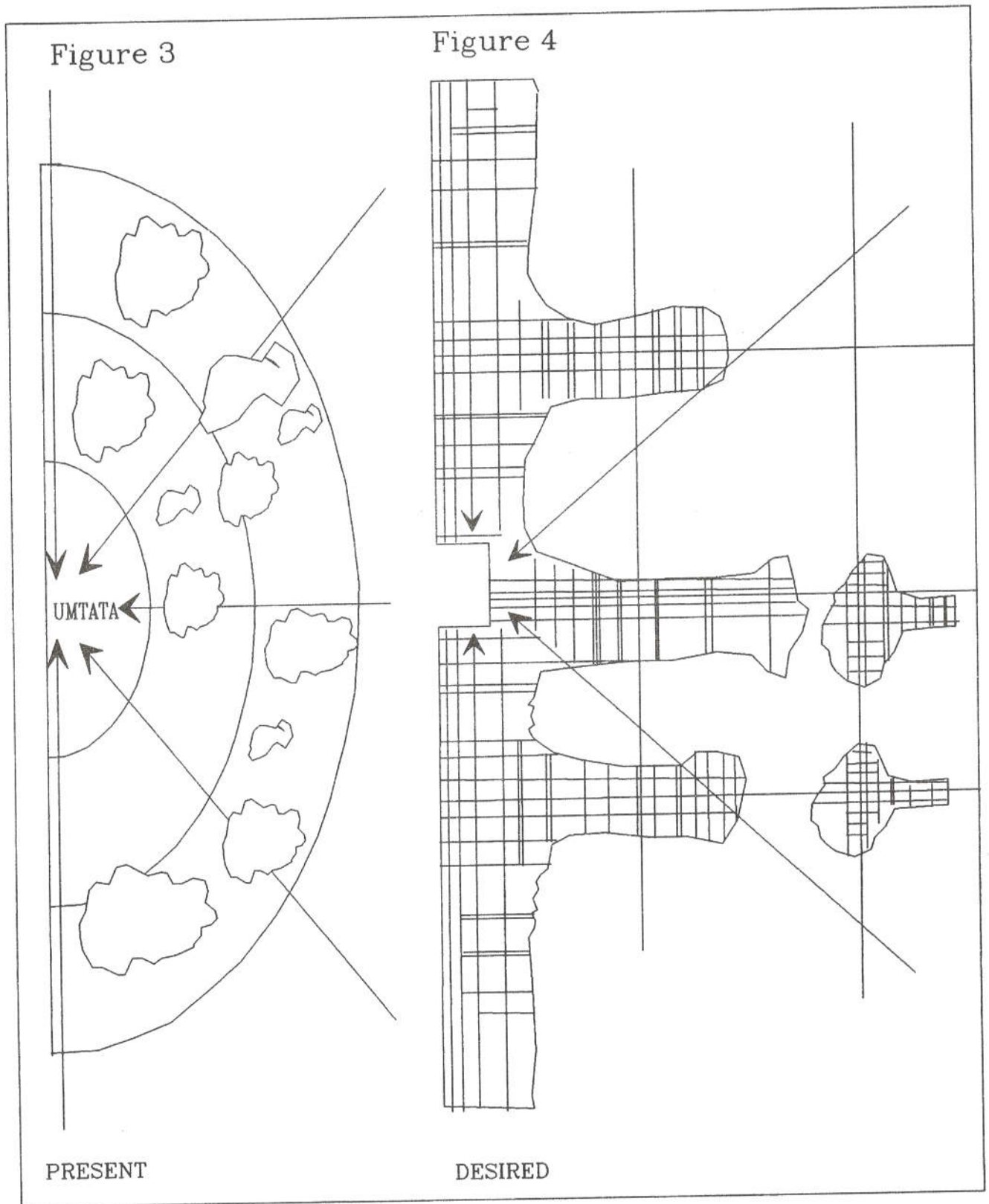
- Efficient, viable and easily accessible public transport would become possible.

- Land allocation cannot continue to occur in the relatively random way which is happening at present. Urban development needs to be channelled into demarcated urban zones. In short, allocation must occur in relation to an urban agenda and not according to an agricultural agenda, as at present.

- The size of the basic land parcel allocated needs to be much reduced. The present size (50 x 50 metres) reflects an agricultural mindset not an urban one. This is extremely wasteful of a most valuable resource.

- There needs to be much greater cost equalisation between the municipal and peri-urban areas: costs charged need to reflect the true costs of different locational options. This means not only that the almost total subsidisation which currently occurs in the peri-urban areas must cease, but also that the municipality should be encouraged to do everything possible to lower entry prices (for example by undertaking low-cost, lower-serviced housing projects on vacant land within the municipal boundaries).

Figures 3 and 4: Managed growth over time



6.2 Some institutional and attitudinal issues requiring resolution

The introduction of the management practices necessary to guide growth in the Transkei in directions which maximise developmental opportunities faces a number of severe implementational difficulties.

The first, in relation to Umtata, is a jurisdictional blurring and an institutional gap. The peri-urban areas are functionally urban but are managed as rural areas by the Department of Agriculture and Forestry, which does not have the institutional capacity to provide utility or other urban services. It is clear too that some cost equalisation and standardisation of conditions between the municipal and peri-urban areas must occur if the lateral spread of the town is to be brought under control, but the political will to do this does not exist within the Department of Agriculture and Forestry. Similarly, the Municipality of Umtata is not interested in incorporating the peri-urban areas within the municipal boundaries, on the grounds that this will throw an increased burden on the main tax base of the town and that extension of the boundary (and therefore standardisation of rules) will simply extend the range of peri-urban settlement as people seek to escape paying taxes. The municipality is also not particularly interested in creating low-cost housing opportunities within the municipal boundary, as this would create an additional responsibility which does not currently exist.

What is required is a new institutional form to manage the growth of the town as a whole. Control of the peripheral areas should be placed in the hands of an urban-focused organisation (perhaps the Department of Local Government and Land Tenure) and a joint decision-making structure (perhaps in the form of an urban development corporation involving that body, the municipality and the private sector) established to create a common set of procedures and regulations which are appropriate to the task of longer-term compaction and to the circumstances of the majority of the people. This body should have

the legal capacity to receive and channel funds. The physical provision of services could probably best be handled by the municipality on an agency basis.

The second difficulty is that the problem of sprawling peri-urban development is not perceived to be a problem by the main parties. The people accept it (while acknowledging the inconvenience and cost) since it is the cheapest and easiest short-term option currently available to them (in effect individual costs are being subsidised at the expense of increasing social costs). Moreover emotional attachment to an older, traditional lifestyle is strong. The municipality accepts it as the costs associated with the phenomenon do not directly affect its constituency. Government departments accept it as the traditional way of doing things and costs are so disguised that there is not yet a political backlash. The chiefs accept it (even though they do not like it) since, despite the fact that there are disadvantages, there are still direct advantages to them. Change therefore will not come about from the bottom up nor from any of the main institutional parties.

The third problem concerns the traditional system of land allocation and is perhaps the most difficult to solve. The traditional system of land allocation is incompatible with a settlement pattern at both territorial and local scales which is efficient and logical developmentally and in terms of service delivery. The achievement of an efficient, logical settlement pattern demands that people are able to move freely to places (even if these are initially limited to predetermined 'zones of intensification') of perceived advantage, with full knowledge of the costs associated with particular locations. This is not the case at present. The problem is compounded by the fact that the traditional system of land allocation is an important element underpinning political patronage and will be fiercely defended.

7. Conclusion: some generic issues

Abstracting from the case of the Transkei and Umtata, a number of more generic issues emerge which require resolution through multilateral discussions between the

Government of South Africa, regional government, extra-parliamentary populist political organisations and development agencies. The Development Bank of Southern Africa is probably best placed to operate as a catalytic agency to generate these discussions.

Agreement on a development path for the peripheral areas and on appropriate investment actions. It is apparent that the developmental problems of peripheral areas such as the Transkei are growing and that there is an increasing dislocation or imbalance between the emerging settlement pattern and the maximisation of developmental opportunities. This requires agreement at the highest level on an appropriate development path and a commitment to ongoing investment programmes which maximise gearing opportunities and which stimulate a more appropriate settlement pattern. Part of this is actively promoting programmes outside the peripheral areas to reduce population pressure.

Resolving institutional blocks. There are a number of institutional issues which are creating severe problems and which operate as blocks to a more appropriate development path: these can only be resolved through political action at the highest level. The two

main ones identified in the Transkei are institutional gaps and imbalances in the management of the largest towns and the need for release of some strategic land parcels from tribal systems of allocation and control. Others may exist in other regions.

Land redistribution. The main argument developed here (that the greatest developmental opportunities lie in encouraging the urban areas to become more urban and the rural areas more rural by actively strengthening the rural-urban interface) has applicability not only to the peripheral areas of the country. The clear implication of the argument is that the greatest opportunities for rural land redistribution lie close to the largest markets (particularly the metropolitan areas and larger towns of South Africa) and that programmes of this kind can be used in turn to promote economic development within the urban areas. How this occurs obviously has important implications for urban management practices. Exploring the implications of achieving this around the metropolitan areas is the logical extension of this study.

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