Local economic development choices in Port Elizabeth

top down or bottom-up LED?

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Introduction: socio-economic conditions

Local economic development in Port Elizabeth

The central project in Port Elizabeth’s local economic development (LED) strategy is the Coega Industrial Development Zone and Port, 25km north of the city. Is this the correct approach? Have all the factors associated with resource utilisation been adequately considered? Are there other routes to local economic development that more directly address Port Elizabeth’s persistent problems of poverty, unemployment and underdevelopment?

In answering these questions, this research report documents socio-economic problems in Port Elizabeth and to some extent in the 'metropolitan area' encompassing the cities of Port Elizabeth, Uitenhage and Despatch. It describes and briefly evaluates the Coega proposal; considers costs and benefits of an alternative scenario based on different utilisations of the Coega land and ecology; and makes preliminary calculations about the way in which alternative use of water and electricity resources might generate an impulse towards bottom-up LED.

Port Elizabeth’s people

The fifth largest city in South Africa, Port Elizabeth had a population of 645,573 at the time of the 1991 census (an exercise bedevilled by serious counting errors, but nevertheless necessary as a baseline estimate since the 1996 census results are not yet available). The black townships encompassing iBhayi – New Brighton, KwaZakele, Zwidle, Soweto-on-Sea and others – had 257,000 residents, while the township of Motherwell had 73,000 residents. In addition to these Port Elizabeth residents, another 300,000 people lived in nearby Uitenhage and Despatch at the time. More recent estimates put the population of what is termed ‘the metropolitan area’ at 1.2 million (Institute for Development Planning and Research, 1997:8).

With respect to income, dramatic inequality exists between race groups. Of African households, 79% earned less than R$ 000 in 1991, while 59% of white households earned at least R$30,000 that year. With such a large low-income population, nearly a quarter of household income is spent on food, compared to less than 18% in Johannesburg (Institute for Development Planning and Research, 1997:11–13).

A combination of key socio-economic conditions – income, health (life expectancy) and literacy – make up the Human Development Index (HDI). At 0.67 – on a scale where 1 is the highest and 0 the lowest – Port Elizabeth’s HDI (based on the 1991 census) is roughly equivalent to that of South Africa as a whole, but the HDI for the city’s African residents is just 0.32, compared to 0.94 for white residents (Institute for
Development Planning and Research, 1997:11–13). (Life expectancy indicators are national, it should be noted.)

Unemployment remains a central indicator of uneven development in Port Elizabeth. According to the 1991 census, the metropolitan area had 344 810 economically active residents, of which only 169 181 were employed. A further 62 994 were in the ‘active informal sector’ and another 57 597 were engaged in subsistence agriculture (Institute for Development Planning and Research, 1997:15–17).

Education, health care and other social services leave a great deal to be desired. But it is worth focusing on housing, infrastructure and municipal services delivery so as to identify those backlogs that can also serve as economic development opportunities. The housing backlog in Port Elizabeth is estimated at 68 000 units although estimates of 94 000 units include serviced sites on which informal shacks exist (tens of thousands of Port Elizabeth residents reside in somewhat more formal shacks). Another 66 000 units will be added to the housing demand as new households form over the next 15 years. Nearly all of Port Elizabeth’s residential building activity (worth R106-million in 1996) was in upper- and middle-income developments. The Institute for Development Planning and Research (1997:30–31) has concluded that ‘no low-cost houses can be built in Port Elizabeth or anywhere else in the region despite any heroic effort by local government’.

However, local government in Port Elizabeth has been taking a variety of steps towards delivery of basic services. These have not been sufficient to meet the water and energy needs of low-income households. Cut-offs of both electricity and water services have become commonplace due to non-payment, but Port Elizabeth has at least set up a system for grants to cover the cost of basic service provision to some of its low-income households. However, this system can be improved upon, as argued below.

**A history of competition**

Port Elizabeth has a long tradition of energetic initiatives to promote its position as an industrial and commercial centre; as a key entry and distribution point for goods and produce destined for the regional and national hinterland; and as a processing, production and export point for local industry and agriculture. An important aspect of this has been the city leaders’ strong sense of the need to compete with alternative centres and ports. For much of the 20th century, Port Elizabeth’s city fathers proved relatively successful at promoting modernisation and industrial development. The local state was harnessed by the local elite in their efforts to transform Port Elizabeth from a run-down and poorly serviced colonial town into a suitable place for capitalist expansion. Merchants and traders tended to dominate the city council but in the 1920s their horizons shifted from promoting local conditions facilitative of their own activities to the active encouragement of industrial investment in the town.

But overall, local attempts to capture industrial investment – even relatively successful examples such as Port Elizabeth’s motor industry – are dependent upon the dynamic and changing world market. The substantial infrastructural investment which the boosterism of the 1920s onwards entailed were costly for the municipality of the time. Achieving
sustainable economic growth as a result of such investment and entrepreneurialism, this example suggests, depends either on substantial linkages to locally-based resources and skills (as in the beneficiation and processing activities that continue to be important in the town), or on an astute reading of the international economic conditions in the relevant industry, and an ability to respond creatively to these. In the case of the motor industry this would have meant building on Port Elizabeth’s historical industrial strengths in the motor components sector (Adler, 1993) and fitting into the current export-oriented, flexible, transnational component-parts production systems. To do this would have required efficient and skilled labour, rather than the not very efficient, not-quite-fordist methods common in the South African motor industry.

Any future development paths which mobilise scarce local resources in promoting or creating Port Elizabeth’s locational advantage – often at the expense of attending to the well-being of the local population – need to take account of this example. The case of the motor industry shows it to have been relatively successful, but not very strongly linked to the local economy, and dependent upon a conditional and transient apparent locational advantage. It has also been dependent upon some persuasive city marketers who were able to subsidise industrial development to the detriment of service and housing provision (and for a long period, employment) for the local population.

Decades of urban and industrial policy left an important legacy in terms of land use, employment and housing in the town. The prioritising of industrial development meant that much of the best land was set aside for industrial use, including land which might have been more suitable for housing. Indeed, much of the land which came to be used for industrial development had previously been set aside or already occupied by the poor for residential purposes. Their removal contributed to the present distant location of poorer communities in the town. Moreover, the subsidisation of industrial land sales and services diverted funds from other much needed housing and social facilities especially for the poor.

But growing industrial employment also provided an opportunity in the longer term for African economic advancement. It made it possible for the African community to extend a long-standing tradition of community-based political organisation into the workplace and ultimately into forging today’s non-racial local government. It is this government that must now decide how to improve on the boosterist strategies of their predecessors and respond to the declining local economy they have inherited.

A rosier future?

Notwithstanding the disastrous socio-economic conditions and the lack of delivery in some key areas of development, the city’s economic news has not been all bad. The late 1980s witnessed decline and rapid job loss, yet during South Africa’s long 1989–93 depression, Port Elizabeth managed to increase its gross geographic product (GDP) (although Uitenhage continued to lose 2–3% output a year). The area’s economic structure shifted to rely more on government activity – in 1970 the fifth most important sector following manufacturing, but by 1990 the second most important – while the wholesale and retail trade, catering and accommodation slipped from second to fifth most important during
the 1970s and 1980s. Services in general (including government) comprise 26% of economic activity today (up from less than 12% in 1970), while manufacturing slipped rapidly in importance from 1970–75 (44% to 37% of economic activity) and again from 1990–93 (34% to 26%) (Institute for Development Planning and Research, 1997:53–63).

This research report focuses largely on whether Port Elizabeth’s future lies in its role as a Southern African regional transport hub and industrial production zone for exports, particularly through the proposal to establish a new deep-water port and industrial development zone at Coega, just to the north of the city and close to Motherwell township. The following section begins with a consideration of spatial integration as the basis for local economic development. It then documents the potential Coega holds for economic success, partly in relation to employment and income projections. Coega is, however, quite controversial. While it holds promise as an international trans-shipment point, competition from other Southern African ports, and questions as to whether Coega’s advantages outweigh its disadvantages, all have to be overcome. In particular, the opportunity costs of Coega have yet to be fully factored in, insofar as the project will consume large quantities of water and electricity which may be better utilised elsewhere.

The report considers the benefits of the primary alternative proposal for use of Coega’s ecology, including aquaculture, salt works, agriculture, and the investment, income and employment impact of these alternatives.

This is followed by suggestions for a redistributive strategy that makes a distinct break from Coega’s utilisation of public funding, air, and electricity, on the grounds that jobs, productivity and small, medium and micro-enterprises (SMMEs) will result, providing that innovative attempts to adjust pricing and demand-side management of these resources are not undercut by the growing momentum for privatisation. In each of these areas, a constructive critique and feasible alternative is offered. If instead of a bias towards corporate subsidies, a bottom-up approach were to be attempted, the LED implications appear vast.
Coega as Port Elizabeth’s lead LED strategy

The Coega initiative — a major new deep-water harbour, a zinc smelter, other associated beneficiation industries, infrastructure for heavy industry, and an industrial development zone (IDZ) — is a bold attempt to reindustrialise a part of South Africa that suffered enormous job loss and manufacturing decay during the 1980s. The primary motive for building the harbour at the mouth of the Coega River is to reduce the substantial transport cost associated with heavy industry, particularly the proposed zinc smelter. The Coega IDZ would cover 10 000ha, encompassing most of the area north-east of Motherwell and the Markman industrial area which lies to the south of the Sundays River.

Spatial development initiatives and local economic development

Coega is not just a transport and industrial production node. It fits into the envisaged ‘Fish River Corridor’ that would stretch to East London. Such development corridors or spatial development initiatives (SDIs), formulated in 1995 by the Departments of Transport, and Trade and Industry, aim to reduce growth discrepancies between the regions of South Africa, as part of a process of economic rebalancing (Jourdan et al, 1996). Corridors were meant to ‘facilitate urban integration of apartheid settlements’ within metropolitan and district areas; ‘link urban nodes along major transport routes, for example, Port Elizabeth-East London-Butterworth; or link production and ports in regional corridors, for example, Mpumalanga-Maputo (Hosking and Jauch, 1997).

Theoretically, a corridor describes a geographical line of economic interaction involving various means of transport through which imports and exports of regional or international origins are in transit (Perroux, 1966). Corridor development is also explained through theories of Asian regionalisms or growth polygons, and their models of gravity (Krugman, 1993). These concepts refer to a new economic geography that enhances the relations between territoriality and political decision making in the context of active industrial policy (Hugon, 1996). In the case of South Africa, in contrast, regional integration is characterised by a polarised and asymmetrical approach.

To illustrate, there emerges the danger that export processing zones (EPZs) — of which the proposed industrial development zone at Coega is a variant — will exacerbate the lack of forward and backward linkages in the South African economy, including that of Port Elizabeth and its hinterlands. There are various measures by which such zones have performed poorly in relation to other forms of economic activity. Job creation in Mexican and Asian EPZs is extremely weak, according to international studies (although in Mauritius it has been impressive). Technology and skills transfers have been largely non-existent, with managerial and technical jobs mainly going to foreign nationals. Given that the import content of EPZ firms tends to be 60% or greater, foreign
exchange earnings are often overstated as an advantage of EPZs. The main backward linkages tend to be packaging and simple engineering inputs. Diversification is difficult. Financial liabilities by governments to EPZ firms are often extremely high due to excessive bidding between competitive EPZ locations (Hosking and Jauch, 1997).

The danger of relying upon spatial development techniques of the sort proposed, is that unless there are specific public investments aimed at meeting basic needs of low-income residents, there will continue to be a transfer of resources from low-income areas to areas of high but polarised growth. In short, SDIs have not overcome the dichotomy between top-down versus bottom-up development. As much as any other, Coega has largely been marketed as a top-down form of local economic development, with only indirect benefits to the citizenry.

**Coega’s potential**

There is, Coega proponents argue, a fundamental economic logic to the proposed port’s location (Coega Implementing Authority, 1998: homepage):

South African development has previously been focused on import substitution, making location close to the major consumer markets, most suitable. The IDZ is export focused and thus logically located on the coast.

Coega would cater for most of Port Elizabeth’s industrial development activity. The Coega Implementing Authority (1998) provides a list of Coega’s attractions:

- 10 000ha of open land suitable for industrial development, with almost unlimited capacity for expansion;
- the proposed IDZ is close to main road and rail links, and the Department of Transport has already committed to a road interchange and is considering rail upgrades necessary to meet demand;
- the neighbouring metropole has extensive established infrastructure with spare capacity;
- IDZ is close to the Motherwell residential area and there is extensive land already identified for further residential development;
- the adjacent metropole has substantial training facilities in the Port Elizabeth Technikon and the University of Port Elizabeth, which could quickly respond to the training needs;
- topography of the area allows for a deep-water port with current draught estimated at 23m;
- proximity of Eskom’s main supply substation at nearby Grass Ridge enables the supply of the required electricity;
- water supply is readily available from either the Orange River supply line which passes near by or from the Fresh Water Flats facility which is currently pumping half of its purified water back out to sea; and
- remaining bulk infrastructure requirement is already in place at nearby Markman Industrial Township, and could be readily extended.
In addition, the Authority (Coega Implementing Authority, 1998) promises the following will be available at Coega:

- purpose-built facilities;
- latest conveyor technology to be world-class competitive;
- skilled and unskilled labour pool, and a specifically negotiated labour dispensation;
- tax incentives and concessions;
- scope for vertical integration and supply chain management by location of downstream and upstream industry in the zone; and
- cheap energy.

In the planning stages, the anchor for Coega has been Billiton’s proposed R2,7-billion zinc smelter (Bay Public Relations, 1998d). If the main funding and legal work is completed by August 1998, the timing of port construction could be as little as 24 months to build and the zinc refinery would take an additional six months to build. This, then, is the broad potential. But specific projections of job creation and earnings have also been made.

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**Projected employment and earnings**

The most recent economic assessment of the Coega IDZ and Port available was Pakes and Nel’s *Preliminary economic assessment of the proposed Coega Industrial Development Zone and port* (1997). Three scenarios for the project are sketched in the Pakes and Nel (1997) preliminary economic assessment, based on ‘conservative’, ‘optimistic’ and ‘high road’ investments:

- conservative scenario (Coega 1) – key anchor projects (the Billiton zinc refinery, the phosphoric acid plant proposed initially by Kynoch, and the PPC cement plant);
- optimistic Scenario (Coega 2) – above projects plus steel mill and stainless steel plant, and possibly a ferro-manganese smelter; and
- high road scenario (Coega 3) – above projects plus potential further growth, including petro-chemicals, batteries, steel mill ore processing, and several other firms which have expressed an interest (such as Powertech and Algorax).

This list is incomplete, for the *Eastern Province Herald* has reported other companies (such as Afrox) as also having expressed interest in investing in the IDZ since the Pakes and Nel report was written. Pakes and Nel’s economic scenario assessment, however, is unclear about how reliant all of these projects are on the Coega IDZ proposal. Some companies may well be able to (and/or intend to) proceed within the current industrial areas of Port Elizabeth, even if the Coega IDZ and Port project does not go ahead. These companies, for example, Algorax and PPC, will thus not be lost to Port Elizabeth.

An aspect which raises doubts about plausibility of the ‘optimistic’ and ‘high road’ scenarios is the lack of detail available about the key major projects listed, for example, the steel and the petro-chemical producing plants. Assuming environmental constraints would not exclude them from the area, are there any petro-chemical companies that are really interested in starting these industries in Port Elizabeth in preference to where one would expect them to be better situated, for example, at Mossel Bay or Durban?
The income and employment figures of the three scenarios are described in Table 1.

### TABLE 1: INVESTMENT, DIRECT INCOME AND EMPLOYMENT GENERATED IN THE COEGA IDZ PROJECT: SELECTED SCENARIOS

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Investment(^1) (millions of R)</th>
<th>Permanent direct income(^2) - EC (millions of R)</th>
<th>Permanent direct income(^2) - SA (millions of R)</th>
<th>Permanent direct employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(a) Conservative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New port</td>
<td>1 275</td>
<td>12</td>
<td>12</td>
<td>1 000</td>
</tr>
<tr>
<td>Other infrastructure</td>
<td>779</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc and phosphoric acid plants</td>
<td>2 325</td>
<td>179</td>
<td></td>
<td>750</td>
</tr>
<tr>
<td>Cement</td>
<td>(850)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - Conservative</td>
<td>4 379</td>
<td>191</td>
<td></td>
<td>850</td>
</tr>
<tr>
<td><strong>(b) Optimistic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4 379</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel plants</td>
<td>6 500</td>
<td>191</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - Optimistic</td>
<td>11 879</td>
<td>972</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(c) High road</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimistic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - high road</td>
<td>11 879</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed others</td>
<td>940</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total - high road</td>
<td>11 819</td>
<td>1 087</td>
<td></td>
<td>2 721</td>
</tr>
</tbody>
</table>

Sources: Based on Pakes and Nel (Tables 22–33, 1997); Black and Saxby (1996); African Environmental Solutions (1997).

Notes:
1. Total investment including both private and public sources.
2. Period of 25–40 years; plant decommissioning may be necessary after 40 years.
3. There are slight divergences in figures used by different sources.
4. PPC are included by Pakes and Nel (1997) in the construction phase of the project, but not in the operational phase. PPC have formally committed to the Coega project, but this represents a zero sum gain for Port Elizabeth given that PPC had already announced a new factory in the metropolitan area. A more consistent approach than that taken by Pakes and Nel (1997) would have been to have excluded PPC altogether from the investment, income and jobs analysis, which is the approach taken above.
5. The investment, extra permanent direct income and extra permanent direct employment attributed to the ‘assumed others’ (high road) are deduced using the same proportions as Pakes and Nel (1997) use with respect to the steel mill (Table 33).

These job creation and profitability data are considered in comparative perspective in the next section.
Coega contested

There has been intense controversy about Coega's appropriateness, both from a public interest perspective and from the standpoint of whether public or private funds should drive the large port investment (Wakeford, 1997c). Competing visions of economic development strategies have long divided Port Elizabeth's various interest groups. The area's citrus farmers, environmentalists, some sections of black communities, and organised labour have expressed disquiet about Coega. They have done so for reasons ranging from competing uses of resources to ecological concerns. The use of vast sums of public monies to subsidise corporate development is difficult to justify when there are competing projects that more directly serve the interests of the majority.

Indeed how much responsibility for Coega's capital expenditure falls on the public as opposed to the private purse, remains unresolved (Richardson, 1997b). According to Richardson (1997a):

private-sector stockholders slammed suggestions the harbour be a 'build, operate and transfer' (BOT) option, implying the private sector would have to finance the port and IDZ's infrastructure.

'The private sector has already committed over R30-million in project planning and hopes to invest R5-billion in industrial operations, on condition there is a port,' said Mark Drewell, of cement company PPC. 'To expect a port's dead infrastructure to be financed by the private sector is totally devoid of economic reality. This kind of infrastructure requires a public sector commitment. Only once the infrastructure is in place can we realistically talk about a public-private sector partnership' (Eastern Province Herald, 4 July 1997).

The public sector's R1,5-billion investment over three years would pay for itself, insisted Wakeford (quoted in Richardson, 1997a):

Its earning revenues would be R5,8-billion from personal and company tax, VAT and duties by 2005, plus the creation of at least 26 000 construction jobs and 14 000 permanent jobs based on anchor projects only. This figure gives no consideration to downstream investments, which hold huge potential. This should be reason enough immediately to commission the financing and construction of the port (Eastern Province Herald, 4 July 1997). (As noted below, however, actual business plans studied have nowhere near this number of jobs).

Funds from Portnet could be leveraged so as to justify the funding on economic grounds, Wakeford argues (interview 1998). With an annual profit in excess of R150-million from just its Port Elizabeth port, Portnet could establish a separate commercial business unit in the city so as to provide the basis for financing the R300-million a year it would require to service debt on the Coega port construction.

Yet, equally compelling estimates of alternative uses of the land and natural resources – particularly energy and water – have been made at a preliminary level (discussed below). Moreover, questions remain about one of the most important aspects of Coega: its harmonisation with international shipping trends.
Coega and International shipping trends

According to the sales director of P&O Nedlloyd, Richard Burmeister (speaking at the March 1998 Intermodal Africa Conference), 'Port Elizabeth is ideally situated on the southern tip of Africa and could become the major shipping hub of the sub-continent' if a deep-water port is constructed at Coega (Richardson, 1998a; Neill, 1998b). Proponents of Coega point to the 14–17m depth which global shipping will require of hub ports (Reid, 1998:10).

On the other hand, there is some question as to whether Coega is required when South Africa has existing deep-water ports on the Atlantic (Richard’s Bay) and Indian (Saldanha Bay) Oceans, and when trans-shipment from such ports might serve Port Elizabeth's development needs just as easily. 'The future of container ship development is clouded by the competing trends of economy of scale and Just-in-Time ocean transport,' according to Robert Reid (1998:14). The crucial question for Coega is thus whether the future is based on the fact that, as Reid (1998:10) puts it, 'container ship design is relentlessly pursuing economies of scale in capacity and efficiency' or, in contrast, on the fact that, simultaneously, 'revolutionary container ship designs are pursuing shorter transit times and higher service frequency' entailing 'smaller, faster ships (and) daily sailings'.

If the former is the case, a port at Coega may be sensible; if the latter is true, then it is probably more appropriate to develop other ports with better access to South African markets. The Maputo Port, for example, presently operates at roughly 30% the capacity it had just before independence in 1975 and notwithstanding the fact that it is in Mozambique, remains the closest port – at 400km overland distance – to the large Gauteng market.

Coega proponents claim that trans-shipment from large cargo ships that carry as many as 6 000 containers to smaller, speedy ships would have to occur in deep-water ports perhaps as far away as Latin America, thus adding R5 000 in cost per container (interview, Wakeford, 1998). But one expert, John Vogt (1998:2, 5) of Rennies Logistics, argues that today, ships 'are not just chosen to be bigger ... The proponents of extra deep berths to cater for the largest ships are not looking at economic logic'. Indeed as Reid (1998:18) conceded: 'Carriers' loadcentre strategies are still evolving; flexibility, adaptability, and reliability require that ports do more; and identifying the customer (carrier, third party, shipper) will remain a dilemma.'

In the intensifying competition amongst ports to attract carriers, the only variables that port management itself controls are infrastructure (channels and facilities) and pricing. Related cost factors (management-labour relations, inland connections, regulatory and environmental issues) can only be influenced (not controlled) by particular port managers. Other important factors (cargo routing decisions, ocean and rail transport services, vessel and inland transport technologies and competitor ports' strategies) are entirely beyond the ability of a single port to manage (Reid, 1998:20).
Coega's competition

Is Coega the optimal site for meeting these requirements, compared to Richard's Bay or Saldanha? The latter two ports are also in the process of upgrading. An important argument still to be established is which local ports can serve as transport hubs in Southern Africa more generally. According to Vogt (1998:3), 'to achieve volume for a cost effective port, you can not have many hub ports in one region. Inter-regional ships will not call at more than one port'. In Southern Africa, the ranking of ports by tonnage shipped in 1996 was as follows (Wessels, 1998:1–2):

<table>
<thead>
<tr>
<th>Port</th>
<th>1996 (Tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Richard's Bay</td>
<td>78 619</td>
</tr>
<tr>
<td>2) Durban</td>
<td>31 510</td>
</tr>
<tr>
<td>3) Saldanha Bay</td>
<td>20 350</td>
</tr>
<tr>
<td>4) Cape Town</td>
<td>6 797</td>
</tr>
<tr>
<td>5) Port Elizabeth</td>
<td>5 300</td>
</tr>
<tr>
<td>6) Dar es Salaam</td>
<td>3 535</td>
</tr>
<tr>
<td>7) Maputo</td>
<td>3 177</td>
</tr>
<tr>
<td>8) Beira</td>
<td>2 971</td>
</tr>
<tr>
<td>9) Walvis Bay</td>
<td>1 782</td>
</tr>
<tr>
<td>10) East London</td>
<td>1 269</td>
</tr>
</tbody>
</table>

The problem with the current Port Elizabeth facilities, according to Coega IDZ Initiative (1998:7) promotional material, is that it 'is a shallow water port permanently constrained by the historical urbanisation of the City. Continued development of the existing port for industrial purposes will furthermore limit tourism opportunities in the Metropole'. On the other hand, Port Elizabeth has begun making investments for modernisation, including four gantry cranes for containers that are:

part of a three-year programme to increase container handling capacity at the port. Refurbished cranes were bought from the port of Durban in May 1996 and again in 1997 to supplement the two existing cranes which were taken out of service for refitting. At the same time the height of the two cranes was raised to cater for post-Panamax vessels (Bay Public Relations, 1998c).

Unfortunately, the existing Port Elizabeth port – with its extensive sunk investments – would be largely redundant if Coega is built, since oil tanks and the iron ore berth would likely be moved to Coega possibly along with the refurbished cranes (Matavire, 1997). One use of the land may be for tourism, since for aesthetic reasons there is not much scope for Port Elizabeth's waterfront development while the port remains active. A casino and access to steam-powered rail for tourists have been proposed for the land around the port, which is said to be worth R500-million alone if the area were to be redeveloped (interview, Wakeford, 1998).

But Coega champions have not convinced shipping experts of its own superiority compared with regional competitors. Aside from Burmeister's presentation, conference papers from Intermodal Africa 98 – the most recent showcase for port and shipping issues in the region – included barely a positive mention of Coega, though deep-water bays at Saldanha (20.5m), Richard's Bay (19.5m), Nacala (60m) and Walvis Bay were...
discussed in depth, along with Maputo and Beira (both much shallower ports) and several West African ports. Depth remains an important aspect of competitiveness, although how important in relation to other factors is still not determined. Cape Town’s port is relatively shallow (and is also plagued by weather and capacity constraints). The Port Elizabeth port depth is 12.2m, while East London’s is 10.6m.

Coega’s disadvantages stem partly from the fact that due to the lack of existing facilities, there are few carriers familiar with its potential. Nevertheless, Coega champions like Wakeford (1997) argue that ‘Richard’s Bay is a sterling example of a greenfields project that created 30 000 direct jobs in a period of 20 years albeit that not even one anchor tenant was lined up prior to the commissioning of their deep-water facility’. The Port Elizabeth Regional Chamber of Commerce and Industry (1998:2) explains, however, that Richard’s Bay is now: operating close to maximum capacity and would require additional extensions ... The port and industrial park in the nearby area was constructed over 20 years ago and is not configured as a world-class modern entity. Major South African companies are also over-exposed from an investment profile viewpoint as they have not really had any other east coast deepwater alternative as a venue for new factories. Should Richard’s Bay for instance experience political or labour upheaval, not to mention the likes of a natural disaster, the consequences are obvious for any astute businessperson ...

Saldanha Bay are also experiencing capacity problems and in fact, are going through a minor expansion to cope with the increased activity ... We believe that Saldanha’s niche markets are location driven. Her positioning on the West Coast will attract those investors servicing Europe and the Americas. Coega on the other hand has a stronger focus on servicing those industries targeting the markets of the Far East and South East Asia. In addition, Coega is bound to attract industries that require a more modernised and purpose-built infrastructure.

Wakeford (1997b) concludes: ‘Both Saldanha Bay and Richard’s Bay will struggle to compete with a world-class modern facility at Coega.’ However, for this to be convincing, a more accurate assessment of Coega’s advantages and disadvantages must be made.

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**Coega’s challenges**

Coega faces a huge, acknowledged challenge: insufficient transport infrastructure. A central requirement for Coega’s development as a hub is the establishment of ‘feeder services between Port Elizabeth and Durban, and Port Elizabeth and Cape Town’, according to Burmeister (cited in Richardson, 1998a; Neill, 1998a). Moreover a ‘fast, dedicated and efficient rail link must be set up to Gauteng and a new and more modern railhead must be developed at an appropriate site’. In addition, Burmeister noted that a ‘large, well-established central warehouse must be established, run by professionals with modern and efficient systems’.

Another challenge remains the strong labour movement in the Eastern Cape, notwithstanding Coega promotional promises of a ‘specifically negotiated labour dispensation’ (itself not by any means secure, given resistance from the Congress of South African Trade Unions (Cosatu) to IDZs). According to an Andrew Levy and Associates study issued in
1997, 51.5% of all recent strikes were national, and were generally well-supported in the Eastern Cape. Only in KwaZulu-Natal (27.5% of all strikes) were there more provincial- and local-level strikes than in the Eastern Cape (9%) (Bay Public Relations, 1997c). Strike days in Port Elizabeth recently peaked at 262 934 in 1994 (the year of the national automotive strike) but were down to 72 941 by 1996, of which 70% were days lost to unprocedural strikes (Institute for Development Planning and Research, 1997:19). In August 1997, a 24-hour strike paralysed the province, leading the Port Elizabeth Regional Chamber of Commerce and Industry (PERCCI) to comment:

The time has arrived for the labour movement to 'get real' and accept that we are now an inextricable part of the international economy which is highly competitive and unsentimental to domestic problems ... The business community cannot sustain ongoing disruption and rolling mass action for much longer (Bay Public Relations, 1997a).

In addition to the potential for labour mobilisation — given that, in part, there is intense opposition from Cosatu to export processing zones such as Coega, where the main value added is inexpensive labour — ecological challenges are also certain to dog the proposed project. Citrus farmers protested about the potential emissions from the proposed zinc refinery in 1997. According to a Coega official, a study confirmed that 'if you have unbridled and uncontrolled development at Coega, the potential for adverse effects on peoples’ health, crops and agriculture is enormous'. However, he continued: 'It also confirms that if you keep emissions from industry to a minimum level, there should be no adverse effects on agricultural crops and particularly the citrus industry.' Although the study had been made available to the citrus farmers, the official said that 'despite that they remain unconvinced and have continued bombarding various authorities, ministries and private groupings with their objections' (Cull, 1997).

Nevertheless, Trade and Industry Minister Erwin rebuts: 'The environmental issue has been addressed and will continue to be addressed ... It would be stupid to go into projects that are not compatible with what the world will demand of environmental standards in the next 10 to 15 years' (Bay Public Relations, 1998b).

Still, concerns persistently arise — and have not been conclusively answered by Coega champions — regarding the extent to which the ecology will be protected. The need for independent analysis was recently highlighted by Richard Fuggle, one of South Africa's leading authorities on environmental assessment. In his commentary on the Strategic environmental assessment for the proposed industrial development zone and harbour at Coega, commissioned by the Coega IDZ Section 21 company and published by the consultants, Fuggle concluded:

This study is no more than a very general assessment of the proposed Coega project. There is no analysis of possible policy or programme alternatives: no systematic comparison of alternatives, and no analysis of how existing activities (for example, salt extraction, citrus farming, market gardening, dairying) will be affected by the new initiatives (review of documentation pertaining to the Coega IDZ initiative, for the Eastern Cape Citrus Forum, 14 July 1997).

Reflecting the ambivalence in resolving these controversies, there is currently a delay in getting the Coega project beyond the point of
feasibility studies. This has frustrated key Coega advocates considerably (Interview, Wakeford; Richardson, 1997c, 1998a; Neill, 1998a; 1998b). The legislation still required includes extensive tax breaks and other incentives to large firms associated with Coega, which together will give the impression that a system of corporate welfare is being established.

Given uncertainties about what firms will invest and what concessions would be granted, it is excessively speculative to estimate the costs associated with such tax breaks and incentives. But according to Wakeford (1998:2): ‘With over 300 top rate special economic zones world-wide, the location decision often becomes marginal, hence incentive packages and liberal tax regimes become critical to the final decision.’ Indeed, some incentives are already in place. As Paul Jourdan, deputy director-general of the Department of Trade and Industry, confirmed: ‘The Coega and East London IDZs would be the first industrial parks which enjoyed blanket tariff exemption for all products made for export’ (Bay Public Relations, 1997d).

After the main tenant – Billiton’s proposed zinc smelter – other industries are expected to enter the Coega IDZ. But their character remains largely unplanned, leaving open the possibility that Coega will follow the example of relatively poorly-linked South African predecessors, where mega-projects have not been sufficiently rooted in a local economy.

Wakeford (1998:2) notes the need for ‘market research to determine possible niche markets and the sustainability of proposed industrial clusters’. That such research has not been completed at this stage is a cause for worry; especially because the potential for South African industrial clusters has been thrown into question by the Department of Trade and Industry itself. After the Department commissioned detailed studies on thirty industrial clusters from 1994–96, the chief director responsible for the research testified to Parliament in 1997 that the entire cluster strategy was ‘in trouble’. Moreover, as Business Day (10 March 1997) reported: ‘Many cluster studies had taken on the aspect of a religious reevaluation where participants bowed down to the God of globalisation, but few concrete and measurable targets had been laid down.’

In a context in which a central anchor – industrial cluster strategy – has come loose, and with high-powered political leaders moving rapidly from one project to another, there is growing concern that Coega does not represent a particularly high priority (Wakeford, interview). Moreover, with private sector champions backing away from Coega due to the need for a public authority (comprised of politicians and administrators) to take the project forward in the crucial development stage, the current planning structure may not be capable of moving Coega forward. The difficulty of bringing all the pieces together is heightened by the emergence of an alternative proposal for Coega’s land and resources (see below), and the growing realisation that there are negative externalities associated with the proposed Coega industrial activity.

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**Negative externality costs of the Coega IDZ and Harbour Project**

The key negative externalities associated with the industrial activity at Coega appear in the damage that industrial activity at Coega will do to ecotourism, fishing income, agriculture and public health. More research is required on the income and recreation value losses due to the
Coega IDZ and Port project than is available in the environmental impact assessments. The estimates provided below are merely a starting point for further analysis.

ECOTOURISM AND RECREATION VALUES/INCOME

The proposed Greater Addo National Park, the beaches, the estuaries, the islands and the whales would all be adversely affected by the Coega IDZ and harbour. The Coega environmental impact report (Environmental Impact Report) (CEN, 1997:253) recognises that ecotourism may constitute an opportunity cost of the Coega IDZ. However, the issue is not explored, other than by way of noting that the National Parks Board has a vision of extending the Addo Elephant National Park to the mouth of the Sundays River (a questionable initiative if Coega's industrial activity proceeds).

That vision – the Greater Addo National Park Initiative (or Greater Algoa Park as it is sometimes referred to) – aims to incorporate the expansion plans of the Addo Elephant National Park with a contract parks system on privately-owned farm and various provincial reserves in order to bring more than 400 000ha under one management system and authority. Ultimately the Greater Addo National Park will consist of six biomes, ranging from marine coastline to Karoo scrub, through Alexandria and Afromontane forest, fynbos, savanna, grassland and valley thicket. The restocking programme has already begun with the intention of reintroducing all of the original fauna types, including the big five (interview, Anthony Hall-Martin, Director of Research and Development, National Parks Board. 20 April 1998).

The Coega IDZ interrupts the lateral bisect of the corridor between the Groendaal Wilderness Area and the Addo Elephant National Park. The opportunity cost of the Coega IDZ is the consumer surplus and tourist revenue foregone as a result of locating this extended national park further away from Port Elizabeth than if the Coega IDZ project were abandoned in favour of a plan which allowed for a contract park to extend into the Coega area as well.

Besides the Greater Addo National Park there are also a number of other natural tourist and recreational attractions which can be expected to be negatively affected by the Coega IDZ and Port project, for example, the Coega estuary, the St Croix Island group, the beaches in the area of the Coega mouth and the over 400 Southern Right Whales that annually enter Algoa Bay. Since 1996 whale watching has grown rapidly as a tourist attraction of Algoa Bay (interview, 21 April 1998, Dr Norbert Klages, Director of Research, Port Elizabeth Museum). There are some studies on the recreational value of these natural assets:

- Geach (1997), using the Clawson and Knetsch (1966) travel cost method, estimated the existing Addo Elephant National Park's annual recreational value to be over R300-million. Addo Elephant National Park receives about 80 000 visitors per year, about half of which are foreign tourists. The Park itself collected about R2,4-million from these visitors in 1992; about R3,4-million at 1996 price levels. Hotels, airlines, transport companies and other domestic businesses would undoubtedly have collected much more than this in providing services to these visitors. All these sums are included in the recreational valuation.

- Smale and Buxton (1985:142) felt that an estimate of the recreational value of the linefisheries in Algoa Bay was urgently
Elizabeth during 1981, much of which was hake (Smale and Buxton, 1985:141). Hake currently retails in Port Elizabeth for about R14 per kg, so 1 100 tons of it would fetch about R15-million. There also is a significant linefishery in the area (Wooldridge, Klages and Smale, 1997:27). During 1980, the catches of the 300 members of the Port Elizabeth Deep-Sea Angling Club were monitored, and it was estimated that they caught about 32 tons of fish (Smale and Buxton, 1985:141). Setting aside the recreational value of the club’s activities, the actual value of this fish is about R328 000 (assuming R14 per kg).

Actions which undermine this industry give rise to opportunity costs, but at this point in time there is insufficient information on which to base an estimate of them. If the undermining effect is only about 20% — a guess estimate — we could expect the opportunity cost to be about R20-million per annum (20% of (R85-million + R15-million)).

FARM INCOME AND AIR EMISSIONS

The Sundays River citrus and vegetable yields and animal products in the Coega and Alexandria areas, could all be adversely affected by Coega’s air emissions. The Eastern Cape citrus industry, which earned about R523 000 000 from citrus exports in 1996, is projected to earn about R706 000 000 in 1997 (Van Zyl and Ferreira, 1996). It employs about 19 000 people directly. Over 65% of this industry is located in the Coega and Sundays River valleys. About one third of the cultivated area in these valleys is under vegetables.

This citrus industry may be threatened by emissions in the air (and possibly wastes into subterranean water reservoirs) from the heavy industries located in the Coega IDZ. According to the study commissioned for the EIA process, ‘the level of fluoride emissions (from Billiton/Kynoch alone) can definitely be expected to injure plants in the Coega area, as well as for several kilometers along the narrow corridors of the predominant wind directions’ (Botha and Olbrich, 1997).

Second, with regard to the effects of sulphur dioxide emissions, the project manager of Billiton Zinc Refinery (Norman Green) made the point that ‘critical (life-threatening) SO levels for agricultural crops, forest trees and natural and semi-natural vegetation are used [in planning estimates]. These are, respectively, 30, 20, and 20ug/m$^3$’ (letter to C.M. Logie, 14 May 1997).

The zinc and phosphoric acid facility SO$_2$ levels are calculated in modeling exercises to reach levels of 15ug/m$^3$. It is unclear if this level includes the contribution of existing ambient levels within the proposed IDZ. The predicted normal ambient concentration of SO$_2$ in the air with the zinc/phosphoric acid plant is 59ug/m$^3$ (83ug/m$^3$ in upset conditions), but the levels are expected to be much lower where agricultural crops are currently grown (Coega IDZ Strategic Environmental Assessment Final Report, June, 1997:4, 33). The PPC plant is expected to contribute further to the SO$_2$ levels in the area and is not included in the strategic environmental assessment calculations. For these reasons the addition of further industries or expansion of the proposed ones are likely to push the levels of SO$_2$ and other air pollutants in the area close to or beyond the limit at which damage is expected to occur to plants in terms of Billiton’s air modelling exercise. While each of the emissions, in isolation, might not exceed critical levels, together they might do so.

Should the air quality in the Sundays River valley deteriorate to exceed the threshold levels of sensitive species, deleterious effects that
needed (so that the importance of the industry could be properly documented). McGrath and Horner (1996) provide us with some insight into the matter. Addressing a National Productivity Institute conference in Port Elizabeth they estimated that linefisheries in South Africa’s coastal provinces generated about R2 167-million in income (about 1.3% of the GGP of these provinces) and about 131 560 jobs. If this proportion is applicable to the Port Elizabeth area the linefishery industry alone is worth about R200-million per annum here.

- No studies have been carried out on the recreational values of visitors other than of fishermen to the beaches and dunes in the area, for example, bathers and hikers. Presumably it also would be substantial. Here we recognise that income generated for recreational uses is primarily sourced from higher-income households, whereas the non-pecuniary satisfaction of those users of the Coega area from lower-income households may also be substantial, even if impossible to enumerate.

- No studies have been carried out on the use values attached to the St Croix Islands, nor the recreational value to scuba divers of the diving sites in the affected area of Algoa Bay.

Based on those studies that have been carried out, the total annual recreational value of the natural assets negatively affected by the Coega IDZ and Harbour Project could be in the region of R500-million. If only 10% – a guesstimate – of this is lost due to the Coega IDZ and Harbour Project, the ecotourism opportunity cost per annum is R50-million.

**Fishing Income in Algoa Bay**

The potential opportunity cost of the Coega IDZ in terms of fishing yields is acknowledged in the Coega EIR where it is stated that this impact will need to be ‘considered’ (CEN, 1997:253). It is stressed that information on this score will need to be available before a decision on the harbour is taken (CEN, 1997:205).

The potential effects of the Coega IDZ and Harbour Project on the Algoa Bay fisheries are important, for the IDZ will undermine the growth of phytoplankton to the east of the proposed harbour as a result of disruption to the water circulation patterns in the bay from harbour structures. The phytoplankton growth in the area between the Coega River mouth and the Sundays River mouth is critical in sustaining the food chain in Algoa Bay.

More generally, the food chain upon which the fisheries depend will be disrupted, for at least three reasons: closure of important fishing grounds as a result of increased commercial shipping in the area Wooldridge, Klages and Smale, 1997); increased pollution in Algoa Bay (Final EIR, pp178, 180; Wooldridge et al, 1997); and dredging effects on currents in Algoa Bay, reduced photosynthetic activity, and disturbance of natural and anthropogenic contaminants in silts (Final EIR, pp175, 178, 180).

Understandably, many members of the fishing industry in Algoa Bay are concerned about the impact on their incomes of the Coega IDZ (interview, Rada Demain, Port Elizabeth Fishing Forum). The Chokka fishery in Algoa Bay is the third most productive in South Africa. It generated an income of about R66-million in 1993 (Dr Norbert Klages, personal communication, July 1997) which is equivalent to about R85-million in 1996. It is estimated that the inshore trawl fishery landed a total of about 1 100 tons of fish (1 550 tons live weight) in Port
may affect plant productivity may be experienced. More information is needed on current and predicted air quality levels to further quantify the potential impacts of Coega’s industrial development on vegetation (Botha and Olbrich, 1997:26). It is unclear how the above-mentioned scientists were that no deleterious effects occur with concentrations of SO₂ and other air pollutants over long periods of time higher than the current levels, but lower than the threshold levels they were working by. Recent medical research on human beings shows that even in the short term there are adverse effects on human health from increased exposure to air pollutants, such as SO₂, and at lower levels than were previously thought, that is, the SO₂ concentration did not exceed 200µg/m³. As Katsouyanni et al explain: ‘In Western European cities it was found that an increase of 50µg/m³ in sulphur dioxide or black smoke was associated with a 3% (95% confidence interval 2–4%) increase in daily mortality and the corresponding figure for PM₁₀ (particulate matter smaller than 10µm in diameter) was 2% (1–3%)’ (Katsouyanni et al, 1997:1658).

Assuming deleterious effects do occur, all of the following could be expected to be negatively affected: citrus and vegetable yields in the lower Sundays and Coega River valleys, and output of animal products in the Coega and Alexandria areas. Moreover, if the undermining effect is equivalent to 5% of the citrus yield of the Sundays and Coega River valleys, a per annum income sacrifice will be made by the relevant farmers of about R23-million (5% of R459-million). Citrus farmworker jobs would also be adversely affected.

In addition, presuming that the estimated threshold air pollutant concentrations are adhered to, serious limitations will be imposed on the nature and scale of other industries which may be considered in the proposed 10 000ha Coega IDZ. It stands to reason that if the zinc, phosphoric acid and cement plants use up most of the ‘safe’ capacity available in the air to assimilate pollutants, others after them will necessarily be more constrained in what they can do and the Coega IDZ site will be less appealing to these other prospective investors.

HEALTH COSTS

Since the 1900s mortality rates have fallen for most major causes of death. The most conspicuous exception is cancer, even amongst cohorts in which the percentage of smokers has decreased (Tietenberg, 1992:512). Increased exposure to toxic substances is thought to be a cause, although this is difficult to prove, due to the long latency periods for cancer (from 15 to 40 years). Based on the fact that the zinc smelter and phosphoric acid plant will substantially increase the levels of toxins in the area, an increase in the incidence of cancer could be expected amongst its residents some time after they commence production. In addition, there may well be a negative effect on health in the short term.

There are two distinct threats to public health from the pollutants emitted at Coega: sulphur dioxide, and heavy metal emissions (Tennille and Le Quénë, 1997). First, sulphur dioxide is one of the major pollutants that would be generated by the proposed zinc, phosphoric acid and cement facilities. Sulphur dioxide is widely acknowledged as a respirator irritant and a broncho-constrictor. Its effects seem to be particularly acute for asthmatics, which include a disproportionate share of low-income people. The specialist study on air pollution impacts commissioned for the Coega IDZ noted that such a threat was a very real concern, specifically if large increases in zinc production did materialise.
at a later stage in the development of the refinery.

The World Health Organisation (WHO) recommends a maximum hourly concentration of sulphur dioxide at 340ug/m$^3$. Under upset conditions, the hourly ambient air concentration of sulphur dioxide is predicted to be 328ug/m$^3$. This level does not appear to include existing pollution, and certainly not the substantial sulphur dioxide emissions from the proposed PPC plant. The inclusion of these estimates, which still must be done, could well increase the hourly concentration of sulphur dioxide above WHO guidelines. According to the SEA, the daily emissions from the zinc and phosphoric acid facilities would be 59ug/m$^3$ under initial production, rising to 89ug/m$^3$ under the proposed increase in production. The consequences of sulphur dioxide pollution should not be taken lightly. In particular, substantive new research from Europe indicates that the health consequences of sulphur dioxide may be more serious than previously believed. According to the new research, the levels of sulphur dioxide that would be emitted by proposed industrial facilities at Coega could lead to a 3% increase in mortality in the vicinity of Port Elizabeth (Katsouyanni et al, 1997).

Second, the heavy metal emission from the proposed facilities at Coega are potential carcinogens. In particular, significant quantities of zinc will be emitted into the atmosphere, as well as smaller quantities of arsenic, cadmium, cobalt, mercury, nickel and silver. These emissions pose a potential threat not only through direct transmission to humans, but also through accumulation in plants and soils which is then passed on to humans. This latter pathway is susceptible to contamination through much lower levels of contamination as toxicity levels in plants and soil can accumulate over a period of time.

Recently published research has indicated that the carcinogenic consequences of certain industrial facilities may be greater than previously believed. Hazard proximities of childhood cancers in Great Britain from 1953–1980, published in the Journal of Epidemiology and Community Health, demonstrate the increased incidence of childhood cancers among communities in the vicinity of industrial facilities, including some of the facilities proposed for the Coega IDZ. If 100 000 work days per year are lost due to increased pollutant levels in the environment, and each work day would generate R70, the health cost would be R7-million (a liability shared by national, provincial and local government). The really big expense would be the transfers of income required to care for the sick (which could easily triple this cost). If the additional cost of health care is double the production loss cost, it will be R14-million. The total cost of decreased human health would be: R7-million + R14-million = R21-million per annum.

**SUMMARY OF COSTS**

A summary of the estimated negative impacts of the Coega IDZ and Harbour Project is presented below. The income losses due to the Coega IDZ and Harbour Project should be subtracted from the income generated (see above) in order to determine the net income gain, as shown in Table 2.
TABLE 2: ESTIMATES OF THE NEGATIVE INCOME AND RECREATIONAL VALUE EFFECTS OF THE COEGA IDZ AND HARBOUR PROJECT

<table>
<thead>
<tr>
<th>(R millions)</th>
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</thead>
<tbody>
<tr>
<td>1. Greater Algoa National Park</td>
<td>15.00</td>
</tr>
<tr>
<td>2. Reduced fishing in Algoa Bay</td>
<td>20.00</td>
</tr>
<tr>
<td>3. Reduced citrus and vegetable yields in Sundays River valley</td>
<td>15.00</td>
</tr>
<tr>
<td>4. Ill health income losses</td>
<td>22.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>114</strong></td>
</tr>
</tbody>
</table>

Sources and notes: Africa Environmental Solutions

1. Based on 10% of estimated total annual recreational value estimated for Algoa Bay natural recreation assets (also see Final EIR Coega IDZ, p262).
2. Based on 20% of estimated annual income generated from commercial fishing in Algoa Bay (also see Final EIR Coega IDZ, p205).
3. Based on 5% of the value of the Sundays and Coega River valley citrus exports.
4. Based only on 100 000 working days lost per annum at R70 per day plus R14 for medical treatment of sick.

Coega’s use of water and electricity

CONSUMPTION PATTERNS

The two main industries seriously being considered in the Coega IDZ and Harbour Project are the zinc smelter and a phosphoric acid plant. Together these two plants are expected to consume 4 860 000 cubic metres of fresh water per annum, and 968 000 million Watt hours per annum. The electricity consumption of the two firms is expected to peak at 135MW, which assuming a power factor of 0.9, converts to a 150MVA requirement. This demand constitutes about 0.5% of Eskom’s total supply capacity and 4% of its available surplus installed capacity (African Environmental Solutions, 1997). The companies originally anticipated to produce the zinc (Billiton) and phosphoric acid (Kynoch) negotiated a separate deal whereby they would only purchase water from the Port Elizabeth municipality. Electrical power would be purchased directly from Eskom at the same reduced cost that Billiton negotiated for the Richard’s Bay aluminium smelter (African Environmental Solutions, 1997; interview, Nico Potgieter). The differential cost and use of capacity of both water and electricity are addressed below.

WATER

The cost of the water to be used in the zinc smelter and phosphoric acid plant must still be negotiated. The Port Elizabeth municipality are in the process of revising their tariff structure, replacing the flat rate of R2,18+VAT (R2,49) per kl plus an availability charge, with a 7-step tariff, starting at R2,43 per kl for the first 30kl per month and...
increasing in six steps up to R8 per kl for consumption in excess of 80kl. The change-over to a 7-step tariff is expected to come into force for domestic users from 1 July 1998. Charges for industrial users are not expected to be introduced as rapidly as this (reflecting the effective lobbying power of Port Elizabeth business representatives). At present a 3-tier tariff structure is proposed for industry, but the way the tariffs are calculated—with normal or base consumption levels as the lowest-cost tier—will make it likely that only the lowest rate will apply to industrial users. A higher rate only applies to industrial users who exceed these levels (Interview, Kevin Felix). The rate that would currently apply to Coega industries is the lowest rate, about R2.49 per kl. The lack of cross-subsidisation represents a lost opportunity, because the environmental impact assessment of the zinc refinery and phosphoric acid plant appeared to commit these companies to paying a price for water which allowed lifeline requirements to be satisfied first (African Environmental Solutions, 1997:14/2).

**ELECTRICITY**

Billiton and Kynoch had indicated from the outset that they would purchase their electricity directly from Eskom. Their demand is about 25% of Port Elizabeth's current demand. This purchase will be a customised pricing package; the details of which have yet to be determined. It is expected that they will negotiate the same arrangement as Alusaf (Richard's Bay), that is, the Megaflex tariff structure together with a commodity-linked pricing arrangement and an 'interruptable' power discount option (about 5–10%, in return for a potential interruption of service of up to about 100 hours).

Electricity pricing is made up of several components: basic charge, maximum demand charge, active energy charge, reactive energy charge, and transmission percentage surcharge (Eskom, 1998:16–17). The actual rates depend upon the spread of energy consumption over peak, standard and off-peak times. The electricity rates proposed do not provide any other consumers with a cross-subsidy, except possibly part of the installation costs of new electricity connections provided to new receivers in the electrification of South Africa project. At present rates of consumption the connection costs (about R2 500 per connection) of most of the new receivers cannot be recouped in service charges (Interview, Jonathon Probert). This failure to cross-subsidise at the local level makes it more difficult to realise the multiplier benefits of infrastructure, in economic and socio-ecological terms, as described below.

Which local authority will control the Coega IDZ is an unresolved issue at this point in time. However, it appears likely that all users of water and electricity (other than those who negotiate otherwise) will have to purchase it from the Port Elizabeth municipality, because this authority has the rights to supply these services along the coastal zone between the Sundays and Van Staden's River mouths (Richardson, 1998b).
An ‘agro-tourism’ LED strategy at Coega

As noted at the outset, concerns have been raised about the funding, land, air, water and electricity utilised by the highly subsidised Coega deep-water port and IDZ initiative. A feasible multiple-use alternative for Coega’s space and environment has been suggested, primarily by the citrus industry, and deserves a brief evaluation.

Tourism (as discussed earlier), mariculture, salt extraction and agriculture together form the basis of an agro-tourism option which would be impossible if the IDZ and harbour become a reality. This option also has negative environmental effects, but they are nowhere near as severe as the current Coega plans. The agro-tourism option does not exclude either light industry or the PPC’s proposed cement mining operations, but is more sensitive about the need for PPC, for example, to build its new factory in existing industrial areas.

Each of the projects discussed below – aquaculture, salt works, agriculture – is not only feasible, but already has private sector champions. In addition, an agro-tourism option could include a tourism proposal represented by the potential Umtha Welanga casino, recreation and hotel complex (details in Hosking and Hosking, 1997; Bond, Hosking and Robinson, 1998). The sum of these activities is impressive in terms of investment, income and employment. Each is already in operation or at a feasibility study stage. The mariculture industry – abalone farming – is envisaged by Marine Growers. National Ingredients Suppliers (National Salts) are responsible for the salt extraction works. Citrus farmers already in the Coega area are proponents of the agriculture alternatives, and promise to include black small-scale farmers (although the details are still to be established). The different projects making up the agro-tourism option are described next.

Abalone and oyster aquaculture

The June 1997 Coega environmental impact report (CEN, 1997:253) states that the management team of a perlemoen farm in the Coega area was of the opinion that the operation would have to relocate as a result of the Coega project. This conclusion is not disputed in the final EIR, which acknowledges that an investment of about R5-million has been made in the farm. Being a relocation, Pakes and Nel (1997:73) did not regard it as an opportunity cost. However, the potential of aquaculture in the area is much greater than the impression given in the EIR and relocation will not eliminate the opportunity cost.

In 1993, Urban Economic Consultants carried out an analysis for the Port Elizabeth City Council of potential employment and income generating industries for the area. Aquaculture was chosen as one of the top five opportunities. As a result of widespread poaching of abalone, natural stocks are being eroded and the market is becoming more dependent on supplies from aquaculture.
Each abalone farm unit is estimated to require an investment of R15-million when full production is achieved. The Marine Growers/Sea Harvest farm has not yet reached full production, as quite a few years are required to get a farm to this state of development. When in full production, each farm will employ about 175 permanent staff (about 85% of whom are unskilled) and yield about 80 tons of abalone per annum. All of the abalone is exported (it is processed as undersized in terms of the local regulations for natural stocks). The global market is big enough for increases in local supply to have virtually no influence over the price. The price that could currently be expected for this abalone is R300 per kg.

If other new farms can be developed elsewhere in the Eastern Cape, they will add to the region's income. However, the market for abalone is very sensitive to quality, and even minimal additional contamination by heavy metals over and above existing levels will render the output worthless. Marine Growers are of the opinion that the introduction of a zinc refinery and phosphoric acid plant into the area will cause contamination. According to Dr. Norbert Klages, a consultant for the Coega IDZ on the impact of the Coega IDZ on marine life, the Marine Growers are correct in arguing that their operation will be excluded by the Coega IDZ due to heavy metal emissions into Algoa Bay, harbour construction activities and interference with the circulation patterns within Algoa Bay (interview). Thus it can be deduced that the five abalone farms proposed in the area are an opportunity cost of the Coega IDZ and port project.

Salt works

National Ingredients Suppliers currently operate a salt works with sea water and constructed salt pans in the Coega River estuary. According to operations manager Pat Hill, the Coega IDZ and harbour proposals will result in the closure of the existing salt works (interview). This would severely prejudice their firm, because they have been experiencing great difficulty in finding and developing other suitable locations for their business. Hill declined to reveal the income they generate per annum, other than to express the view that R20-million sounded too low. He was prepared to reveal how many permanent staff they normally employ, namely about 136. Hence the Coega salt works is also an opportunity cost of the Coega IDZ and Harbour Project (for a supporting view, see the CEN, 1997:253).

Agriculture

Access to water is of primary importance to agriculture in the Coega area. The issue is not so much whether there is sufficient water available for heavy industry, but whether the case heavy industry can make for using this water is stronger than that which can be made by other industries. If water is available, and it appears that it is, it is clear that agriculture in the Eastern Cape would also like to stake a claim to it. With this in mind three scenarios are presented: a conservative one, an optimistic one and a high road one. In the conservative one only the quantity of water needed by the zinc and phosphoric acid complex is made available to agriculture in the Coega area (a reallocation of the
13,321 ML per day), while in the optimistic and high road scenarios bigger reallocations of water are made from the proposed industries of the Coega IDZ (49,5 ML per day and 100 ML per day, respectively).

The sites for which this water is proposed lie in the Coega and Sundays River valleys:

- **Lower Coega.** According to Clyde Niven of Amanzi Estates (Pty) Ltd. in the Coega River valley, the agricultural development of the lower Coega valley as prime citrus and peri-urban agricultural land has been proposed since the early 1930s. The limiting factor has consistently been the lack of water. As recently as 1988 an agricultural project was proposed here as a joint initiative between the Department of Agriculture and private landowners, but was again shelved due to water constraints. The land on which this project was proposed is identified as the lower Coega area and is 600 ha in size.

- **Logan Braes.** In terms of the Orange River Replanning Study an area of about 2,500 ha on the west bank of the Sundays River has been allocated for emergent black farmers. This area runs from Barkly Bridge south to Tankatara annex. It is a substantial area of prime, alluvial, arable land – suitable for high-intensity agriculture as soon as the water is available. This site is identified as the Logan Braes. To bring both the Lower Coega and Logan Braes sites into citrus production would require a bit less than 50 ML per day of water. Vegetables would require less.

- **Expansion of existing areas under cultivation in the Coega and Sundays River basins.** If 100 ML per day of water were made available to agriculture in the Coega and Sundays River basins, then besides the Lower Coega and Logan Braes sites, a further 3,189 ha of citrus could be brought under cultivation.

In sum, more jobs per one million litres of water are created in agriculture than in the proposed heavy industry. For each one million litres of water consumed per day (4,860 292 cubic metres annually), the proposed zinc and phosphoric acid complex is associated with approximately 56 permanent on-site jobs (and an annual income of about R20 423 000 from the complex’s production), compared with citrus farming in the lower Coega and Sundays river valleys which would generate 188 permanent on-site jobs (and an annual income of R4 389 000).

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**Summary of direct effects of agro-tourism option**

Estimates of the income and employment expected to be generated through the above projects are shown in Table 3. As is the case with the earlier analysis of the Coega IDZ and Harbour Project, no multiplier impacts are added in.
### TABLE 3: ESTIMATES OF INVESTMENT, DIRECT INCOME AND EMPLOYMENT GENERATED IN ALTERNATIVE SCENARIOS TO THE COEGA IDZ PROJECT

<table>
<thead>
<tr>
<th>Scenarios of activities foregone as a result of IDZ</th>
<th>Investment (millions of R)</th>
<th>Permanent direct income SA (millions of R)</th>
<th>Permanent direct employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Conservative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Umthathu Welanga tourism proposal</td>
<td>700</td>
<td>212</td>
<td>2 404</td>
</tr>
<tr>
<td>2. Marine Growers/Sea Harvest abalone farms</td>
<td>75</td>
<td>120</td>
<td>875</td>
</tr>
<tr>
<td>3. National Salt works</td>
<td>20</td>
<td>20</td>
<td>136</td>
</tr>
<tr>
<td>4. Agricultural projects with a 13,32ML per day water constraint:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Lower Coega</td>
<td>48</td>
<td>42</td>
<td>1 200</td>
</tr>
<tr>
<td>(ii) Logan Braes</td>
<td>19</td>
<td>16</td>
<td>469</td>
</tr>
<tr>
<td>Total – Conservative</td>
<td>862</td>
<td>410</td>
<td>5 084</td>
</tr>
<tr>
<td>(b) Optimistic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for projects 1–3 (above)</td>
<td>795</td>
<td>352</td>
<td>3 415</td>
</tr>
<tr>
<td>5. Agricultural projects with a 49,29ML per day water constraint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Lower Coega</td>
<td>48</td>
<td>42</td>
<td>1 800</td>
</tr>
<tr>
<td>(ii) Logan Braes</td>
<td>200</td>
<td>175</td>
<td>5 000</td>
</tr>
<tr>
<td>Total – Optimistic</td>
<td>1 043</td>
<td>569</td>
<td>10 215</td>
</tr>
<tr>
<td>(c) High road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for projects 1–3 plus 5 (above)</td>
<td>1 043</td>
<td>569</td>
<td>10 215</td>
</tr>
<tr>
<td>6. Additional agricultural projects with a 100ML per day water constraint:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with a 50,71ML per day in the Sundays and Coega River valleys</td>
<td>64</td>
<td>223</td>
<td>6 378</td>
</tr>
<tr>
<td>Total – High road</td>
<td>1 107</td>
<td>792</td>
<td>16 593</td>
</tr>
</tbody>
</table>

**Sources and notes:**

1. Hosking and Hosking (1997). In deriving this total estimate, 80% of the jobs and of what is generated per annum in the casino were deducted from the gross totals so as to take account of substitution effects in domestic consumer spending patterns in the Eastern Cape resulting from the introduction of a new casino. Also, 10% of the casino and hotel income was deducted, so as to take into account dividends sent out of the country per annum (estimated at about R12,4-million).

2. Connie Muller, Managing Director of Marine Growers (Interview, 21 April 1998).

3. Pat Hill (interview), managing director of National Ingredients Suppliers, Port Elizabeth. No income or investment figures were supplied by Pat Hill. Considering the size of the labour force and based on visual observation an estimate of about R20-million for the investment and R20-million per annum gross income would appear to be conservative.

4. Investment based on R80 000 per ha – for citrus.

5. Investment based on R80 000 per ha – for citrus.

6. Investment based on R80 000 per ha – for citrus.

7. Insufficient information was available to distinguish between income effects for the Eastern Cape and South Africa.
Infrastructure investment as a bottom-up LED strategy

The most direct way of enhancing local economic development in Port Elizabeth, and in most locales, is through employment that allows households to survive, reproduce and save for future consumption or investment. After considering the impact of infrastructure investment upon job creation in this section, we examine the related issues of worker productivity and small enterprise creation. However, the pricing of infrastructure and services is just as crucial, particularly the need for properly-designed subsidies and cross-subsidies (as an alternative to the existing policy). In addition, there is a growing awareness of the need for demand-side management of municipal resources (especially water). However, the progress envisaged in these areas is potentially threatened by the growing momentum towards privatisation of municipal services.

This section provides the essence of the ‘bottom-up’ approach to LED. There are many other aspects of the human and social condition that are promoted by access to infrastructure and municipal services, including greater gender equality, improved public health, lower levels of racial segregation, and improved social capital (Bond, 1998). However, it is primarily the economic case that is made for the purposes of this research report.

Jobs, productivity and SMMEs

JOB CREATION

Infrastructure-related employment is largely in the field of construction. Formal sector construction employment includes residential (high- and low-income groups), non-residential (commercial, industrial and civic amenities) as well as civil engineering construction (for infrastructure, bulk infrastructure and earth works).

Employment based upon infrastructure development was often anticipated to be the main engine of job creation in post-apartheid South Africa. For example, in 1993, formal sector employment generated by low-cost housing construction alone was estimated by National Housing Forum consultants as increasing from 233 000 in 1992 to 400 000 in 2010, and related informal sector employment from 984 000 to 1,7 million (BMI Building Research Strategy Consulting Unit, 1993:70).

According to the Growth, employment and redistribution (Gear) strategy: ‘Construction is largely labour intensive and provides jobs and training, while improvements in housing and infrastructure enhance the productivity of labour and the quality of urban life.’ Gear also estimated that ‘Government programmes can add a further quarter of the new jobs, mainly through accelerated labour-based infrastructural development and maintenance of public works in urban and rural
areas (Department of Finance, 1996, appendix 6.2 and section 8.2). The Green Paper on Public Works noted that with respect to job-creation:

'Some estimates are that 3-3.5 million people could benefit from public works programmes in South Africa today (depending on the state of the economy, the number participating at any one time would probably be 1-2.5 million)' (Department of Public Works, 1996:4). Thus far such expectations have failed to materialise. Yet infrastructure and housing continue to be key Reconstruction and Development Programme policy priorities, and construction work more generally remains an extremely important part of the labour market, as well as in relation to fixed capital investment.

There have been three main sources of research on potential employment creation associated with infrastructure (including housing construction). These have been based on formal sector jobs alone (Merrifield, 1996), upon hypotheses about informal sector activity (conducted by the Building Industries Federation of South Africa (BIFSA)), and upon jobs associated with infrastructure investment through the ‘Urban Infrastructure Investment Framework’ (UIIF) (RDP Ministry, 1994/95). Since BIFSA's methodology highlights the informal sector and since much government policy indirectly lends itself to the development of this sector, it is worthwhile to include a description of this indirect feature within the construction industry.

It is possible to estimate the ratio of employment per R1-million spent in the construction industry. Of greatest influence is whether employment is in residential, non-residential or civil engineering construction, with employment varying between 12,5 jobs per R1-million in non-residential new construction to 23 jobs per R1-million in public housing construction. However, employment generation in the civil engineering sector is much lower, with only 6,7 jobs for every R1-million spent. But by adding employment creation in the informal sector, the average for all housing construction is raised to as high as 29,6 jobs for every R1-million spent, a figure competitive with labour-intensive manufacturing (Merrifield, 1996).

BIFSA's (1995) estimates for employment creation through construction are nearly as optimistic: 27,6 jobs for every million Rand spent. The method used to arrive at this figure is – using Receiver of Revenue statistics of total turnover in the construction industry (R18-billion) – to extrapolate based on assumptions regarding the ratio of materials to labour (at specified levels of wages). Although the informal sector is not explicitly included in this methodology, total turnover does include building materials purchased from formal sector suppliers, which in turn lends itself to some measure of informal building activity, albeit indirect.

Based on differing assumptions about ratio of materials to labour, BIFSA generated scenarios about the components of construction that relate to differential skills. Drawn from industry data, the most common scenario for the components of construction work is the following: 50% unskilled workers at R45 per day; 26% semi skilled workers at R72 per day; 19% skilled workers at R120 per day; and 5% supervisory staff at R160 per day. The apparently low daily wage for unskilled and semi-skilled workers takes into account the irregular nature of employment for workers in this industry, especially those in the informal sector who are usually laid off between contracts. By weighting skills in this way, BIFSA conclude that 27,6 jobs are created for every R1-million spent in the construction industry.
The UIIF assumptions and calculations were even more ambitious. On the assumption that intermediate-level standards would prevail on average for South Africa as a whole, for every R1-million spent on infrastructure, 200 person-years in direct employment could be generated in construction work (along with another 30 person-years in indirect employment). The estimated job creation of bulk infrastructure, upgrading and new stands worth R19.2-billion would be 4,426 million jobs per annum (RDP Ministry, 1994/95:72).

PRODUCTIVITY

It is not only the quantity and remuneration of jobs that is important, but increasingly the quality of employment and the depth of skills that employees bring to their work (World Bank, 1993). There are several means of considering economic benefits that flow from enhanced literacy and productivity of citizens. Electrification reduces reproductive rates through altering social relationships and generating economic opportunities, and as a result, women in electrified areas place more emphasis on children’s education than on children as productive agents. Electrification provides some of the essential prerequisites for education, such as lighting and opportunities for efficient administration. In addition, it generates the potential for longer school days, opening of night schools and access to audio visual aids. It enables children and adults to study at home and offers the opportunity for health promotion through the broadcast media such as television and radio.

Education has been shown to impact directly on a range of variables which, taken together, contribute to the health status of domestic units and ultimately of the nation. There is a high rate of social return through investment in education and this rate of return is substantially higher for women than men. Female education has been shown to impact upon reproductive rates, child-rearing practices and child mortality rates. Higher levels of maternal education have a significant impact on nutrition of children, improved child health and reduction in diarrhoea morbidity.

The use of electricity in a household can have several effects on the productivity of inhabitants. Firstly, improved lighting brings about considerable improvements to the quality of the working environment of students and scholars. The ability to study at home, although also dependent on other factors such as the number of people in the household and the number of rooms available, is certainly enhanced through electrification. Improved lighting and air quality can also increase the quality of life of inhabitants, and this has a positive effect on their productivity in places of employment or income generation.

Finally, good health results in fewer days lost to illness, increased productivity, greater opportunities to obtain better paying jobs and longer working lives. Healthier workers earn more because they are more productive and can get better paying jobs. Environmentally-caused diseases have been shown to impair productive work and lead to heavy loss of income and malnutrition in family members. When illness occurs, the loss of income is borne by the household and healthier members have to work harder and longer to make up for the loss in income. This is particularly a burden on the women caregivers of each household.
SMMES

The anticipated burgeoning of SMMEs may be hampered at the outset if access to infrastructural services such as water and electricity is not ensured. This is particularly the case for small enterprises (which tend to hire low-income workers) and for micro-enterprises (which are often a survival strategy for the low-income people themselves).

Such infrastructure access often comes initially through home-based activities, so a full supply of services (not limited, for example, to a single yard tap or small-voltage electricity meter) to residences can also be seen as an investment in local economic development. It has been estimated that one new small business can be created for every ten electricity connections, and that during the next ten years an additional R8-billion will be spent on appliances from electrification (at existing rates of expansion), which in turn has spin-offs in the domestic appliance sector (Bond, 1998). But measuring the impact of infrastructure on SMMEs is difficult.

To take one example, it is notoriously difficult to quantify the multiplier effects of electrification. Econometric studies of electrification have generated (unrealistic) estimates of up to 1 000 000 new jobs created during the first ten years of the programme, with an 11% cumulative increase in the gross domestic product (GDP). More accurate analysis based on recent experience with electrification suggests that for every 100 households which are connected, between 10 and 20 new economic activities are started. For example, electrical fridges are often acquired by small traders to store drinks and perishable goods. In one rural KwaZulu-Natal town, of 23 enterprises 21 required electrical refrigerators to store produce, meat and drinks for sale. The benefits of moving from very low electricity supplies (5–8 Amps) to an intermediate 20A supply are particularly large given the need to operate appliances such as refrigerators and small motors. For enterprises involved in welding or carpentry, higher levels of service are required (Van Horen, 1994; 1996).

Infrastructure service pricing

THE NEED FOR CROSS-SUBSIDIES

To achieve any of these local economic benefits of infrastructure investment requires very close attention to the ongoing subsidies that will permit the systems to operate. Indeed the primary reason that infrastructure investments do not pay off is that many people do not have enough income to afford the recurrent (operating and maintenance) charges associated with the service. Eskom’s rural electrification programme, for example, has had enormous problems paying for itself because consumption levels are so low due to lack of affordability. Clearly, an alternative approach is required based on the constitutional responsibilities set out above, namely the provision of at least a basic minimal amount of water/sanitation (50 litres per person per day is the medium-target in the Reconstruction and Development Programme) and electricity (20 kiloWatt hours per capita per month) as a lifeline amount, with higher volume consumption (that is, following the 50th litre of water) attracting much higher (and rising) tariffs.
In general, the best administrative system for this would be a free lifeline amount provided through metered taps and metered electricity hookups, with technical systems to reduce the amount to be consumed to the lifeline minimum in the event of non-payment on amounts higher than that minimum. This is technically feasible and inexpensive, and has already been applied in some circumstances in South Africa. At present, 61% of Port Elizabeth residents have water meters, and all those who presently receive subsidies have, in return, agreed with the municipality on the issue of delimiting the water flow through washers in the event of non-payment.

The issue of consumption levels has implications for the wider benefits anticipated from infrastructure. For example, to realise the health benefits of infrastructure, the quantity of water is almost more important than water quality. For this reason, municipalities should strive to supply private household taps or, at minimum, yard taps when they make infrastructure investments, as distance to the water source is the most important factor affecting the quantity of water used by households. Improvements in both water and sanitation produce larger impacts than either alone. In addition, providing a lifeline source of water would make an enormous difference, given present low levels of per capita water consumption in low-income communities.

A cross-subsidised lifeline system must obviously be designed with a careful regulatory approach so as to avoid ruinous competition between individual service providers (municipalities or provinces competing for corporate investment or wealthy residents’ settlement by lowering the cross-subsidies). This approach to pricing services is not unusual when broader social objectives are at stake. For example, the South African government did not adopt a cost recovery approach to primary health care (it is free to all citizens) only because health is a basic human right guaranteed in the Constitution’s Bill of Rights and because low-income people’s spending on health care is typically subtracted from spending on vital food and other components of good health, but also because it is administratively expensive to do so. Cost recovery administration often costs more than what can be squeezed out of low-income people desperate for treatment.

In Port Elizabeth, there is already cross-subsidisation with respect to the provision of electricity. Other council spending benefits from large surpluses made on electricity. According to the Port Elizabeth municipal operating budget, the 1996/97 spending on electricity was just over R405-million, while income was R477-million, leaving a R72-million surplus. Other major services ran at a loss, including water (R97-million expenditure, R87-million income), sewerage (R70-million expenditure, R57-million income) and refuse (R30-million expenditure, R29-million income). The entire city budget was R987-million in 1996/97, and income amounted to R1 017-million, allowing a R30-million surplus.

**THE INDIGENCE POLICY**

Instead of promoting cross-subsidisation from high-use commercial, industrial and residential consumers to low-income consumers, however, a different policy was adopted for subsidising rates and recurrent water charges (though not electricity, which is unsubsidised), known as the indigence policy.

If a household lives in some dwelling supplied by the Port Elizabeth Municipality and their earnings are below a specified level, they qualify for a provincially funded subsidy of their water and rates; the subsidy
would depend on their level of income. The amount of water subsidised is limited to 12kl per month. Surprisingly, if consumption of 12kl water per month is exceeded only 6kl is provided free (not 12). To qualify for a 100% subsidy a household must earn less than R470 per month, and to qualify for a 50% subsidy it must earn between R470 and R800 per month. (Also under review is the possibility that households with two pensioners and hence an income of R940 per month will also qualify for the 50% subsidy.) About 9 000 households receive a 100% subsidy and 10 000 a 50% subsidy. Many people, who would qualify for a subsidy on the basis of their low incomes, are left out because the dwellings they live in have no connections to the municipal water supply. Of approximately 256 000 Port Elizabeth households, only 19 000 have signed up to receive the indigence subsidy, notwithstanding the estimate (according to a 1997 survey) that 55 000 households earn less than R800 per month. (Interview, Abri Vermeulen).

The administrative costs of the indigence policy are high, at more than R115 000 per month just for wages of workers who must monitor the policy. Council decided in July 1997 to hire 80 staff on one-year contracts.

Disconnected have risen significantly in the wake of the application of the indigence policy, as the council apparently believes there is increased legitimacy to disconnect those not accommodated by the policy. According to Van Huysesteen (1998:12): ‘Currently about 4 000 [pre-paid meter] installations are inspected per month, with about 800 disconnections being carried out.’ In fact, the last three months of 1997 witnessed 12 698 electricity disconnections, followed by 9 931 reconnections. There were 534 water disconnections and 218 reconnections. According to Port Elizabeth’s submission to Project Viability, the number of debtors paying accounts regularly was 89% of the total 256 770 households in the municipality (Department of Constitutional Development, 1998:4).

**SUBSIDIES AND CROSS-SUBSIDIES IN WATER AND ELECTRICITY PRICING**

As noted above, a universal lifeline supply is an alternative approach to meeting the needs of low-income people, for it better targets subsidies to those with low consumption. If 50 litres per day per person lifeline water and 20kWh per month per person lifeline electricity were provided to all urban households in Port Elizabeth, the following amounts of water and electricity would be required per annum (assuming a population of 256 000 households with an average of 3 per household): 14 016 000kl of water, and 184 320 000kWh of electricity. The municipality’s foregone revenue from providing the free water would be R30 554 880 for consumption plus R8 509 440 for availability, for a total cost of R39 064 320 (VAT not applicable). The cost of the electricity would be R35 984 793 (VAT not applicable) (Bond, Hosking and Robinson, 1998).

With the cost of universal electricity lifeline supply easily within the existing electricity budget surplus, and water supply at a similar reasonable cost (both below R40-million per annum), there remains the issue of which sectors can carry responsibility for the cross-subsidy associated with lifeline supply. The analysis depends upon the price elasticities of water and electricity, which are not feasible to estimate in cases where quite large increases might occur, and which vary substantially across the range of user groups.
In the case of water, at the flat rate of R2.18 per kl and the set availability charges prevailing up to the end of June 1998, the costs of water supply (R103.9-million per annum) are just covered at current budget levels, leaving only a small surplus on water provision for the city of about R1-million per annum. Availability charges are set according to the diameter of the pipe supplying the water. The smallest pipe charged for is a 15mm one; the charge being R2.77 plus VAT per month. The largest pipe charged for is one exceeding 150mm, and the charge for it is R207.75 plus VAT per month (Schedule of Prescribed Charges in terms of the Port Elizabeth Water Supply By Law; interview, Tom Proudlock, 21 April 1998). However, a new 7-tier tariff structure on domestic consumption proposed for 1 July 1998, is expected to generate a surplus of about R14-million over the financial year 1 July 1998–30 June 1999. It would also be possible to impose sharper increases in the tariff structure, and to apply it to commercial (not just residential) users. As noted below, however, there is resistance to this approach amongst council officials (who instead apparently favour privatisation as a route).

In the case of sewerage, the Port Elizabeth Municipality currently charges R11.46 for sewerage service provision to all of the 35 000 households which live in formal dwellings but have no water meters installed, and charges R6.50 to the 20 000 households who live in informal dwellings to whom they provide these services (these charges are called community charges). With the new 7-step water tariff system a new sewerage tariff system will also be introduced – a hydraulic tariff system, with a proposed rate of R1.20 per kl.

In the case of electricity, current plans will allow the zinc smelter and phosphoric acid plant to avoid paying the Port Elizabeth Municipality for their electricity, which would in turn prevent the municipality using these payments to raise a surplus on electricity sales. The Port Elizabeth Municipality was able to generate a surplus on its electricity provision of R72-million in 1996/97. This surplus is currently channeled into general revenues and has the effect of reducing the rates payable. The Coega IDZ anchor companies are forecast to use about 25% of what all existing consumers in Port Elizabeth do. In bypassing the Port Elizabeth Municipality as an electricity vendor, the zinc and phosphoric acid producers will therefore avoid contributing about R18-million to Port Elizabeth in the form of surplus on electricity sales. If this surplus was captured and used to provide lifeline electricity supplies, more than 92 million kWh could be supplied, thereby enabling more than 380 000 people to have free access to 20 kWh per month (City of Port Elizabeth Electricity Tariff Summary, 1 July 1997–30 June 1998). If higher rates were applied, much more cross-subsidisation would be feasible.

In conclusion, there is scope for cross-subsidisation in water and electricity tariff structures in the Port Elizabeth municipal area. But such cross-subsidisation is only one element of demand-side management, particularly as applied to water. As noted in the next section, there is emerging resistance to the concept.

The case for demand-side management

The municipality's partial movement towards cross-subsidisation partly came through a 'carrot', offered by Water Affairs and Forestry Minister Kader Asmal, 'of an amount of R5-million and a further unspecified eight-figure sum for the purpose of creating over 2 000 job
opportunities clearing invasive alien vegetation and planting indigenous vegetation in the Driftsands Forest Reserve together with such other areas in the city as may be agreed ...' (Port Elizabeth Municipality, 1998:1). The Department of Water Affairs and Forestry carrot was attractive, and highly celebrated as a means of combining public works employment, ecological conservation and water systems management (Bay Public Relations, 1998a). One reason is that the number of people that can be supported by this programme is extremely high (in part, unfortunately, because of the relatively low wages paid). Moreover, the number of women included is anticipated to be far higher than their ratio in the formal workforce, which is itself an effective poverty alleviation targeting strategy.

Because of the catalyst provided by this funding, and on the basis of further lobbying by the Working for Water programme, at a meeting on 29 January 1998 the Council committed Port Elizabeth to ‘become a major role model through the development of an urban water management system’. This system is defined as ‘the reduction of the demand on the supply system to extend the useful life of the system rather than increase the supply capacity’ (Port Elizabeth Municipality, 1998:1–2). The proposed urban water management system would include: a) a Port Elizabeth Working for Water project; b) a multiple-stepped water tariff; c) an assurance of supply tariff; d) informative billing; e) intensive communication; f) water audit by schools; g) use of water-saving devices; h) water-wise gardening; i) water-wise food production; j) national water regulations; and k) water loss management. Costs of implementing the system would be met from general rates. Most elements of demand-side management are new, although one that isn’t, water loss management, has been policy since at least 1965, according to the City Engineer. However, the number of water loss inspectors had been reduced from eight to three and hence ‘very little water loss management is practiced’ (Port Elizabeth Municipality, 1998:8).

Changes of the magnitude desired are often difficult to cope with, and the City Engineer made various objections to some of the demand-side management techniques. For example, the information sheet included with the account was meant to include a graph, but ‘many consumers will not comprehend the graph and water meters will have to be read monthly. Informative billing can only be applied to consumers who are metered’ (Port Elizabeth Municipality, 1998:5–6). Metered consumers represent just 61% of all households (Port Elizabeth Municipality, 1998:5–6). (Large consumers who most need to conserve and who are metered would, however, understand the graph.)

Most objections, however, were raised by the City Engineer about the implementation of rising block tariffs. Not only have the number of blocks been reduced from the Department of Water Affairs and Forestry’s proposed 11 blocks to 7 blocks, but businesses have been excluded (and when they will be included, the block tariff structure will not be noticeable at normal consumption levels). Yet the concept of progressive block tariffs isn’t new to Port Elizabeth, for increasing block tariff rates has been applied ‘during times of water shortage when the situation is critical but not an emergency’ (four increasing tariff rates applied).

The first block has never been free, however. Moreover, Port Elizabeth has traditionally charged a tariff for availability (assurance of supply) to all consumers so as ‘to ensure recovery of fixed costs which is important for a small municipality where houses may not be occupied in Winter’ (probably referring to other coastal resort communities). However, noted
the City Engineer: 'Since 1989 it has been the policy of the City
Treasurer and the City Engineer to remove the availability tariff but lack
of sufficient income to the Water Fund has not allowed the removal of
this tariff.' The Department of Water Affairs and Forestry proposed
increasing the availability tariff from R2,77 to R10 per month (both with
VAT added) (Port Elizabeth Municipality, 1998:3).

The proposed block tariff system would cause quite dramatic changes
to billing and distribution systems. Indeed, noted the City Engineer (Port
Elizabeth Municipality, 1998:4):

The tariff principles which have been applied to tariffs promulgated
by the Council, differ with the White Paper on Water Supply and
Sanitation Policy, November 1994. A life-line tariff proposed by the
White Paper is not applied by the municipality. The application of a
life-line tariff will mean the duplication of welfare support by cross-
subsidisation within the service and by the subsidy scheme for the
indigent.

Having set up an indigence policy, as promoted by the Department of
Constitutional Development, that notably failed to achieve its stated aims
of assuring all those with low incomes adequate access to water, Port
Elizabeth’s officials then used the policy’s existence to argue against a
replacement policy promoted by the Department of Water Affairs and
Forestry. The policy confusion at national level, which had grown since
the World Bank initially drafted the Urban Infrastructure Investment
Framework in early 1995 – advising government to eschew cross-
subsidies in favour of denying water to individual low-income households
(RDP Ministry, 1994/95; Bond, 1998) – had by now trickled down to
local level.

The implications of the policy confusion will only become more
onerous for low-income residents. In July 1998 Port Elizabeth consumers
will be subjected to the first (logical) linkage between sewerage tariffs
and water consumption and ‘it is expected that water consumption will
decrease’ (Port Elizabeth Municipality, 1998:9). Only in July 1999 will a
‘gradual stepped tariff’ apply, and then only to ‘domestic consumers who
consume large volumes’, not commercial and industrial users (Port
Elizabeth Municipality, 1998:5). In other words, the cross-subsidisation
of water will be limited at the outset to within the existing residential
consumer base, even though this was responsible for only 40% or so of
the total water bill. The possibility of raising the extremely low water
rates for large businesses had already been discounted by virtue,
reportedly, of strong Chamber of Commerce lobbying.

Ironically, on grounds of common sense, the idea of a ‘lifeline’ service
(of 12kl per month) to all Port Elizabeth residents was supported,
personally, by the city’s deputy treasurer, who realised that the high
administrative costs and partial coverage of the existing indigence policy
were counterproductive (Port Elizabeth Municipality, 1998, 5, interview,
Wilson. 31 January 1998). Nevertheless, amongst the reasons given by the
City Engineer for his resistance to lifeline and progressive block
tariffs were that: ‘Water rebates are granted by the City Treasurer under
specific circumstances to avoid financial hardship for the consumer. If an
eleven point stepped tariff is adopted, rebates will require time
consuming calculations.’ The idea of replacing the rebates with a simple
lifeline policy was not considered. The City Engineer added that: ‘The
eleven point stepped water tariff ... is not simple for consumers to
comprehend and administration will be very difficult’ (Port Elizabeth
Municipality, 1998:5–6). Moreover, the spectre of privatisation emerged when the City Engineer firmly advocated not adopting the multiple-point stepped water tariff because a tender for a full investigation of how to privatise the city’s water had just been bid upon, ‘and a change in the water tariff at this stage may pre-empt later tariff proposals to the disadvantage of the Municipality’ (Port Elizabeth Municipality, 1998:5).

The spectre of water privatisation

The basis for water privatisation was a visit by the World Bank’s deputy president representative in September 1996. The week-long model-building exercise he conducted with the Deputy Treasurer focused entirely on one option: increasing capital expenditure by privatising the city’s water works. Various claims about likely efficiency enhancements were made, some of which — such as the feasible reduction of staff from 6,5 to 3,5 per 1 000 water consumers, and a 1,2% interest rate advantage on capital-related borrowing for a private firm in contrast to the municipality (Port Elizabeth Municipality, 1997:2) — were based on dubious assumptions. In short, argued the Deputy Treasurer and World Bank, only the loss of many hundreds of union jobs, the opportunity for huge rates of private profit, and the more thorough commodification of services will allow the city to expand water-related infrastructure to tens of thousands of residents of unserved townships.

At a two-day meeting to discuss the matter in early February 1998, critical reactions emerged. Representatives of the South African Municipal Workers’ Union (Samwu) recalled their own national slogan — ‘No to privatisation! 50 litres of water per person per day free of charge!’ — as a means of disentangling the false division between producers and consumers. Outsiders offered advice. A Johannesburg lawyer from Rand Water — the country’s largest intermediate buyer of water — suggested a ‘public-public’ partnership based on a water utility model instead. A representative of the International Labour Research and Information Group in Cape Town presented options for public sector reform as a means of improving services.

All of this was reactive, however. Already a year earlier, the municipality’s Director for Administration conceded, there had been ‘pressure for Port Elizabeth to carry the [privatisation] investigations further ... from banks and commercial concerns’. Banque Paribas, Rand Merchant Bank, Colechurch International, Development Bank of Southern Africa, Generale des Eaux, Metsi a Sechaba Holdings, Sauer International and Lyonnaise Water had all met with Port Elizabeth officials, as well as the Department of Constitutional Development, which allocated R2-million from a R50-million US Agency for International Development grant to fund Port Elizabeth’s PPP business plan development (Port Elizabeth Municipality, 1997:6). The workshop participants found themselves, in a sense, at the end of a chain that began with international capital and that was welded together by international development agencies and national and local states.

The prospect of privatisation, hence, appeared as one of the forthcoming barriers to socially-just tariffs, which in turn could have been the basis for a local economic development strategy with bottom-up, not top-down characteristics.
Conclusion

In one of the most detailed studies ever conducted of the apartheid economy, Ben Fine and Zav Rustomjee (1996:252) conclude The political economy of South Africa with the observation that South Africa's 'strengths arise out of the productive and infrastructural capacities that have been built up around its core [minerals and energy] sectors. The weaknesses arise from the failure of this to be vertically integrated forward into the rest of the economy'.

The weaknesses of Port Elizabeth's leading LED strategy – the Coega IDZ and deep-water port – follow directly from the failure of its proponents to establish the conditions for forward linkages. Public funds, land, marine activities, water, and electricity are to be utilised in enormous quantities at Coega. A combination of other activities – for example, the agro-tourism option promoted by other local interest groups – provides greater benefits and more sensibly and sustainably utilises these resources. In particular, a basic need infrastructure investment and cross-subsidisation strategy would generate both human comfort and economic activity and would transcend the current provision of municipal services.

As Fine and Rustomjee remark (1996:252):

we place considerable emphasis upon a state programme of public expenditure to provide social and economic infrastructure. This forms part of a strategy to provide for basic needs. The problem of how to finance such a programme is less acute than the formation of the political, social and institutional capacity to carry it out.

In short, for South Africa in general, infrastructure and a more balanced utilisation of resources such as water and electricity should be at the very foundation of any economic strategy. This was confirmed in the Reconstruction and Development Programme in 1994:

The RDP integrates growth, development, reconstruction and redistribution into a unified programme. The key to this link is an infrastructural programme that will provide access to modern and effective services like electricity, water, telecommunications, transport, health, education and training for all our people. This programme will both meet basic needs and open up previously suppressed economic and human potential in urban and rural areas ...

(African National Congress, 1994, Section 1.3.6).

The difficulty of relying on a major piece of transport infrastructure – the R1,5-billion publicly funded Coega port – that is oriented to capital-intensive, export-oriented economic activity, while so much other basic infrastructure is not being delivered, should be obvious. In that sense the Coega IDZ and Harbour Project exacerbates the apartheid economic legacy of division and marginalisation, rather than providing a viable model for top-down LED. Even an LED model promoted by oppositional citrus industry and tourism interests fares better in any direct comparison of benefits.

The logistical and financial aspects of an alternative, bottom-up LED strategy have already been documented in this report. What is lacking,
however, is what Fine and Rustomjee refer to as 'the formation of the political, social and institutional capacity to carry it out'. That capacity can only be built from a base of adequate information. While this report begins the process, perhaps, by identifying key problems, far more work must be done – in line with Port Elizabeth's other governance processes such as land development objectives, integrated development planning, participatory budgeting, etc. – to give the city's citizens an opportunity to make the choice themselves about what kind of LED strategy would work best for them.
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**List of interviewees**

Rada Demain  
Kevin Felix  
Anthony Hall-Martin  
Pat Hill  
Norbert Klages  
Connie Muller  
Nico Potgieter  
Jonathan Probert  
Tom Proudlock  
Abri Vermeulen  
K Wakeford
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Introduction: Stutterheim’s crisis

The town of Stutterheim in the Amatola mountains of the Eastern Cape is South Africa’s most celebrated case of local economic development (LED). The efforts, since 1990, of town leaders have attracted published commentary in dozens of South African and international newspaper articles (for example, Lewthwaite, 1998), in NGO evaluations (for example, Tandy, 1992), in development training manuals (for example, Chaturvedi, 1996), in consultancy reports (for example, Dewar, 1995), in academic papers (for example, Nel, 1994), in a short book (Nussbaum, 1997) and in a video documentary (South African Broadcasting Corporation, 1993). The contemporary policy paper technique of illustrating the merits of favoured strategies through ‘boxes’ has been applied to Stutterheim LED by advocacy groups ranging from the South African National Civic Organisation (Sanco) (1995:68–69) to the National Business Initiative and International Republican Institute (NBI/IRI) (1998:5). Without exception, these commentaries have been effusive in their praise for the ‘Stutterheim experience’.

As the driving force behind the publicity, the Stutterheim Development Foundation regularly hosts South African and international visitors and trains officials from dozens of other municipalities on how to ‘do’ LED. Observers such as those who visited Stutterheim in May 1998 for an international conference on LED can be forgiven for concluding that South Africa’s overall transition ‘miracle’ is encapsulated in this town, and that Stutterheim should be a role model for similar initiatives by municipalities and local organisations in civil society.

After all, in key demographic and geographic respects, the Stutterheim area has similar characteristics to the many dozens of South African agricultural centres linked to impoverished rural hinterlands. Of roughly 55 000 people living in and around Stutterheim, approximately 8 000 people live in the African township of Mlungisi, less than 4 000 people reside in the traditionally white town of Stutterheim, and around 1 000 people live in the traditionally coloured Amatolaville township. There are another 18 000 or so ‘greater Stutterheim’ residents – though excluded from the Stutterheim Transitional Local Council – in the African townships of Kubusie (8 000), Cenyulands (6 000) and Cenyu (4 000). Another 24 000 or more (Africans) live in surrounding villages within 30km of Stutterheim: Mgwali (12 000), Wartburg (8 000), Isedenge (3 500) and Hecke (1 000) (Stutterheim Development Foundation, unpublished estimates).

The number of Stutterheim residents is said to be expanding by 3.5% per annum (Makalima Johnston Associates, 1997:15), outstripping the national population growth rate.

The area’s economy is based partly on raw materials – timber and the Lentz and Rance saw mills – but there are two other major employers: Boardmans factory (paint, candles, toiletries) and the Dohne Agricultural Development Institute. Stutterheim also has relatively good tourism
prospects and is a potential site for further industrial production based on its location near key transport routes and the provincial capital, Bisho.

At first glance, Stutterheim appears to have made the transition to the new South Africa seamlessly. The town, according to Nussbaum (1997:back cover) of the University of the Witwatersrand Business School, ‘managed to change its destiny from a town crippled by violence, poverty and racial tension, to one in which black and white created a partnership, working together, meaningfully engaged in social and economic development’. Similarly, in the words of (Lewthwaite pg.15, 1998): ‘It is a dramatic turnaround for a town which, in the 1980s, was an example of the worst of South Africa, characterised by racial conflict, fear and uncertainty. Today it is the epitome of the best, a community that has stolen the lead on the policymakers in Pretoria.’

A closer look at Stutterheim, however, reveals a variety of substantial problems that warrant a more critical perspective:

• Stutterheim resegregated itself after an initial movement towards ending the apartheid urban form. It now consists of a mainly ‘white’ area, a mainly ‘coloured’ area and an ‘African’ township. There are at least three other African townships close by and many other neighbouring, highly-dependent rural villages – together representing more than three quarters of the Stutterheim community – which are effectively left out of resource distribution, local democracy and planning for future development.

• The resegregation of the town of Stutterheim is also well advanced. Early-1990s notions of a ‘buffer zone’ that would separate low-income black people from white residential areas has now been replaced by class-conscious residential development planning – which has the same effect.

• Stutterheim’s LED activities – particularly those co-ordinated by the Stutterheim Development Foundation – have never managed to develop beyond a few discrete projects, many of which proved to be unsustainable. Despite skills training, people were still unemployed or forced to leave the area in search of employment. The very existence of the Foundation itself was at one point threatened by the delivery crisis.

• Privatisation of water in Stutterheim was carried out in such a manner that a large foreign firm successfully ‘cherry-picked’ the lucrative white and coloured areas, which presently receive dependable water supplies. This process left much of the official Stutterheim township (Mlungisi) unserved and the unofficial neighbouring townships (Cenyu, Kubusie, Cenyulands) nearly entirely unreticulated. At the same time, the general secretary of the area’s civic association got a job working for the water company.

• The ability of township residents to pay their service bills is so limited that 61% of Mlungisi residents have effectively been declared indigent for the purposes of paying for municipal services. A redistributive block tariff has not been instituted, making it difficult, even for those fortunate to have been incorporated into Stutterheim for payment of their bills, to pay for services. (Moreover, the use of ‘remissions’ for these residents – consistent with national Department of Constitutional Development ‘indigence policy’ – has backfired. According to the Stutterheim Council it has generated a doubling of consumption by those who receive free water, in part, it is alleged, because of ‘free-riding’ by those who were cut off).
• The supply of water to nearly 20% of Mlungisi residents was cut off during the final three months of 1997 (the latest available information). This was done in a manner that was probably both unconstitutional and illegal. Only 6% of this group had their water reconnected during the course of that three-month period.

• The overall ratio of municipal services payments in arrears to payments due was 112% in Mlungisi in January 1998 (due to accumulated arrears), as compared to 15% for the white and coloured areas of Stutterheim and 27% nationally.

• There has been no effort, as yet, made by the Stutterheim Council to price basic services in a socially-just manner, to repair water pipes and electricity lines (and hence save resources lost due to apartheid-era leaks and faults), or to respond to other demands relating to services.

• There has been a general failure by the Councillors and officials of the Stutterheim Council to link the provision of infrastructure to opportunities for job creation, public health provision, gender equality and geographical desegregation.

• Capital spending declined during 1997, and there has been virtually no transformation of the municipal budget.

Each of these aspects of Stutterheim's LED crisis is explored in this research report, beginning with a review of the local economic and social inheritance. The report examines the extremely intense struggles over both apartheid politics and socio-economic underdevelopment and looks at the achievement of local-level reconciliation in Stutterheim. However, since municipal service delivery problems stand out in many contemporary South African townships – and indeed have generated protest riots in some (Barchiesi, 1998; Phadu, 1998) – it is most appropriate to highlight the sudden surge of service cuts that occurred during the last quarter of 1997 (the most recent 'Project Viability' records provided by the Department of Constitutional Development). The report then proceeds to examine missed opportunities in service demand management, budget transformation, housing, small business, and land reform, after which the conclusion warns about an uncertain but pessimistic future.
The local economic development inheritance: from apartheid to neo-liberalism

The mythical status of Stutterheim as South Africa’s premier LED success story is difficult to comprehend, given the distressing status of low-income people in the town today. An estimated three-quarters of economically active people are formally unemployed, and about the same ratio are functionally illiterate (Chaturvedi, 1996:4–5). Aside from an unverifiable, highly dubious claim that the area has a 15% annual economic growth rate, made by a former Town Clerk (SABC, 1993) and repeated often enough elsewhere, the following are typically cited as triumphs:

Since 1992, the (Stutterheim Development Foundation) has raised more than R25 million providing housing, schools, day care centres and more. A local business service centre provides extensive consultation and advice supporting local entrepreneurs. Extensive educational and job skills training courses are other important functions of the Foundation (NBI/IRI, 1998:5).

Yet as discussed below, the sustainability of these activities has been thrown into question. Indeed there are many ways to understand the local development crisis Stutterheim faces at present. A review of apartheid in Stutterheim dates it back to two decades prior to the settlement’s 1857 founding, when the Berlin Mission Society’s Bethel Mission Station came, in the words of Colin Bundy (1988:37), ‘as torch-bearers of capitalist social norms and the market economy ... [and to foster] class formation in African society’. The subsequent century and a half of white domination included all manner of power plays by missionaries and mercenaries and divide-and-rule tactics successfully deployed against the indigenous African inhabitants (Stutterheim Historical Society, 1984; Bond, 1998b).

One of the most shocking aspects of Stutterheim’s inheritance – both a reflection of failed LED and a potential catalyst to a people-driven LED (Ecsec, 1998) – is the status of basic residential facilities, especially municipal services. The vast majority of Stutterheim’s black people were denied services and formal housing in the townships and villages in the vicinity of the white town. By 1977, the Daily Dispatch noted that Mlungisi location is the shame of Stutterheim.

It is a slum and for ten years all development has been frozen in the township while the government decides whether to build a new one. Twenty-five taps serve water to 4 000 people of the township and yet Bantu Affairs Administration Board intends to spend only R240 on washing facilities in the coming year (cited in Nussbaum, 1997:8).

Nussbaum (1997:9) cites the threat of forced removals to the former ‘homeland’ Ciskei as the main reason that the white government inhibited funding for township development. This was also a problem in
neighbouring Mgwal, declared a 'black spot' and cited for permanent removal to Frankfort in the Ciskei. The offer of residential and arable plots in the Ciskei may have appealed to some Mgwal residents, but the Mgwal Residents Association was dominated by 'quitrent' tenure holders (leasehold tenure on ten-acre lots with rights over use of commonage land), who successfully mobilised against the forced removal. In 1985, a court granted Mgwal a reprieve (Border Rural Committee, 1997:13).

Regardless of the homeland factor, the 1980s in any case witnessed the withdrawal of the South African state from provision of black urban housing. This was done under the assumption that due to liberalised urban residential status (beginning with the 99-year lease), housing and infrastructure supplied by the private sector (bank and developer) and parastatal organisations (South African Housing Trust, Development Bank of Southern Africa) could make up the difference. In 1990, the retreat from housing policy was codified by the establishment of the Independent Development Trust (IDT), whose site and service schemes represented a decisive shift in policy consistent with international trends that dated to the 1970s.

Internationally, the neo-liberal era brought fiscal constraint, high interest rates, deindustrialisation or at best jobless growth, and the rapid decline in workers’ and poor peoples’ standards of living. In the housing field, the World Bank and conservative international aid agencies recommended shifting state responsibilities to house the poor towards merely providing serviced stands upon which 'self-help' shacks could be constructed. This would have the effect of lowering the amount of money workers would require from employers on a monthly basis to meet housing needs (Burgess, 1978:1985).

Even in upper middle-income South Africa, neo-liberal development policymakers reached the conclusion that it would be impossible to provide decent public housing to the citizenry. In the wake of the state's 1980s retreat from public housing construction, several public and private sector agencies formally adopted the analysis and language of neo-liberal development, gradually growing more sophisticated about the need for social contracts and community consultation so as to give more credence to policies in which the state would play a smaller role in maintaining the social wage (Bond, 1995). These included the Urban Foundation (a corporate think-tank and development agency whose origins date directly to the 1976 Soweto uprising), the Development Bank of Southern Africa (which although set up to promote bantustan 'independence', ultimately attempted to reform during the late 1980s by modeling itself on the World Bank), the Independent Development Trust (founded in 1990 and then run by the former chair of the Urban Foundation, with a mandate to promote local negotiations over development), and the Small Business Development Corporation (increasingly a vehicle to promote a black free-enterprise ideology, notwithstanding a loan book biased to white entrepreneurs).

The state relied, unwisely, upon a combination of repression and 'winning hearts and minds'. Through the heightened responsibility these agencies bore for kick-starting development at a time when black local authorities had lost all credibility. But the highly-constrained form of 'development' posited in the neo-liberal model, and the assurance that the existing system of capital accumulation would continue virtually unhindered, generated new contradictions. These erupted, in late 1989, into a major offensive by the black community against the white power structure.
The battle for Stutterheim’s future, 1989 to 1990

In Stutterheim, as across South Africa, the combination of state socio-economic neglect and repression, augmented by intense racial discrimination by white residents and businesses, generated growing resistance (Tandy, 1992; Nussbaum, 1997). Although, beginning in mid-1989, ‘a new spirit of protest was evident’ in Mlungisi township, there had been precedents several years earlier (Tandy, 1992:7). The mid-1980s witnessed increased protests, stayaways, boycotts and conflicts with the police. A boycott of local businesses in 1986 compelled white leaders to spend R1.8-million to upgrade Mlungisi and construct a new school (Daily Dispatch, 11 January 1990).

But it was the students of Mlungisi who were the catalysts of sustained community resistance in August 1989 by leading a march of 7000 residents in protest against segregated schooling. Workers at a local sawmill went out on strike. And on 5–6 September, a stayaway against the white parliamentary elections was estimated to be 90% effective (Tandy, 1992:7).

The security state was still extremely effective, however, as reflected in a series of incidents that infuriated the town’s black residents. The August student march was broken up by police. A progressive priest, Lulama Ntshingwa, was detained two days before the September stayaway. At a prayer session for his release, more than 250 people – including 23 priests – were beaten by police, while later a smear campaign was launched by shadowy elements against the activist clergy. White businesses then dismissed workers who joined the September stayaway. A magistrate subsequently refused permission for township residents to march in protest against local conditions. On Christmas Day, a meeting to give solidarity to death row prisoners was teargassed by police. And on 16 January 1990, 214 residents were arrested in what was purported to be an anti-crime operation (Tandy, 1992:8–10).

But the security state could not prevent a combined consumer and rent boycott, which was the tactic township residents employed on 13 September 1989. Local civic associations from the townships and villages came together as the Stutterheim Co-ordinating Committee (known as the Stutterheim Unit of the United Democratic Front), with the following goals (some of which were national in character, some essentially local): upgrade conditions in the township; improve health services; increase wages; gain the release of detainees and the lifting of detainee restrictions; reinstate dismissed workers; revise rentals and grazing rights; establish non-racial schools; and have troops removed from the townships (Daily Dispatch, 16 January 1990).

Specific developmental demands were made for the tarring of the main road in Mlungisi and other potholed, non-navigable roads; the erection of security lights; installation of storm water drains; provision of low-income housing at ‘affordable rents’; and a better sanitation system. One immediate victory for the Stutterheim Unit was the forced
resignation of the black local authority. Yet, ongoing living conditions remained untenable. There were regular complaints that domestic and farm workers earned as little as R40 per month. Rental rates, meanwhile, had increased from R12,98 to R21,50 per month in July 1989, although many residents lived in mud houses without services.

Racism remained widespread in local education. Accusations were leveled at the Stutterheim hospital that it rejected patients on racial grounds (the mayor, Nico Ferreira, later insisted that ‘treatment is differential on an economic and not on a racial basis’ (*Daily Dispatch*, 18 January 1990)).

Economically, the Small Business Development Corporation’s hive of industries was ‘doomed to failure’, because, according to the Stutterheim Co-ordinating Committee, ‘a man who earns R40 a month does not have money to become involved in a scheme like this’ (*Daily Dispatch*, 16 January 1990).

Farm workers were evicted in February 1990 in another display of white power and insensitivity.

The consumer boycott, initially set for one month but then extended for another six, was aimed in large part at conservative shopowners. The context was the decisive role played by the Afrikaanse Sakekamer, a verkrampte (conservative) business body which actively petitioned the local state to clamp down on dissidents. Beginning in 1988, the Stutterheim Council became controlled by *verligte* (enlightened) elements, after a group of independents, led by Ferreira, was elected. This ultimately allowed for a resolution of the crisis after 14 white businesses went bankrupt (interview, Hamish Scott, 1998).

The May 1990 negotiations between Ferreira and Chris Magwengana – leader of the township civics – led to a few minor but immediate victories for the Stutterheim Unit. These included a commitment by the white Council to try to persuade white businesses to rehire dismissed workers (this was only partially successful); the withdrawal of the rental increase and writing off of arrears; and a reward offered for information about the smear campaign against the clergy. It also confirmed the grassroots power of township residents, and forced Stutterheim’s elite to come to terms with the leaders of the boycott (Tandy, 1992:10–11).

All of this history is important in order to understand the changes that began in mid-1990. Barry Erasmus, then Stutterheim’s Town clerk, in an interview in 1991 with a newspaper, explained the history as follows: ‘the origin of distrust and suspicion (that) had arisen from the land issue – when settlers came into the area and took possession of black ancestral land’ (*Daily Dispatch*, 11 July 1991).

Clearly, a great deal of what happened in between, including in relation to developmental and political grievances, also shaped the town’s culture and race/class/gender relations. As in South Africa as a whole, the old way of doing business had to change, but the change itself could be mediated to suit the interests of elites. What followed was the ascendance of *verligte* politicians in white Stutterheim politics and the moderation of a few central black leaders.
Reconciliation and the promise of development, 1990 to 1998

The change from early 1990 to mid-1991 was remarkable, by all accounts. As one reporter put it (Maclean, 1991): 'A year and a half ago, Stutterheim was a microcosm of everything wrong in South Africa.' Stutterheim was, subsequently, 'the only town in the country to achieve what it did on such a scale at the time', according to Pumla Kubukeli of the Development Bank of South Africa (DBSA) (Nussbaum, 1997:1).

A great deal of attention has been paid to the extremely effective conflict-resolution function of the key leaders – amongst them Chris Magwangana, Nico Ferreira, Loel Ferreira, Nosimo Balindela, Minlyakhe Balindela, Hamish Scott and Max July. They were the founders of the Stutterheim Forum and later the Stutterheim Development Foundation (SDF) and various spin-off initiatives. The Stutterheim Forum was a negotiating platform with numerous sub-committees, and was established following a meeting in May 1990 led by the mayor (Ferreira) and the main civic leader (Magwangana). The forum also helped to end the boycott of Stutterheim's white shops and its activities ultimately resulted in the SDF's prominence as the central strategic and implementing agency for LED.

Nussbaum (1997:2) considers the SDF – which has offices in the Stutterheim industrial site and a staff complement across racial and class divides – a 'community-based organisation'. Yet, in reality, it much more closely resembles the Urban Foundation, the business think-tank established by the leaders of Anglo American Corporation and Rembrandt in the wake of the 1976 Soweto uprising. In addition, Barlow Rand – itself submerged in a strike and threatened by a national boycott by several unions at the time, in 1990 – sponsored much of the SDF's start-up activity and seconded the SDF's director (the former mayor, Nico Ferreira). Barlows was 'a trusting, committed, unimposing outside champion', according to Nussbaum (1997:5). (Barlows also sponsored the 1998 NBI/IR: book on LED.)

Institutions like the DBSA and the IDT became directly involved. In fact, Ferreira had served as a project manager on a DBSA-sponsored project during the late 1980s and Magwangana and Scott would later have jobs as IDT communications officer and project manager, respectively.

Politics were moderated significantly under these circumstances. Magwangana was quoted in the Daily Dispatch (Blacklaws, 1991) as saying 'the term “radical” need no longer be applied to the white or black communities, as democratic forces had brought about significant changes in attitudes'. According to Lt. Theo Meyer: 'Police figures indicate that since 1989, there has been a remarkable decline in marches and political violence.' This was seen as a lead ‘indicator of success’ (Nussbaum, 1997:29).

Yet this was not a universal sentiment. Magwangana noted in a video documentary (SA3C, 1993) that the township leaders were accused by
militant youth of selling out the struggle, a point reiterated by Max July (interview, 1998). But although activism was apparent in protest marches in 1992 and 1993 (after the Boipatong and Bisho massacres and the Hani assassination) – Meyer acknowledged that 'eleven open air gatherings and marches' took place in 1993 (Nussbaum, 1997:29) – there was a marked stagnation of the ANC's own local branch development (Tandy, 1992). This led a researcher aligned to the Democratic Movement, Patrick Tandy of the progressive East London service NGO, Corplan, to caution that: 'The Stutterheim experience also alerts us to a number of possible pitfalls in engagement in development structures, namely, that there is a danger that communities can be drawn into local development to the exclusion of wider political activity' (Tandy, 1992:21).

One such pitfall was the residue of apartheid development logic. The Council resolved in March 1990 that a housing scheme could go ahead in Mlunugisi provided that 'a buffer zone be created adjacent to white land owners and that the proposed future extensions be planned towards the airfield to allow for such a buffer zone' (Municipality of Stutterheim, 1990a:6). The apartheid-era structure plan was subsequently replaced in 1991 by one funded by the DBSA and drafted by David Dewar, a University of Cape Town planner. Yet apartheid segregation considerations remained, for in June 1991 the Council considered whether the Boer War 'concentration camp cemetery in the vicinity of [Mlunugisi should] be included in the narrowing of the buffer strip' (Municipality of Stutterheim, 1991c:4). Furthermore, services for the new housing scheme were also of an earlier era, as they did not include electricity. There was also no funding left over for housing. Nevertheless, in August 1991, nearly 900 serviced sites were approved for Mlunugisi by the IDT (Municipality of Stutterheim, 1991d:4).

Reflecting the spirit of what can only be described as 'disengagement' that permeated municipal offices during the transition period, the possibility of privatising services was officially mooted as early as April 1990 (Municipality of Stutterheim, 1990b:2). By May 1993, First National Bank had presented a symposium on the issue (Municipality of Stutterheim, 1993b:1). 'Delegated management' to the privatised water company, Water and Sanitation of South Africa (WSSA, ultimately controlled by Lyonnias des Eaux), began during the 1994/95 fiscal year. This led to a dramatic increase in waterworks and sewerage spending for virtually the same levels of services.

Reconciliation was also tempered by long-standing suspicions. The Stutterheim Council's Constitutional Committee, for example, approved the names of civic representatives for a transitional local authority in November 1991, but the committee 'was not happy with the nomination' received from the Cenylands Civics' (Municipality of Stutterheim, 1991e:1).

Finally, in April 1992, the penny dropped for local negotiators: the most durable problem of all – getting low-income residents to pay for municipal services – could not be resolved through an elite-pacting process that was celebrated as a political victory, but with little attention being paid to development problems. Council minutes show that:

The financial position (of Mlunugisi) remains critical as, although a reduced service fee was negotiated with the Civics only a small percentage of the accruals per month are being paid. This is not as agreed to with the Civics who indicated a 100% commitment to paying the reduced fee ... This matter (must) be discussed again at a
later stage as Council moves towards an integrated community/
Council where the non-payment of service fees/charges will have to
be addressed (Municipality of Stutterheim, 1992b:2).

This problem was flagged, also, by Tandy (1992:19), who in a review
of the Stutterheim experience asked:

How do we anticipate communities engaged in local development
structures responding to a central government cut to development/
municipal funding – for example, cutting services, increasing service
charges, winding down IDT/DBSA support? ... Municipalities
normally expect full cost recovery. This is unrealistic in the short,
and even medium, term.

Although it was evidently impossible for the Council to impose the
rule of law at this stage, the ‘integrated’ (but only partially) community
would indeed have to address the non-payment of municipal services
within a few years. It is easy to hypothesise that within the broader local
political settlement, what appeared as a central concession by whites
holding power – one that ensured a flow of aid resources into Stutterheim
– was, apparently, an unspoken consensus that no real redistribution
would take place. In turn, a local economic development crisis, catalysed
by cuts in municipal services, was assured.
Municipal services: tariffs, non-payment and cut-offs

By year-end 1997, the Stutterheim municipality's books carried chronic deficits in payments on several municipal accounts (although these were budgeted for surpluses) and an inherited provincial government loan of R3 682 098 was long in arrears, due to (according to the acting Treasurer) 'non-payment – lack of history supporting individual balances – not financially healthy to afford the cost of interest and redemption' (sic) (Department of Constitutional Development, 1997:4).

Stutterheim's financial problems were most often blamed on low payment levels for municipal services by Mlungisi township's low-income citizens. Of 4 468 Stutterheim households receiving accounts, 45% did not pay regularly. Punishment, in the form of cut-offs during late 1997 and early 1998, was severe.

The broader context, to repeat, was a virtually complete lack of household services to the nearly 20 000 residents of greater Stutterheim who lived nearby – in Cenyu, Cenyulands and Kubusie – but fell outside of Stutterheim, Amatolaville and Mlungisi. In Mlungisi, the situation was particularly dire. Payment rates of 22% were recorded in early 1998 (down marginally from 25% during 1997).

According to the Stutterheim Treasurer, more than three out of five Mlungisi households – those with an income below R1 050 per month – received 'remissions' or sliding-scale payment subsidies, and 44% of Amatolaville households received remissions. A free-rider problem quickly emerged, according to officials, for 'It was also discovered that consumers receiving a 100% remission have increased their water consumption by more than double!' (Stutterheim TLC, 1998:1). As discussed in more detail below, such remissions were a far cry from the lifeline service and progressive-block tariff system that could have been adopted. Means testing was unscientific, to put it mildly, in a township – Mlungisi – in which more than half the workers were unemployed.

Before looking at the remission schedule, consider the existing set of service charges. In addition to paying relatively high connection fees, low-income households in Mlungisi were billed the same monthly consumption levies as upper-income Stutterheim residents for refuse removal (R18) and sewage services (R39) (approximately 60% of the business tariffs). As for Mlungisi's recurrent water and electricity costs – the real basis for the arrears problem – there were no real concessions to affordability and lower quality of township services. The flat rate for water on unmetered stands (before VAT was added) was R22 and for basic services, R22. Even the lowest-income residents were expected to pay R62 per month (including the R18 for refuse removal) unless they received a remission. For those with metered stands, water was charged at a basic monthly rate of R16 plus R1,80 per kilolitre above 11 per month; refuse removal was R18; sewerage for 'informal dwellings' was R26; and basic charges were also R22 (Stutterheim TLC, 1998:46). In higher-income Stutterheim and Amatolaville, the basic rate for water
was slightly lower at R20, plus R1,80 for each additional kilolitre above 11 per month. In short, there was no tiered block charge for water consumption, so luxury consumption carried exactly the same marginal cost as basic needs consumption.

Electricity, in contrast, was charged at variable rates, but these were regressive. The two-tier block model charged consumption below 300kWh at 31 cents per kWh and above at just 25 cents. In addition, a basic charge was levied, ranging upwards from R54 for single phase connections of below 20 Amps. New connections were extremely expensive (R1 616.96 in Stutterheim, but as much as R3 419.89 in some outlying rural areas), and reconnection fees were R88.20 (Stutterheim TLC, 1998:44). According to treasurer Geoffrey Hill (interview, 1998), the National Electricity Regulator – increasingly influenced by cost-recovery principles – wrote to the Council in March 1998 informing them that their tariff schedule was disapproved and that they should not have any block tariff, whether regressive or progressive.

The failure to redistribute income through tariff reform – whether water or electricity – cost Stutterheim dearly, not only in socio-economic terms, but also because the use of cost-recovery methods made it impossible to balance the books. All told, while South Africa as a whole witnessed accumulated arrears of debtors reaching 27% of the value of municipal accounts in 1997, Mlungisi’s had risen to 112% by year end (at R2 149 619 – including balances older than three years, which had not yet been written off – compared to charges of R1 917 600). The combined Stutterheim/Amatolaville’s ratio was just 15% (Stutterheim TLC, 1998:3).

The above figures hint at the underlying issue, which is the maldistribution of basic infrastructural resources in a context of generalised poverty, and the potential solution, which is to view the provision of a lifeline service of water and electricity to all Stutterheim’s residents – followed by a steep rising block tariff to pay for consumption – as integral to a bottom-up LED strategy.

Instead of drawing such obvious lessons, Stutterheim’s local officials focused on getting politicians to address the non-payment problem. Extremely low payment rates in Mlungisi were initially recorded during the 1991/92 fiscal year. At that stage, however, central government’s intergovernmental grant (IGG) mechanism was providing sufficient subsidy funding so that Stutterheim and most other municipalities rarely resorted to service cuts. But the national budget commitment to IGGs fell, in real terms, by 85% over the subsequent six years, from R856-million (in 1990 Rand) to just R133-million in 1997/98 (Financial and Fiscal Commission, 1997:20). This forced most municipalities by late 1997 to cut services.

A variety of discussions about low payment rates were held in the Stutterheim Council, which, with its increased credibility, was now expected, by officials and outgoing white Councillors, to clamp down on what became generally known as ‘the culture of non-payment’ of service charges. The national campaign to encourage payment for services, Operation Masakhane – ‘let us build together’ – was a R30-million campaign, founded in February 1995 and largely built on advertising. By July 1995, the failure of the national housing policy was evident, as Minister Sankie Mthemb-Mahanyale labelled the programme she had inherited from her predecessor Joe Slovo ‘toilets-in-the-eld’ and as rates payments in many Gauteng townships fell to below 5% (Bond and Ruiters, 1996). But national pressure on local authorities to cut services to non-payers intensified.
By early 1996, a few months after the first democratic municipal elections in South Africa’s history, the new Stutterheim Council had achieved sufficient legitimacy to consider drastic steps to be implemented with regard to the recovery of arrear service charges and the commencement with general payment of service charges’ (Municipality of Stutterheim, 1996a:9–10). Interestingly, to this end, the engineers, Ove Arup, developed a video ‘intended for use as a method to encourage people to pay service charges’, but their R40 000 bill was considered so ‘excessive’ that the Council ‘furthermore questions whether the beneficiaries of the Old Mlungisi Project supported this expenditure’ (Municipality of Stutterheim, 1996a:9–10).

Disconnections were clearly now on the agenda, including ‘cutting off services for certain periods during the day and thereafter monitoring the effects thereof and reaction thereto’ (Municipality of Stutterheim, 1996a:10). Disconnection of even water was not limited to Mlungisi, as the new Council agreed that ‘the Amatola Regional Services Council be advised that unless outstanding amounts in respect of services rendered to Cenyu, Cenyulands and Kubusie by the Transitional Local Council on behalf of the ARSC are settled the services will be discontinued without further notice’ (Municipality of Stutterheim, 1996a:10).

Hence in the three non-municipal townships, the Stutterheim Council was by now prepared to engage in mass cut-offs of the inadequate (communal tap) water supply, regardless of individual willingness to pay. The fault for non-payment may not have been with the residents, but with the contractor (ultimately the Amatola District Council) which had no feasible means of directly supplying services to its constituents, locked in as they were to residual apartheid-era patterns of residential segregation. A few weeks later, the Amatola District Council’s chief executive formally confirmed receipt of a Stutterheim bill for R49 000 ‘in respect of water consumed by the residents of Cenyu, Cenyulands and Kubusie which had been paid by the ADC on behalf of the residents’. Yet since the ADC had no means of billing the township residents, the ADC chief executive now expected ‘a firm proposal’ from the Stutterheim Transitional Rural Council – which itself had practically no capacity, and which reported to the ADC – ‘in conjunction with community structures in respect of the payment for services’, failing which he ‘would have no other alternative but to request [Stutterheim] to discontinue with services to the above-mentioned areas’ (Municipality of Stutterheim, 1996b:13).

Although water supplies had reportedly not been cut at the time of writing (interview with Stutterheim Transitional Rural Council chief executive, 1998), other Stutterheim services remained out of reach. Access to the library was effectively denied residents of outlying townships, on economic grounds. The Stutterheim Council refused, in August 1997, to waive the R50 fee for access to the library payable by residents of Cenyu, Cenyulands and Kubusie (Municipality of Stutterheim, 1997e:10).

Mlungisi, as a formal part of Stutterheim, fared little better; although to its credit the Stutterheim Council beat back an old-guard attempt to restore the apartheid town’s geographical inheritance. The Stutterheim treasurer was told by the Council at that same January 1996 meeting to ‘once and for all “bury” the Old Cumakala Town Council concept and ensure that all financial administration is finalised and integrated with the Stutterheim Transitional Local Council by the end of March 1996’ (Municipality of Stutterheim, 1996a:10).
Nevertheless, Mlungisi was still subject to far lower quality water than Stutterheim. In February 1996, the Treasurer conceded that ‘intermittent supply problems occurred as a result of existing pipes damaged which resulted in an irregular supply of water to Mlungisi as a result, disconnections should be postponed until supply was normal’ (Municipality of Stutterheim, 1996b:13). A month later, the Council declared April would be ‘the month for the commencement with the payment of service charges’ and if by the end of April there was no significant improvement with regard to the payment of services charges e.g. approximately 60% then ‘electricity and water accounts in arrears will be cut off with immediate effect ... however genuine cases who request deferment in payment due to financial reasons will be considered on merit ...’ (Municipality of Stutterheim, 1996c:14).

The measures included three that constituted collective punishment for a geographical area, notwithstanding the possibility that individuals in the area were not themselves personally guilty of non-payment.

Withdrawal of services to be focused on areas where payment is lowest ... Switching off of street and high mast lighting from Mondays to Thursdays ... subject to careful consideration of the implications of such action particularly with regard to the alleged serious crime rate in certain areas and based on the principle of ‘with darkness comes crime, however the message and intention to the residents must be loud and clear ... Discontinuation with the provision of refuse removal services to individuals who were in arrears ... (Municipality of Stutterheim, 1996c:14–15).

In May 1996, the Treasurer testified ‘that although the payment of service charges had increased to 20% in respect of April 1996, this was still far from satisfactory and a marked improvement thereon was essential’ (Municipality of Stutterheim, 1996d:13). But the Treasurer also reported that ‘services such as water and High Mast Lighting would be 100% normal by 1 June 1996 which included the repairing of all High Mast Lighting, upgrading power supply to newly erected pump station, and installation of bigger dimension main supply piping’ (Municipality of Stutterheim, 1996d:13). In fact, substandard and broken services to Mlungisi continued, leaving the authors of the October 1997 Stutterheim draft structure plan to comment: ‘Losses of [water] pressure also occur as Mlungisi is fed through the central area of town, and the TLC is investigating the possibility of diverting the flow to Mlungisi to avoid the central area of town’ (Makalima Johnston Associates, 1997:18).

To the Council’s credit, it finally came to realise that non-payment wasn’t a matter of choice. Councillors requested information in May 1996 about, ‘as a matter of extreme urgency, ways and means of implementing remission of service charges for those people who genuinely cannot afford to pay’ (Municipality of Stutterheim, 1996d:13). This group quickly became the majority of Mlungisi residents and almost a majority of Amatolaville residents.

The remission strategy included a schedule for rebates that ranged from 100% for households with an income of less than R300 per month, to 3% for households whose income was between R1 026 and R1 505. For every R25 per month additional income, an additional 3% of the municipal service charges had to be paid. The amounts in remission claimed by the 61% of Mlungisi households (numbering 1 170) plus the 40% of Amatolaville households (numbering 83) who received rebates, rose from R93 762 in September 1997 to R113 848 in February 1998. The average monthly rebate was more than R90 over the period.
Even before the remissions system became fully operative, service cut-offs remained a potent tool for the Stutterheim Council. The first wedge (in June 1996) would, ‘once the services ... have been restored to 100% normality’ be ‘the withdrawal of refuse removal services ... as a first step towards implementing punitive measures’ (Municipality of Stutterheim, 1996d:13). That services never achieved 100% normality did not stop the cut-offs, nor did the cut-offs succeed in increasing the payment levels.

The cut-offs also did not help in providing new connections to those without services. Frustrated by the lack of progress in the Mzamohle area of Mlungisi, the local civic association zone committee – Mzamohle Sanco – requested in February 1997 that Eskom be given the responsibility for supplying electricity (in view of the failure of the Council to extend its services to the area). This was a mistake, however, earning a stern – even defensive and arrogant – rebuke from the Council (Municipality of Stutterheim, 1997c:4; 1997b:8).

The breakaway of a zone of Sanco from ANC loyalty or merely from adherence to established procedures of municipal governance – which was also evident in Sanco-ANC tensions surrounding the SDF – was not unusual in mid-1990s South Africa, particularly given systematic attempts at national level and in many provinces and locales to co-opt Sanco through corporatist deal-making. Attempting to play the dual role of community mobilisers and close allies of the governing political party often proved difficult for Sanco leaders, who faced on the one hand grassroots rebellions and on the other, deals that didn’t deliver.

Nationally, Sanco’s investment arm, headed by Moses Mayekiso, decided to participate in joint municipal infrastructure ventures with the British firm Biwater, which became controversial in Nelspruit when virtually all civil society forces opposed this pilot case of water privatisation. In Stutterheim, a parallel phenomenon was the decision by Sanco’s general secretary to take a job with WSSA, promoting water privatisation.

When finally the Council agreed to make a request to Eskom on behalf of residents, the parastatal replied in October 1997 that ‘it was not in a position at the present time to electrify Mzamohle’ and would only be able to evaluate such a proposal when ‘occupation exceeds 80% ... permanent houses are built and occupied; an approved surveyor general layout plan is available; and housing and civil services are completed’ (Municipality of Stutterheim, 1997f:6). Notwithstanding the informal character of many of the Mzamohle dwellings, the Stutterheim Council eventually approved electrical hook-ups (interview, Councillor Anna-Marie Mayekiso, 1998).

The cut-off that commenced in November 1997 left nearly a fifth of Mlungisi without access to household water. An astonishing 400 Mlungisi households and 45 Amatolaville households had their water supplies disconnected. Only 35 households subsequently made payments so as to have their water supply reconnected (Department of Constitutional Development, 1997:4). In interviews, one of the town’s Councillors and its Treasurer surmised, however, that Mlungisi residents whose services were cut were either using their neighbours’ water, which was now partially (or in some cases fully) subsidised, or nearby communal standpipes, provided by the old government. The implications, however, of the cut-offs for sanitation, sewage and public health, were not known by Councillors or Council staff, nor had they been considered.
In addition, electricity disconnections numbered 70 during the fourth quarter, with 34 paying to be reconnected (Department of Constitutional Development, 1997:4). The number increased dramatically in the town of Stutterheim, from average monthly levels of 25 during 1997, to 112 in February and March 1998. In Amatolaville, average electricity cut-offs of 1 per month during 1997 soared to 48 during March 1998. The Council's policy was to cut off electricity services to all people whose accounts showed any indebtedness (even if not on the electricity account). Of electricity cuts, only 50% of households cut off were later reconnected. Yet the result of these cuts, by January 1998, was a decline, not an increase, in Mlungisi's payments rate.
Neglect of demand side management

Stutterheim officials and Councillors spent a large amount of time and energy on trying to make people pay, in a context in which most, objectively, could not afford to do so. The main reasons higher levels of payment are required, are to increase the amount available for capital expenditure (and, hence, potentially new connections), and to fund the recurrent (operating and maintenance) costs of the services.

Some such capital expenditure would not be required, however, if conservation were to take place. Payment requirements for recurrent costs can also be mitigated by cross-subsidisation through a socially-just progressive block tariff with lifeline service. Such outcomes, which were not considered by the Stutterheim Council or its officials, would depend upon an effective 'demand side management' strategy. (To the Council's credit, though, an attempt in June 1997 by commercial farmers within Stutterheim for reductions in rates and levies was rejected (Municipality of Stutterheim, 1997d:8).)

Demand side management is an emerging sub-discipline of resource economics. It draws attention not just to building supply-side capital projects (waterworks and other bulk infrastructure) so as to quench an insatiable thirst for water and other services. It also attempts to better distribute those resources so that basic consumption norms are met and other socio-economic and ecological goals, especially conservation, are achieved. Demand management techniques include repairing leaky pipes; changing water usage patterns through progressive block tariffs; water conservation education; regulations prohibiting excessive watering of gardens; and a variety of physical interventions. Amongst these latter are the replacement or installation of low-flow shower heads, dual-flush toilets, and similar mechanical interventions, as well as saving more water through clearing invasive alien trees and vegetation.

For example, the extent to which Mlungisi's water losses could be attributed to leaky pipes (or worn washers) and faulty infrastructure was unknown to officials. Investigating the problem was, the Treasurer conceded, 'the most difficult task' for 'if losses do occur, but is very time-consuming' to calculate (Stutterheim TLC, 1998:4). No attempt was made to bring community organisations into the process of monitoring water use and leakage. Yet Mlungisi's outdated apartheid infrastructure was a well-known problem, and the following comment appears in the October 1997 draft structure plan: 'The major problem with water supply in Stutterheim is that of water losses through old and inadequate water mains. There is thus a need to investigate costs of replacing many of the internal pipelines to limit losses' (Makalima Johnston Associates, 1997:18).

Under a system of fully privatised water provision, it would have been reasonable to expect the privatised water supply company, WSSA, to repair the Mlungisi pipes. (The delegation of management for water provision to WSSA was accompanied by a 25% increase in water fees
paid by consumers in 1994/95, according to the Stutterheim municipality budget.) However, due to 'cherry-picking' – the tendency of firms to avoid doing business in low-income areas – WSSA only provided services to Stutterheim and Amatolaville. (WSSA did make proposals to serve Mlungisi, but these were considered financially disadvantageous, according to Councillor Anna-Marie Mayekiso (interview, 1998).)

However, notwithstanding the poor payments record and the additional costs associated with the privatisation of water, the municipal water budget had a projected surplus of R136 825 for 1997/98. In addition, the sewerage budget was anticipated to generate a surplus of R164 762. Those surpluses were redirected into other aspects of the budget, rather than used to expand basic provision of services in Stutterheim's townships.

At the same time, Stutterheim dramatically increased its capital expenditure on the bulk waterworks, raising the capacity by 67%, from 1,5 Mi per day to 2,5 Mi per day, incurring extremely expensive debt servicing obligations in the process. Apparently there was little or no attention paid by the Council or the Stutterheim budget to demand side management. The irony was that retail services were desperately necessary and were not being adequately funded, while expensive bulk water supply could have been mitigated through conservation on the demand side.

A small programme to clear invasive aliens has been funded through the national Working for Water scheme. But even this could have been expanded dramatically, given that, according to the Stutterheim draft structure plan: 'Invasion by black wattle and other alien species is a serious problem in Stutterheim, leading to a reduction in stream flow and diminution of wildlife habitat' (Makalima Johnston Associates, 1997:12).

How much water could be saved through such measures? Preston and Davies (1994) estimate that 30% could be saved in typical South African conditions. The implementation of these measures would reduce the need for large capital projects, while at the same time assure all residents a fair share of access to water – not through an open-ended and ultimately unsustainable indigents' fund (the remissions on 61% of Mlungisi accounts and 44% of Amatolaville accounts), but through socially-just tariff pricing.

Much the same principles apply to electricity pricing, which at present is done on the basis of a regressive (not progressive) block tariff with an incentive to higher usage. Electricity fees generated a substantial surplus of R998 344 in 1997/98. But connection and reconnection fees brought in only R96 000 for the 1997/98 year, indicating that fewer than 50 new accounts were supplied, notwithstanding the tens of thousands of residents in the greater Stutterheim area without electricity.

Unfortunately, the draft structure plan does not set out demand management techniques such as cross-subsidisation as options for infrastructure and service delivery. Finally, none of the extensive economic multipliers and other benefits of better demand management – including direct economic benefits (employment, the creation of small, medium, and micro-enterprises (SMMEs), productivity enhancements, smallholder irrigation, etc.) and indirect public health, environmental and gender benefits – have been factored into Stutterheim's municipal services. Nor have such considerations apparently informed the town's broader budget.
Unreconstructed budget

The budgets for water, sanitation and electricity have been considered in the previous section. There are a variety of other areas of the R11.4-million 1997/98 budget that reflect a lack of transformation.

Most importantly, the municipality is cutting back substantially on its capital spending, from 1996/97 levels of R1 706 645 to R1 336 022 in 1997/98. The only major expenditures accounted for in 1997/98 were a new grader (R350 000) and an electricity ring connection to Lower Kologha (R140 000). Water reticulation capital spending fell from R67 500 to R50 000.

Amongst general expenditures, public health spending rose from 1996/97 to 1997/98 due to a 20% salary increase and a dramatic increase in medicines (from R60 000 to R248 928). However, public health income also increased, from R678 008 in 1996/97 to an anticipated R1 018 746 in 1997/98, largely due to a near doubling of the provincial government’s health subsidy. The requirement that the municipality shoulder a greater health care budgetary requirement should have sensitised Councillors to the implications of service cuts for public health, but apparently did not.

Aside from public works (R964 092 deficit), the biggest single deficit item in the budget was for parks, gardens and sports fields (R372 457, which included in 1997/98 a 40% increase for salaries/wages and allowances, to R303 204, in comparison to 1993/94, when less than R100 000 of R143 840 was for salaries and wages). Most of the public recreational facilities in Stutterheim – including the town park – are still located in the immediate vicinity of the wealthier residential areas. In any event, according to the draft structure plan, Stutterheim’s other recreational facilities are:

- generally of a private nature (for example, the country club and golf course, as well as the swimming pool at Stutterheim High School).
- There is a need for public facilities such as sports fields, both in the central part of town and Mlungisi (Makalima Johnston Associates, 1997:20).

Could the budget have been transformed during the 1993/94–1997/98 period? Perhaps, but to be fair it must be pointed out that fiscal constraints associated with government’s macroeconomic policy may also have played a role in locking in existing spending. The total government subsidy for Stutterheim in 1995/96 was R899 433. That was anticipated to increase to R1 003 262 in 1996/97 but instead fell to R515 797 (the shortfall was covered by increased fee income). For 1997/98, the government subsidy was estimated to fall further still, to R165 425. In real (after-inflation) terms, this 90% decline in central to local spending represents one of the most important constraints to Stutterheim’s future transformation.
Growing housing backlogs

According to Stutterheim’s draft structure plan:

In the lower income residential areas, there is a great need for the upgrading of both services and housing. There is a need to expand the existing residential development in Stutterheim, as the future demand has been estimated to be in excess of 2 000 stands (Makalima Johnston Associates, 1997:19).

This is an understatement, of course, given that the housing shortage legitimately extends to many tens of thousands of greater Stutterheim residents who live in impermanent, substandard housing. Indeed, according to the plan: ‘The highest priority identified in the majority of the community workshops was that of the need to develop additional residential land’ (Makalima Johnston Associates, 1997:32).

The main problem, however, is that Stutterheim Council essentially agreed to forfeit its responsibility to provide and maintain any form of public housing, when, in 1991, the IDT’s site and service model was adopted. Nel (1994:374) aptly describes the function of housing privatisation, as facilitated by the IDT in Stutterheim: ‘The injection of finance into the town has assisted the municipality through the removal of responsibility for providing housing sites.’ According to Max July (interview, 1998), the IDT funding did not pay for electricity, nor was there a top-up due according to the new 1994 national housing policy. Moreover, according to July, ‘there was protest over the small size of houses’ built using the IDT subsidy.

The removal of municipal responsibility was marginally reversed after the 1995 local government elections when the Council gradually began to take on responsibilities – no longer as a municipal developer of housing, but instead as facilitator. Yet, even this role was constrained by the difficulties presented by the developer-driven character of the national housing policy.

In undertaking Stutterheim’s main housing project – 500 units in Mlungisi, proposed initially in 1993 – the two firms involved, Grinaker Construction and Ove Arup, spent an excessive amount (R9 000 per unit) on the provision of services during construction in 1997, leaving an insufficient amount for the top structure. Then, in December 1997, the Council realised that they had little room to manoeuvre when ‘Grinaker indicated that they were not in a position to continue with the project until they have received financial details’ (Municipality of Stutterheim, 1997g), presumably about how the Council wanted to proceed with funding construction. Less than a year earlier, Grinaker had entered the Eastern Cape with the claim that it would generate 20 000 houses if given the opportunity to utilise their ‘bottoms up (sic) people driven’ process (Municipality of Stutterheim, 1997a:4). This was also the basis on which the Council decided to transfer the long-delayed construction of the 500 units (interview, Anna-Marie Mayekiso, 1998).

One of the main things that a municipal facilitator must do is to establish land development objectives (LDOs), which highlight the integration of social, economic, institutional and physical aspects of land development. This theme was repeated by Dewar (1997:78) in discussing
Stutterheim’s development planning principles. Here, not only were the contradictions between theory and reality revealed in the decision to omit most of greater Stutterheim from municipal service delivery (as discussed above), but Stutterheim’s planners also endorsed, in practice, contrary residential development objectives that exacerbated the tendency of replacing racial segregation with class segregation. While denying this in principle – lip service is paid to the objective of establishing a single town which is physically, fiscally, administratively and politically integrated – Makalima Johnston Associates give this tendency full momentum by evoking ‘density’ as a euphemism for class.

Thus although demand for ‘medium to low density housing’ is ‘limited’, Makalima Johnston Associates set out several exclusive areas for development, including infill housing in the centre of town. Moreover, high-density, high-cost housing should also be constructed in geographically-favourable areas:

Based on discussions with residents and local estate agents, there appears to be a need for additional flats and townhouses. These should be developed close to town around the CBD, where land and services are available (Makalima Johnston Associates, 1997:34–35).

High-cost housing should also be located on 20 hectares of suitable commonage land immediately to the north and south of town, according to Makalima Johnston Associates. (The low-income townships of Mlungisi, Cenyu and Cenyulands are due east, and Kubusie is south-west of Stutterheim, so this trajectory of housing development for high-cost housing would utilise land that could otherwise have been allocated to lower-income people desiring to be closer to amenities).

In contrast, Makalima Johnston Associates (1997:32–34) observe that there are four options for high-density, low-cost housing which could serve the 2 600 households (from Mlungisi, Kologha and Amatolaville) who are on formal housing waiting lists. Tellingly, even though land directly adjacent to Kubusie is cited for development, no Kubusie (or Cenyu or Cenyulands) residents were considered to be in need of Stutterheim housing.

Where there exists a (single) low-cost housing development option that has the potential to border wealthier neighbourhoods near the golf course, the planners of Makalima Johnston Associates are quick to point out that:

Previous discussion that this portion of commonage should be set aside for future low density residential usage is recorded. Many residents regard the area as prime land and if utilised for high density housing will lead to depreciation of adjoining properties (sic) (1997:33).

The potential class bias of the ‘many residents’ referred to is not recorded. Of the other three options, two include extending and amplifying the inherited apartheid geography of Stutterheim, by building on the south-east end of Mlungisi or west of Amatolaville. The third option is development on a small piece of land around Amatolaville.

Most importantly, low-income residents are implicitly excluded from potentially well-located developments on infill spaces within Stutterheim, on nearby buffer land such as between Kubusie and Stutterheim or just north of Stutterheim. In sum, the Makalima Johnston Associates’ draft structure plan dispenses with the early 1990s attempt to reinforce a physical buffer zone separating the white residential area from the
African township; but its income-related planning has much the same effect.

All of this is not to deny that very gradual racial desegregation is taking place. With one exception, the key Mlungisi leaders active in the SDF since 1990 have moved to Stutterheim. Several earn sufficient incomes from well-paying Bisho jobs to afford bond payments. The one SDF leader who didn’t move was Max July, who in an interview confirmed he stayed in his (unserviced) Mlungisi residence ‘to promote self-help’.
Small business cul-de-sacs

The pride of Stutterheim’s LED efforts is entrepreneurial training and small business promotion. Yet, in the most important respects – retention of trained people in the community through local job creation, and enterprise sustainability – the SDF and its two main education/training and advice centre offshoots are not succeeding.

The Business Advice Centre provides support to entrepreneurs in the form of skills development (geared to local resources such as wood and sewing); assistance in the location of raw materials; facilitation of premises such as a hand weavers’ workshop and rural market workshops; and marketing assistance. There was an attempt to establish six periodic markets linked to pension payout days, but, according to Max July, these ‘never worked’ (interview, 1998).

Addressing the perennial problem of access to credit, the advice centre and the Eastern Cape Development Agency (ECDA) established a group credit scheme that replaced what Dewar (1997:82) had described as a ‘not particularly successful’ small loan scheme of the Kei Development Trust. Writing in October 1994, Dewar (1997:83) found the new ECDA scheme was ‘particularly successful’. Yet, according to Max July (interview, 1998), the scheme collapsed after a facilitator – an American citizen – left.

More generally, bank credit for small entrepreneurs is unavailable in Stutterheim (interviews, 1998). There is allegedly no local decision-making power on the part of the town’s bank branch managers, and although Stutterheim municipality had R5,3-million in four bank accounts (R3-million with First National Bank and R2,3-million with Unibank) in 1998, it had never enquired about the possibility of linking such deposits to lending relationships (Stutterheim TLC, 1998:7; interview, Ferreira).

Thus, without credit the Stutterheim entrepreneurial projects most often celebrated have a built-in ceiling on growth, leaving most beneficiaries of programmes stuck in the cul-de-sacs of hawking and sewing, according to Councillor and entrepreneur Anna-Marie Mayekiso (interview, 1998). Moreover, she said, of the ten sewing ventures begun during the early 1990s, only three still exist. Although pottery and shoe-making enterprises are still in business, the growth required to generate employment on anything more than a token scale does not exist.

Reflecting the limits of the entrepreneurial strategy, the other area of Stutterheim’s community upliftment most often praised is privatised educational and child care support. Yet here too, the famous Amakhaya home-based educare crèche programme ran into difficulties associated with a neo-liberal conception of the day care problem and its self-help solution. Instead of receiving generous municipal funding, as would be a reasonable demand by residents, the crèche scheme was based on a discrete intervention to rationalise child care, but with as little involvement as possible by the state. Ironically, the founder of the scheme went on to become the MEC for Education in the first post-apartheid Eastern Cape provincial cabinet (although she was dismissed from this position in early 1998). According to Dewar (1997:89):
the Amakhaya mothers were appointed by, and were accountable to parent groups, which in turn were responsible for collecting contributions from parents. The Foundation, in all good faith and with the best of intentions, raised some finance to supplement the 'pocket money' of the mothers and paid this to them directly. This created the perception that the mothers were 'employed' by the Foundation: this led to reduced contributions by parents and discontent over 'levels of pay' on the part of the mothers.

For Dewar (1997:89), this problem reflected merely 'confusion' in 'lines of accountability' rather than a misguided structural relationship of workers to employers, and of citizens to their local state.
Land reform paralysis

Land reform in Stutterheim was failing, according to Councillor Anna-Marie Mayekiso (interview, 1998). The main evidence of land reform in the Stutterheim area is the 1995 demarcation of an additional 1,031 plots on the Mgwali commonage. This codified existing arrangements, but also exacerbated legal conflicts over control of the commonage land and social conflicts between long-term quitrent tenure holders and those without tenure security. The divisions generated by differential tenure and the overall paralysis in redistributing the Stutterheim area’s rural land, are the main signs of an ongoing rural development crisis. But the complete lack of access to water and any other municipal services also serves as a warning for the time when, in the near future, Mgwali and other peripheral, though densely-populated, rural areas will fall under Stutterheim municipal rule.

In 1995, 65 holders of quitrent tenure who were dispossessed during the betterment-era demarcation of sites, filed a Land Claims Court claim. The 1993 Upgrading of Land Tenure Rights Act allowed quitrent tenure to convert automatically, upon application, to freehold status. But to access the sites on the commonage of which the quitrent holders were dispossessed during the 1960s–1970s reversion back to tribal and then homeland rule, requires the powers of the Restitution of Land Rights Act of 1994.

According to the quitrent holders’ claim, the homes of subsequent settlers on the commonage land “resemble a rural slum and it is almost impossible for quitrents to continue with successful farming. Our main aim is to recapture the agricultural environment we once enjoyed before betterment took control of the commonage” (Border Rural Committee, 1997:20). Under these conditions, class differentiation between quitrent holders and other residents is intensifying, such that 14 Mgwali families own more than one quitrent plot, and only 30 of the original 152 quitrent plot title deeds are considered legally valid. Moreover, according to the Border Rural Committee (1997:20):

There are class stratifications among the quitrenters themselves ... There is a tendency by original quitrenters to exclude the new owners in decision-making on the issues that affect all quitrenters, especially when a difference of opinion is anticipated.

Although in this context of tenure uncertainty “the internal market for land in Mgwali appears to be very limited” (Border Rural Committee, 1997:20), the estimated value of plots is R30 000. One form of return on such a substantial investment is cash rental (since labour tenancy on black-owned farms was prohibited by the Bantu Laws Amendment Act of 1964). But as the Border Rural Committee (1997:24) continues:

The uncertainty of land reform has resulted in the escalation of evictions of tenants, by landowners forcing tenants to move to their newly demarcated sites. This is attributed to a sense of fear and anxiety regarding the possibility of losing their land to the tenant occupants.
Theft of agricultural implements, livestock and fencing is also common.

In sum, a variety of informal tenancy arrangements emerged in the 1980s, some of which were formalised by post-1994 legislation. But strong class and patriarchal social residues hindered progressive changes in rural social relations.

This was not because civil society was non-existent. Organisations in Mgwali that have been involved in settling disputes over land include the Sanco village and central committees, the ANC, ANC Women’s League, ANC Youth League, Community Policing Forum, the Farmers Association and the church. Reporting on its role in mediating the land issue, the Border Rural Committee (1997:4) observed ‘serious tensions within the community, particularly between the youth who are active in local structures and a small group of the elderly who are quitrenters’.

Some quitrenters refused to sign a code of conduct – for the purposes, apparently, of codifying an initial consultation – proposed by government officials and the Border Rural Committee, because ‘in the past, signing government documents had resulted in loss of land’ (Border Rural Committee, 1997:6). The quitrenters suggested that the team continues with its work and finds land for the landless without their signing the Code of Conduct’ (Border Rural Committee, 1997:6). The Border Rural Committee (1997:7) conceded:

It was unrealistic to have expected the quitrenters, in particular, to sign a Code of Conduct. A second criticism is that it is arguable whether a signed Code of Conduct would have ensured community commitment in any case.

Women residents of Mgwali were particularly harmed by the process. In general terms, rural women play a vastly important but rarely recognised role in the formal South African economy by ensuring that their fathers, brothers and sons are born, raised, healed when sick, and cared for in retirement – so that employers in distant cities do not have to pay wages sufficient to cover such costs. The unpaid role of women in the reproduction of the male work force is particularly poignant in rural areas of the Eastern Cape. There it is only the women’s extraordinary rural tenancy – on overgrazed land in areas fraught with social tensions – that ensures not only survival under difficult conditions, but also the cross-subsidisation of costs (rearing, caring and retirement), which are normally built into the wages and salaries of urban men working in societies not burdened by inherited bantustan-type rural-urban relations.

Yet, the progressive denuding of women’s rights to land – which existed, de facto, in customary arrangements, but were removed in the 1927 Native Affairs Administration Act in favour of male primogeniture – have been cemented, not overturned, by the introduction of an imperfect land market, which has added a pecuniary incentive for men to retain control and effective ownership. Mgwali women have ‘seen widows in this community being driven away from their homes by sons who claim to be owners’ (Border Rural Committee, 1997:29). The women are further disadvantaged by illiteracy and lack of resources to transfer land into their own names. Although the equality clause of the Constitution provides equal rights to women, the failure to overturn sexist laws and de facto discrimination – such as the requirement that a husband’s signature should accompany a bank loan application – mean that very little has changed for women (Border Rural Committee, 1997:27–28).
What must also be questioned, in the context of this relatively micro-level contestation of land rights, is whether the outcome of land reform envisaged by the Department of Land Affairs, namely a growing class of small-scale farmers, is realistic. The question is relevant as the Stutterheim district’s large tracts of white-owned commercial farmland remain untouched by distributional challenge. According to the Border Rural Committee (1997:31 and 33):

For an individual to cultivate the 10 acres of land [in Mgwal] it costs him/her approximately R1 000 and only a small proportion of the households can afford to pay this ... [Instead,] households do maintain small gardens where vegetables are grown for subsistence.

Perhaps most disturbingly, any vision of more thorough-going transformation – more aggressive land reform activity in white farming areas, government intervention in agricultural markets (including inputs such as seed, fertilizer, credit and irrigation systems, such as those which white farmers depended on), much more technical assistance, a much larger grant from central government to buy land and own it, perhaps communally – seems to have been lost in the process. Even the Border Rural Committee’s (1997:39) recommendations to the Department of Land Affairs assumes that ‘Mgwal will never again be a thriving agricultural settlement, but with an integrated approach, it could develop into an economically viable and socially stable peri-urban area’ – evidence to the contrary notwithstanding.
Conclusion

Stutterheim’s local economic development crisis has the potential to be resolved only if enormous changes to power relations, institutional forms, planning and consultation processes, municipal budgeting, and ideological vision are all transformed. More likely is the prolongation of the crisis, as even activities considered viable at one stage are unveiled as unsustainable when donor funding is withdrawn.

Some may not approve of the pessimism implicit in this analysis of Stutterheim. At the other end of the spectrum, Nussbaum (1997:55), for example, remarks that:

If Stutterheim is a microcosm of what a reconstruction and development programme in South Africa can be, may all communities be inspired by its example and its people! May all communities discover their own particular magical rainbow that is created by their own particular chemistry, skills, talents and vision in order to create a prosperous future and to inspire people to better serve their communities.

Yet criticising Stutterheim for relying on an excessively ideological brand of local boosterism is not particularly controversial. As Nel (1994:374) remarked at a relatively early stage:

This raises the question whether the initiative is replicable in other towns or even sustainable in Stutterheim in the long term without continued financial support. Most of the finance does not appear to have come from the private sector and a negligible amount was raised locally ... The limited private sector investment in the town and in major forum projects is a matter for attention in the future.

Tandy (1992:20) flagged the problem even earlier, commenting that ‘it is not clear that the Stutterheim funding is available for similar projects on a similar scale’. Nel (1994:374) argues that: ‘The effects in Stutterheim of the external financing and entrepreneurial development can only be assessed when current funding runs out and the town has to rely on its own resources and skills.’

But already, well before Stutterheim loses its appeal to external donors, it is feasible to assess the general results of the model adopted since 1990. Those results reflect the acceptance of a wretched status quo by Stutterheim’s mass base, largely, it appears, because a small group of township leaders pacted with Stutterheim’s verligte white elite and demobilised popular protest. While Stutterheim was highly celebrated by the intellectual and policy wings of big business – including Barlow Rand, a major conglomerate with a long track record of promoting neo-liberal public policy – its premature local social contract failed conclusively in nearly every material respect in which it can be judged.

The vexed problem of ‘sustainability’ cannot even begin to capture the scope of Stutterheim’s deficiency. In his study, The rise and fall of the South African peasantry, based on evidence from Stutterheim and similar settings, Colin Bundy (1988:243) asserts that: ‘The underdeveloped sector of the South African economy is not “separate” from the developed sector: the economy of the former is firmly integrated
with that of the latter. This theme has emerged repeatedly throughout this report.

Indeed ‘uneven development’ – differential growth of sectors, geographical processes, classes and regions at the global, regional, national, sub-national and local level (Bond, 1998a) – is readily observed as a continually evolving process that ties greater Stutterheim residents to their fate in the local, national and increasingly international divisions of labour. It is true that most people in the area are ‘surplus’ to the formal capitalist economy, as witnessed by the high, and rising, rate of unemployment. But the informal ties to capitalism as a system bind more closely; for rural women in greater Stutterheim continue to surrender their unpaid labour to reproduce a male labour force in distant urban areas, a fact not changed in the least by the post-1990 ‘Stutterheim experience’ or by post-1994 democracy.

The phenomenon of uneven development in peripheral settings has thus been explained as a process of ‘articulations of modes of production’ in which the capitalist mode of production depends upon earlier modes of production for an additional ‘superexploitative’ subsidy by virtue of reducing the costs of labour power reproduction (Wolpe, 1980). Smith (1990:156 and 141) insists, however, that ‘it is the logic of uneven development which structures the context for this articulation’, rather than the reverse. This observation appears valid in the case of Stutterheim. It was necessary to trace the historical unevenness of settlement in the area to understand how African people were forcibly thrown off their land as a result of the efforts of missionaries and mercenaries to draw them into formal capitalist relations, efforts which led to a century and a half of systematic underdevelopment.

It is in this broader context that the rationale for the Stutterheim experience becomes clearer. Stutterheim was, after all, only an emblem – albeit a particularly impressive one – of the problems that South Africa’s white elites faced during the 1980s. The solution to both the specific 1989/90 boycott and to the more general radicalisation of Stutterheim’s township conforms to the problem faced by what Ferguson (1994) has called ‘the anti-politics machine’ in a book subtitled ‘Development, depoliticization and bureaucratic power in Lesotho’. That important work calls our attention, as students of depoliticised development, to the fact that failure – represented in Stutterheim by multiple objectives that have not been reached, and, instead, an observable deterioration of living conditions – does not necessarily represent cause to change course. Ferguson (1994:19–20) cites the French theorist Michel Foucault to help deconstruct development discourse:

Perhaps the best example of this kind of analysis is Foucault’s ‘genealogy’ of the prison ... By differentiating illegitimates, and by turning one uniquely well-supervised and controlling class of violators against the others, the prison did end up serving as part of a system of social control, but in a very different way than its planners had envisioned. ‘If this is the case,’ Foucault (1979:276–77) writes, ‘the prison, apparently (failing), does not miss its target; on the contrary, it reaches it ... For the observation that the prison fails to eliminate crime, one should perhaps substitute the hypothesis that the prison has succeeded extremely well in producing delinquency, a specific type, a politically and economically less dangerous – and, on occasion, usable – form of
illegality; in producing delinquents, in an apparently marginal, but in fact centrally supervised milieu; in producing the delinquent as a pathologised subject ... So successful has the prison been that, after a century and a half of (failures), the prison still exists, producing the same results, and there is the greatest reluctance to dispense with it, The point to be taken from the above argument is only that planned interventions may produce unintended outcomes that end up, all the same, incorporated into anonymous constellations of control – authorless 'strategies', in Foucault's sense – that turn out in the end to have a kind of political intelligibility.

Of importance to concede is the undisputable evidence that in Stutterheim the issue is not an expansion of the state (as Ferguson observed in Lesotho), but rather its contraction and replacement by an unelected, elite-controlled development agency whose relations with external agencies – the IDT, DBSA and a host of supporters in major foundations, corporations, allied think-tanks and periodicals – appear far more successful than Stutterheim's own development trajectory. But to borrow Foucault's words, 'after a century and a half of "failures", the prison still exists, producing the same results', just as after a century and a half of failures, so too does the metaphorical 'delinquency' of systematically generated underdevelopment of people who come into contact with increasingly more sophisticated missionaries and mercenaries of capitalism.

Just as during the town's first decade or two, the last decade of development and underdevelopment in Stutterheim bears all the scars of misapplied physical force, divide-and-rule strategies, co-optation, and indirect rule – all with the overriding objective of combining legitimation of the system with increasingly sophisticated efforts at drawing surplus from the victims of 'development'.

The 'political intelligibility' of all of this does not need much clarification, for it is Stutterheim's role as a poster child of LED and local social contracts ('reconciliation') that helps us understand the very limits of such concepts. Unless LED can break loose from the association with the set of discrete, unconnected (though often mislabelled 'holistic'), marginal and demonstrably ineffectual interventions that have characterised the Stutterheim experience, it is doomed as a strategy, either for local-level growth or for addressing poverty in South Africa, or anywhere else for that matter.

The alternatives to the kind of depoliticised LED initiatives found in Stutterheim are many (Ecsecc, 1998), and follow very closely the strategy proposed in the conclusion to the most serious analysis of the South African economy yet produced, The political economy of South Africa by Fine and Rustomjee:

We place considerable emphasis upon a state programme of public expenditure to provide social and economic infrastructure. This forms part of a strategy to provide for basic needs. The problem of how to finance such a programme is less acute than the formation of the political, social and institutional capacity to carry it out (1996:252).

The lack of apparent political, social and institutional will to attempt anything more than the ineffectual initiatives associated with the Stutterheim experience was not the subject of this research, though it certainly deserves study. Instead, in this evaluation, a prerequisite understanding has been established. Writing somewhat myopically in the
early days of the Stutterheim experience, Tandy (1992:21) found that: 'The lesson of Stutterheim is that much can be done during this interim period without doing violence to the political objectives, short and long term, set by progressives.' No one could deny the general logic of this comment – that is, the continually maturing engagement of mass organisations with the development industry, and the potential for progressive outcomes. But the particular myth of Stutterheim as a developmental success story – for progressives and neo-liberals alike – is certainly open to revision.
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