

South African Cities in the Second Decade of Democracy: Emerging Conceptual and Policy Spaces for a New Urban Agenda

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Introduction

After thirteen years of robust democratic experimentation, South Africans remain deeply perplexed by the persistence of poverty, deepening inequalities and all the social dysfunctions that stem from this malaise (crime, social alienation, urban fragmentation, security suburbs, fear, shrinkage of the public realm, and the ravages of pandemics). How can high growth rates, a well endowed natural resource system, a reasonably competent multi-sphered state system, a sophisticated tertiary education sector and a well developed tradition of civil society organisation result in massive economic transformations that fail to benefit the poorest of the poor?

It will be argued in this paper that the answer can in large part be traced back to the persistence of ‘capital fundamentalism’ (King & Levine, 1994) that has dominated macro-economic theory and policy and effectively obliterated the space for wider non-reductionist conceptions of development. However, since 2002 there have been some key policy-cum-strategic shifts that if pushed just a little further - and connected up in a transdisciplinary manner - could displace ‘capital fundamentalism’ from its self-appointed imperial pre-eminence.

These shifts are as follows:

- from crude neo-liberal macro-economic policy to the ‘developmental state’ approach, reflected most clearly in the recently released National Industrial Policy Framework (NIPF) formulated by the Department of Trade and Industry (DTI) which builds as the Accelerated and Shared Growth Initiative for South Africa (ASGI-SA);
- from a-spatialism to a ‘city-region’ approach, with two key policy frameworks in place that recognise local spaces within the national development process, namely the *National Spatial Development Perspective* (NSDP) formulated by the Presidency and the *National Framework for Local Economic Development in South Africa* (NFLED) released in 2007 by the Department of Provincial and Local Government (Republic of South Africa, Department of Provincial and Local Government, 2007);

- from environmental conservatism to sustainable resource use articulated in the soon to be adopted *National Framework for Sustainable Development* formulated by the Department of Environmental Affairs and Tourism (Republic of South Africa: Department of Environment and Tourism, 2006).

In isolation and in their own right, these shifts are not particularly significant. But when read together and interpreted via the work of the new institutional economics that is fanning out like a bush fire across the development economics community, some new and exciting opportunities are opening up. I am referring in particular to the work of writers like Ha-Joon Chang (Chang, 2002), Peter Evans (Evans, 1995; Evans, 2005), the Indian economist and Nobel Prize winner Amartya Sen (Sen, 1999), Dani Rodrik¹ (Rodrik, Subramanian, & Trebbi, 2004) and even former World Bank Chief Economist Joseph Stiglitz (Hoff & Stiglitz, 2001). Chang's economic policy workshops co-hosted with the DTI are one example of this direct impact, others include the distribution by DPLG of the work of Peter Evans as background reading for the policy process that led to the formulation of the NFLED and the so-called Harvard Panel of economic advisors (Frankel et. al., 2006).²

The significance of this academic ferment amongst development economists, is that they confirm what many outside this exclusive club (particularly in the urban research and public management fields) have been saying for nearly two decades, namely that it is the quality of your institutions that matter when it comes to development, not the quantities of capital in the financial circuits. Urban researchers have even gone beyond institutions, pointing to the significance of social processes, power relations and culture. What is significant, though, about the new institutional economics is the economic rationale provided for the centrality of institutions, namely the recognition that value in today's globalised knowledge economy is derived from ideas, not tangible assets. This refers in the main to the intellectual regimes of commoditized intellectual property, routinized corporate processes and the brands/symbols of mass consumption goods that dominate the developed economies and, indeed, the global economy. However, it can also refer to the micro-economics of development in the global South where it is now accepted wisdom that development only works when the experience and ideas that are deeply embedded in dense networks of lived social relations are directly tapped and mobilised to animate development processes.³ In both cases, however, it is the quality and configuration of institutions that makes it possible - or impossible - to transform embedded or commoditized ideas into the drivers of economic growth and development. Once institutions, social processes and culture come to be valued because they are also economically significant, then it should be obvious how this creates the much needed bridge between economists and

¹ . Dani Rodriki is one of the so-called "Harvard Economists" that has advised the Presidency.

² . This paper and argument has been influenced by a masters thesis by Kate Rivett-Carnac project supervised by the author (Rivett-Carnac, 2007).

³ . This is not to suggest that these ideas can be extracted from these networks – they are only accessed by working with the networks themselves.

urban researchers. Herein lies, in particular, the importance of Sen's notion of a deliberative democracy as the institutional context for expanding the "capabilities for development" – a line of logic that runs somewhat contrary to the Asian 'developmental state' model where developmental priorities were bureaucratically determined. (This also signals a bifurcation point between a lesser or more democratic developmental economics which will be discussed later.)

However, I want to push this argument one step further by arguing that a bridge between institutional economics and urban researchers is not sufficient because both are almost totally ignorant of some of the most fundamental material transformations currently underway, namely the consequences of the breakdown of the world's ecosystem services and resources. The new institutional economics potentially creates a three-way bridge between economists, urban researchers and the new 'sustainability science' that has in recent years started to expand rapidly across many fields in South Africa (for a review of this emerging field see Burns, Audouin, & Weaver, 2006). Following Sneddon et. al., the bridge itself is provided by another rapidly emerging field called "ecological economics" which has evolved a rich literature centred around the journal *Ecological Economics* (Sneddon, Howarth, & Norgaard, 2006). Why this is significant is that wherever transitions to more sustainable resource use have taken place, this has been achieved by reconfiguring institutions around a new set of ideas in response to ecosystem breakdown, and the result has often been the release of new investments as new value chains are created out of sources of value that were previously ignored or suppressed.⁴ These new value chains often undercut the constipated and constricted value chains that are so tightly controlled by the established (often monopolized) corporate sectors. Alternatively, they create new flows of value where established corporate entities are absent because their costly systems could not access returns in these spaces; and, of course, there are the many emerging high potential economic synergies between the old and new value chains predicated on the impact of new technologies as the costs of the old ones rise to critical thresholds (in particular in the energy, water and food production fields).

In short, the new opportunities that hold my attention arise from the possibility created by the gathering influence of institutional economics for translating the richness of our urban dynamics and the profundity of our ecosystem challenges into transformative sources of economic value for driving development. This transdisciplinary synthesis constitutes the kernel of a much needed theory of urban sustainable development.

False Promise of Capital Fundamentalism

With hindsight, I have little doubt that it will be possible to attribute many of the lost developmental opportunities of the first decade of democracy to what King and

⁴ . This is the conceptual space that explains the rise of social entrepreneurship.

Levine have called “capital fundamentalism” (King & Levine, 1994), namely the assumption that “solving the problem of underdevelopment was primarily about increasing poor countries’ stock of capital” (Evans, 2005, p. 91). The equivalent in South Africa was the initial obsessions with FDI after 1994, and the current (post-2002) focus on national infrastructure investments. However, the rise of institutional economics has changed all this. As Evans goes on to argue, “most would agree with Hoff and Stiglitz ... that ‘shortage of capital must be a symptom, not a cause, of underdevelopment’ (Evans, 2005, p. 91).⁵ Instead, following the recent work by Evans, development economics is now about building the kinds of institutions that organise and mobilise a wide variety of energies, ideas, processes and deal making dynamics that *cause* GDP per capita growth (amongst other development benefits) rather than the other way round (Evans, 2002; Evans, 2005; Evans, 2005; Evans, 2006; see also Chang, 2002). Out of this emerges the vast literature on the developmental state which depicts the state as the key and most legitimate coordinator of these contextually specific institutional configurations. No other actor exists with a similar role and capacity, hence the loud calls for ‘bringing the state back into development’. Hoff and Stiglitz provide a summary of where contemporary “modern economics” has arrived (that is old hat for anyone steeped in the governance and public management literature of the last twenty years): “Development is no longer seen primarily as a process of capital accumulation, but rather as a process of organizational change.” (Hoff & Stiglitz, 2001, p. 389) Urban researchers have been saying exactly this since at least the late 1980s (Stren, 1996; Swilling, 1997).

The problem with “capital fundamentalism” in South Africa after 1994 is that it was presented as a non-negotiable, or in the famous words of Maggie Thatcher, “there is no alternative”. Debate was effectively closed, paving the way for the imposition of macro-economic stabilisation measures. Urban space became irrelevant, eco-system services and resources were taken for granted and participation became a legitimising ritual. In response, the community of South Africa’s urbanists retreated into ways of conceptualising urban processes that rendered the certainties of capital fundamentalism redundant – complexity, multiple identities, informality, institutional duplicity, collusions that confounded formal rules, cultural practices, endemic perversions of power relations over spaces and bodies, and capacities that defied both bureaucratic and market logics were valorised and even applauded (Swilling, Khan, & Simone, 2003; Kihato & Landau, 2006; Mbembe & Nuttall, 2004; Pieterse, 2005; Simone, 2006; Isandla Institute, 2007; Tomlinson, 2003). Environmentalists retreated into project-level “impact studies” within the parallel framework set up by the National Environmental Management Act, and social movements emphasized autonomous action for localised change or anti-neoliberal protest. Even engagement to achieve tangible gains for the poor was regarded by some as a waste of energy – survivalism or wild cat protest became the norm.

⁵ . Evans is referring here to (Hoff & Stiglitz, 2001, pp. 389,428).

It is worth recalling the initial conditions that existed post-1994 to remind us how a growth policy focussed exclusively on capital formation came to be implemented in practice. These were choices rooted in a very specific set of material circumstances, conditions which may largely no longer apply. For various reasons that have been adequately covered elsewhere (Habib & Padayachee, 2000), by the time of the founding election in 1994 the ANC's senior policy makers were convinced that the best bet for South Africa's economic future was to integrate the South African economy into the global economy and the various multi-lateral institutions that govern and regulate the global economy. This effectively meant adopting language and policy positions that made this entry and integration strategy viable. This was believed to be important to pacify the fears of a jittery white business community who wanted access to foreign direct investment (FDI) and the right to relocate capital offshore, attract foreign direct investment and create new opportunities for emerging black business – all, of course, legitimised by the language of job creation via private sector investment. Measured on its own terms, and given that a Government of National Unity was in place, the achievements by the end of 1994 were impressive: the independence of the South African Reserve Bank (SARB) was constitutionally guaranteed, a new Treasury department was under construction, the Department of Trade and Industry (DTI) was preparing its role as Africa's 'MITI'⁶, inflation was down, General Agreement on Tariffs and Trade (GATT) commitments on trade liberalisation were agreed, legislation was passed to open up the banking system and the Johannesburg Stock Exchange (JSE) to international investors, the plan for liberalising capital movement controls was on the drawing board, the idea of an institutionally autonomous SARS had been accepted at senior level (but only implemented in 1997), and a policy of fiscal restraint had been adopted (including 'targets' that were conveniently ambiguous).

The Government of National Unity under ANC leadership essentially took over the core policy group that spanned the Ministry of Finance and SARB (plus other related institutions such as the Industrial Development Corporation [IDC] and the Development Bank of Southern Africa [DBSA]) that had dominated macro-economic policy making before the regime changed in 1994. Following Gelb (2004), this approach was predicated on the assumption that it was possible to simultaneously manage three macro-economic variables: capital mobility to secure FDI, exchange rates to promote export competitiveness, and interest rates (via monetary policy) to control domestic growth and debt. The underlying assumption was that the more liberalisation of capital flows there was, the better things would be for the economy. However, by the late 1990s the logic of the measures referred to in the previous paragraph built up pressures within the domestic economy that made it necessary to abandon these old habits. Gelb articulates the 'trilemma' that drives the choices all

⁶ Japan's all-powerful Ministry of International Trade and Industry, the centre of that country's economic policy-making.

macro-economic policy makers must make if their aim is to manage national economies that have been inserted into a global economy managed by neo-liberals:

Monetary and exchange rate policy should be considered together with each other and with capital account liberalisation, because capital mobility places limits on monetary and exchange rate policies. In general, macroeconomic policymakers in any economy would choose, if they could, to have an open capital market to enable access to external finance, and a stable nominal exchange rate to underpin international trade and the freedom to adjust interest rates via monetary policy to achieve domestic objectives such as output growth or price stability. The problem is that these three goals constitute a 'trilemma': achieving all three simultaneously is not possible, at least not in the medium to long-term, and policy authorities must decide which two to prioritise and abandon the third." (Gelb, 2004, p. 7)

Gelb argues that it is possible to divide post-1994 macro-economic policy into a pre- and a post-1998 phase. Whereas between March 1995 (when capital flow liberalisation began) and 1998 it was assumed that all three goals (i.e. capital flow liberalisation, exchange rate targeting and inflation targeting) could be achieved, Gelb argues that by mid-1998 exchange rate policy had been 'abandoned' in favour of capital flow liberalisation and inflation targeting (via an autonomous monetary policy managed by the SARB) (Gelb, 2004).

Based on the policy framework that had been put in place by the end of 1994, it was decided to adopt a 'big bang' approach to capital flow liberalisation in March 1995. With considerable fanfare, the dual exchange rate was unified to remove restrictions on transactions (mainly outflows) by non-residents. The liberalisation of controls on outflows was seen at the time as necessary to balance the large inflows that were increasing money supply, thereby creating upward pressures on the currency which, in turn, could have endangered export competitiveness. To understand this balancing act, we need to realise that two assumptions dominated the mindset of macro-economic policy makers during this myopic honeymoon period between March 1995 and its rude end in 1998: the first was the belief (fuelled by the mesmerising impact of 'Madiba magic' and the love affair with US President Bill Clinton) that FDI was going to continue to flow in as investors rushed to participate in 'the miracle'; and the second was that export-led growth was the key to achieving sustained long-term growth. At the time these were such deep-seated assumptions, the possibility of both being false was hardly ever entertained.

But as long as large capital inflows continued (or, more accurately, appeared to be about to materialise), economic policy makers believed they could avoid the 'trilemma'. If FDI was going into assets with long maturity time frames then the risk of rapid outflows would be reduced and 'trilemma' avoidance could have lasted longer. In reality, the liberalisation of controls over investment in the JSE (an

achievement by a lobby of interests not always aligned with the interests of exporters) encouraged rapid inflows of speculative capital in short-term portfolio investments that are notorious for disappearing overnight at the first signs of trouble. This, coupled to the fact that currency speculators could rely on the SARB to intervene via dollar purchasing or selling in pursuit of a stable exchange rate, created a highly volatile situation. By 1996 this resulted in the famous exchange rate crisis that triggered the dropping of the RDP and the adoption of the Growth, Employment and Redistribution (Gear) macroeconomic strategy. By 1998 (the second crisis but this time triggered by the Asian meltdown) it was clear to enough senior policy makers that the much vaunted and expected FDI wave was not going to materialise.

A future without mountains of FDI slowly dawned. And with this dawned the realisation that choices had to be made: monetary targets, or exchange rate targets, or an open capital market? Unfortunately, all three were choices couched within a neo-liberal paradigm underpinned by the globalised flow of capital investments which imposed limits on the so-called 'patriotism' of South African capital. Something had to give. To make matters worse, the state liberalised inflows into liquid assets instead of focusing inflows into investments in fixed assets for an initial ramp up period which is what even the IMF now contends is a preferable approach for managing volatility (especially after the Asian crisis in 1998). The policy response after 1998 was based on the assumption that capital market liberalisation was irreversible and inflation targeting was a domestic priority. The result was the dropping of exchange rate targets, thus effectively allowing the exchange rate to float. However, little was done beyond moral exhortations to direct FDI into fixed assets where the job creation (and therefore poverty) impact would be greatest. The arms deal trade offsets represent a strategy that was about more than moral exhortation, but the results of this strategy have been disappointing (not to mention the fiscal price paid to achieve these poor results).

Capital liberalisation across the board plus harsh inflation targeting using the single instrument of interest rates became the hard core of the state's macro-economic policy after 1998. The question is whether this has in fact achieved what government claims it has achieved, namely 'macro-economic stabilisation' and the clearing of the way for an endogenous 'micro-economic' focus on job creation via enterprise, black economic empowerment (BEE), extended public works, land reform and – more recently – micro-finance.

Gelb makes a distinction between 'external' and 'internal' economic stabilisation and questions whether 'external' stabilisation took place by the late 1990s. Although Minister of Finance Trevor Manuel argued that a flexible exchange rate can 'help cushion the economy from external trade and capital shocks and mitigate the impact of economic contraction, especially for the poor' (quoted in Gelb, 2004, pp. 10-11), Gelb points out that '[o]ver the three years since mid-2001, the rand has been perhaps the most volatile currency in international markets' (Gelb, 2004, p. 10). Exchange rate

volatility has increased the levels of uncertainty which, in turn, have delayed investment decisions in sectors that are particularly dependent on exports. This, plus the continued light handed approach to capital inflows into the non-real economy instead of into fixed assets, has had a detrimental effect on job creation and labour absorption. Investments in the real economy have suffered as a result of ‘external instability’, while ‘internal stability’ has been achieved via an extremely narrow focus on inflation targeting and tight fiscal controls. Even the US Federal Reserve uses a wider set of criteria (including employment levels) to determine interest rates than a simplistic focus on inflation.

What then, was the link between inequality (and therefore poverty) and economic growth. Despite a deep scepticism amongst senior economic policy makers about any dilution of the spirit and letter of ‘capital fundamentalism’, it was accepted by South African economic policy makers that there is a link between inequality and growth. Although the more conservative wings of the neo-liberal movement locally and internationally still insist that any form of state intervention to prepare the conditions for market-led growth is economically counter-productive, less fanatical economic policymakers have found it difficult to deny empirical evidence that clearly demonstrates the linkages. In its 2000 *World Development Report*, the World Bank has come to endorse some of this thinking. While the Report has many weaknesses – chief among them being a failure to identify the optimal combinations of policies that would reduce poverty more than others (Institute of Development Studies, 2000) – it does contain numerous useful insights. The Bank notes:

For a given rate of growth, the extent of poverty reduction depends on how the distribution of income changes with growth and on initial inequalities in assets, and access to opportunities that allow poor people to share in growth ... Other things being the same, growth leads to less poverty reduction in unequal societies than in egalitarian ones... Evidence confirms this: when initial inequality is low, growth reduces poverty nearly twice as much as when inequality is high... These results open the possibility that policies to improve the distribution of income and assets can have a double benefit – by increasing growth and by increasing the share of growth that accrues to poor people... *Policies should focus on building up the human capital and physical assets of poor people by judiciously using the redistributive power of government spending...* These reinforcing effects from human development to economic development and back suggests the possibility of vicious and virtuous circles. Poor countries and poor people can be locked into a vicious cycle as low human development diminishes economic opportunities, making it more difficult to invest in health and education. In contrast, well-targeted public interventions in health and education can contribute to a virtuous circle of greater economic opportunities generating resources for further investments (quoted in Institute of Development Studies, 2000, emphasis added).

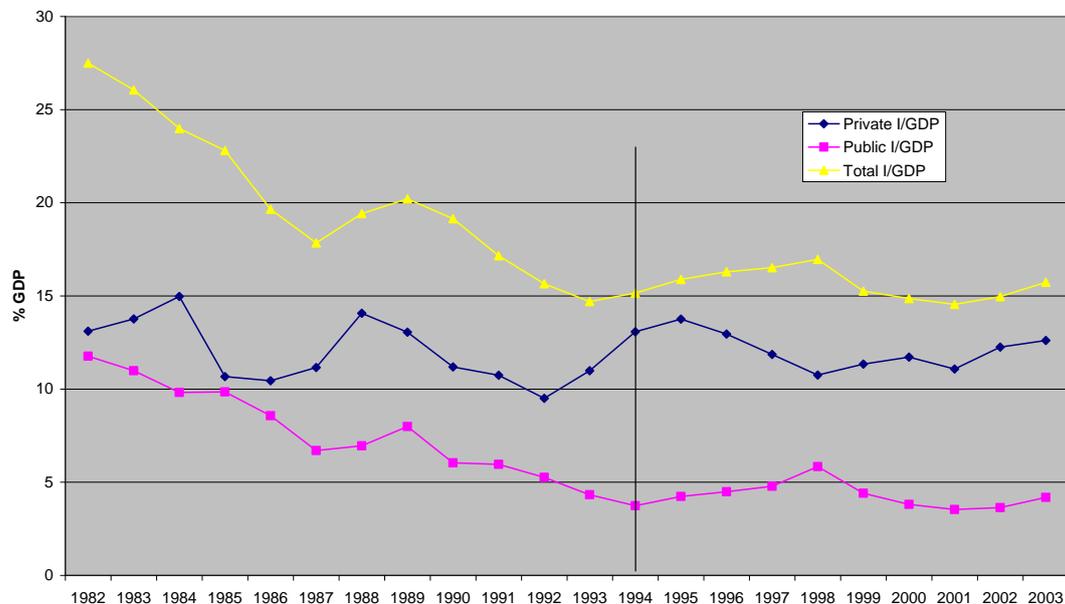
Given that South Africa is one of the most unequal societies in the world, it is unsurprising that economic growth strategies could feed into a vicious rather than a virtuous cycle of low growth, increasing inequality and rising poverty levels as the evidence suggests for the period 1994–2004 (Institute of Development Studies, 2000). The state recognised this and, contrary to the conventional pattern of cut-backs in fiscal expenditure in other countries that implemented neo-liberal economic policy, social expenditures were systematically increased over the decade since 1994 with results that may only become apparent in the second decade of democracy (Swilling, Khan, Van Breda, & Van Zyl, 2006).

As the Report by Swilling et. al. cited above demonstrated, expenditure on social services increased in real terms by 57.5 per cent, from actual allocations of R70.2 billion in 1995/6 to R196.6 billion in 2004/5. The result of this trend is that the relative share of social services of consolidated expenditure increased from 45.4 per cent in 1995/6 to 50.9 per cent in 2004/5. Expenditure on economic services increased in real terms by 71.5 per cent, from actual allocations of R16.2 billion in 1995/6 to R49.4 billion in 2004/5. As a result, its share of expenditure grew from 10.5 per cent in 1995/96 to a projected 12.8 per cent in 2004/05. Furthermore, this has been achieved by slightly lowering total expenditure as a percentage of gross domestic product (GDP) from 30.8 per cent in 1995/6 to 28.6 per cent in 2004/5. Nor did state revenues increase – they remained at around 25 per cent of GDP per annum for most of the period (Swilling, Khan, Van Breda, & Van Zyl, 2006).

While the state was implementing a capital-centred growth strategy in parallel to increased expenditures on social and economic services, the white elite that continued to dominate investment decisions in South Africa remained reluctant to invest their large pools of surplus cash, preferring instead to increase dividend payout levels to shareholders, invest externally and splash out on conspicuous and ultimately economically dysfunctional consumerism (such as investing in the property boom). White business elites still (correctly) regard increasing inequality and rising poverty levels as a political threat that could culminate in a rapid leftward shift in government policies or, alternatively, a disruptive leftwing challenge to an increasingly moderate mainstream ANC leadership. Although evidence of this view can be found in the popular and financial press every week, in a recent systematic survey of 800 South African firms by the World Bank that tried to determine amongst other things the causes of limited investment despite high profitability, this factor was referred to as ‘systemic risk’ – a thinly disguised euphemism for ‘doubts about whether blacks can run the country – or any country, for that matter’. In short, as Professor Sampie Terreblanche from Stellenbosch University likes to say repeatedly, the ANC was assured by white business elites that business would support the ‘rainbow nation’ and invest, but the problem was that local investors never mobilised nearly enough capital to justify business and consumer confidence.

Whereas the state did its part by substantially increasing investments in the ‘human capital and physical assets of poor people’ (fiscal expenditure), it was only after 2000 that the state has made concerted efforts to increase economic investment levels within the framework set by its macro-economic policies . Figure 1 represents private, public and total investment in fixed assets as a percentage of GDP for the period 1982–2003. The trend is obvious: total fixed investment was on a long-term downward spiral, and declining public investment levels have led the way. Private sector investment picked up after 1994 but dropped to an all-time low in 1998, after which it has slowly recovered, but very slowly with few signs of significant inclines. Public sector investment slowly increases after 1994, peaks in 1998 but declines dramatically in the aftermath of the switch to Gear, with the first signs of what could be sharp increases from 2003 onwards as the ‘developmental state’ agenda starts to kick in.

Chart 7: Investment as share of GDP, 1982-2003



(Source: Gelb, 2004)

It is common cause that South Africa’s GDP grew at an average of 3% per annum between 1994 and 2003, and at 4.5% since 2004. At the same time, the tradable sectors (agriculture, mining and manufacturing) declined from 32% to 28% of GDP between 1994 and 2005; while private non-tradable sectors (financial services, construction, trade, catering and accommodation, transport, communications and other private services) grew from 47% to 56% of GDP for the same period.

Expanding domestic household consumption (supported by rising local debt levels for the richer households and state welfare expenditures for the poorer households) has been the driving force of this growth, with strong global commodity prices (driven by Indian and Chinese demand) in the latter years also making a significant contribution. As consumption starts to level out as household debt starts to hit saturation point,

South Africa must find other economic drivers if it wants to hit the target of an average growth rate of 6% between 2010 and 2014.

The trends summarized above had extremely negative effects on South Africa's manufacturing base which effectively went into decline. As the number of blue collar jobs declined, city development plans that were premised on this sector as the organised backbone of the democratic movement ended up focussing on areas where unemployment was rising and tax bases weakening, while the rise in service sector jobs emerged across privatised spaces often outside the developmental purview of the urban planners (Beall, Crankshaw, & Parnell, 2000). The boom in debt-driven consumption spending as the primary driver of economic growth was made possible by rapidly rising property values driven by the privately managed outward sprawl of middle class suburbia.

The shift to a 'developmental state' approach in South Africa amounts, in practice, to a realisation that state institutions must be used to rapidly ramp up public sector investment in fixed assets as a percentage of GDP. The focus is a R370 billion national infrastructure investment programme, which is a programme of investments that will fundamentally restructure the capital base of the major urban centres. To the extent that these investments conform to the priorities of the IDPs, they become the cash pumps for a new physical infrastructure approach to urban development. The logic is that by taking the lead, domestic and foreign private sector investment will follow. In short, 'capital fundamentalism' remains the focus of the South African 'developmental state' approach, with major implications for the cities. If the pre-2002 period was about de-industrialisation resulting in a mismatch between the spatial location of jobs and the spatial focus of fiscal expenditure; the post-2002 period is about public sector infrastructure investments aimed at re-industrialisation and the strengthening of the services sector – this, it is hoped, will replace the debt-driven consumption boom as the primary driver of economic growth (because it is accepted this has effectively reached its limits).

Interestingly, it seems South Africa's economic policy makers are not heeding the advice of their advisors. Reflecting their institutional economics bias, the Harvard Panel of economic advisors are somewhat sceptical of the persistence of a capital deployment approach into the current era. Frankel et al (2006:56) (part of the Panel), see a number of problems with ASGI-SA:

“First, that there is little evidence in the program suggesting that firms will have an incentive to increase investment in the magnitudes required. Second, that it seems to be a program focused on capital deepening when international experience suggests that this is not where the key to growth accelerations lies, more so when even the recent South African experience suggests that capital deepening has not been the most important driver of growth. Finally, that there is no clear explanation of how the resources for the financing of such an

ambitious investment program will be obtained without worsening external imbalances” (Frankel et al, 2006: 56).

In short, we are effectively adopting a hybrid of the Asian model – a state-driven capital investment programme to promote economic growth (‘capital deepening’), but this coupled to rising levels of fiscal expenditure on social services with distinct social democratic hallmarks (but without institutional mechanisms to transform these expenditures into multipliers to drive the local economies). The direct result of this model is bureaucratically determined developmental priorities financed by public sector investments in urban growth centres that will fundamentally reconstitute the economic role and internal functioning of these space-economies. Left unchallenged, this hybrid ‘developmental state’ approach will remain capital focussed and thus miss the more complex developmental targets that legitimise fiscal expenditures in the social services and development sectors. However, in line with my core argument, by breaking away from neo-liberal capital fundamentalism by ‘bringing the state back’ into the development equation, strategic and conceptual opportunities have been opened up that need to be exploited by, in particular, urban researchers and policy makers. The place to start is to accept the developmental state as a step in the right direction, but to explore ways of expanding its developmental focus beyond a narrow focus on capital accumulation. Localism and sustainable resource use provide the context for this transcendence of capital fundamentalism.

Rethinking the Developmental State

The ANC Policy Conference in 2007 did not result in the much anticipated clash between the ‘left’ and ‘right’ in the face of rising discontent in the communities and workplaces. Once again these tensions were carefully stage-managed, leaving little doubt that the “alliance” will survive (at least into the foreseeable future). The media obsession with the leadership succession issue, however, blinded them to the real story of the ANC Policy Conference, namely the further entrenchment (and, possibly clarification) in ANC discourse of the notion of the ‘developmental state’. In all likelihood, it was this more than anything else that made it possible for the political leadership to cement a compromise between a rapidly growing middle class elite and increasingly militant formations disillusioned with jobless growth, slow service delivery and rising inequalities.

Although the idea of a ‘developmental state’ has been around in South African political discourse since at least the late 1990s (finding its way into the 1998 White Paper on Local Government), it was only in 2002 that it emerged in mainstream ANC discourse, displacing in the process a neo-liberal paradigm. The Accelerated and Shared Growth Initiative for South Africa (ASGI-SA) announced in 2005 and the 2007 NIPF both represent an attempt to define a specific purposive role for the state

in the development process.⁷ In particular, both focus on the six “binding constraints” to growth that must, as a result, be addressed by the state. The ASGI-SA framework listed the following ‘binding constraints’ and associated ‘interventions’:

- Currency volatility. Intervention: macro-economic policies and strategies to stabilize the currency, target inflation, improve fiscal expenditures, increase investment component of the budget.
- Cost, efficiency and capacity of the logistics and transport system. Intervention: infrastructure investment programme.
- Shortage of skilled labour. Intervention: skills development strategies.
- Barriers to entry and limits to competition. Intervention: ‘2nd economy’ interventions.
- Regulatory environment. Intervention: governance and institutional capacity.
- State capacity. Intervention: governance and service delivery improvements.

The *National Industrial Policy Framework* (NIPF) lists four pre-conditions for effective industrialisation via industrial sector interventions:

- a stable and supportive macro-economic regulatory environment;
- an adequate supply of skilled labour supported by an appropriate educational infrastructure;
- the existence of traditional and modern infrastructure: traditional infrastructure includes transport, electricity, water; and modern infrastructure refers to wireless, satellite, broadband, fixed line and mobile telecommunication networks;
- innovation capabilities to foster the development of domestic technologies and systems.

Significantly, spatial or urban factors are not specifically identified as a ‘binding constraint’. The only hint to the contrary appears in a comprehensive presentation dated June 2005 by the National Treasury entitled *Accelerating Economic Growth – A Diagnostic Scan* where it was argued that there are “six critical issues” that needed to be addressed to ensure the acceleration of growth, one of which was “inefficient urban landscape & under-development of low-income residential areas”. However, this important point which acknowledges the inefficient use of space and by implication related transport-generated resource use issues (e.g. dependence on imported oil, emissions, costly road space, distances that eat into productive time, congestion, road accident costs, etc) had not re-appeared in the ASGI-SA and NIPF documents by 2007. Instead, recognition of the negative impact of current urban spatial configurations re-emerges in the Strategy for the Second Economy document that was circulated within government in 2007.⁸

⁷ . See Hirsch (2006). Alan Hirsch is an economic policy advisor in the Presidency.

⁸ . This is an unofficial discussion document that emerged out of the Presidency that is linked to the Anti-Poverty Strategy. (Presidency(a), 2007)

The origins of the developmental state at a global level, however, go back to the 1960s when underdeveloped economies struggled to find ways of speeding up development to eliminate poverty via accelerated growth (for a much longer-range historical perspective see Bagchi, 2000). Although state-socialism (Cuba), the national-democratic ‘non-capitalist road’ (Africa) or authoritarian populism (Latin America) were options, it was Korea, Singapore, Malaysia and Taiwan that emerged as the archetypal developmental states – the so-called ‘Asian Tigers’, following quite closely the Japanese model (Leftwich, 2000). The key elements of the ‘developmental state’ that emerged out of Asia was a capable well paid rule-following professional bureaucracy with sufficient policy ‘autonomy’ to set and drive national development strategies, and what institutional economists have called the ‘embeddedness’ of the state elite within the networks and circuits of influence of the nation’s business class (Evans, 1995). Autonomy and embeddedness must go together – the one without the other compromises the nature of the developmental state because autonomy without embeddedness means disconnection from the knowledge flows crucial to policy, and embeddedness without autonomy runs the danger of capture by special interests to the detriment of the general interest. Both were configured within the political project of the nation-state, including the full array of nationalist economic imperatives such as protectionism.

The core project of the c.20th developmental state was to massively accelerate the traditional Western pathway to industrialisation, namely the transition from an agricultural to a manufacturing-based economy (Leftwich, 2000; Evans, 1995). The underlying economic theory that drove this was, of course, the notion that value derived from material and physical goods. It was this theory that enthroned GDP as the ultimate measure of economic success. One advantage of manufacturing-based industrialisation is that it fits well with nation-building because the state can simultaneously manage growth and limit excessive inequality via taxation and targeted interventions. The key to success was massive investments in education and human capital, within an urban hierarchy that was planned to absorb massive investments in economic infrastructure.

However, by the end of the 20th, growth theory was in turmoil because the emergence of the information technology revolution and the emergence of the knowledge economy made it patently obvious that value was being driven more by intangible assets protected by intellectual property regimes and brand marketing machines than by tangible material goods and physical assets. At the international development level, capital did not flow from richer economies to poorer economies in search of higher returns as had been predicted by the neo-liberals. The rise of the services sector became the real motor of growth, and with it came new economic theories – ‘endogenous growth theory’ that recognised returns on ideas as the new driver of growth (Aghion & Howitt, 1999); ‘institutional economics’ that recognised the centrality of viable institutions and shared norms (North, 1990); and Amartya Sen’s

theory that ‘capabilities’ are the real ends and means of development (Sen, 1999). Read together as does Evans (2005) they have effectively dethroned ‘capital fundamentalism’ as the self-appointed emperor of development theory and practice because they all agree – for different reasons – that the state needs to be brought back into the development equation as the organising agent of institutional reform. For Sen, in particular, expanding human capabilities to achieve the developmental goals of a particular group or nation is directly dependent on the creation of democratic spaces for public dialogues about what these goals should be, how best to achieve them and what roles different collectivities can play in the various development processes. In other words, unlike the Asian developmental state that bureaucratically determined these goals, a democratic developmental state aims to facilitate the creation of a ‘deliberative democracy’ with institutionalised spaces to realise Sen’s vision of *development as freedom*.

But is the c.21st developmental state the same as the c.20th developmental state? More specifically, are we still talking about an autonomous developmental leadership embedded in a patriotic business elite as the key conditions of existence of a developmental state? Or have global economic conditions changed so drastically that we need more than this? For starters, we have a globalised economy where nation-states play very different roles to their c.20th forebears – they’ve become hustlers that mediate two-way global-national flows with significant discretion as to which local interests win and lose – much more discretion than anti-globalisation critics often realise. More importantly, the global economy has bifurcated into two: highly profitable Northern-controlled IT-based flows of patented knowledge and symbols on the one hand, and millions of low-paid people-centred services jobs (located overwhelmingly in the South) on the other. States that get captured by powerful global business elites end up policing intellectual property regimes and low wage export processing zones to the detriment of their own local knowledge networks, businesses and working class. And in so doing, they get cut off from civil society where the real knowledge about services that meets real needs exists. This is not the way to go.

The c.21st developmental state has three basic tasks (Evans, 2006; Chang, 2002). Firstly, if institutions are key to an environment that fosters innovation, networks and new value chains as the driver of growth, then the quality of governance to build effective institutions – and networks of institutions - across all sectors becomes the main challenge. This will mean striking a very delicate balance between regulation of shared norms and self-managed implementation. The rapidly growing consensus amongst those who think about ‘corporate citizenship’ is that this will not happen voluntarily (Hamann, Agbazue, Kapelus, & Hein, 2005) and for Gelb, the state must demonstrate it has the capacity to “discipline” particular business interests to fit into the wider strategic direction (Gelb, 2006). The other element of the consensus is that public leadership is critical: capable uncorrupted political leaders who can account for

themselves without depending on spin or shadowy thugs are a necessary condition for building the institutions that foster trust, reciprocity, mutuality and creativity.

Secondly, no-one disputes that knowledge and innovation matters, but these are emergent properties that stem from dense networks of people working together across institutional boundaries unconstrained by accepted norms. The private sector will always under-invest in human capital, innovation and networks because the direct returns to the investor are impossible to predict. Without state-led investment in these sectors via the Universities and NGOs, knowledge-based innovation-led economic development will be impossible. This is what drove the Baltic economic miracle with a population similar in size to Southern Africa. It is what drives local economic development from the simplest agri-centre to the most complex global cities.

Thirdly, embeddedness for the c.21st developmental state might mean partnering more with networks of civil society formations, trade unions and entrepreneurial associations than the business elites that are now fully consolidated in most places, especially in South Africa. The reason for this goes back to Sen's notion of 'development as freedom'. If money on its own could resolve poverty, poverty eradication would not be so difficult to achieve. Real solutions are context-specific which means partnering with those who know, and they are rooted within civil society. The problem is that the language of partnering civil society has been around since 1994, and on the whole it has meant legitimation – getting your pre-conceived policies rubber stamped. What the trade unions, community-based organizations, NGOs, entrepreneur associations, faith institutions, science and research organizations, and the cultural arts really need is a state that knows how to engage, listen and co-create within increasingly rich inter-relationships that span the service networks that drive the services and manufacturing economy across the commercial, social, and public sectors. This entails a multiplicity of smallish interventions, rather than just a few massive physical infrastructure investments that satisfy the need for increasing investment in fixed assets, but nothing more.

If the ANC Government has a c.20th developmental state model in mind, this needs to fit the realities of the knowledge economy and the real forces shaping South Africa economic realities, in particular the cities. Luckily the 1990s 'one-size-fits-all' neo-liberal state approach to development is dead, but this does not mean the Asian model is the only alternative that is appropriate for the current context. Experimentation is the order of the day across the globe. From Chavez's Venezuela, to the China boom, the Baltic miracle, India's unique road, Cuban self-reliance, and the call for an 'African way' (Mkandawire, 2001), now's the time for creativity if there ever was one. Public investments in skills, education and human capital were the key to success in every case. An open society that's free to deliberate and debate development goals is a necessity. Authentic empowerment of the poor is a precondition for success and a strong trade union movement is indispensable. And it goes without saying that where developmental Local Governments think in these terms, remarkably creative

initiatives are often the end result. Unfortunately, with some exceptions, it is the more limited Asian model that seems to be prevalent in contemporary South African policy discourse.

Most recent writing on the South African developmental state remains sceptical. Gelb seems doubtful that government can broker a state-labour-business 'pact' aimed at reconciling (B)BEE and outward investment (Gelb, 2006); Southall questions whether the requisite state capacity exists to effectively implement a fully-fledged developmental state approach (Southall, 2006); and Pillay argues that the tendency to favour the Asian model coupled to COSATU's mistaken support for a Zuma Presidency has resulted in the failure to seriously consider democratic developmental state alternatives to the Asian model (Pillay, 2007).

One cannot help wondering whether the consequences will be another set of lost opportunities for our cities, many of whom are governed by Municipalities that have gradually evolved bureaucracies that are well equipped to play a 'deep developmental' role within a democratic framework. Will their involvement in massive infrastructure planning and investment distract them, or will they use these new investment flows to reinforce the capacity of their 'city-regions' to define and achieve their contextually determined development goals. This is where the 'new localism' and 'new regionalism' come into play. Will localities simply be the implementation zones of national and provincial plans (with IDPs derived from Provincial Growth and Development Strategies which, in turn, are derived from the NSDP), or will local stakeholders build the institutional relations and dialogical dynamics that will allow them to take advantage of the investment resources that become available to them to animate locally determined trajectories? At the time of writing (August 2007) it would appear as if the national state will pursue an Asian-typ 'developmental state' approach that remains focussed on capital deployment in physical infrastructure despite the academic research that suggests that poverty eradication will require more than this. However, there are policy processes underway within the Presidency and in the Social and Economic Clusters that move away from a capital deployment approach. I referring here to initial draft documents on the Second Economy Strategy (Presidency(a), 2007) and the Anti-Poverty Strategy for South Africa (Presidency(b), 2007). Both documents recognition the necessity for targeted public sector interventions to enlarge the social wage, stimulate sector economic strategies, and support various institutional innovations such as social entrepreneurship, local economies, rural development and skills development. There is no doubt that raising the levels of public and private investment as a percentage of GDP is a necessary condition for growth, but it is by no means a sufficient condition. It may be within local space-economies that development processes emerge that go beyond the ultimately counter-productive exclusive focus on infrastructure-led capital intensive accumulation.

New Localism

Despite the a-spatialism of the ASGI-SA and NIPF documents, two national policy frameworks have emerged from research conducted by state agencies into the nexus between public investment and developmental outcomes, namely the NSDP and the NFLED. Although the latter is self-consciously rooted in an institutional economics perspective, both confirm the argument thus far that growth is an outcome of specific and directed efforts by public sector agents to build development coalitions, institutionalise the coordination of investments, and create spaces for active dialogue about development goals and strategies. The core argument is that local and regional development will depend significantly on ideas, innovations and technologies that will attract investments with significant multipliers. In the case of the NFLED, a radical programme of institutional innovation to create so-called Community Investment Programmes is proposed, including Community Trusts to transform basic rights into financial flows to build local economies that can be protected from outward flows into supermarket chains and national banks. The cross-overs here with an institutional economics perspective that does not reduce development to capital investment is obvious. Underpinning this newfound appreciation for the spatial coordinates of developmental interventions is, in fact, a search for social processes and institutional dynamics that can catalyse, stimulate, locally manage and sustain economic growth and development initiatives over extended periods of time. The advantage of organising these processes by using relations rooted in local and regional economies and identities has now been accepted.

The developmental orientation referred to above has, fortunately, started to influence housing policy which has played an extremely destructive role in shaping the urban agenda since 1994. Post-1994 housing policy was little more than a continuation of apartheid housing policy thinking for one simple reason: it defined the problem in purely quantitative terms as numbers of homeless (i.e. black) people who, in turn, needed access to land and services. The solution was equally quantitative: provide a capital subsidy to cover mainly the cost of land and services, and ensure access to affordable land in greenfields developments. In other words, the focus of the post-1994 housing policy was “the poor” and in particular the “urban poor”, and the creation of a single homogenous product (the capital subsidy) to trigger housing developments “for the poor” using state-funded private sector delivery mechanisms. The focus was not the overall housing system and its complex dimensions and modalities, and contextual specificities were ignored. As predicted at the time, this replicated the apartheid spatial form for one very simple reason – the cost of land needed to be covered by the subsidy, which inevitably meant the poor would get housing opportunities where land is cheapest, i.e. on the urban periphery. Result: racial apartheid spatial forms persisted, the poor ended up far from centres of employment thus undermining employment-generating growth, and environmentally unsustainable urban sprawl was encouraged. This was only made financially viable by massively escalating the transport subsidies required to transport poor people over long distances. In other words, the Department of Transport helped the Department of

Housing to subsidize an extremely costly land and housing programme that has, on the whole, made the poor poorer.

With a few exceptions led by NGOs (namely SA Homeless Federation now renamed Federation of the Urban Poor), because the state funded private sector operators to build the new peripheralised serviced urban settlements and the capital transport companies to transport the poor to work, poor households and communities had no framework for self-empowerment thus contradicting 20 years of development activism and international research findings in the development studies literature over the same period. To make matters worse, if the problem is defined purely in terms of numbers of homeless, and the state's only solution was a range of housing projects in greenfields developments funded by the capital subsidy and the transport subsidy, it followed that the state did not have a solution to match the problem for reasons related to the vicious circle of cost, capacity and spatial dysfunctionality that has plagued housing delivery since that fateful decision in 1994 by a Communist Minister of Housing to adopt a policy developed by the policy advisors of organised business interests because he was seduced by the "pro-poor" sound of the capital subsidy.

Ten years later, the post-1994 housing policy began to be reviewed within a context of a national policy shift away from the neo-liberal notion of "state-as-facilitator" of development, to the notion of a "developmental state" approach. The result is a new national housing policy of sorts entitled *Breaking New Ground (BNG)*. The result was a search for a mid-way between the old policy because of its failures and the more radical demands for pro-poor state-delivered mass housing schemes. The reason why the latter was unattractive is that it ran the risk of the same error as the old policy, i.e. a narrow focus on the needs of the poor, no restructuring of the economics of the housing delivery system as a whole, a tendency to ignore contextual specificity, and being state-centric it would reinforce household and community disempowerment.

Seeing BNG as a "mid-way" solution, however, does not imply that it is a compromise, or the "best of both worlds". As it stands, it is a policy framework that is faithful to a "developmental state" approach in that it makes provision for state intervention across a wide range of fronts, in particular in land and property markets. At the same time, it's so-called "demand-driven and supply negotiated approach" is simply another way of saying that contextual specificity is finally recognised. The most significant consequence of this is that the recognition of contextual specificity immediately opens up the space for empowerment, i.e. once you acknowledge the obvious by saying that each context is different, then it follows that specific knowledge of that context is now needed as a basis for planning a particular project (e.g. a greenfields development) or systemic intervention (e.g. reinforcing backyard housing development via loans to landlords and regulations to protect tenants, etc). The need for contextually specific knowledge is what makes participation an authentic necessity, rather the rhetorical ideologically determined formalistic and therefore legitimating ritual that it has become. For the first time, there is therefore a

real potential role for CBOs and NGOs. Finally, working with the private sector and the market while simultaneously transforming the ground rules remains core to BNG. In short, one way of reading BNG is as a sophisticated pragmatic way of mapping out a viable balance between what the BNG refers to as hierarchies, markets and networked governance. This is cutting edge thinking at a global level and deeply rooted in an institutional economics perspective within a deliberative democracy frame of reference.

However, the most radical shift that BNG makes from traditional housing approaches is the shift from a focus on “projects for the poor” to the “housing system” as a whole. Quite correctly, it is realized in both BNG that the “projects for the poor” approach allowed for the emergence of a dual housing economy, i.e. the formal sector housing market with its highly sophisticated institutional environment that caters for the middle and upper income markets, and the state-dependent market that caters for the poor. Moral exhortations to shoe horn the financial institutions into pro-poor housing delivery has been a failure precisely because this was a replication of the paternalistic (and partly even racist) view that housing for the poor was delivered via a “different system” to the formal housing delivery system. In short, housing was seen as a welfare issue and not as a developmental driver. If this dual system had a chance of working, then maybe no-one would have thought of changing it. But what BNG recognises is that the much vaunted “capacity to deliver” problem has got a lot to do with the fact that the sophisticated institutional capacity of the formal housing system (including construction, materials, banking, bonding, loans, professional services, etc) is not configured to work for pro-poor housing delivery. Correctly, BNG says that the state and communities cannot be expected to resolve the capacity problem on their own. To this extent, BNG can be defined as a “systems approach” that generates a set of problem statements and solutions that are radically different to the simplistic reductionism that inspired the post-1994 approach.

In short, BNG is a “mid-way” approach with a lead role for the state that recognises contextual specificity and systemic transformation. This is what makes it possible for both BNG to tackle the vexed question of apartheid spatial forms. This is done by recognising that the state needs to have at its disposal a multiplicity of instruments that builds assets and achieves width immediately and depth incrementally (capital subsidies, rental housing, social housing, landlord support/tenant protection, gap housing, in situ upgrade, urban renewal via interventions in the land and property markets, land banking, development levies on for-profit developments, etc) so that it can respond in contextually specific ways rather than assume that “one-size-fits-all”. This, in turn, makes it possible to terminate the mindset that equates pro-poor housing solutions with peripheralized greenfields developments. This, in turn, is key to reversing apartheid spatial forms. In particular, it can potentially make possible for the first time socially mixed and mixed-use developments. By bringing the poor back into the cities by using public land for rental and social housing, gap housing, and

subsidized individually owned houses, a completely new vision for finally reversing apartheid spatial forms and processes starts to emerge.

It needs to be said that although there is no national urban development policy framework (despite numerous attempts), the BNG is a de facto urban development strategy. The shift to “sustainable human settlements” by a policy that comes out of a housing line function is in fact an unsurprising response to the massive vacuum created by the intellectual failure at national government level to craft an urban development policy that relates to the nitty gritty of the everyday workings of the urban system. Unsurprisingly, this has now emerged from the housing sector which has experienced these workings, learnt from them, and realized the bankruptcy of previous policy. In reality, however, BNG is only one part of the picture. The other – which emanates from a different Department (DPLG) – is about LED. If it were possible to conjure up a substantive urban development policy, it would have to be premised on conceptual merger of BNG and the NFLED. This has not been done, and even if it was, it would have left out the question of sustainability.

A number of government policies and strategic documents are facilitating the LED trend in development (Abrahams 2003). The Constitution (Republic of South Africa 1996) calls for local government to “promote social and economic development” and to “...give priority to the basic needs of the community”. The Local Government White Paper (1998) requires municipalities to “promote integrated economic development”. In the foreword of the much under-read Urban Development Strategy (Republic of South Africa 1995: 5) former President Nelson Mandela called on “urban residents to build their local authorities to promote local economic development”. The Rural Development Framework (Republic of South Africa 1997) also identifies local economic development as an effective approach to rural development. The Local Government Municipal Systems Act provides for “the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of communities, and ensure universal access to essential services that are affordable to all” (Republic of South Africa 2000: 2). In 2000, following commissioned studies by the Isandla Institute (Isandla Institute 1999), DPLG published five manuals on LED which provided comprehensive guidance for Local Governments as to how to conceptualise, design, institutionalize and implement LED (Republic of South Africa 2000). In 2001 DPLG published *Refocusing Development on the Poor* (Department of Provincial and Local Government 2001). Eventually, in 2006 the DPLG launched a national policy framework for LED that led to the NFLED. All these documents and legislative framework advocated or provide in one way or another for an active role for local government in promoting local economic development.

Two recent comprehensive policy and literature reviews of ten years of LED policy-making and research in South Africa both reached the (quite remarkable) conclusion that, in the words of one them, “[t]he concept of ‘developmental local government’ is

now firmly entrenched in the country and, within this context, LED is widely recognised by local municipalities as a core responsibility.” (Nel & John 2006: 225) Rogerson refers to the “rise of LED planning” observing that “it is evident that since the 1994 democratic transition, the promotion of LED initiatives has emerged as a central facet of policy and planning for both urban and rural reconstruction.” (Rogerson, 2006, p. 228) What is remarkable about these two statements from the two most significant academic authorities in the field is that both explain the consolidation of LED as a key element of municipal governance and local development in terms of the gradual impact of an unfolding strategic perspective - that finally culminates in a national policy framework (by 2006) - that has tested and learnt from a multiplicity of approaches to LED during the first decade of democracy. It is clear that contemporary LED policy is a ‘home brew’ that has emerged from a synthesis of learning from local-level experiences in large and smaller urban centres, academic research influenced by global trends, and the logic of increasingly integrated policy-making at national, provincial and local levels.

Rogerson’s review took into account 120 academic articles and monographs plus 3 books on the subject of LED, plus a wider range of policy and legislative documents. He argues that South Africa may well be a leader in the Global South with respect to innovation and strategies for promoting LED at various levels of government. Like the review by Nel and John, he identifies a common set of themes that have been the focus of debate, discussion and action over the past decade. These include the tension between pro-business growth and pro-poor poverty eradication strategies; the consequences of inadequate capacity and resources; the roles of different spheres of government and the perennial challenge of coordination and integration across and within public sector institutions; big competitiveness-driven projects versus bottom-up smaller developmental initiatives; the differences between large cities and smaller towns; the highly contested “unfunded mandate” problem; the vexed question of “sector” or “area” targeting; and the wide variety of tools and methods available to municipalities for designing and implementing LED.

Nel and John conclude their review by arguing the potential of LED in South Africa has suffered from four key “constraints”, namely: the delay in finalising a national LED policy framework (a problem that was resolved after their article was published); “the limited applied results achieved to date”, which they partly blame on the rise and subsequent demise of the LED Fund managed by DPLG which had the consequence of equating LED with micro-level poverty alleviation projects; the assumption that LED is a local government affair and therefore not the responsibility of communities or the private sector; and finally the permanent lament that there is a lack of experienced staff and resources within Local Government to handle LED successfully (Nel & John 2006:225). Rogerson, the on other hand, seems far more worried about what he calls the “pro-growth and pro-business” bias in LED policy frameworks and local strategies. Although he notes the fact that DPLG did try to counter this, his warning is worth quoting in full:

“...[It] is important to avoid taking the position that it is possible or acceptable to achieve both global competitiveness and poverty reduction independently of one another. Failure to move beyond considerations of a ‘balancing act’ potentially will perpetuate the widely accepted notion that poverty reduction programmes are for the poor and global competitiveness projects are for the non-poor. In terms of moving the debate forward, researchers should address the more difficult question of how South African municipalities – collectively or individually – can achieve a pro-poor growth path that operates simultaneously to achieve the desired goals of economic growth, competitiveness and poverty reduction.” (Rogerson 2006:230)

The NFLED has clearly been compiled to achieve the balance that Rogerson calls for. Unfortunately, the result is not a synthesis, but a bout of severe conceptual schizophrenia. The NFLED proposes two largely unrelated LED approaches: a competing city perspective, and a pro-poor perspective labelled SCIP – Sustainable Community Investment Programme. The former is traditional LED a la World Bank prescriptions, and the latter is hard core radical institutional economics that connects development to local fiscal autonomy via local currencies, community banking, entrepreneurship, cooperatives, Trusts, and community institution building.

Although both reviews identified research trends and future challenges, none adequately emphasized the challenge of institutionalising LED. This is partly related to the paucity of research into the various ways that LED has been institutionalised within Local Government, but this has also got to do with a tendency to conflate the capacity problem and the challenge of adequate institutional design. Rogerson is aware of this, and ends off his review with reference to Sue Parnell’s path breaking study of the challenge of institutionalisation in the Johannesburg context (Parnell 2004). Rogerson concludes: “Finally, the research frontiers in South African LED are clear – now dominated by issues and debates concerning the imperative of pro-poor growth as well as the need for more sectorally-focussed research and impact evaluations or closer monitoring of the progress of different forms of intervention.” However, he is acutely aware of the challenge posed by Parnell’s work when he notes that: “Important question marks have been raised, however, regarding the structural and institutional capacity of the local state for driving an inclusive economic development agenda.” (Rogerson 2006: 243) Various public sector agencies have tried to resolve this problem, with the Local Economic Development Agencies funded by the Industrial Development Corporation being the most well known (Xuza & Swilling, forthcoming).

Lack of a national guideline or policy on LED created confusion as municipal authorities tried to institutionalize LED. Simon (Simon, 2003, p. 128) understands this point when he states that ‘theoretical or conceptual contextualization does not form an essential part of municipality’s professional consciousness’. Therefore the key to

selling LED to municipal authorities by national government was the promotion of the value of a developmental local government system without adequate guidance on for institutionalization of an appropriate set of structures, processes and leadership capacities. Developmental local government challenged municipalities to complement their traditional approaches of service delivery for example, refuse collection, water etc, with economic development approaches aimed at creating job opportunities and sustainable economic growth (Republic of South Africa 1998). One reaction from municipalities was to create special units within the municipalities to initiate community and economic development projects or to create an enabling environment for economic development.

The underlying research trends and policy processes that culminated in both BNG and NFLED as manifestations of the shift towards a 'developmental state' were basically wrestling with the severe tension between two logics that have effectively pulled our urban economies apart. On the one hand we had an a-spatial capital-centred economic growth logic that regarded housing as a welfare function and LED as basically irrelevant. On the other, we had a normative commitment to pro-poor development and the transcendence of urban apartheid spatial forms. Read together, the underlying conceptual frameworks that inform the BNG and NFLED policy frameworks confirm the arguments of the institutional economists. However, much will depend on whether Local Governments have the capacity to synthesize these policy frameworks in order to harness the capital injections in urban infrastructure that have already commenced and are set to grow over at least the next five years.

In conclusion, there is a growing connection between the institutional perspectives that are evident in macro-economic policy frameworks like ASGI-SA and the NIPF on the one hand, and local and regional development policy frameworks like the NSDP and the NFLED on the other. However, both fail to identify a field that provides a unique set of opportunities for innovation, value-creation and learning that could catapult the economy in general, and the local space-economies in particular, onto a new level of high growth, skills development and labour absorption. This is where sustainable resource use and sustainable development in general can become the core focus of South Africa's development path. As will be argued below, a sustainability focus opens up opportunities for new value chains within local economies that can only be exploited if Local Governments facilitate the kind of institutional environment that can knit together external public and private sector investments with the knowledge and social capital embedded within local networks, social processes and relationships.

Sustainability, Dematerialisation and Innovation

One of the most remarkable features of the large bulk of literature reviewed thus far is the failure to take into account the economic and developmental implications of unsustainable resource use. The new institutional economics, the development as

freedom tradition, and the large bulk of the new regionalism and LED literature share a persistent disregard for the economic roles that ecosystem services and resources can play within the wider development process.⁹ The grand divide between the natural and social sciences (C.P. Snow's famous 'two cultures') may well be the explanation, but as the evidence mounts that economic and human development is threatened by the breakdown of the ecosystem services and resources that all development depends on, it becomes increasingly difficult to refute the logic and evidence of ecological economics (Sneddon, Howarth, & Norgaard, 2006). However, the conventional wisdom across the burgeoning literature on sustainable development is that as long as economic growth continues to mean *material* economic growth, the end result will be ecosystem breakdowns with devastating consequences for billions of people. The core argument here is that as we hit these ecosystem thresholds, economic opportunities are created that could become the basis for a more just form of *non-material* economic growth. However, this will require innovations that stem from productive networks of knowledge workers, researchers, technology developers, policy makers, urban planners, architects, engineers, investors and social activists working openly within a supportive environment where proposals can be publicly discussed and debated. This is most likely to occur in smaller cities and towns governed by a political and business leadership inspired by the vision of a more sustainable future. Herein lies the nexus between the new institutional economics, deliberative democratic space for expanding capabilities for development, local urban spaces and systems, and sustainable development. If sustainable development, and the logic of ecological economics in particular, wants to come in from the cold and connect to mainstream economic decision-making, this is the conceptual nexus that opens up the possibilities for major advances. Many policy processes underway in Cape Town at the moment confirm this argument. It is also the logic that pervades the National Framework for Sustainable Development (NFSD), and the recently released *Western Cape Strategy for Sustainable Human Settlements (WCSSHS)*.

In 1987, the World Commission on Environment and Development (WCED) published a report entitled *Our Common Future* (World Commission on Environment and Development, 1987). More commonly known as the Brundtland Commission after its leader Gro Harlem Brundtland, it was this report that attempted to reconcile the ecological limits to growth articulated by the Northern green movement since the early 1970s and the need for growth to eliminate poverty as articulated by Southern developing country governments (for overviews see Dresner, 2002; Mebratu, 1998), quite a number of whom had recently broken free from colonial control. This extremely influential report provided the strategic foundation for the 1992 Earth Summit in Rio, the World Summit on Sustainable Development (WSSD) that took place in Johannesburg in 2002, and numerous international sectoral policy conferences over the thirty years 1972-2002 (UNEP). It was both a product of and

⁹ . A key and notable exception is the 1998 Human Development Report which, like all the UNDP Human Development Reports, takes Amartya Sen's writings as their primary intellectual inspiration.

catalyst for the construction of an elaborate multi-lateral governance system for building and implementing sustainable development on a global scale. Since the release of *Our Common Future*, we have learnt a lot more about the challenges we face: numerous crises that were predicted years ago have materialised and many nations across the world are being forced to respond, but in reality very little has been done to address this 'polycrisis' (Sneddon, Howarth, & Norgaard, 2006).

Six globally significant mainstream documents, plus a key website, will in one way or another shape the way our generation sees the world that we need to change. They are as follows:

- **Global warming:** the broadly accepted reports of the Intergovernmental Panel on Climate Change (IPCC) confirm that global warming is taking place due to release into the atmosphere of greenhouse gases caused by amongst other things the burning of fossil fuels, and that this is going to lead to major socio-economic changes that will negatively affect billions of poor people who have done least to cause global warming (IPCC, 2001).
- **Eco-system degradation:** the United Nations *Millennium Eco-System Assessment* compiled by 1360 scientists from 95 countries and released in 2005 (with virtually no impact beyond the environmental sciences) has confirmed for the first time that 60% of the eco-systems that human systems depend on for survival are degraded and possibly beyond repair (including key systems such as soils, water supply, clean air, fisheries, forests, etc) (Millennium Ecosystem Assessment, 2005).
- **Inequality:** According to the United Nations *Human Development Report* for 1998, 20% of the global population who live in the richest countries account for 86% of total private consumption expenditure, whereas the poorest 20% account for 1.3% (United Nations Development Programme, 1998).
- **Oil peak:** although there is still some dispute over whether we have hit peak oil production or not (despite agreement that we are only finding one barrel of oil for every four we consume), the fact remains that even the major oil companies now agree and mount public campaigns to say that oil prices are going to rise and alternatives to oil must be found sooner rather than later. Our cities are designed for systems that depend on cheap oil and changing them will mean fundamentally rethinking the assumptions underpinning nearly a century of urban planning dogma (see www.peakoil.net; (Heinberg, 2003))
- **Planet of slums:** according to the UN Habitat Report entitled *The Challenge of Slums*, one billion of the six billion people who live on the planet live in slums, or put differently one third of the world's total urban population (rising to over 75% in the least developed countries) live in slums (United Nations Human Settlements Programme, 2003);
- **Food insecurity:** according to the World Resources Institute Report for 2002-2004, 65% of global agricultural soils show signs of soil degradation and that this has already started to undermine the \$1,3 trillion global agricultural industry

(World Resources Institute, 2002) that is supposed to feed a population that will grow from 6 billion in 2005 to 8 billion by 2030.

Assembled together, the above trends combine to conjure up a picture of a highly unequal rapidly urbanising world connected to eco-system services that are degrading at alarming rates, with looming threats triggered by climate change, high oil prices and food insecurities. This is what the mainstream literature on unsustainable development is worried about. This is the growing shadow of modernity that has been denied for so long, in particular by those in the developing world who equate development with material modernisation.

After all is said and done and all the verbiage put aside, the challenge of sustainable development in the current global conjuncture is about eradicating poverty once and for all, and doing this in a way that rebuilds the eco-systems and natural resources that we depend on for our collective survival as a species. In practice, the challenge of sustainability will be faced in the mushrooming cities of the developing world where the realities of daily life and urban governance are profoundly different to the realities that the world's over-consumers assume to be the norm that all should aspire to achieve. Cities may well provide the spatial context for imagining and institutionalising new cultural frameworks for more sustainable living. This may sound simple and logical and some might well disagree, but in reality it will entail a profound transformation of our understanding of development which, in turn, directly challenges the existing structures of political and economic power. Sustainability challenges the way the city is imagined by the design professions and it also challenges the existing circuits of capital that drive the production and operation of the urban system (from the way the built environment is constructed, through to the way it is spatially distributed, traded, lived and travelled) .

The simplest way to understand the tension between ecological limits and the aspiration to modernity is that if poverty is to be eradicated via a development strategy that promises everyone that they can all live like the (city-based) global middle class which comprises approximately 20% of the population (about 1 billion people) but consumes over 80% of extracted and manufactured resources, there will simply not be sufficient material (ecologically constituted) resources available to make this happen¹⁰. Ironically, the financial resources to eradicate poverty are available, but if this is done in old ways, it is the ecological limits created by unequal consumption that will prevent a poverty eradication agenda from succeeding.

Human needs have expanded while the eco-systems we depend on have remained formally finite and are in the process of being substantively eroded. As leading thinkers in the Economic Commission for Latin America and Caribbean currently

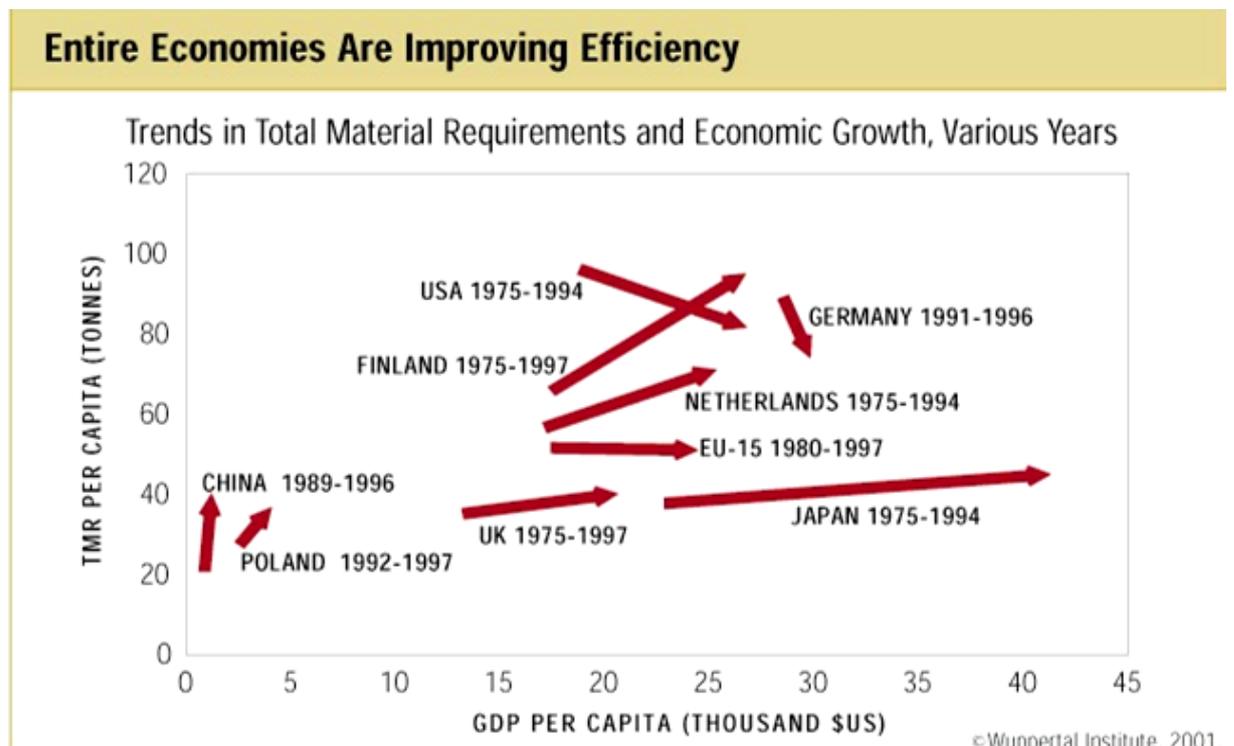
¹⁰ . This statement is a generalized interpretation of the figures referred to at the outset of the chapter from the 1998 Human Development Report.

argue, the only way poverty eradication can be achieved is if we radically decouple economic growth rates (Read: growth in GDP per capita) from the rate of consumption of primary resources and eco-system services (Gallopín, 2003). This is what is referred to as “dematerialisation” or, in more popular terms, reduction in the size of our average “ecological footprint” (Wackernagle & Rees, 2004). What Gallopín calls non-material economic growth is now technically possible: entire cities can now meet all their material needs by re-using all their solid and liquid wastes, using renewable energy instead of burning fossil fuels to meet at least 50% of their energy requirements (Monbiot, 2006), renewing rather than degrading soils for food production, cleaning rather than polluting the air, preserving instead of cutting down forests and natural vegetation, under- and not over-exploiting water supplies, and conserving instead of killing off other living species (in particular marine species). If it is technically possible, what’s left is to make the necessary policy and financial decisions. However, it would be naïve to ignore the fact that this will cut across the way most production and consumption systems are currently configured. This, in turn, means that sustainability - and dematerialization in particular - will more than likely be opposed by some of the most powerful economic stakeholders obsessed with short-term financial gains rather than long-term system viability and durability. The role of General Motors in suppressing the commercialisation of the electric car has become the contemporary iconic story of the tension between long-term public interest and the short-term profits of the most powerful institutions in the global economy.

The Wuppertal Institute in Germany is a renowned sustainable economics think tank and producer of the highly influential best seller *Greening the North* (Sachs, 2002). Below is a remarkable Table produced by this Institute that summarizes research into the relationship between GDP growth per capita against Total Material Requirements (TMR)¹¹ per capita over specific periods of time for several developed economies plus China and Poland. What this Table graphically reveals is that the relationship between GDP growth per capita and TMR/capita is not fixed but is, rather, highly contingent and dependent on the nexus between policy choices, technology and economic structure. China, for example, adopted in 2005 the notion of a ‘circular economy’ as the cornerstone of its national economic policy because it has realised that GDP growth per capita will be undermined if TMR/capita growth continues at current rates – the Chinese realise there are simply insufficient resources available in the world to sustain material-intensive economic growth for such a large economy. The USA responded to the oil crisis in 1973 with massive investments in efficiencies that fundamentally changed the long-term relationship between TMR/capita and GDP growth/capita – a precedent that some have used to say that the world’s biggest over-consumers can do it again without giving up their middle class life styles (Lovins, Datta, Bustnes, & Koomey, 2005). Similarly in Germany, the policy influence of the

¹¹ . Total Material Requirements refers to the total quantity of primary resources consumed divided by the size of the population – this includes energy, water, food, building materials, forest products, etc.

Green Party in Government during the 1990s has resulted in quite dramatic investments in dematerialisation in the energy sector in particular (solar, wind), but also in building design, land-use and food production (subsidies to promote organic farming). Cuba after the collapse of the Soviet Union probably represents the most dramatic, far-reaching and systemic example of dematerialisation across many sectors, in particular food, transport and energy. Japan would not have been able to achieve such remarkable levels in GDP growth per capita *without* substantial investments in dematerialisation. In short, context matters and in each case there is a specific story of a relationship between TMR growth/capita and GDP growth/capita mediated by a matrix of policy decisions, institutional arrangements and financial flows.



Can South Africa really afford to subsidise inefficient and unsustainable systems and simultaneously generate the funds required to eradicate poverty and compete with economies that are dematerialising their consumption and production systems? Contrary to what most development economists think, the depleted resource base is such that we can no longer first eradicate poverty and then 'clean up the environment'. This much was a key finding of 1360 scientists from 95 countries who wrote the Millenium Ecosystem Assessment report for the Secretary-General of the United Nations (Millenium Ecosystem Assessment, 2005) and constitutes the most profound challenge to the development economics discipline since at least post-War Reconstruction. Nor is there much sense in the neo-liberal resource economics argument which tries to suggest that the poor benefit from unsustainable resource use by the rich because this is what drives global growth (and trickle down), and that as scarcities kick in, the market will trigger demand for more sustainable production and

consumption systems. The alternative to this kind of unsubstantiated rational individualism sees sustainable resource use as a precondition for poverty eradication. This will mean dealing with inequality which is the root cause of poverty and, in particular, the economic and political power structures that reproduce these inequalities. Over-consumers will have to cut back and be satisfied with sufficient to meet their needs, and the savings this generates will be needed to ensure that poverty is entirely eradicated by making available infrastructures, services and goods that have been produced and consumed in accordance with efficient and sustainable resource use approaches. The call for 'sufficiency' seems to capture what this means – or to use a slogan used by the South African Government's Department of Water Affairs and Forestry, "some for all forever". This is very different to the current global consumerist culture which can be depicted as "all for some for now".

There is no doubt that South African development trajectories are starting to come up against the limits of ecosystem services and resources in ways that will undoubtedly undermine both economic growth and human development. These arguments are captured in three documents: the *National Framework for Sustainable Development, South African Environmental Outlook 2007* published by the Department of Environmental Affairs and Tourism, and a Report Commissioned by the Presidency entitled *Growth, Sustainability and Dematerialisation: Resource Options for South Africa 2019* (Swilling, 2007). All three confirm that South Africa's major economic, social and development policies are ignoring the implications of the systematic breakdown of our ecosystem services and resources. The following are the main issues that are addressed in this discussion:

- Climate Change (Department of Environmental Affairs and Tourism, 2005)
- Oil Supplies (Association for the Study of Peak Oil and Gas - South Africa, 2007)
- Energy (Agama Energy, 2005)
- Water and Sanitation (Rowlston, 2005)
- Solid Waste (Von Blottnitz, 2005)
- Soils (Laker, 2005)
- Biodiversity (Driver, Smith, & Maze, 2005)
- Coastal and marine physical environment (Clark & Atkinson, 2005b)
- Coastal and marine living resources (Clark & Atkinson, 2005a)
- Air quality (Cairncross, 2005)
- Mineral reserves

The Case of the Western Cape

The Western Cape's towns and cities have been built and operated in ways that are highly unsustainable from a resource use perspective. What this means is that we are extremely inefficient consumers of increasingly scarce and therefore costly primary

materials and resources (energy, water, building materials, space, goods, and food) . Furthermore, we produce large quantities of solid, liquid and airborne wastes that pollute the indoor and outdoor environment. Given that land and space is a natural resource, these towns and cities are also extremely inefficient because they are low density and developments are continuously approved that promote urban sprawl and the destruction of agricultural land and biodiversity. The result is rapidly escalating transport costs at a time when oil prices are destined to rise well into the future. As elsewhere in the world, this kind of unsustainable resource use is becoming a financial burden on tax payers, government budgets, households and investors. When too much money is spent on building and operating systems that could do more at a much lower cost, it means that less is available for development and poverty eradication.

With respect to energy, South Africans are amongst the highest contributors to rising levels of CO₂ emissions – now over 7 tons/person/annum. CO₂ will cause rising global temperatures of 1.4 – 5.8 degrees by 2100, with major implications for the W Cape (water shortages, shrinkage of the fynbos, crop failures, etc). Rainfall patterns are already changing – total amount of rain has not changed, but there are fewer rainy days which means rainfalls are more intense, resulting in more run-off and slower aquifer replenishment. 50% of all CO₂ emissions are generated by the construction and operation of buildings. For every ton of cement, a ton of CO₂ is pumped into the atmosphere. The average small middle class house uses 5 to 10 tons of cement. The average South African uses on average 4500 KWh/annum – one of the highest levels in the world, with many poor South Africans averaging as low as 500 KWh/annum. Average middle- to high-income households in the Western Cape consumes 774KWh/month releasing 750 Kgs of CO₂ in the atmosphere per month. Low-income houses consume 274KWh per month releasing 265 Kgs of CO₂ into the atmosphere per month. 92% of Cape Town's energy comes from imported non-renewable fossil fuels: 33% from coal via the electricity grid, 3% from burning coal, and 56% from oil (petrol & diesel). Only 1% is renewable, i.e. from wood. The Western Cape Provincial Government has set a renewable energy target of 10%.

Cape Town generated over 2 million tons of solid waste in 2002/3, and the Western Cape as a whole generated between 3 and 4 million tons of solid waste. This equates to between 2 and 2.5 kg/person/day which is higher than the average EU citizen (where recycling is compulsory for most countries). Low income households generate an average of 0.3kg/person/day. 38% of total waste stems directly from households, 42% comes from commercial & industrial sources, 5% was green/garden waste, and 15% was builder's rubble. In Cape Town, 87% of all waste is unrecycled and goes to 6 public and 1 private landfill. 3 of the 6 have been closed, and 3 more are due to close in 1-3 years. Waste generation in the Western Cape increased by between 3% and 4% between 1996 and 2001 which is higher than the population growth rate which suggests the average Western Cape citizen is gradually increasing the amount of waste they throw into their dustbins. Most landfills in Cape Town are located above the Cape Flats Aquifer which is an important water resource. Pollution from

the landfills is infiltrating the aquifer. Costs of disposal to landfill have doubled over the period 2000 and 2004.

54% of all the energy used in the city of Cape Town is used for transportation. Low level public investments in rail and public transportation over the years has encouraged private car use, leading to congestion in many parts of the city. The same basic pattern is apparent in many other Western Cape urban centres, e.g. Stellenbosch. Given that the majority of this transportation is powered by oil and that oil prices have increased dramatically over the past 5 years and continue to increase, this means that the Western Cape economy will suffer the consequences of larger and larger amounts of cash leaving the provincial economy to pay for important oil. It is therefore highly unlikely that Cape Town and the Province as a whole will realise 6% growth targets if the transportation sector remains so dependent on increasingly expensive oil. Even if 50% of the amount spent buying oil exports was redirected into the purchase of biofuels manufactured from citrus waste or forest products, this would substantially boost the local and provincial economies.

Building materials and associated building methods can determine the embodied energy of a building, and it's thermal performance (the least efficient being single skin cement block as used to build most low-income housing, with hemp-based building materials as the most efficient). Some materials are more dependent on fossil fuels (such as coal or oil to heat up cement kilns) than others (e.g. wood or clay), and some are more toxic than others (e.g. most cheap commercial paints are far more toxic than lime-based paints).

Cape Town's 800 000 households and visitors currently consume about 1,5 million tons of food per annum, or an average of 1,8 tons per household per annum on average (which ignores differences between poorer and richer households, and non-household consumption like visitors to the city). The large bulk of this food is imported from outside city boundaries and bought from major supermarket chains who like to use expensive packaging. The bulk of the food is not organically cultivated which means food consumption contributes to the degradation and pollution of the Western Cape's already degraded and increasingly unproductive soils.

The demand for water in the Western Cape is fast outstripping supply. Rivers are polluted, underground aquifers are being drained unsustainably, and climate change is already resulting in rainfall being less frequent and heavier which means there is more run-off and related erosion. For example, Cape Town's unrestricted demand is 510 million cubic metres, but maximum supply is only 475 million cubic metres, with the new Franschhoek dam intended to increase supply by at most 18% at a cost of R1,4 billion. There are 40 000 farm dams storing approximately 100 cubic metres of water. Water demand for the Province is growing at 3% pa, with supply expected to be exhausted by 2025. The fact that agriculture uses 60% of the water and will require more as global warming escalates points to serious conflicts between agriculture and

urban areas. By the turn of millennium, 59% of all water in Cape Town was consumed by households, with 60% of this water consumed by the wealthy households (which comprise 10% to 16% of all households depending on location). 21,3% of all domestic consumption was used for gardens and pools, and 61% of all potable water used in the City of Cape, for example, was used for flushing sewerage. Across the Province, low income households use on average 80 l/person/day, middle income households 100 l/person/day and upper income households between 150 -250 l/person/day.

The Western Cape is internationally recognised as one of the world's 'hottest biodiversity hotspot', rich in endemic amphibian, reptile, fish and invertebrate species. Besides biodiversity per se, the ecosystems of the Western Cape provide an irreplaceable source of goods and services for the residents and economy of the province: catchment areas safeguard water supply, wetlands help regulate water yield and quality, plants guard soils against erosion and maintain productivity, and natural landscapes attract domestic and international tourism. Harvest of marine resources and fynbos products are valued at over R1,3 billion and R78 million p.a. respectively, and the total Cape Floral Kingdom has been valued at R10 billion p.a. Despite this rich heritage, agriculture and the urban areas are operated in ways that over-exploits the eco-systems. 80% of the Province's 19 Waste Water Treatment works do not comply with standards thus causing major pollution; the fynbos is receding as a result of urban expansion and agricultural practices; soil quality is declining; and the majority of rivers are polluted or suffering from salinisation due to over-abstraction. Even air quality is negatively affected – the Brown Haze study, for example, found that air quality in Cape Town suffers pollution levels that regularly exceed internationally accepted standards. Motor vehicles are the major cause. Other areas in the Province facing air quality pollution are the Saldanha region (from metal and steel industries), Robertson and Riebeeck Wes (cement and raw materials processing), Mossel Bay (refinery), Knysna (wood milling), Oudtshoorn (brick works), and George (from many different industries).

In short, existing middle and upper income neighbourhoods are extremely inefficient, and their inefficiencies are subsidized because they are not being required to pay for the full costs; sprawled out low-income neighbourhoods are transport intensive, expensive to service, and undermine the financial resources of poor households; infrastructure design for energy, waste, water and sanitation is based on highly inefficient technologies that prevent households from being more sustainable in resource use terms. If this continues, the Western Cape Province will simply run out of key resources for normal living, including water, clean air, healthy locally produced food, and natural green spaces.¹²

¹² . This account of the unsustainability of the Western Cape's ecosystem services and resources is extracted directly from the Western Cape Strategy for Sustainable Human Settlements which was compiled by myself.

It is impossible to avoid the conclusion that South Africa's economic growth and development path is on a collision course with the process of breakdown of the ecosystem services and resources that our social and economic systems depend on. From this flows the proposition that these challenges can best be faced at the level of the city where it is possible to mobilize learning networks to craft innovations and therefore new value chains for managing urban resources in a sustainable way. This proposition is certainly supported by a vast new literature on "sustainable cities" (For a review from a South African perspective see Swilling, 2004; also Revetz, 2000; Schwartz, 2004; Satterthwaite, D. (ed), 2001; Girardet, 2004; Dobereiner, 2006; K'Akumu, 2007; Kenworthy & Newman, 1999; Register, 2006; You, 2007) and "ecological design" (Bang, 2005; Birkeland, 2002; Irurah & Holm; Jackson & Svensson, 2002; Roath, Fuentes, & Thomas, 2004; Wortman). Given that new technologies, production systems, consumption processes, institutional arrangements and spatial relations will be required to make this transition to sustainable resource use across a vast array of sectors (energy, food, water, sanitation, building materials, air quality, transportation, etc), it follows that new investments will be required that could be captured by locally based economic agents that are not necessarily entrenched in existing financial circuits. Socially constructed deal making processes to marry system change, technology development and investments could unleash substantial public and private investments that incrementally over a twenty year period create a new environment that is less unequal and poverty free. This is the trajectory that would confirm the significance of the nexus between institutional economics, deliberative democracy for expanding capabilities for development, pro-poor and sustainable LED, and ecological economics.

Learning from Local Experiments

In conclusion, a case has been made for exploiting a wide range of new opportunities that emerge from trajectories within the South African research and policy context that have responded to the persistence of low-ish growth rates, poverty and ecological unsustainability over the past decade. Unfortunately, these trajectories are conceptually path dependent, bounded by disciplinary segmentalism, and the logic of sectoral policy-making presided over by turf-sensitive well-resourced Government Departments and their respective research and consulting communities. If this continues, another decade of missed developmental opportunities could follow. However, there is cause for optimism, in particular at the city level where Local Governments working in partnership with networks of NGOs, researchers and entrepreneurs could synthesize these trajectories to build longer-term strategies for sustainable urban development and transformation.

I have argued that the more democratic interpretation of institutional economics inspired by the work of Sen plus many others, and synthesized most eloquently by Peter Evans, legitimises a conception of urban development that values the economic role of relational and knowledge networks, and by extension the economic potential

of innovations aimed at reversing unsustainable and increasingly costly resource use patterns in our cities. Although the shift towards a more 'developmental state' since 2002 must be welcomed, this will only result in the much hoped for developmental outcomes if the classical and outdated Asian model is avoided. The Asian model is about reinforcing the interests of the business elite, bureaucratically determining development priorities and focussing on massive infrastructure investments. As Pillay has argued, the democratic alternative will have to be rooted in a wider set of class interests, create the space for democratic deliberation and be prepared to relate to the complex micro-dynamics of authentic participation and engagement (Pillay, 2007).

In my view, the likelihood of this happening is fairly limited for three reasons: 'capital fundamentalism' suits the amalgam of old and new business elites who must cement their compact by finding an alternative driver to the urban consumption boom¹³; the age-old 'capacity problem' at Local Government level might mean that these opportunities are misunderstood or ignored; and an intellectual culture that has not yet synthesized the trajectories addressed in this paper, namely institutional economics, the new localism, and sustainability.

I have no doubt that what will stimulate a mindset change will be the increasing number of local experiments that are trying to figure out what this synthesis means in practice. Policy makers, researchers and investors at the Provincial and Local levels in the Western Cape are already making progress in this direction (Swilling & Annecke, 2006; Swilling, 2006). Although this is another story that must still be told, it is nevertheless where hope will emerge from experimentation in context. But when this story is told, it must include an account of the way an appropriate set of social relations, institutional forms and ideas promotion via public dialogue created the space for both innovation and the construction of new value chains for driving higher growth levels without further destroying the underlying ecosystem services and resources.

Bibliography

- Abrahams, D. (2003). Local Economic Development in South Africa: A Useful Tool for Sustainable Development. *Urban Forum*, 14, 185-200.
- Agama Energy. (2005). *'Every decision is an energy decision': Sustainable Development's Hottest Topic*. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Aghion, A., & Howitt, P. (1999). *Endogenous Growth Theory*. Cambridge, Mass.: MIT Press.
- Association for the Study of Peak Oil and Gas - South Africa. (2007). *Peak Oil and South Africa: Impacts and Mitigation*. Cape Town: Association for the Study of Peak Oil and Gas - South Africa www.aspo.org.za.

¹³ . High growth is a critical condition for financing the geared BEE deals that are the mechanisms of this pact.

- Bagchi, A. K. (2000). The Past and the Future of the Developmental State. *Journal of World-Systems Research* , 1 (2), 398-442.
- Bang, J. (2005). *Ecovillages: A Practical Guide to Sustainable Communities*. Edinburgh: Floris Books.
- Beall, J., Crankshaw, O., & Parnell, S. (2000). *United a Divided City: Governance and Social Exclusion in Johannesburg*. London: Earthscan.
- Birkeland, J. (2002). *Design for Sustainability*. London: Earthscan.
- Burns, M., Audouin, M., & Weaver, A. (2006). Advancing Sustainability Science in South Africa. *South African Journal of Science* , 102.
- Cairncross, E. (2005). *Air Quality*. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Chang, H. J. (2002). *Kicking Away the Ladder: Policies and Institutions for Development in Historical Perspective*. London: Anthem.
- Clark, B., & Atkinson, L. (2005a). *Coastal and Marine Living Resources*. University of Cape Town, Department of Zoology. Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Clark, B., & Atkinson, L. (2005b). *Coastal and Marine Physical Environment*. University of Cape Town, Department of Zoology. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Department of Environmental Affairs and Tourism. (2005). *Climate Change*. Pretoria: Presentation to the National Round Table - Towards a National Strategy for Sustainable Development, August.
- Department of Provincial and Local Government. (2001). *Refocusing Development on the Poor - Draft LED Policy Paper*. Pretoria: Department of Provincial and Local Government.
- Dobereiner, D. (2006). *The End of the Street: Sustainable Growth Within Natural Limits*. Black Rose Books.
- Dresner, S. (2002). *The Principles of sustainability*. London: Earthscan.
- Driver, M., Smith, T., & Maze, K. (2005). *Specialist Review Paper on Biodiversity*. South African National Biodiversity Institute. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Evans, P. (2002). Collective Capabilities, Culture and Amartya Sen's 'Development as Freedom'. *Studies Comparative International Development* , 37 (2), 54-60.
- Evans, P. (1995). *Embedded Autonomy: States and Industrial Transformation*. Princeton: Princeton University Press.
- Evans, P. (2005). Harnessing the State: Rebalancing Strategies for Monitoring and Motivation. In M. Lange, & D. Rueschemeyer (eds.), *States and Development* (pp. 26-47). New York: Palgrave MacMillan.
- Evans, P. (2005). The Challenges of the Institutional Turn: New Interdisciplinary Opportunities in Development Theory. In V. Nee, & R. Swedberg (eds.), *The Economic Sociology of Capitalist Institutions* (pp. 90-116). Princeton: Princeton University Press.
- Evans, P. (2006). What will the 21st Century Developmental State Look Like? Implications of Contemporary Development Theory for the State's Role. *Conference on 'The Change Role of the Government in Hong Kong' at the Chinese University of Hong Kong*. Hong Kong: Unpublished.
- Frankel et. al. (2006). *South Africa: Macroeconomic Challenges after a Decade of Success. Working Paper 133*. Retrieved June 28, 2007, from Centre for International Development: <http://www.cid.harvard.edu/cidwp/pdf/133.pdf>

- Gallopin, G. (2003). *A Systems Approach to Sustainability and Sustainable Development*. ECLAC/Government of the Netherlands, Sustainable Development and Human Settlements Division. Santiago: Economic Commission for Latin America.
- Gelb, S. (2006). A South African Developmental State: What is Possible? *Harold Wolpe Memorial Trust's Tenth Anniversary Colloquium 'Engaging silences and unresolved issues in the political economy of South Africa', 21-23 September 2006*. Cape Town: Unpublished.
- Gelb, S. (2004). The South African Economy, 1994-2004. *Paper Presented at a Wits Institute for Social and Economic Research (WISER) seminary, University of the Witwatersrand*. Johannesburg, 26 July.
- Girardet, H. (2004). *Cities People Planet: Liveable Cities for a Sustainable World*. Washington D.C.: Academy Press.
- Habib, A., & Padayachee, V. (2000). Economic Policy and Power Relations in South Africa's Transition to Democracy. *World Development*, 28 (2), 245-263.
- Hamann, R., Agbazue, T., Kapelus, P., & Hein, A. (2005). Universalizing Corporate Social Responsibility? South African Challenges to the International Organization for Standardization's New Social Responsibility Standard. *Business and Society Review*, 110, pp. 1-19.
- Heinberg, R. (2003). *The Party's Over: Oil, War and the Fate of Industrial Societies*. Gabriola Island: New Society Publishers.
- Hirsch, A. (2006). *South Africa's Development Path: Government's Programme of Action*. Pretoria: Office of the President, Unpublished.
- Hoff, K., & Stiglitz, J. (2001). Modern Economic Theory and Development. In G. Meier, & J. Stiglitz (eds.), *Frontiers of Development Economics: The Future in Perspective*. New York: Oxford University Press for World Bank.
- Institute of Development Studies. (2000). *Not enough and little new: the response from the Institute of Development Studies to the World Bank's World Development Report 2000/01*. Retrieved September 20, 2000, from Institute of Development Studies: <http://www.ids.ac.uk/IDS/news/Worldbank.htm>
- IPCC. (2001). *IPCC Third Assessment Report*. Geneva: Intergovernmental Panel on Climate Change.
- Irurah, D., & Holm, D. Energy impact analysis of building construction as applied to South Africa. *Construction Management and Economics*, 17, 363-374.
- Isandla Institute. (2007). *Culture and the Right to the City: Diversity in the Cultural Ecology of Cape Town*. Cape Town: Unpublished Report by the Isandla Institute.
- Isandla Institute. (1999). *Linking Local Economic Development to Poverty Alleviation*. Pretoria: Department of Constitutional Development.
- Jackson, H., & Svensson, K. (Eds.). (2002). *Ecovillage Living*. Totnes, Devon, U.K.: Green Books.
- K'Akumu, O. (2007). Sustain no city: An ecological conceptualisation of urban development. *City*, 11 (2), 221-228.
- Kenworthy, J., & Newman, P. (1999). *Sustainability and Cities: Overcoming Automobile Dependence*. Island Press.
- Kihato, C., & Landau, L. (2006). The Uncaptured Urbanite: Migration and State Power in Johannesburg. *Working Paper 25, Forced Migration Studies Programme*. Johannesburg: University of the Witwatersrand
<http://migration.wits.ac.za/FMSPWP.html>
- King, L., & Levine, R. (1994). Capital Fundamentalism, Economic Development, and Economic Growth. *Carnegie-Rochester Conference Series on Public Policy*, 40, 259-292.

- Laker, M. (2005). *South Africa's Soil Resources and Sustainable Development*. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.
- Leftwich, A. (2000). *States of Development: On the primacy of politics in development*. Cambridge: Polity Press.
- Lovins, A., Datta, E., Bustnes, O., & Koomey, J. (2005). *Winning the Oil Endgame*. Snowmass, Colorado: Rocky Mountain Institute.
- Mbembe, A., & Nuttall, S. (2004). Johannesburg: the Elusive Metropolis. *Public Culture* , 16 (3).
- Mebratu, D. (1998). Sustainability and Sustainable Development: Historical and Conceptual Review. *Environment Impact Assessment Review* , 493-510.
- Millennium Ecosystem Assessment. (2005). Retrieved August 12, 2006, from www.maweb.org/en: <http://www.maweb.org/en>
- Mkandawire, T. (2001). Thinking About Developmental States in Africa. *Cambridge Journal of Economics* , 25, 289-313.
- Monbiot, G. (2006). *Heat: How to Stop the Planet Burning*. London: Allen Lane.
- Muller, A. (2006). Sustainability and Sustainable Development as the Making of Connections: Lessons from Integrated Development Planning in South Africa. *Planning Africa Conference*. Cape Town: Unpublished.
- Nel, E., & John, L. (2006). The Evolution of Local Economic Development in South Africa. In U. Pillay, R. Tomlinson, & J. du Toit (eds.), *Democracy and Delivery: Urban Policy in South Africa* (pp. 208-229). Cape Town: HSRC Press.
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Parnell, S. (2004). Building Developmental Local Government to Fight Poverty: Institutional Change in the City of Johannesburg. *International Development Planning Review* , 26, 377-399.
- Pieterse, E. (2005). Transgressing the Limits of Possibility: Working Notes on a Relational Model of Urban Politics. In A. Simone, & A. Abouani (eds.), *Urban Processes and Change in Africa*. London: Zed.
- Pillay, D. (2007). Transcending Two Economies: Renewed Debates in South African Political Economy. *Africanus* .
- Presidency(a). (2007). *Support for the Development of Strategy for the Second Economy*. Pretoria: Presidency: Unpublished.
- Presidency(b). (2007). *Towards an Anti-Poverty Strategy for South Africa: Draft Framework Discussion Document*. Pretoria: Presidency: Unpublished Report.
- Register, R. (2006). *Ecocities*. Gabriola Island: New Society Publishers.
- Republic of South Africa. (2000). *LED Manual Series*. Pretoria: Department of Provincial and Local Government.
- Republic of South Africa. (1997). *Rural Development Framework*. Department of Land Affairs. Pretoria: Government Printer.
- Republic of South Africa. (1996). *The Constitution of the Republic of South Africa, Act 108*. Pretoria: Government Printer.
- Republic of South Africa. Department of Provincial and Local Government. (2007). *National Framework for Local Economic Development (LED) in South Africa 2006-2011*. Pretoria: Department of Provincial and Local Government.
- Republic of South Africa: Department of Environment and Tourism. (2006). *Planet-Prosperity-People: A Strategic Framework for Sustainable Development in South Africa*. Pretoria: Government Printer.

- Revetz, J. (2000). *City Region 2020. Integrated Planning for a Sustainable Environment*. London: Earthscan.
- Rivett-Carnac, K. (2007). *Local Economic Development, Industrial Policy and Sustainable Development in South Africa: A Critical Reflection on 3 New Policy Frameworks*. Stellenbosch: Unpublished Masters Thesis, School of Public Management and Planning, Stellenbosch University.
- Roath, S., Fuentes, M., & Thomas, S. (2004). *Ecohouse 2*. Oxford: Architectural Press.
- Rodrik, D., Subramanian, A., & Trebbi, F. (2004). Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development. *Journal of Economic Growth* , 9, 131-165.
- Rogerson, C. (2006). Local Economic Development in Post-Apartheid South Africa: A Ten-Year Research Review. In V. Padayachee (ed.), *The Development Decade? Economic and Social Change in South Africa, 1994-2004* (pp. 227-253). Cape Town: HSRC Press.
- Rowlston, B. (2005). *Sustainable Management of Water Resources*. Pretoria: Presentation to the National Roundtable - Towards a National Strategy for Sustainable Development, August.
- Sachs, W. (2002). *Joburb Memo*. Germany: Heinrich Boll Foundation.
- Satterthwaite, D. (ed). (2001). *Sustainable Cities*. London: Earthscan.
- Schwartz, H. (2004). *Urban Renewal, Municipal Revitalisation: The Case of Curitiba, Brazil*. Alexandria, VA: Hugh Schwartz.
- Sen, A. (1999). *Development as Freedom*. New York: Knopf.
- Simon, D. (2003). Contextualising South African Local Economic Development Planning Within Current Development Debates: The International Setting. *Urban Forum* , 14, 127-146.
- Simone, A. (2006). Pirate Towns: Reworking Social and Symbolic Infrastructures in Johannesburg and Douala. *Urban Studies* , 43 (2), 357-370.
- Sneddon, C., Howarth, R., & Norgaard, R. (2006). Sustainable Development in a post-Brundtland World. *Ecological Economics* , 57, 253-268.
- Southall, R. (2006). Introduction: can South Africa be a developmental state? In S. Buhlungu, J. Daniel, R. Southall, & J. Lutchman (eds.), *State of the Nation, 2005-2006* (pp. xvii-xliv). Cape Town: HSRC Press.
- Stren, R. (ed.) (1996). *Urban Governance in the Developing World*. Toronto: University of Toronto Press.
- Swilling, M. (ed.) (1997). *Governing Africa's Cities*. Johannesburg: Wits University Press.
- Swilling, M. (2007). *Growth, Sustainability and Dematerialisation: Resource Options for South Africa 2019*. Stellenbosch University. Stellenbosch: Unpublished Report Commissioned by the Presidency, Republic of South Africa.
- Swilling, M. (2005). *'Hear the Forest Grow': Evaluation of Shackdwellers International - Case Studies of Kenya, Malawi and South Africa*. Cape Town: Unpublished Report Commissioned by Shackdwellers International.
- Swilling, M. (2004). Rethinking the Sustainability of the South African City. *Development Update* , 5.
- Swilling, M. (2006). Sustainability and Infrastructure Planning in South Africa. *Environment and Urbanization* , 18 (1), 23-51.
- Swilling, M., & Annecke, E. (2006). Building Sustainable Communities in South Africa: the Lynedoch Case Study. *Environment and Urbanization* , 18 (2).

Swilling, M., Khan, F., & Simone, A. (2003). 'My Soul I Can See': The Limits of Governing African Cities in a Context of Globalisation and Complexity. In P. McCarney, & R. Stren (eds.), *Governance on the Ground: Innovations and Discontinuities in Cities of the Developing World* (pp. 220-250). Baltimore and Washington D.C.: Woodrow Wilson Centre Press and Johns University Press.

Swilling, M., Khan, F., Van Breda, J., & Van Zyl, A. (2006). *Instead of Utopias: Making Sense of the South African Developmental State, 1994-2004*. Durban: Centre for Civil Society, University of KwaZulu-Natal.

Tomlinson, R. (ed.) (2003). *Emerging Johannesburg*. New York: Routledge.

United Nations Development Programme. (1998). *Human Development Report 1998*. Retrieved October 22, 2006, from United Nations Development Programme: <http://hdr.undp.org/reports/global/1998/en/>

United Nations Human Settlements Programme. (2003). *The Challenge of Slums: Global Report on Human Settlements*. London: Earthscan.

Von Blottnitz, H. (2005). *Solid Waste*. University of Cape Town, Department of Chemical Engineering. Cape Town: Unpublished paper commissioned by the Department of Environmental Affairs and Tourism.

Wackernagle, M., & Rees, W. (2004). *Our Ecological Footprint*. Gabriola: New Society Publishers.

World Commission on Environment and Development. (1987). *Our Common Future*. Oxford: Oxford University Press.

World Resources Institute. (2002). *Decisions for the Earth: Balance, Voice and Power*. Washington D.C.: World Resources Institute.

Wortman, A. Sustainability on Trial: Architecture and Ecology. *Archis*, 2, 8-18.

Xuza, P., & Swilling, M. (forthcoming). Institutional Arrangements for Local Economic Development Implementation in South Africa. In E. Pieterse, S. Parnell, M. Swilling, & M. Van Donk (eds.), *Consolidating South Africa's Local Government Democracy*. Cape Town: Juta.

You, N. (2007). Sustainable for Whom? The urban millenium and challenges for redefining the global development planning agenda. *City*, 11 (2), 214-220.