

Sector Strategies for Employment Creation: Construction, Social Services and Food

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ABSTRACT

High and growing rates of unemployment have been a source of great frustration to policy-makers. Although exports have been buoyant and the 1990s has been the first decade of sustained growth, unemployment has been rising by 2 percentage points each year. If the expanded definition is used, the rate of unemployment reached 41.8% in September 2002.

In a context where the majority of the unemployed are unskilled and the tradables sector has been shedding rather than absorbing unskilled labour, less orthodox avenues of employment creation require investigation. To that end, this paper examines the prospects for employment creation through meeting basic needs. While the latter is an imperative in its own right, because the industries that provide basic needs are non-tradable and have high employment multipliers, particularly of unskilled and semi-skilled labour, the expansion and re-orientation of government expenditure in this area unlocks opportunities for employment creation.

The central contention of this paper is that industrial strategies for each of the basic needs sectors are required to realise their potential for employment creation. Three sectors are analysed from this perspective: construction and building, social services and food distribution. These sectors are aligned to existing government programmes where expenditure is projected to increase significantly over the next three years. This means that either through the direct provision or procurement of these goods and services, government has a powerful policy lever to influence the pace and pattern of employment creation in these sectors.

Ultimately, employment creation strategies that are aligned to industrial strategies and that fulfil government's obligation to meet basic needs are more sustainable than the short-term job creation strategies that dominate policy interventions at present. A preliminary analysis of the form that such industrial strategies could take in the construction, social services and food sectors is presented as the basis for a more comprehensive research agenda.

1. Introduction

The high and growing rate of unemployment in South Africa is a central preoccupation of policy-makers. Economic and political liberalisation has had many positive results – amongst them are more representative local governance and the beginnings of a more dynamic economy. The 1990s was the first period of sustained growth in decades, and the economy has seen the establishment of new industries, product diversification, and substantial growth in value-added exports. Since the mid-1990s, more firms are being established each year than are liquidated. The rapid job losses in primary industry that occurred in the 1990s seem to be over now. But the distortions left by apartheid still weigh heavily.

The economy is increasingly tending to greater capital intensity, and there are few existing labour intensive industries of a substantial size that are led by the private sector. Consequently, the broad unemployment rate is 41.8% and the narrow unemployment rate is 30.5%.¹ In this context, unemployment rises by 2% each year. This has been a source of frustration.

At this point, the economy needs to generate about 600,000 net new jobs per year *just to maintain the current rate of unemployment* – this would be the sum of job creation minus job loss. The 2% annual rise in the unemployment rate is attributed to the fact that the economy is not nearly meeting this minimum target. If the target were to reduce unemployment, net employment creation would need to surpass 600,000 net new jobs annually.

Between 1996 and 2001, the formal and informal sectors combined generated about 450,000 net new opportunities annually, primarily in informal trading and domestic work. Recent data from the Labour Force Surveys are showing that employment growth in the informal sector is tapering off, so unless net employment starts growing in the formal sector (private and public), the rate of unemployment will continue to rise. Had the informal sector continued to grow at the same pace, we might say that the economy needed to generate a further 150,000 net new jobs annually to halt the rise in unemployment. However, it appears that unless more dramatic measures are taken, it is possible that the rate of job creation may be even slower.

In this context, it is necessary to explore less orthodox avenues for employment creation. Government expenditure is a central lever to influence the nature and pace of the expansion of employment in industries where it provides and procures services. Has sufficient attention been given to strategically using this lever? The question this

¹ Broad unemployment includes discouraged workers – this refers to people that would like to work, but have stopped looking, often because they have been unemployed for such a long time that they have given up. Although the 'narrow' rate is the officially accepted measure internationally, discouragement has a substantial racial and rural bias in South Africa and so should not be ignored.

paper poses is whether Government can simultaneously deliver critical goods and services, and also generate employment, both directly and indirectly.

There is currently much discussion on the role of public works in creating immediate short term job opportunities. It has been accepted that this will form an important part of Government's strategy towards job creation. The Poverty Relief Fund, which creates employment through a range of programmes, including community-based public works, has hitherto been the visible centrepiece of government's endeavours to redress unemployment through the provision of basic needs to poor households. While community based projects are no doubt important in reaching rural areas, they are notoriously difficult to implement as each project is different and government has difficulty managing discretionary funds. In a context where Government allocates a significant proportion of its budget to procuring goods and services - to the order of about R 70 billion in 2002 – the R1.5 billion allocated to the Poverty Relief Fund in 2002/3 is a tiny proportion of government resources that could be directed to the related objectives of meeting basic needs and creating employment.

This paper aims to marry immediate job creation goals, which often revolve around short-term job creation, with the promotion of basic needs industry strategies. Government can use a powerful policy instrument – the direct provision and procurement of a range of goods and services – to foster the sustained expansion of output and employment in construction, social services, and food production and distribution.

In light of the centrality accorded to these sectors in the Growth and Development Summit agreement, there is some urgency for government to translate its obligations into concrete programmes². The approach adopted in this paper is to align the employment targets to central expenditure items in a way that stimulates sustainable economic activity both directly and indirectly. National Treasury has already committed more funds in the MTEF to capital and social expenditure in a way that resonates with this approach. Critically, the aim would be to achieve these targets, thereby laying the foundation for further growth in expenditure on construction, social services and food distribution.

To promote sustainability and a virtuous circle of growth, such a programme will require a detailed understanding of the dynamics of the targeted industries, in order to ensure that increased expenditure is matched by enhanced supply capacity, including appropriately skilled and accredited labour. This requires an industrial strategy for each sector, in addition to the more narrow focus on increasing the demand for goods and services through the expansion of government expenditure.

Government can only go so far in stimulating jobs directly. Ultimately, deeper linkages are required. It is often forgotten that employment is about all the linkages that occur in

² The GDS agreement offers a good starting point for identifying programmes, primarily revolving around public infrastructure and expanded public works programmes.

response to an investment. The more credible and sustained a programme is, the more the private sector will respond, not just by delivering the procured service, but by mobilising investable resources to provide inputs, logistics, and related goods and services – these are the desired spin-offs that are required to enhance the ability of the economy to create more jobs.

To illustrate: if 150 000 *additional* public works jobs were created in year one, that figure would have to be sustained and doubled up in the subsequent years in order to keep employment levels stable. In other words, the current allocation would be the base, and then expenditure and delivery would be expanded on top of this base, to have the effect of creating the equivalent of an extra 150,000 jobs. It should be possible to expand a programme each year, within limits. However, due to the rapid expansion of the labour force and the structural character of unemployment, this isn't a once-off commitment: instead, as a strategy it would need to expand along the scale of the labour force growth for the foreseeable future. To promote sustainability and market response – leading to economic linkages, it will make sense to align new and existing expenditure on infrastructure, maintenance and social services to central Government programmes, rather than trying to create new special employment programmes.

This paper offers background on the key sectors that offer opportunity in this regard – namely, construction, social & personal services, and food production & distribution. It is not meant to be comprehensive, but rather to offer an initial overview that enables Government to situate plans to expand 'immediate job creation' within existing industries and programmes. Sections 2, 3, and 4 analyse the specific industry dynamics and government expenditure programmes in the construction, social services and food distribution sectors, respectively. Part 5 provides some concluding remarks.

2. Construction and building

The construction and building sector is an important avenue for employment creation because of its employment generating capability and because government expenditure has a large influence on its expansion or contraction. It is estimated that an increased output of one million Rand, results in the creation of 9 jobs directly and 8 jobs indirectly (Lewis, 2001). There are few other sectors in South Africa that have this kind of employment impact, particularly in relation to the employment of semi- and unskilled labour. While a range of policies influence the construction and building sectors, this paper primarily focuses on the influence of Government expenditure on infrastructure, government buildings and low-cost housing³.

³ There are a number of other policy realms, such as interest rates, that directly impact on the building industry – however, stimulating construction is not the central consideration in the setting of interest rates.

The promotion of public works programmes have long been a policy intervention to pull an economy out of a cyclical downturn. In the context of the structural (as opposed to cyclical) unemployment that characterises the South African situation, construction still has a role to play, but mainly insofar as there is a sustainable plan to maintain expenditure and promote economic linkages around this expenditure.

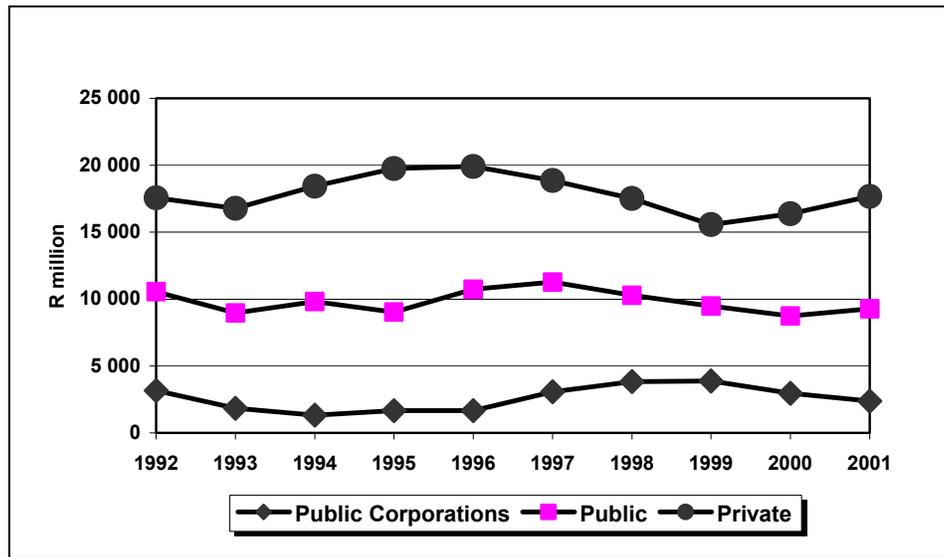
The challenge confronting all tiers of government is how higher budgetary allocations for infrastructure expenditure can be translated into the *delivery* of high-quality infrastructure in a manner that creates employment. This requires a comprehensive analysis of the characteristics and capacity of the construction industry, as well as government's capacity to implement infrastructure projects through its procurement practices. Ultimately, the demand for construction emanating from government must be aligned with public management capability and industry capacity.

Overview of construction and building

The role of the construction sector in the broader economy is the starting point for understanding the dynamics of the industry. Unfortunately, information on the construction sector is quite scattered and aggregated at different levels, so drawing together a coherent picture is not simple.

There does not appear to be a standard way of identifying the construction industry, and so the statistics put forward in various reports are extremely difficult to compare. Hence the entire industry will be called "Construction and Building", where expenditure includes three categories: *construction* (which comprises all *infrastructure* expenditure), and *building* (which includes *non-residential buildings* (shopping malls, office buildings, manufacturing plants etc.) and *residential buildings*). Expenditure on these aggregate categories by source during the 1992 – 2001 period is shown in Figure 1.

Figure 1: Aggregate Construction and Building Expenditure, 1992 - 2001



Source: SARB

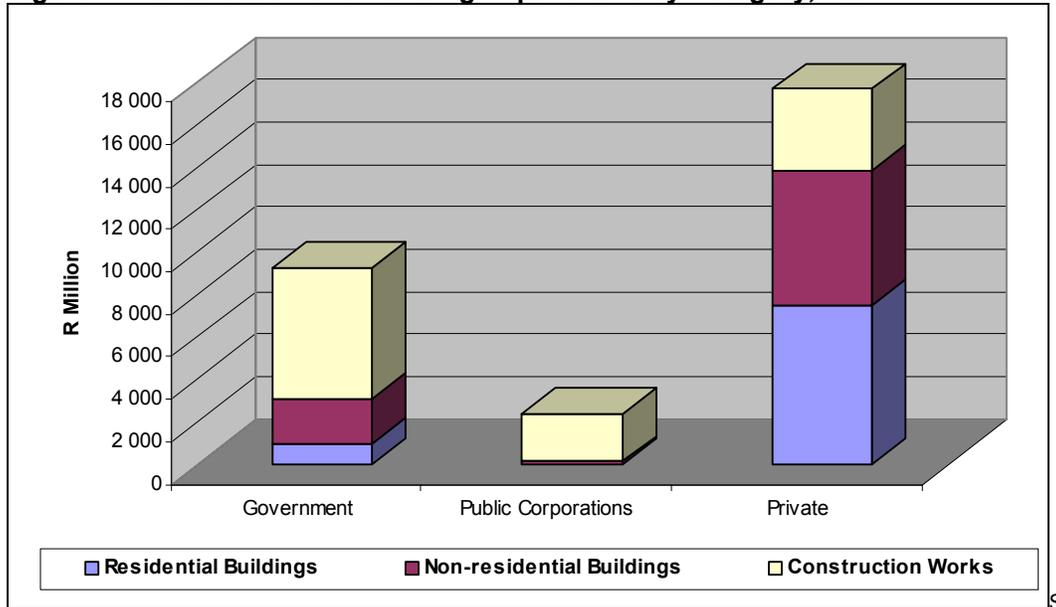
Notes: Values in 1995 Rand. Actual (or nominal) expenditure in 2001 was in excess of R 60 billion.

The private sector dominates construction and building, accounting for 60% of total expenditure. The public sector and public corporations respectively accounted for 32% and 8% of total construction and building expenditure in 2001.

But private and public sector roles in construction and building vary considerably. Figure 2 shows that in 2001:

- Non-residential and residential buildings accounted for 79% of private sector construction & building expenditure.
- Infrastructure accounted for 66.5% of government construction & building expenditure, followed by non-residential buildings (23%) and residential buildings (10.5%).
- For public corporations, infrastructure expenditure accounted for 94% of expenditure.

Figure 2: Construction and Building Expenditure by Category, 2001

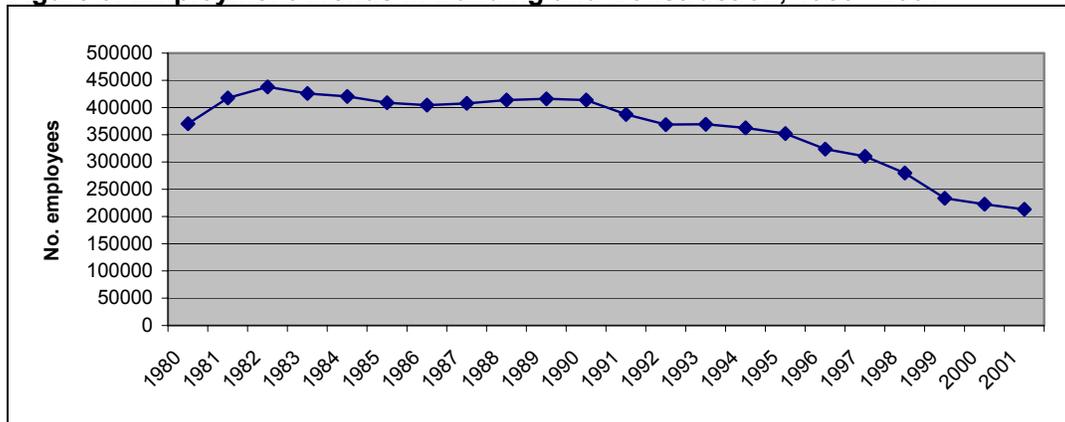


Source: SARB

Notes: Values in 1995 Rand

Formal employment in building and construction has declined significantly in the past decade. Figure 3 shows that 200,000 jobs were lost in the construction industry, thereby halving formal employment in this sub-sector over the 1990s (SARB, 2002). It is estimated that the informal sector may account for 35% to 40% of construction employment, possibly growing to 50% by 2003 (Teljeur and Stern, 2002). Hence, the marked contraction in formal employment may be explained both by informalisation and by unemployment caused by reduced expenditure.

Figure 3: Employment Trends in Building and Construction, 1980 - 2001



Source: SARB, 2002

The role of government in stimulating the building industry

From the perspective of employment creation, government exercises influence over this sector through the following avenues:

- Expenditure on gross fixed capital formation by general government, which is dominated by expenditure on social and economic infrastructure and is projected to increase by 5.1% per annum in real terms over the next three years.
- Housing subsidies, which stimulate employment and output in the residential buildings sub-sector. These subsidies amounted to R3.9 billion in 2002/03 and will increase by 5% over the next year and remain constant for the two years thereafter in real terms.
- Government building refurbishment and related industries, including prisons, military bases, schools, hospitals and government offices. For illustrative purposes, it is worth noting that approximately 50% of the public works budget for 2003/4 (of R 4.46 billion), is earmarked for works and maintenance.
- Interest rate policy and tax treatment. Interest rates impact on the building sector in two ways: first, as is the case with any investment, the higher the interest rate, the lower the return to the investor; and, second, the demand for residential property is strongly influenced by the interest rate as it determines mortgage payments. In the case of tax treatment, it imposes substantial transaction costs through substantial transfer fees, VAT and capital gains taxes. These transaction costs increase the cost of acquiring and disposing of fixed property and hence reduce the demand for both residential and non-residential buildings.

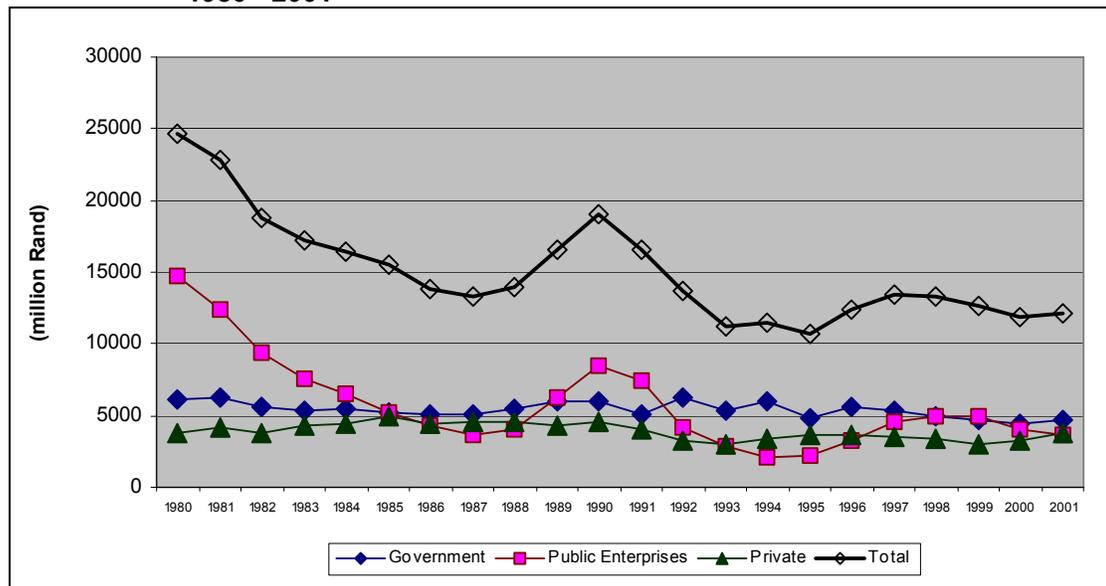
Government's ability to stimulate the construction sector is much more powerful than is the case with the building sector as government is the main source of demand for infrastructure. In this regard, it is widely believed that the SA construction sector is small by international standards.⁴ In 2001, the construction sector accounted for 3.1% of GDP (Stats SA, 2002), in contrast to international trends, where this sector typically accounts for between 5% and 7% of GDP (Department of Public Works, 2002). Indeed, the industry has experienced a secular decline in output and employment since 1980, when it accounted for 5.5% of GDP.

Over the 1990s, employment in civil construction fell by 38.4% to about 100,000 jobs. Most of this decline took place after 1996/7. Civil construction value added fell by about 18% between 1990 and 2001 (Teljeur and Stern 2002). The public sector plays a lead role in civil construction, accounting for about 75% of its expenditure. Hence, the secular fall in construction investment and expenditure since the 1980s is largely explained by a shift away from the large government driven development investments associated with the 1960s and 1970s.

⁴ Merrifield (2002a) challenges this view on the grounds that construction expenditure is closely correlated to a country's level of economic development and hence the contraction in such expenditure is commensurate with South Africa's level of economic development. Instead he argues that the problem is related to the distribution of expenditure, as witnessed by the fact that a large proportion of South Africa's population remains unserved by basic infrastructure, coupled with widespread infrastructure maintenance backlogs. There is so much confusing data in this environment, that in truth, it is difficult to say. Most experts believe that total expenditure is low, and we might take the dramatic drop over the 1980s and 1990s as a marker that this may well be correct.

As illustrated in Figure 4 – which provides data from as early as 1980 - trends in *infrastructure* expenditure are dominated by the public sector, including public enterprises. The secular decline of expenditure by government and public corporations between 1980 and 2001 has been a key contributor to the decline of the construction industry. There is a widespread view that the contraction in government expenditure on infrastructure is a consequence of an oversupply of infrastructure during the 1970s. However, evidence of infrastructure backlogs suggests that the replacement of infrastructure is now necessary (Merrifield, 2002a).

Figure 4: Government expenditure on construction (or Infrastructure), 1980 - 2001



Source: SARB

Notes: Values in 1995 Rand

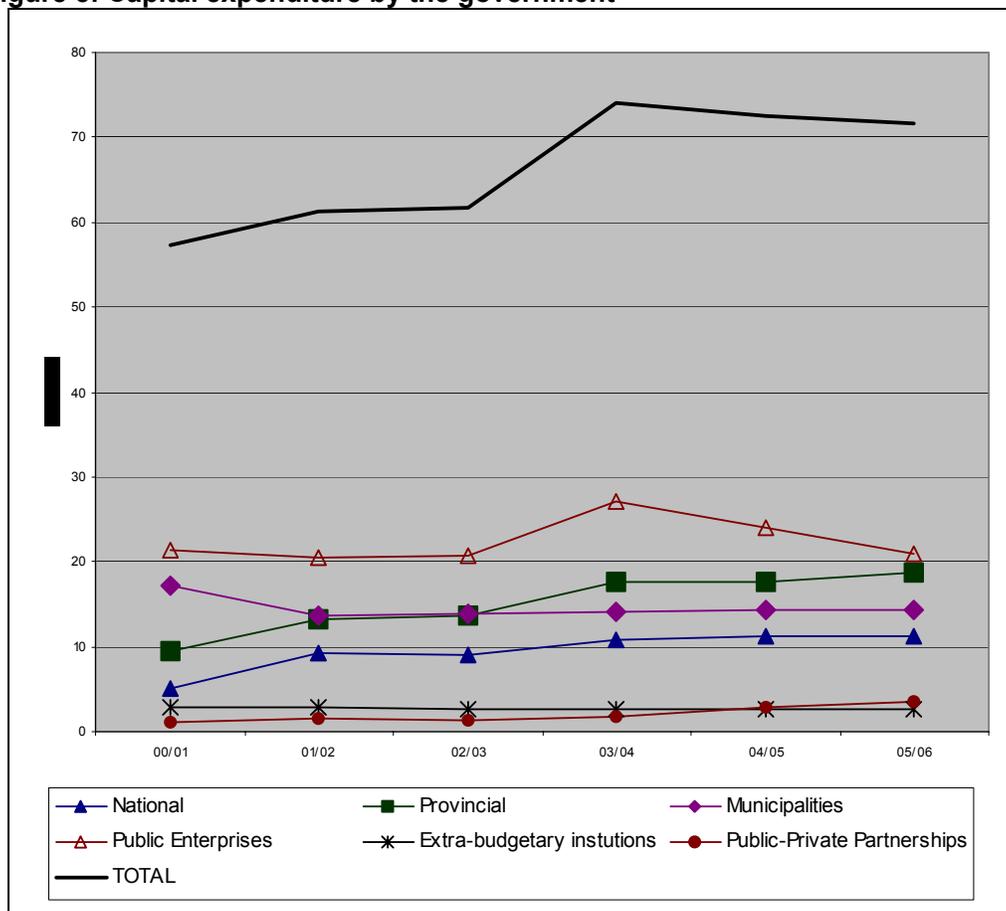
Expenditure and employment trends in the construction sector illustrate the central role of government and public corporations in determining its size and capacity to absorb labour. After a period of fiscal austerity, government commenced with an expansionary fiscal policy in 2001. In the 2003 budget, this is evidenced by a real annual growth in national and provincial expenditure of 4.5% per annum over the next three years. The annual real increase of 5.1% per annum on gross fixed capital formation by general government over the next three years will provide a significant stimulus to the construction industry.

Decisions to expand infrastructure expenditure from these sources are important markers of the potential for employment creation in the construction sector. Government's commitment to increasing expenditure on construction in order to redress infrastructure backlogs is demonstrated in budgetary allocations over the MTEF. Figure 5 illustrates the real increase in government expenditure on

infrastructure for the three tiers of government as well as public corporations, extra-budgetary institutions and public-private partnerships.

It should be noted that figure 5 depicts trends in *capital* expenditure (although the Budget Review (2003:55) reports it as *infrastructure* expenditure), which is not only allocated to infrastructure, but includes capital equipment, vehicles and non-residential buildings. Notwithstanding these limitations, the trends demonstrate the dominant role of public enterprises as a source of infrastructure expenditure, which grows significantly between 2002/03 and 2003/04, whereafter it declines. In the case of provincial government, expenditure grows consistently over the MTEF, as does national government expenditure. Notably, infrastructure financed through public-private partnerships (PPPs) grows steadily from a relatively low base over the MTEF.

Figure 5: Capital expenditure by the government



Source: Budget Review, 2003, p.55

Notes: In constant 2003/04 Rands (deflators provided by National Treasury)

Whether these increases in infrastructure expenditure will create employment, depends on the extent to which labour-intensive construction methods are utilised and government's capacity to spend capital budgets. As regards the former, the Department of Public Works has initiated a labour-intensive infrastructure programme, which is designed to transform conventional capital-intensive construction methods into

labour-intensive methods in the construction and maintenance of local and provincial roads, sewage pipes and storm-water drains. It is estimated that this programme can increase the employment coefficient from 17 to 50 jobs per million rand of output.

In addition, Government aims to expend public works programmes that have been effective in creating employment as well as constructing and maintaining infrastructure, such as the Zibambele rural roads programme in Kwazulu-Natal and the Zivuseni programme in Gauteng which involves painting public buildings, collecting recyclable materials and once-off clean-up campaigns. These labour-intensive projects fall into the category of special employment projects. While they are projected to create a significant number of job opportunities, they are short-term jobs, averaging a period of 6 months. If, however, effective training is provided, these programmes could ensure a supply of skilled labour for the construction sector.

The capacity of the three tiers of government to spend capital budgets looms large as a determinant of the ability to redress infrastructure backlogs and create employment in the construction and building sector. Indeed, the marked decline in government expenditure between 1994 and 2001 has been attributed in part to fiscal constraints imposed by GEAR and in part to the difficulty government has experienced at all tiers to spend their capital budgets (Merrifield, 2002b; Department of Public Works, 2002; Teljeur and Stern, 2002).

While the evidence suggests that provincial governments have enhanced their capacity to implement infrastructure expenditure (Merrifield, 2002b; National Treasury, 2003), the capacity of local governments to spend capital budgets remains a concern. Under spending against budgets is a significant problem. Moreover, Coetzee (2003) finds that local governments are increasingly using their capital budgets to finance increases or deficits in operating budgets. The increases in the operating budgets are primarily due to the need to service the interest on long-term capital loans. Surveys of local governments have shown that in some instances more than 70% of operating budgets are used to service long-term loans. The net result is that the ongoing maintenance of fixed assets is neglected or local governments engage in new long-term loans to service the current maintenance backlog.

Although a comprehensive analysis of the capacity constraints that hinder the implementation of infrastructure projects lies beyond the scope of this paper, it is clear that such constraints are inimical to the objectives of redressing infrastructure backlogs and creating employment in the construction industry. Critically, unless government's capacity to spend capital budgets and procurement practices provides a secure stream of contracts, it is unlikely that the private sector will expand its capacity to supply construction services. This, in turn, influences the related multipliers.

The supply of construction services

After undergoing a substantial contraction, the construction sector has stabilised – in terms of output and employment – over the last five years. As the sector has not been investing substantially, it appears that it has reached a capacity constraint, and this could pose a short term brake on growth should there be an intention to stimulate the sector. Even to maintain current capacity, most firms in the industry need to recapitalise in the short to medium-term. This means that unless measures are put in place to enhance the capital and skills base of the industry, increased expenditure on infrastructure could lead to a rise in prices. In short, the growth in demand for construction services must be aligned to an expansion in the industry's capacity.

This will require close cooperation between government and the private construction industry. At present, the industry is highly fragmented: four large construction companies⁵ - Murray and Roberts, Group 5, Aveng and Basil Read (which recently merged with Buick to gain access to the West African market) – dominate the management of construction projects and the supply of professional skills, while semi-skilled and unskilled labour is supplied by a large number of small, informal contractors.

The fragmented nature of the construction industry is partly a consequence of its secular contraction, as the large companies sought to reduce their costs and risk by sub-contracting labour. Should government seek to substantially expand capital expenditure, the first point of call might be to organise, by way of discussion and negotiation with the 'big four', an alignment between expected demand and investment in capacity. Alongside this, mechanisms would have to be found to bring the myriad of small contractors into such an arrangement.

Skills development across the board in this industry is a necessary condition for a sustained expansion of employment that does not compromise the quality of output. At present, the evidence suggests that management and supervisory skills at the contractor level need to be enhanced. There is also a scarcity of artisans, particularly machine operators.

Hence three critical challenges confront endeavours to dramatically expand construction expenditure over a lengthy period of time – firstly, to drive the expansion of construction sector capacity (alternatively, more expenditure might simply put pressure on existing resources, resulting in price rises); secondly, to facilitate the entry of empowerment companies into this industry; and, thirdly, to implement a comprehensive human resource development strategy.

⁵ Stocks and Stocks went bankrupt recently due to a decline in the demand for construction services and internal mismanagement. Hence the 'big 5' have been reduced to the 'big 4'.

In sum, the critical parts of a programme to *align* construction and building industry expansion to an employment creation strategy include –

- Identifying the main construction and building programmes within government's aggregate capital expenditure budget over the next three years, the gaps in these programmes and critical areas for improvement to ensure delivery.
- Identifying required or beneficial expansion in related programmes such as services and maintenance: greenfield construction should typically accounts for 25 - 35% of government expenditure, while maintenance typically accounts for 65 – 75% of expenditure. Hence it is likely that the direct jobs created by infrastructure expenditure will be sustained in maintaining such infrastructure. Critically, in a context where the maintenance of infrastructure has been neglected, maintenance projects are faster and easier to implement and hence present opportunities for 'quick wins' in terms of employment creation.
- Improving government's procurement processes.
- Alignment of skills programmes to industry needs.
- Promoting labour intensive methods in civil construction.
- Improving the availability of coherent statistics to enable the tracking of programmes.

3. Social services

Dramatic social and economic dislocation, weak community care for children, the aged, the disabled and HIV/AIDS sufferers, and a dearth of basic services in waste collection, education, health and welfare amongst others, characterise the South African situation. It is therefore easy to justify the expansion of community goods and services. The expanded provision of community services provides long-term jobs and also contributes to human capital development and social cohesion.

Critically, social and personal services have by far the highest employment multiplier of any industry, where 47 jobs are generated for every R1 million invested, with a large portion of these jobs accruing to low and semi-skilled workers (Lewis 2001). Given that women workers are disproportionately represented in the social services sector, creating new social service jobs as well as improving the quality and security of existing jobs also has important implications for women empowerment and gender equity.

The social services sector already accounts for a high proportion of employment, with the education sub-sector accounting for 7.8% of formal employment in 2001 and health and social work for 5.9% (LFS, 2001). There are also a significant number of voluntary workers, which represents an important starting point for employment creation.

The Department of Labour and others have proposed that a "cohort of paraprofessionals" be built in order to foster "job creation through improved service delivery". Para-professional work can be thought of as work that generally does not

require a university degree, such as work supporting service delivery in areas such as education, nursing and care, counsellors and welfare. The initiative of the Department of Labour is envisaged as a way of bolstering public delivery of continuous services, whilst also increasing learnerships for those school leavers that are not moving onto tertiary education programmes.

Government expenditure in this sector is concentrated at the provincial government level and accounts for 80% of the expenditure of this tier of government. Expenditure on social services will increase at a real annual average rate of 5.5% over the MTEF.

Personnel expenditure accounts for the bulk of provincial spending on social services. In the case of education, 83.7% of 2002/03 provincial spending was on personnel, which is projected to fall to 82.7% by the end of the MTEF period. The percentage of provincial health spending on personnel was 58.1% in 2002/03, declining to 56.4% by 2005/06. Personnel spending in social development as a proportion of the provincial social development budget is lower in the case of social development – 3.8%, falling to 3.2% by 2005/06 – as the bulk of spending is on transfer payments. Overall, total provincial personnel spending in the social services is projected to show positive real growth over each of the coming years of the MTEF period.

The key issue confronting government is how to utilise increased expenditure on social services to enhance the delivery of basic needs and create employment. Challenges in this regard include enhancing government's capacity to effectively design and implement specific programmes, and developing a pool of suitably skilled and accredited suppliers of these services.

Opportunities for employment creation

Policy interventions to create employment will require a thorough understanding of the dynamics of the social services industry. The market for care services is characterised by demand emanating from private households and government and the supply of these services through individuals, public institutions, private institutions, non-governmental organisations, faith-based institutions and community-based organisations.

In contrast to other industries, social services are often undervalued, and are even sometimes treated as 'invisible' simply because their delivery in the household is often seamless and generally unpaid (ie. gender roles are strong – and these jobs are seen to be womens' role in the home). Market based roles often mirror these domestic ones - so we find that service is undervalued, resulting in firstly, insufficient delivery in the market as it is assumed to be provided for 'free' by mothers, and secondly, is generally very low paid work.

At present, it might be assumed that the low level of para-professional delivery partly arises as result of low incomes in poor households where these services may be needed the most. If government wanted to expand the delivery of these services, recognising that there is already a fairly large number of private groups that can deliver them, how would poor households be reached?

There are a wide spectrum of interventions, ranging from direct employment in the public service, to procuring services of delivery agencies, to providing cash or vouchers to households enabling them to choose their provider. The essential question is whether to pay the provider or the consumer. Currently the approach seems to lean towards conditional grants to provinces, who in turn, procure services. Ideally, the design of any programme would aim to expand the industry in a way that enhances the efficiency and quality of such services, as well as the choices available to consumers. Sustained expenditure flows would have a greater effect on ultimate multipliers.

Supply-side interventions in relation to training and accreditation are important in a context where these services are provided in a combination of home-based, community based, residential and institutional modes of delivery and a wide range of actors – government, NGOs, faith based and private institutions – provide these services. Improved accreditation of service providers (workers and agencies) will enhance the ability to procure services, or alternatively, to set standards where vouchers can be used.

Learnerships are one appropriate mechanism because they are directly keyed into the NQF, and are fundable in terms of the National Skills Fund. If the care industry is to be an avenue for employment creation as a means of meeting government's commitment to providing basic needs, resources will have to be made available for enhanced training and accreditation.

Within the broad ambit of social services, specific areas where there is enormous scope for employment expansion, include the following:

- Child and youth care;
- Early child development;
- Care for the elderly;
- Health care;
- Mental health care;
- Disability care;
- School support, such as teaching assistants, school feeding and aftercare; and
- Community facilitators: this is a proposal put forward by the Social Security Commission to provide facilitators that enable poor households to access grants.

Further research could elaborate the scope for employment creation and the policy interventions that would be required, in each of the potential areas listed above. By way of example, integrated community home-based care for people living with HIV/AIDS

provides significant potential for employment-creation, particularly in light of the growing prevalence of HIV/AIDS and the increasing burden on the public health system.

Johnson *et al* (2001) estimate that the cost of home-based care for those afflicted with HIV/AIDS would range from R60.42 to R538.19 per patient per month depending on the quality of care provided. This estimate includes paying those that currently work voluntarily to paid workers on a salary of R1, 400 per month. Based on the non-insured population and AIDS deaths in each province, they estimate that the monthly cost of providing home-based care to 80% of those requiring it would be significantly below 1% of the annual expenditure of each of the 9 provincial health departments. On a national scale, in 2005 the annual cost would range from R10 million for a low-cost option to R1,940,992 for a higher cost option.

As personnel costs account for 62% - 90% of these estimates, which are based on the assumption that voluntary workers will receive a salary of R1,400 per month, a significant number of jobs could be created through such a programme. Given that the majority of these service providers come from poor households and are already skilled in providing these services, transforming them from voluntary to paid workers is an obvious avenue for employment creation.

Moreover, as the ultimate objective of employment creation is to reduce household poverty, it is relevant that research has demonstrated that income earned by women is more likely to reduce household poverty than income earned by men. In the case of pension income, a recent study found that the relationship between transfer receipt and a reduction in child malnutrition is particularly strong where the pension recipient is female, but almost negligible where the recipient is male (Duflo, 1999).

This indicates that targeting women as the beneficiaries of employment creation initiatives may be the most effective way of improving household welfare. The primary mechanisms by which these positive changes are achieved are improved nutrition, improved sanitation, and the reduction of psychosocial stress associated with extreme poverty (Case, 2001). In the context of the care sector, where women dominate the labour market, and many are volunteers, this is a compelling reason to transform voluntary jobs into paid jobs.

Subjecting other social services to this kind of analysis is likely to reveal significant opportunities for creating employment in the process of meeting basic needs, which is an important objective in its own right.

From the perspective of a sector strategy, any expansion in the delivery of social services would need to ensure that quality standards are developed and maintained. One problem relates to how to align paraprofessional services to professional ones. In addition, slow delivery in the conditional grants is partly explained by the fragmented

character of these sectors, with uneven accreditation and training – this makes it difficult to distinguish between applicant agencies.

Ultimately, the ability to expand the supply social services depends on consistent training and accreditation of a cohort of paraprofessionals, and the accreditation of private firms and organisations in those sectors.

4. Food production and distribution

Government is committed to providing food to poor households through conditional grants to provinces in the context of two main programmes: short-term food relief and the integrated nutrition programme. While these programmes fall within the frame of social development and health services respectively, they are treated separately in this paper as they relate to productive activity and not only service provision.

The provision of food to poor and vulnerable households presents opportunities for employment creation in food production, distribution, logistics services and catering services (in the case of school feeding schemes). The sector has high employment multipliers: for every R1 million invested in agriculture, 18 jobs are created, of which 16.65 are semi-skilled and unskilled. For every R1 million invested in the food industry, 2 jobs are created, of which 1.1 are semi-skilled and unskilled (Lewis, 2001)

Food distribution to poor households is a complex economic activity that extends beyond social services to agricultural production, agro-processing, logistics and even catering services. This paper therefore merely aims to frame the issues that will impact on employment creation as expenditure on the provision of food to poor households expands.

There is clearly a significant need for food provision. The ultra-poor are estimated to spend over 50% of their income on food and up to 20% on maize alone (Watkinson and Makgetla, 2002). It has been estimated that 39% of the South African population is vulnerable to food insecurity. About 25% of all South African children are stunted due to malnutrition. It would therefore appear that there is a substantial unmet demand for food – unmet due to the lack of money in poor households. Were this demand met through government intervention, output and employment would be significantly boosted.

The challenge for government is to find ways of addressing this need and closing the food gap, so that it stimulates employment retention and creation. The policy issues to be addressed include how the industrial structure of these sectors affects and is affected by government food provision; the optimal sourcing of food for government programmes; and mechanisms of making jobs based on such sourcing secure, even beyond the lifespan of particular government programmes.

Current government food programmes

By 2005/6, some R1.44 billion is projected to be spent by government on the provision of food to poor households. Short-term food relief programmes will amount to R230 million in 2002/03 and almost R400 million per year for each of the subsequent three years of the MTEF, and will be implemented through a conditional grant to provinces. Initially the programme is focusing on social facilitation and the distribution of food parcels (to the value of R300 per month) to the most vulnerable.

Delivery is currently taking place in cooperation with the IDT, NDA, a range of relief organizations and provincial social development departments. In future, direct provision of food will be complemented by support of food production in poor households through production starter packs and community production centres.

The Integrated Nutrition Programme includes the school feeding scheme as well as food provision to at risk pregnant and lactating women, and other vulnerable communities, groups and individuals; and other nutrition-related activities. It is targeted especially at poor provinces with large populations of schoolchildren, with the Eastern Cape, Limpopo and Kwazulu-Natal receiving over 60% of the allocation. Expenditure on the Integrated Nutrition Programme (INP) is projected to grow substantially from R 642 million in 2002/3 to R1 042 million in 2005/06. The increases are intended to cover more recipients, rising prices, and improved quality of feeding.

The supply chain for food products

In order to identify ways in which the food relief and integrated nutrition programmes can create opportunities for employment creation it is necessary to understand the elements of the supply chains of the various food items provided under these schemes. These supply chains are located within the agricultural, agro-processing and logistics sectors. As each item of food provided by government programmes has a unique supply chain, employment creation strategies should be based on a thorough understanding of such supply chains.

While a comprehensive analysis of these supply chains lies beyond the scope of this paper, an example of the kind of thinking – allowing for higher nutrition basic foods distributed to poor households, but aligned to an existing industry – is described in the box below. This box makes reference to one possible line of thinking in relation to refined maize and bread.

The refined maize supply chain starts with the production of maize and ends with milled and packaged mealie meal in the retail outlet. There are approximately 6,000 large-scale maize growers and as many as 30,000 small-scale growers. They sell their harvested crops to silos (which are generally run by cooperatives or former cooperatives), which issue certificates guaranteeing the quality of the maize.

The millers – on their own or with the help of a grain trader – then purchase the maize from the silos. This maize is stored for as long as 3 months either at the miller's premises or in hired premises. The grain is then milled and packaged before being sold directly to retail outlets. The milling industry is dominated by a small number of large players (such as Premier and Tiger Brand), although there are a number of small-scale empowerment millers (approximately 200-300). The latter have been able to enter the industry because they use basic milling equipment that costs between R50 000 and R80 000.

The integrated nutrition programme is introducing food fortification schemes because maize is currently too refined and therefore of limited nutritional value. This is because the large millers remove the germ as it affects the shelf life and taste of refined maize. The small-scale millers, however, do not remove the germ during the milling process as they mill on demand and the refined maize is consumed soon after. If they are required to fortify this maize, they will have to purchase more sophisticated equipment and hence would effectively be excluded from this market.

This account of the supply chain for refined maize – which is a staple food in poor households – points to ways in which employment creation can be stimulated through the provision of food by government. The key lessons are related to identifying the labour intensive modes of production (in this case the small millers being more labour intensive than large millers), locating producer that already have a tendency to produce higher nutrition outputs (in this case, the large millers fortify the maize, whereas the small millers produce a higher nutrition maize meal). Finally, locations for new entry – in this case, government could use its procurement process to give special access to emerging small scale millers and logistics companies. All these measures, by addressing the supply-side of the industry, will facilitate the expansion of employment-creating economic activity, while improving the nutritional content of food and local supply and delivery.

Further research would need to investigate the actual supply and distribution chains for the various food items provided by the food relief and integrated nutrition programmes. Options for sourcing food products, potential blockages to expanded production, and potential linkages would need to be considered in formulating appropriate policies for the sector, to link food provision and distribution to sustainable employment and output growth. Some of these items already form part of the Food Pricing Committee's

investigations into the price increases for staple food products, which involves analysing the various elements of the supply chain, and could form the starting point for further research on employment creation in this sector.

Food security and employment creation: possible interventions

Government's involvement in the distribution of food based on need is a complex task in that it draws on or impacts on policy and responsibility in various areas: health, agriculture, industrial policy, land reform, education, trade policy, welfare, competition policy, and potentially even public works.

A clear vision is required for the role of the agricultural and food sectors in the economy, including their places with respect to food security, employment, investment, output, and linkages to other sectors. A key challenge is for the real but unmonetised demand that exists for basic foodstuffs to be met in a way that stimulates domestic production, investment, and employment in the agricultural and food sectors, with positive spin-offs for related sectors.

Exploration of additional food provision initiatives outside of the current programmes (or expanding the mandate of the current ones) may also be warranted. Further research could explore the feasibility of proposals such as the large-scale provision of food-parcels to people living with AIDS; the introduction of food vouchers; and the subsidisation of basic foods predominantly consumed by low-income households. Such programmes would clearly also have positive effects in stimulating employment. As with social services programmes, a critical question arises as to whether government should support the provider or the consumer.

Many of the issues around procurement raised in other sections of this paper would also apply here. These include using the leverage of procurement to promote small-scale producers, incentivising labour-intensive production technologies and employment creation, timely payment for tenders and long term performance contracts. The more long term and credible the programme, the higher the employment and output multipliers are likely to be.

Given that small-scale farming tends to be significantly more labour-intensive than large-scale farming, sourcing food from the former would tend to create more jobs for a given quantity of food sourced by government. Concerns around food quality and reliability of delivery would naturally also need to be addressed in this respect. Boosting small-scale production would also require or be assisted by accelerated land reform and the development of appropriate crop strains and production technologies. Shifting a greater proportion of food sourcing to small-scale producers would thus involve both the active promotion of this stratum, with possible measures (such as competition policy) to address problems among large-scale concentrated producers.

Furthermore, availing under-utilised agricultural land for productive use can both enhance food security and stimulate employment.

This cursory analysis of the potential for job creation through the provision of food by government to poor households suggests that there are a range of opportunities for implementing these programmes in a way that creates employment. More detailed analysis of supply chains underpinning the specific food products provided by these schemes, as well as current practices for delivering them to households and schools is required to formulate an employment creation strategy for this sector.

6. Conclusion

This preliminary analysis of the potential for employment creation in the construction, social services and food distribution sectors suggests that there is significant scope for creating sustainable jobs in the process of implementing government's commitment to meeting the basic needs of all South Africans.

Increased government expenditure will not, however, on its own ensure that infrastructure backlogs are redressed and a range of social services are delivered to poor households. The sustainable expansion of output and employment in these sectors requires distinct industrial strategies that redress demand and supply constraints and ensure that policy imperatives such as black economic empowerment are realised. More importantly, sustained and credible expenditure will ultimately encourage more private sector interest and raise the probability of higher output and employment linkages. In light of the commitments made by Government at the recent Growth and Development Summit – which resonate strongly with the sectors analysed in this paper – there is some urgency to develop industrial strategies for the sectors under consideration.

The development of such industrial strategies requires a more detailed analysis of the industries reviewed. On the demand side, government's capacity to roll out expenditure on construction, social services and food distribution requires a thorough interrogation. In addition, the nature of procurement practices must be investigated so that they provide a secure platform for the sustained expansion of supply capacity.

On the supply-side, it is necessary to provide support to ensure that the capacity to supply these services expands in tandem with government expenditure. A critical challenge is to put in place appropriate mechanisms for the provision of training and accreditation of entrants into this segment of the labour market. Further analysis of the training needs specific to each sector is required to put in place such mechanisms.

A coordinated effort across the three tiers of government and relevant national departments is critical to the success of strategies to create employment in these

sectors. In addition, cooperation between government, the private sector, non-governmental organisations, community-based organisation and faith-based organisations is a prerequisite for their sustainable expansion.

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