



TRADE & INDUSTRIAL POLICY STRATEGIES

Trade & Industrial Policy Strategies (TIPS) is a research organisation that facilitates policy development and dialogue across three focus areas: trade and industrial policy, inequality and economic inclusion, and sustainable growth

info@tips.org.za
+27 12 433 9340
www.tips.org.za

**THE SJRP TOOLBOX:
SUMMARY FOR POLICY MAKERS**

May 2020

FOREWORD

The National Climate Change Response White Paper requires the development of Sector Jobs Resilience Plans (SJRs). These plans aim to protect vulnerable groups that may lose their jobs or livelihoods as a result of climate change impacts, related either to physical effects or to the transition to alternatives.

The proposals for the SJRs, and the evidence supporting them, are presented as a suite of related documents. These are *The SJR toolbox: Summary for Policy Makers* and proposals for five value chains that seem particularly likely to be affected: coal, metals, petroleum-based transport, agriculture and tourism.

The research for this project was conducted by Trade & Industrial Policy Strategies (TIPS) for the Departments of Environment, Forestry and Fisheries and Trade Industry, and funded by GIZ.

TIPS research team: Neva Makgetla, Nokwanda Maseko, Gaylor Montmasson-Clair and Muhammed Patel.

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ABBREVIATIONS

BBBEE	Broad-Based Black Economic Empowerment
CoGTA	Department of Cooperative Governance and Traditional Affairs
CSIR	Council for Scientific and Industrial Research
CATHSSETA	Culture, Art, Tourism, Hospitality, and Sport Sector Education and Training Authority
DEL	Department of Employment and Labour
DPWI	Department of Public Works and Infrastructure
DEFF	Department of Environment, Forestry and Fisheries
DHET	Department of Higher Education and Training
DMRE	Department of Mineral Resources and Energy
dti (the)	Department of Trade and Industry
EPWP	Expanded Public Works Programme
GDP	Gross Domestic Product
HLS	Historic Labour-Sending (Regions)
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IPAP	Industrial Policy Action Plan
KPIS	Key Performance Indicators
LED	Local Economic Development
MPRDA	Mineral and Petroleum Resources Development Act No. 28 of 2002
MQA	Mining Qualifications Authority
NSF	National Skills Fund
QLFS	Quarterly Labour Force Survey
SJRPs	Sector Jobs Resilience Plans
SLPs	Social and Labour Plans
SMEs	Small and Medium Enterprises
SOCs	State-Owned Companies
SETA	Skills Education Training Authority
TETA	Transport Education Training Authority
TVET	Technical and Vocational Education and Training
UIF	Unemployment Insurance Fund

1 MANDATE AND CONTEXT

The National Climate Change Response White Paper requires the development of Sector Jobs Resilience Plans (SJRP) that could protect vulnerable groups that may lose their jobs or livelihoods as a result of the climate impacts, either related to physical effects or to the transition. This project provides proposals for five value chains – coal, metals, petroleum-based transport, agriculture and tourism – that seem particularly likely to be affected.

The process of developing the SJRPs built on earlier work on the National Employment Vulnerability Assessment and the associated baseline (the NEVA and NEVB). That analysis used macro-economic modelling to identify the industries that would be most affected by climate change and policies to respond to it. It informed the decision about which value chains to prioritise for SJRPs.

The development of the SJRPs required responses to four core questions.

- **The nature of vulnerable groups in the value chain.** The project developed a common methodology to evaluate vulnerability. For workers and small producers, it centred on income, financial and physical assets, human and social capital. For communities, it related to the degree of dependence on types of production that seemed particularly vulnerable to climate-related impacts.
- **The nature and likely timing of climate-related impacts in each value chain.** That in turn required an analysis of economic trends in the value chain. It also entailed an evaluation of its vulnerability to climate change and/or the likely effects of policies to address the climate emergency. These measures essentially involve either internalising the costs of greenhouse gas (GHG) emissions or rationing their production. In practice, it proved impossible to identify the timing and location of climate-related impacts with any precision, although the broad trajectory was indisputable. The proposals therefore centre mainly on improving information and resilience to deal with impacts as they arise.
- **The range of measures available for addressing climate change.** For this purpose, the available literature on assisting workers and communities faced with economic transitions was reviewed. The evaluation indicated that, given the high levels of joblessness in South Africa, active labour market measures – which focus on helping individual workers take advantage of new opportunities through training, help with job search and various forms of financial support – will not be sufficient. Rather, a core focus should be on helping industries mitigate the effects of climate change to save jobs especially in agriculture, metals, transport and tourism, and on local development programmes that assist affected communities to diversify their economies.
- **The institutional structure and capacity needed to drive implementation of the SJRPs.** Before detailed plans can be drawn up, the entities that would be responsible for their implementation need to be specified. That fundamental decision will largely shape the implementation phases for the SJRPs, and in particular the nature of consultations and the modes through which technical capacity and communities can be mobilised to support implementation.

Proposals were developed based on analysis of the value chains, supplemented by a desk-top analysis of national and international approaches to the just transition as well as relevant existing measures. Interviews with key informants were also held for each value chain. Draft

reports were furthermore reviewed by a varied group of stakeholders through a series of project steering committee meetings.

Substantial uncertainty remains about the timing and specific impact on individual value chains and communities of the climate emergency and policies to address it. The main visible effects of climate change itself are higher temperatures and changes in rainfall patterns, but experience to date may not adequately predict future changes. Furthermore, the extent and timing of measures to disincentivise the use of fossil fuels remain unclear.

These measures may take the form of internalising the full cost of GHG emissions to users (as with the carbon tax) or other kinds of incentives or regulations. In these circumstances, the extent and nature of job losses as an explicit result of climate change remain unpredictable for both numbers and location. Efforts to model potential job losses rely heavily on strong and contested assumptions about future policy decisions.¹

In addition, it is impossible fully to disentangle climate-related impacts from other factors. They include the slowdown in the economy since the end of the global commodity boom in 2011; the rise of alternative energy sources to coal, combined with the decommissioning of Eskom plants due to age and the rapid increase in electricity tariffs; and the frequency and severity of droughts in agriculture.

In these circumstances, it is not possible to forecast climate-change related impacts on the livelihoods of vulnerable groups with much precision. The main challenges arise from lack of clarity about the timing and location. As a result, specific plans to mitigate the effects cannot be developed, but rather broad strategies to improve resilience for vulnerable groups in industries that will be affected. That in turn requires measures to strengthen responses to changing conditions through institutions and systems that can monitor changes more carefully; promote technological adjustments that minimise job losses where possible; ensure early warning of potential livelihood losses or other problems; and develop specific measures to mitigate them as they arise.

Because climate-change related effects cannot be forecast in detail with time frames, the most important immediate step is to develop institutional drivers that can ensure appropriate responses when required.

Proposals aim to improve systems to support vulnerable groups, both through cross-cutting measures that affect all industries and at the level of each value chain. Five main directions for possible action were identified.

1. Clarifying options for responsibility for implementation within government, which in turn affects how technical capacity and communication would be organised and phased. This applies to every value chain as well as to the overall coordination and unblocking of the SJRPs.
2. Maximising the diffusion of technologies that can limit job losses. This is central for agriculture and petrol-based transport, and to a lesser extent to metals and tourism.
3. Promoting economic diversification in communities that rely disproportionately on vulnerable industries (this relates primarily to relatively small mining and farming towns).

¹ See for instance Cruywagen et al. 2019.

4. Assisting individual workers and producers to transition to new livelihoods through active labour market policies. The timing, location and specific employment outcomes of climate-related impacts remain, however, highly uncertain. As a result, the proposals for this project suggest ways to lay the groundwork for this kind of programme as the need arises.
5. Providing social protection to vulnerable groups as they transition to new economic opportunities. This is particularly important in the case of agriculture and workers in the coal value chain.

For each value chain, proposals were made in those areas that were relevant. As a result, the different value chains use a different subset of the five possible strategies identified.

The proposals for the SJRPs, and the evidence supporting them, are presented as a suite of related documents. The aim is to make each value chain SJRP more easily accessible to stakeholders. The documents are organised as follows.

1. This document presents a summary of the cross-cutting measures required to support implementation of SJRPs in all the value chains.
2. Separate documents detail the SJRPs for each value chain. These self-standing narratives cover the proposals and the back-up evidence and analysis for each value chain in greater detail. As noted, because of continued uncertainty about the specific timing, location and extent of impacts on employment in each value chain, the SJRPs focus on monitoring impacts, building resilience, developing systems that can deal with challenges as they arise, and generally managing risk. The proposed programmes can, however, only be concretised, costed and phased when agreement has been reached on the institutions to drive them and on the specific programmes to be included. Costing methodologies could include options analysis, cost benefit analysis, performance expenditure review, as prescribed in the National Treasury Capital Planning Guidelines and (<http://www.treasury.gov.za/publications/guidelines/default.aspx>) and Performance Expenditure Review (<https://www.gtac.gov.za/Pages/pubexppolrev.aspx>).

Detailed background research on each of the value chains and on theories about and experience with the just transition was also undertaken. These background documents are available from the Department of Environment, Forestry and Fisheries (DEFF).

2 EFFECTIVE STRUCTURES FOR COORDINATION AND IMPLEMENTATION OF SJRPS

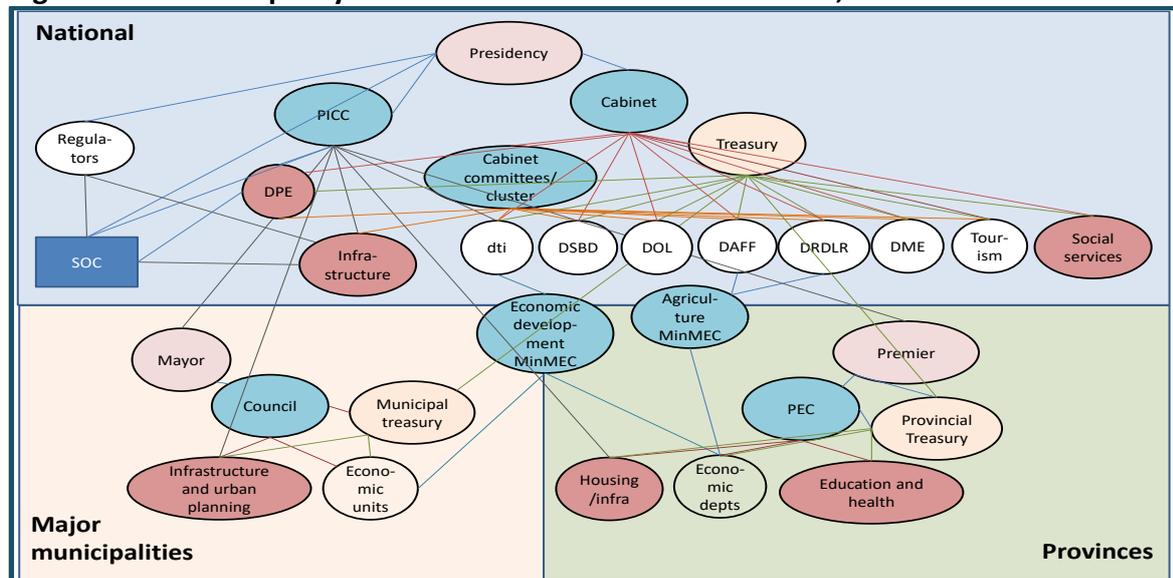
Significant initiatives that the SJRPs could leverage for effective implementation already exist. Two challenges emerge for the SJRPs.

First, many of the measures are not targeted at protecting vulnerable workers and communities during downturns. Meeting the specific needs arising from climate-change related impacts will therefore often require some amendments to their mandates.

Second, the relevant functions are generally divided amongst a number of institutions that cross the spheres of the state. Figure 1 illustrates the challenge. The fragmentation of the state makes alignment to meet specific regional or value-chain challenges more difficult. In

many cases, it can best be overcome by establishing dedicated capacity to secure alignment in supporting the most vulnerable clusters and communities.

Figure 1. Economic policy structures in the South African state, 2019



Source: Neva Makgetla. Forthcoming. Economic institutions and the frustration of economic policy. In, David Platjies. Forthcoming 2020. *Making Institutions Work*.

The South African state is fragmented between departments, spheres and semi-autonomous agencies and state-owned companies (SOCs). Experience shows that the resulting divisions in mandates and priorities can stymie implementation of important strategies. By extension, successful implementation of the SJRPs requires effective structures that can ensure implementation is prioritised, promote coordination and settle disputes between agencies.

Central to addressing both challenges is establishing the high-level central structure that can ensure alignment across government agencies and policies to improve resilience by industries and vulnerable groups to climate-change related impacts. The structure to be established must be effective and authoritative and this would amongst other things:

- To coordinate support systems for vulnerable workers and communities;
- To monitor climate-related impacts and develop faster responses; and
- To maintain national government responsiveness to stakeholders (especially local governments, employers and organised labour and communities).

The proposal here is for Presidency to designate a high-level body to drive the SJRPs. First best would be the proposed Presidential Climate Change Coordination Council (PCCCC). The 2018 Jobs Summit agreed on establishment of the PCCCC to oversee the Just Transition, including both the protecting vulnerable groups and maximising opportunities for new jobs. The PCCCC would include relevant departments, the National Economic Development and Labour Council (Nedlac) constituencies (organised business and labour plus civil society representatives), and experts from civil society and research associations. The structure will need adequate resources to monitor climate-change related impacts to identify needs as they arise, as well as to implement current proposals. In that context, it will have to manage constructive engagement with stakeholders and ensure alignment of government initiatives across the spheres and functions of the state.

The rest of this briefing note reviews existing initiatives that could be leveraged for the SJRPs.

3 PROMOTING TECHNOLOGICAL ADJUSTMENT

Technological adjustments to reduce the impacts of climate change on employment have three main elements. They are:

- Modifying production processes to reduce exposure to carbon taxes and other measures that aim to internalise the climate costs generated by fossil fuels;
- Adapting production processes and products to changing climate conditions, including greater heat and droughts, more extreme storms, and rising tides; and
- Upgrading infrastructure to promote cleaner energy, use fossil fuels more efficiently, and mitigate the effects of droughts through better water management.

Efforts to minimise climate-related impacts on production and employment can be analysed in terms of the standard phases of technological innovation. From this standpoint, research and development is necessary but not sufficient for technologies to succeed. The critical step is diffusion of the innovation among public and private producers. That in turn lays the basis for further adaptation and technological advances.

In practice, in the late 2010s the main blockages to adaptation in South Africa related to the limited take-up of available technologies. The innovations required to limit climate-related impacts were generally known, but they were often neither used broadly nor continually improved based on local or regional experience.

The main bottlenecks comprised the following:

- Individual companies, especially if small, often found it difficult to identify viable options and to mobilise the technical capacity required to implement them.
- The structure of short-run costs and benefits often effectively disincentivised innovation that could mitigate longer-run climate risks and impacts. In part, this arose from the (often unintended) consequences of government measures, embedded among others in regulatory frameworks, taxes, insurance and infrastructure systems.
- Companies often found it difficult to finance the new investment in innovative technologies to mitigate or adapt to climate change. The core challenge was that these new techniques typically respond to risks rather than immediate certainties, and generally pay off only in the long run.

For government to promote technological adaptation, it has to develop targeted programmes to address these blockages. Strategies include:

- Programmes that assist businesses in identifying technological options;
- Improved alignment of government measures of all kinds to effectively incentivise change or at least avoid discouraging it; and
- Provision of industrial finance to support investment in relevant technologies, including in public infrastructure systems.

In South Africa, these types of measure fall mostly under a range of national departments and dedicated agencies, with smaller programmes at provincial and local, especially metro, level.

Table 1 indicates some of the main role players by function. A challenge in every area has been to agree on priorities and to secure alignment across the many state bodies involved. The structure that oversees implementation of the SJRPs would have to ensure greater coordination to meet the technological imperatives arising out of climate change.

Table 1. Roles of government institutions in promoting technological innovation to reduce job losses from climate-change related impacts

Function	Departments	Agencies	Comments
Identification of technological options	National: Trade and Industry, Science and Technology, Environmental Affairs, plus sectoral economic and infrastructure departments; provincial environment, infrastructure and economic development departments.	The Council for Scientific and Industrial Research (CSIR), Agricultural Research Council and other industry-specific agencies, infrastructure agencies (Transnet, Eskom, water boards)	In terms of production technologies, interviews suggest that research has tended to prioritise reducing emissions rather than to minimise job losses. Both are obviously needed, but the SJRPs should encourage more attention to sustainable technologies to limit climate-related effects on production and employment.
Diffusion of appropriate technologies to producers	Same	Small and Medium Enterprise (SME) support agencies, State-Owned Companies (SOCs), water and irrigation boards	Diffusion, especially to small companies, remains the weakest link in the South African innovation system. This limits the diffusion and adaptation of technologies that would enable industries with many small businesses to adjust to climate change, notably agriculture, public transport and tourism.
Investment in appropriate infrastructure	Water Affairs, Minerals and Energy, Transport; provincial and municipal infrastructure agencies	SOCs, water boards, irrigation boards	Priorities are (a) responsibility for promoting renewable energy and in particular Eskom's role; (b) more efficient use of water especially in agriculture; (c) reducing emissions from domestic and international freight and tourist transport.

Function	Departments	Agencies	Comments
Incentivising change (and avoiding disincentives)	Treasury (taxes and budget allocations for infrastructure), the dti (incentive schemes), Environmental Affairs (regulatory framework), sectoral departments; provincial and metro budgetary, regulatory and licensing authorities	South African Revenue Service, National Energy Regulator of South Africa, SOCs, the Industrial Development Corporation (IDC) and SME support agencies	A core factor is the extent to which pricing on government services incorporates the actual and potential negative effects of climate change. Relatively low-cost water for farmers and high-cost and often inaccessible rail transport compared to road in themselves discourage the introduction of more efficient technologies, and in the case of agriculture limit the shift to drought-resistant products. Similarly, in electricity, regulatory limitations on renewable generation and wheeling disincentivise actions to mitigate the effects of carbon taxes, although there are some tax incentives for energy efficiency. In transport, the auto manufacturing strategy does not incentivise electric vehicles, and refineries are not incentivised to upgrade to cleaner fuels.
Industrial financing		IDC, Development Bank of Southern Africa, Land Bank, provincial SME financing agencies	The development finance institutions have been central to financing the Renewable Energy Independent Power Producers. Their support for other forms of adaptation have been much smaller in scale. Multilateral agencies may also play a role.

Collaboration with business associations often proves critical in diffusing new technologies. In particular, business organisations can encourage members to innovate. They can help develop clusters that make it easier for smaller enterprises to adopt new products and production techniques. In agriculture in the 2010s, several industry groups funded research into technologies to adapt to climate change. That said, business associations typically counted relatively few very small township producers or farmers among their members, limiting their ability to diffuse technologies to this group.

In the late 2010s, business associations' work with government research agencies proved uneven. Farmers' groups had moved the bulk of their research funding away from the Agricultural Research Council, arguing that it lacked capacity to meet their needs. The CSIR sharply reduced its work for mining after 1994, although it saw some recovery in the 2010s.

Government research agencies could also play an important role in identifying and diffusing new options. They were not, however, consistently integrated into adaptation efforts.

In interviews in October 2019, managers of some of these agencies said they lacked a clear mandate for research priorities. A central challenge was how they should balance the needs of large formal business against the (often very different) requirements of emerging and small producers. In addition, their work tended to focus more on ways to reduce emissions rather than on adaptation.

The government research agencies also did not have well-developed systems to diffuse innovations either to businesses or to government infrastructure programmes. As a result, potentially important innovations, such as drought-resistant maize, were often not fully

utilised. That said, the CSIR's work on renewable energy had an important influence on national electricity planning.

The SJRPs identify priorities for adaptation that can limit downsizing and job losses. Successful implementation will, however, require substantial, often difficult and risky innovation by both the private and public sector. It is therefore particularly important that these priorities be agreed across the relevant government bodies. That agreement is a precondition for securing alignment in action across the multiplicity of relevant policies and regulations. In addition, business associations should be empowered more consistently to test the viability of proposals and act as channels to enterprises in enabling them to adopt new technologies.

4 DIVERSIFYING LIVELIHOODS

Small, rural communities that depend on a single industry – typically agriculture, mining or tourism – are particularly vulnerable to climate-change related impacts. In addition, towns in the historic labour-sending areas are likely to see impacts on gardening, which could affect food security, as well as a decline in mining jobs.

In economic theory, when an industry downsizes, workers and businesses will ultimately shift into alternative economic activities. In practice, however, especially in South Africa's high-unemployment circumstances, the transition may take years, even decades. The delay in adaptation reflects the range of blockages that face the development of new economic activities. Critical constraints include both limited information about viable options and the need to establish new support systems for new production clusters. Often existing structures are not able to find markets for their products or access affordable inputs, training, finance and infrastructure. Moreover, regulatory frameworks often lag behind the development of new kinds of production.

In these circumstances, government can help accelerate diversification by scoping realistic opportunities and fast-tracking support systems. To succeed, it has to secure stakeholder support. In many cases, it also has to establish dedicated agencies that can mobilise and align the array of state services.

A particular challenge emerges around the role of local governments, especially in mining and farm towns. On the one hand, the small rural towns that are most vulnerable to climate-change related impacts have particularly constrained resources and capacity. On the other, local governments are expected to formulate local economic development plans, but they have little influence on economic policies and on decisions about bulk infrastructure.

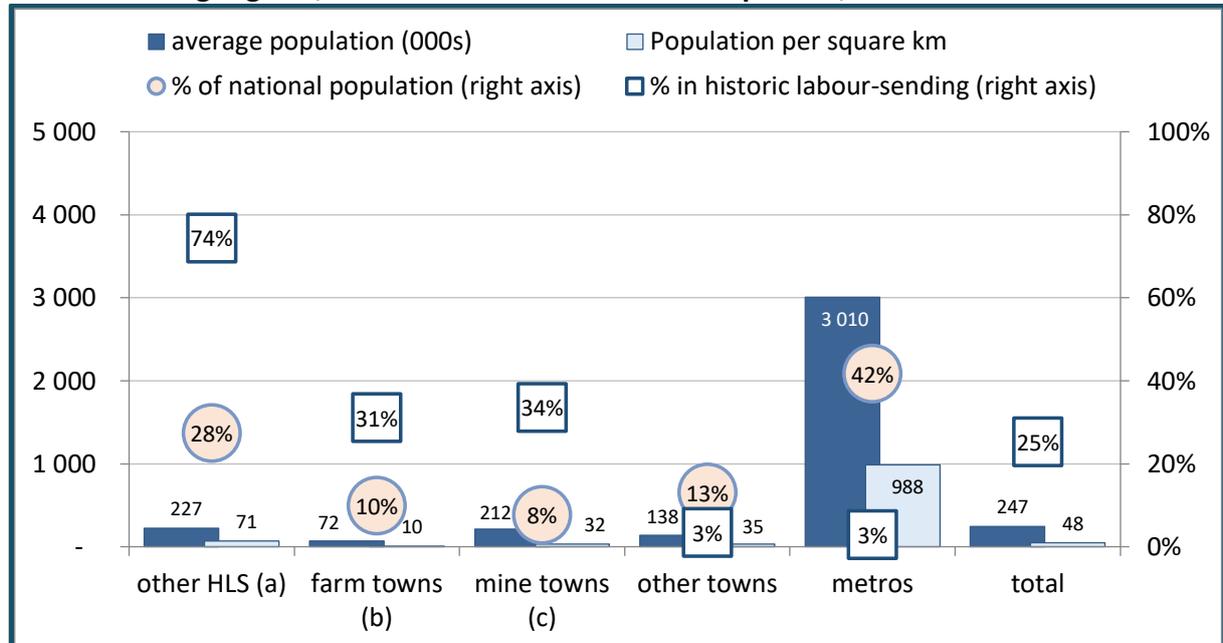
In the late 2010s, small towns that were vulnerable to climate change – essentially farming and mining centres as well as towns in the historic labour-sending regions in general – had lower levels of employment and education as well as worse infrastructure than the rest of the country. That in itself made it harder for them to adjust to a decline in their main industries.

In 2018, there were 80 farm towns (defined in this report as municipalities where agriculture contributed at least 10% of the local economy), 21 mine towns (where mining contributed at least 33%) and 70 towns located predominantly in the historic labour-sending regions, based on Quantec estimates. In addition, there were 55 towns that did not fit these categories, as well as the eight metros. In the farm towns, agriculture accounted for just under 30% of formal employment in 2018, compared to the national average of 8%. In mine towns, a similar

share of formal jobs was in mining; the national average was 3% (calculated from Quantec database 2019).

The vulnerable towns were relatively small, with low population densities. A relatively large share of the population in farm and mine towns lived in historic labour-sending regions, although the percentage varied substantially within the group (Graph 1).

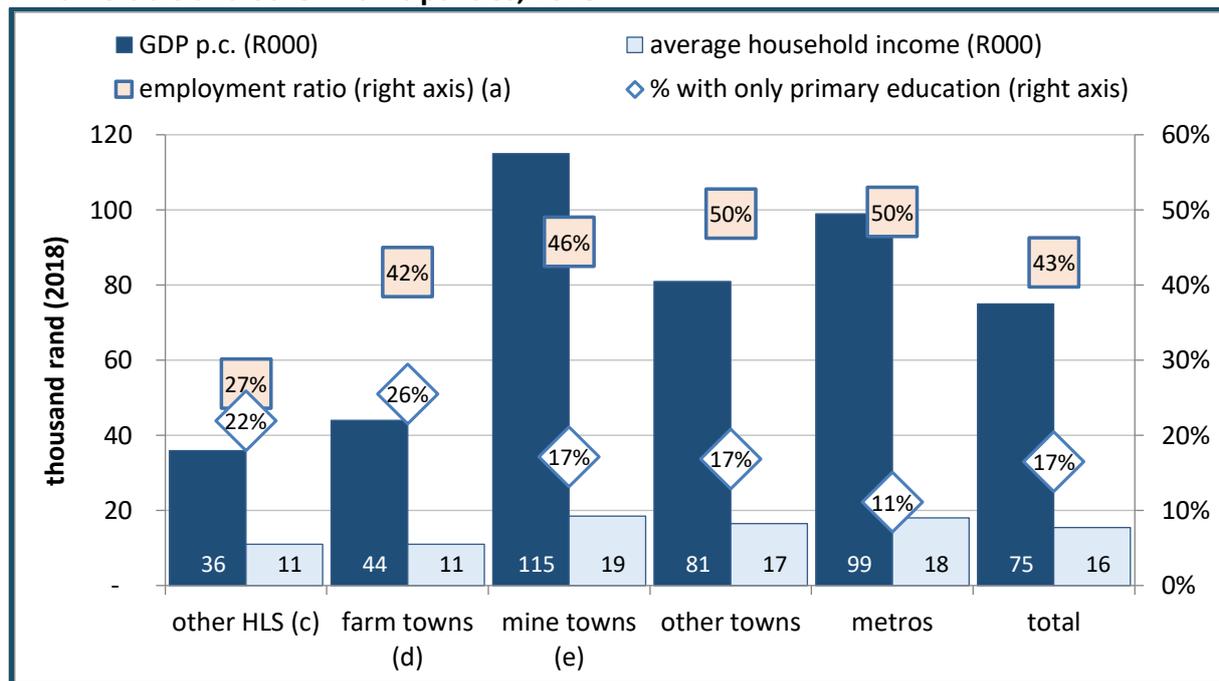
Graph 1. Average population size and density, and share of households in historic labour-sending regions, in vulnerable and other municipalities, 2016



Notes: (a) Defined as having over 50% of households in historic labour-sending regions. (b) Defined as having over 10% of municipal value add from agriculture. (c) Defined as having over 33% of the municipal value add from mining. *Sources:* Categorisation of municipalities and density per square kilometre calculated from Quantec. EasyData. Interactive data set. Series on regional value add and size in square kilometres. Data for 2018. Downloaded from www.quantec.co.za in November 2019. Population figures and share of households in historic labour-sending regions calculated from Statistics South Africa. Community Survey 2016. Interactive data set. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

The vulnerable towns had low levels of employment and education by national standards. Municipalities in the historic labour-sending areas and farm towns also had relatively low incomes. In contrast, mine towns had above-average incomes. Still, they experienced relatively high joblessness and, as discussed below, substantial social and infrastructure backlogs.

Graph 2. Employment ratio (a), education (b), GDP per person average household income in vulnerable and other municipalities, 2018

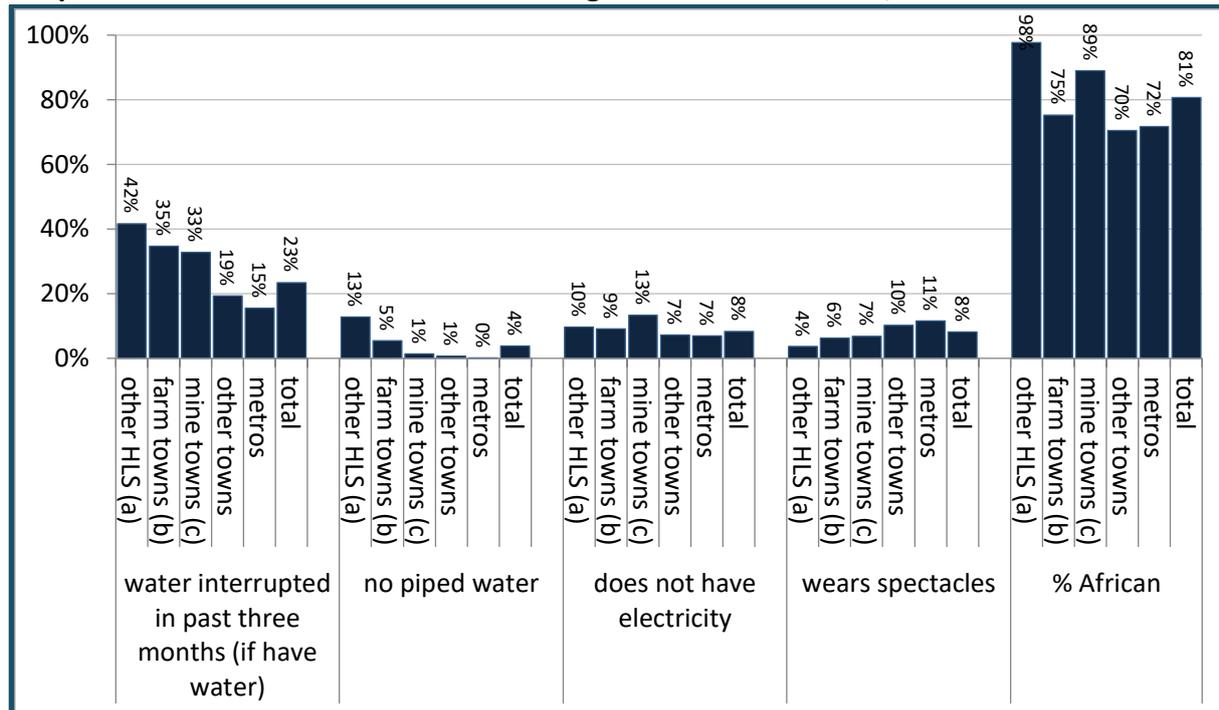


Notes: (a) Share of employed people in working-age population. (b) Figures for 2016. (c) Defined as having over 50% of households in historic labour-sending (HLS) regions. (d) Defined as having over 10% of municipal value add from agriculture. (e) Defined as having over 33% of the municipal value add from mining. Sources: Categorisation of municipalities, gross domestic product (GDP), incomes and employment ratio calculated from Quantec. EasyData. Interactive data set. Series on regional value add, household incomes and total employment. Downloaded from www.quantec.co.za in November 2019. Share of population with primary education or less calculated from Statistics South Africa. Community Survey 2016. Interactive data set. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

The vulnerable towns generally had worse infrastructure and social services. Graph 3 provides a few indicators of the backlogs. The figures on access to eyeglasses are a proxy for healthcare, indicating that people in vulnerable towns were generally worse served.

In part, the infrastructure and service shortfalls reflect the persistence of apartheid inequalities, with access to municipal infrastructure still defined largely by race and region, with the worst services in the historic labour-sending areas. As the graph shows, vulnerable towns had relatively small non-African populations as well as a comparatively high share living in historic labour-sending regions.

Graph 3. Indicators of infrastructure backlogs in vulnerable towns, 2016

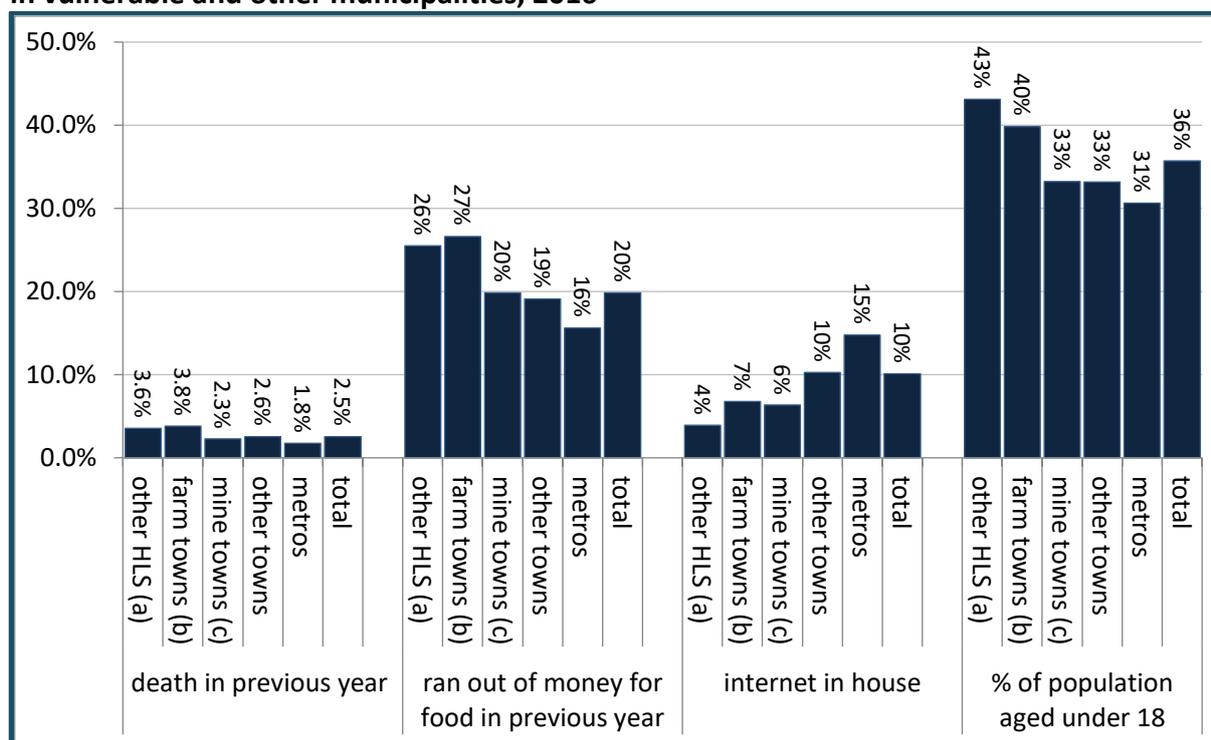


Notes: (a) Defined as having over 50% of households in historic labour-sending regions. (b) Defined as having over 10% of municipal value add from agriculture. (c) Defined as having over 33% of the municipal value add from mining. *Sources:* Categorisation of municipalities calculated from Quantec. EasyData. Interactive data set. Series on regional value add. Data for 2018. Downloaded from www.quantec.co.za in November 2019. Other series calculated from Statistics South Africa. Community Survey 2016. Interactive data set. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

Overall, vulnerable towns fared worse on important social indicators than the rest of the country.

As Graph 4 shows, households in these municipalities reported more deaths, were more likely to run out of money for food and had lower internet access than the rest of the country. They also had a higher share of children in the population, adding to their social responsibilities.

Graph 4. Share of households experiencing death or inadequate money for food in past 12 months, share with internet in the household, and share of population aged under 18, in vulnerable and other municipalities, 2016

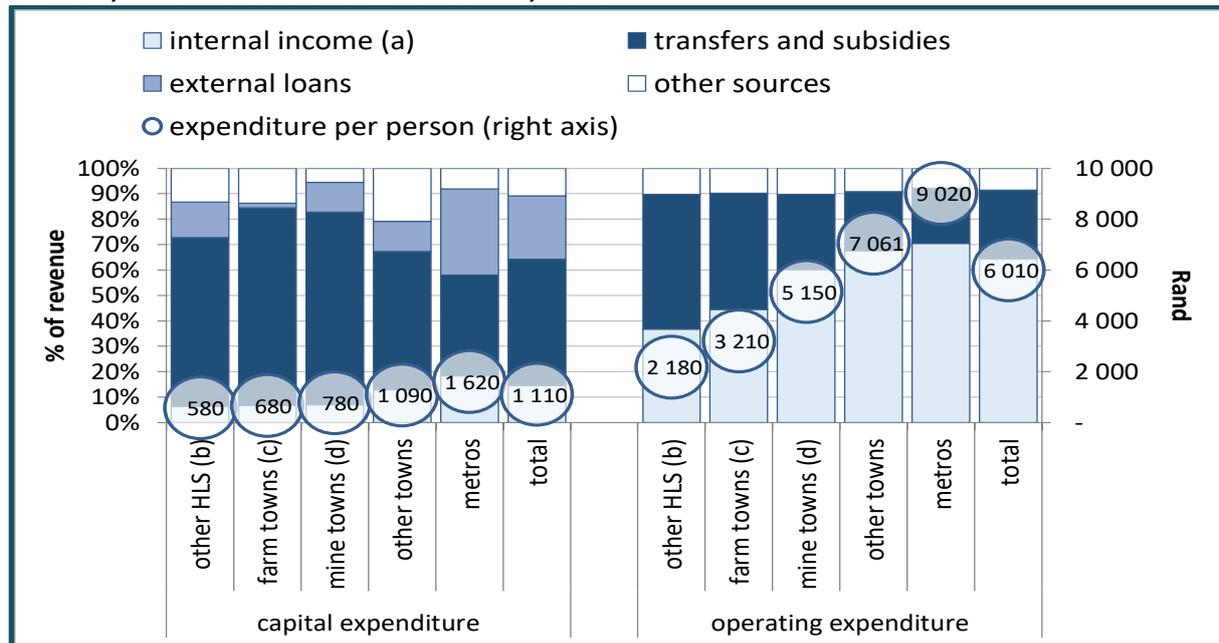


Notes: (a) Defined as having over 50% of households in historic labour-sending regions. (b) Defined as having over 10% of municipal value add from agriculture. (c) Defined as having over 33% of the municipal value add from mining. *Sources:* Categorisation of municipalities calculated from Quantec. EasyData. Interactive data set. Series on regional value add. Data for 2018. Downloaded from www.quantec.co.za in November 2019. Other series calculated from Statistics South Africa. Community Survey 2016. Interactive data set. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

Finally, the vulnerable towns had lower budgets per person than other small towns and the metros. Low local incomes and property values meant they relied relatively heavily on transfers from the national budget. The share of smaller towns in the national budget increased rapidly from around 2005. Still, their operational spending per person remained below the national average.

Towns in the historic labour-sending regions were worst off, with operational expenditure at around a third the national average, and capital spending at around half. Although mining towns had relatively high incomes and productivity, they also lagged behind in municipal revenue.

Graph 5. Capital and operating expenditure per person in thousand rand, and financing sources, in vulnerable and other towns, 2018



Notes: (a) Defined as having over 50% of households in historic labour-sending regions. (b) Defined as having over 10% of municipal value add from agriculture. (c) Defined as having over 33% of the municipal value add from mining. *Sources:* Categorisation of municipalities calculated from Quantec. EasyData. Interactive data set. Series on regional value add. Data for 2018. Downloaded from www.quantec.co.za in November 2019. Data on municipal budgets calculated from National Treasury. Municipal budget information for 2018 in excel form. Downloaded from municipal budget information page under publications and media releases at mfma.treasury.gov.za in November 2019.

In short, the towns that were most vulnerable to climate-change related impacts also started with higher joblessness as well as worse infrastructure, education and socio-economic outcomes than other municipalities. They also had lower budgets per resident. This situation in itself meant it would prove difficult for them to diversify their economies in the absence of coherent and substantial national support.

The difficulties facing vulnerable towns were compounded by the limited role played by municipalities in economic development strategies, which goes back long before the democratic era. As a result, most small towns, especially in the historic labour-sending regions, did not have institutional capacity to engage on economic diversification.

In this context, the Constitution provides only a fairly narrow economic role for municipalities. It requires a municipality among other tasks “to promote social and economic development”. (Section 152(c)) But it gives local governments exclusive power over only a few economic functions – mostly municipal roads, refuse removal and street trading. They have concurrent powers over more functions, mostly around licensing local businesses and maintaining the local environment.

Building on the Constitutional mandate, the Local Government: Municipal Structures Act No. 117 of 1998 and the Local Government: Municipal Systems Act No. 32 of 2000 required municipalities to publish integrated development plans, including measures to promote inclusive growth through Local Economic Development (LED) plans. In practice, LED plans have focused almost exclusively on zoning and infrastructure. Most have not incorporated practical measures to support economic diversification.

The national Department of Cooperative Governance and Traditional Affairs (CoGTA) summarised in 2014, “Economic development has tended to remain marginal to the core municipal tasks of providing basic services.” (CoGTA 2014b:69) It added that LED plans have often proved to be both unrealistic and fragmented, as well as aligning poorly with national and provincial strategies. Combined with the inherent dependence of municipal economies on the broader national context, this lack of coordination often means LED plans have limited impact.

Table 2. Comparison of national economic development policies and local economic development policies

	National economic development strategies	Local economic development
Scope	Sectoral at national level	Spatial
Core outcomes	Economic growth, diversification, job creation, Broad-Based Black Economic Empowerment (BBBEE)	Economic growth, job creation, BEE and small business development
Main instruments	Setting sectoral and cross-cutting priorities; industrial financing, incentives and provision of infrastructure directly to major investments; lobbying big businesses; national procurement and supplier development; legal requirements especially around BBBEE and standards; credit for SMEs; trade policies; improving the cost and quality of infrastructure; skills development	Development of infrastructure, especially funding of industrial sites and logistics, for large formal businesses, clusters and township enterprises; marketing local investment and tourism opportunities; procurement from local black-owned and township enterprises
Consultation	Other departments and agencies; business at national and sectoral level; largely excludes municipalities, even metros	Consult with citizens (required for Integrated Development Plans – IDPs)); limited consultation with national economic departments and agencies, and with businesses
Management	National departments and agencies, with limited forums for engagement with other spheres	LED Unit and Council; coordination with infrastructure and other local government functions often weak; often do not have clear strategy to engage with other spheres
Main strengths	Value chains operate at national and global level, and able to engage effectively with them; resourcing and institutional capacity for dealing with economic issues; access to most policy levers	Closer to businesses, especially small business that operates only within the municipality; more direct accountability to voters; power over infrastructure and local regulations that are often crucial for producers
Main weaknesses	Silos around sectors and functions at national level; contestation over objectives and instruments (especially managing trade-offs between export industries and inclusive growth; lobbying by industries and provinces); inadequate resourcing especially given contestation over priorities by industry, class and region	Cannot directly control factors affecting value chains outside of municipality, which are often critical for growing local production; do not control critical policy decisions even within municipal space, e.g. bulk infrastructure provision and pricing, import tariffs, industrial financing and incentives; lack of capacity as economic diversification was not historically a core function for municipalities; institutional silos disrupt coordination

	National economic development strategies	Local economic development
Role of planning	Rolling Industrial Policy Action Plan (IPAP) sets industrial-policy key performance indicators (KPIs) for the dti and other national departments; articulate prioritisation of manufacturing and value-adding services and, within that, of key strategies and projects, as basis for coordination within the state and with major companies and for budgeting	IDP focuses on type and location municipal services, with LED typically centred on infrastructure provision and sometimes SMEs and township economies. The district model now being introduced may lead to some changes in these responsibilities and roles.

The regulatory framework for mining seeks to ensure that vulnerable towns receive support when mines close down. The Mineral and Petroleum Resources Development Act No. 28 of 2002 (MPRDA), backed by the Mining Charter, requires that companies develop Social and Labour Plans (SLPs) that, among others, should identify ways for mining communities to adapt after a mine closes. It compels every mine to set aside 1% of its profits to expand opportunities for miners and communities. Strategies include support for training, infrastructure and local businesses, including as suppliers. In addition, mining companies are required to set aside funds at the onset of a project for rehabilitation once the mine has reached the end of its life.

From the standpoint of mine closures, this system incorporates contradictory imperatives. It expects mining companies to assist communities after they have effectively ended operations there. That in itself appears to be a perverse incentive. In practice, studies (see CALS 2018; 2017; 2016) suggest that both the design and implementation of SLPs are flawed in that they do not ultimately end up with meaningful social and economic advancement of mining communities. Moreover, the planning process remains undemocratic, exclusive and shrouded in secrecy. Finally, the Social and Labour Plans target the outcomes of individual mines, so they do not secure coordination when a value chain as a whole faces downsizing. The result has been piecemeal and inadequate proposals combined with weak consultation, monitoring and alignment with existing structures and the needs of communities.

The limitations on municipal powers and capacity, particularly in vulnerable towns, raise the importance of national support for efforts to diversify affected local economies. Strategies should take the form of:

- Resourcing to leverage the necessary capacity, ideally leading to a network of practice to evaluate options and improve strategies over time; and
- Dedicated agencies that can mobilise and coordinate support for vulnerable towns from national and provincial departments, including through improved national and provincial infrastructure; investment finance for relevant producers; and increased resources to upgrade local infrastructure.

In the case of mine closures, as discussed for the relevant value chains, this approach requires substantial revision of existing requirements around mine closure. In particular, the SLPs need to be replaced with broader, more responsive and targeted strategies, and do more to address industry-wide downturns as well as providing greater support to labour-sending areas. These issues are discussed in the SJRPs for the coal and metals value chains.

5 ACTIVE LABOUR MARKET POLICIES

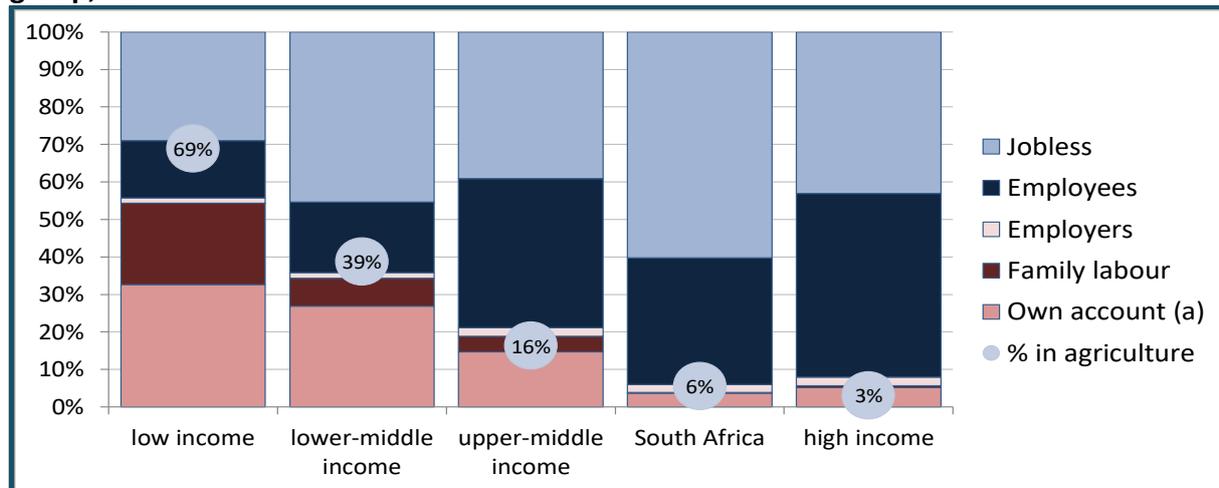
Active labour market policies aim to assist affected workers and small businesses to adapt to changing economic conditions. Table 3 shows the main components of active labour market policies. The ILO also includes social protection, which is discussed in the following section, under active labour market policies.

Table 3. Components of active labour market policies

Policy instrument	Examples
Job and training placement schemes	Data bases of available jobs and learning opportunities and of work seekers
	Job and training placement centres, which consolidate advertised opportunities and help workers apply
Retraining for occupations in growing industries	Training for industries that are growing or could expand, for instance formal agriculture and food processing, construction, transport, work in renewable energy, recycling, healthcare
Income support during transition	Unemployment insurance or grants
	Retrenchment packages (minimum required under the Basic Conditions of Employment Act is one week per year of services; formal employers often give two)
Support for established and potential small, medium and micro-enterprises (SMMEs)	Incubators and extension services
	Financing and grants
	Assistance in identifying opportunities and developing business plans
Transition out of labour force	Early retirement and voluntary retrenchment packages

South Africa faces two major challenges in implementing active labour market policies. First, given unusually high overall joblessness, workers who lose employment often cannot easily find new positions, even with support for reskilling and income support. Moreover, small business is unusually underdeveloped by international standards. As Graph 6 shows, the share of working-aged people with employment is significantly lower in South Africa than the global norm. The percentage of self-employed people is particularly low compared to peer economies. This arises largely out of the destruction of African agriculture over the past century. In these circumstances, active labour market policies need to be supplemented by efforts to expand economic opportunities, as discussed in previous section.

Graph 6. Employment status in South Africa compared to other economies by income group, 2017



Note: (a) That is, self-employed. Source: Calculated from ILO. ILOSTAT. Interactive database. Downloaded from www.ilo.org in August 2018.

Second, limited government resources also affect the extent of active labour market policies. The measures originated in industrialised economies in Europe and the US, where states have far greater resources per citizen. In the global South, in contrast, the scale of active labour market policies is inevitably comparatively small and usually unable to reach most workseekers. Moreover, funding to cushion formal workers against employment losses must compete with measures to support households and individuals with even less resources.

In South Africa, public placement schemes mostly fall under the Department of Employment and Labour's (DEL) Public Employment Services branch. The branch registers vacancies and employment opportunities from employers as well as workseekers. It tries to match them based in part on counselling for registered unemployed people.

In practice, very few workers gain jobs through these services. In 2018/19, the department had 140 000 registered employment or training opportunities and almost 900 000 registered workseekers. It provided counselling to 240 000 people. But it placed only 50 000 in jobs, equal to under 1% of all unemployed people. Still, that was a substantial improvement over the 2014 to 2016 financial years, when it had placed under 15 000 a year, or less than 0.25% of all workseekers.²

Most workers sought jobs, not through formal registration, but through personal networks, advertisements, and direct approaches to employers. Still, while it remained low, the share of unemployed people who registered with some kind of public or private agency increased fairly steadily, from 6% in 2002 to 13% in 2017.³

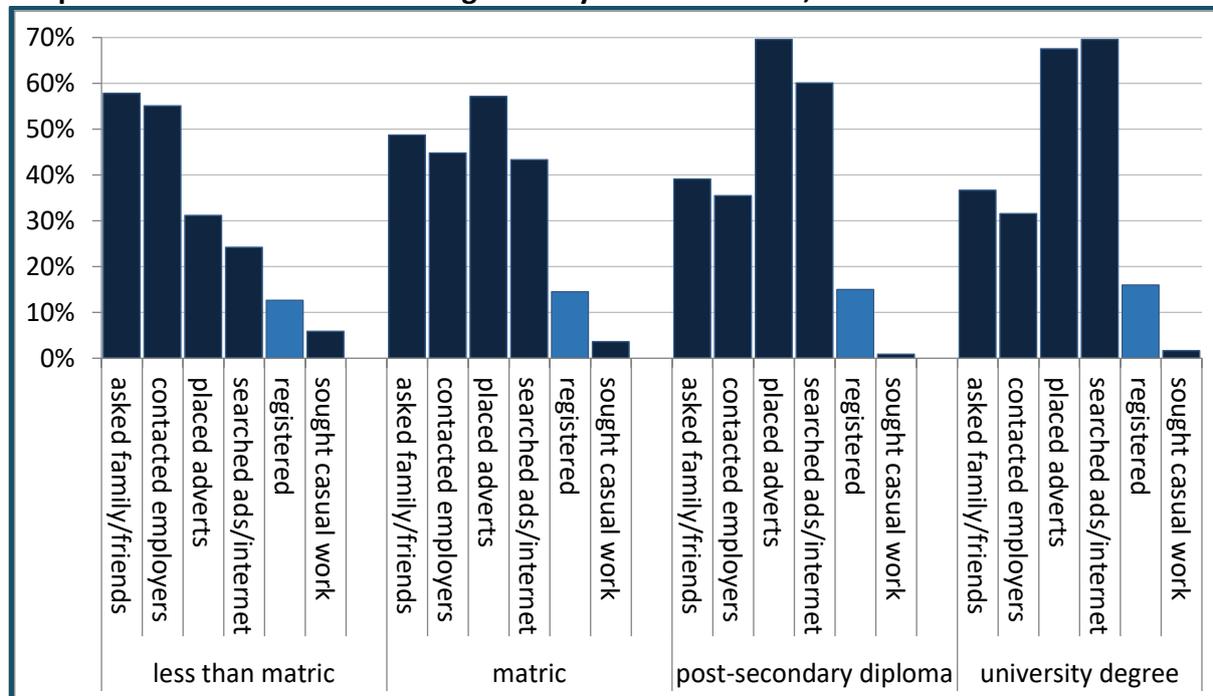
Of previously employed workseekers, farmworkers and miners were least likely to use employment agencies. Only around one in 20 registered with a public or private employment agency, compared to around one in eight for other previously employed workseekers. More broadly, rural and less educated workseekers registered at lower levels than others. In 2017, 820 000 unemployed people said they had registered with some kind of employment agency.

² Calculated from DEL Annual Reports for relevant years.

³ Calculated from Statistics South Africa. Labour Force Survey, March 2002, and Labour Market Dynamics 2017. Electronic databases. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

In metro areas, the figure was 21% compared to only 9% in other urban areas, and 3% in historic labour-sending regions. By education level, 13% of workers without matric registered, compared to 16% of university graduates. But graduates made up only 2% of all workseekers and had an unemployment rate of under 7%, compared to 29% for people with less education.

Graph 7. Methods used for seeking work by education level, 2017

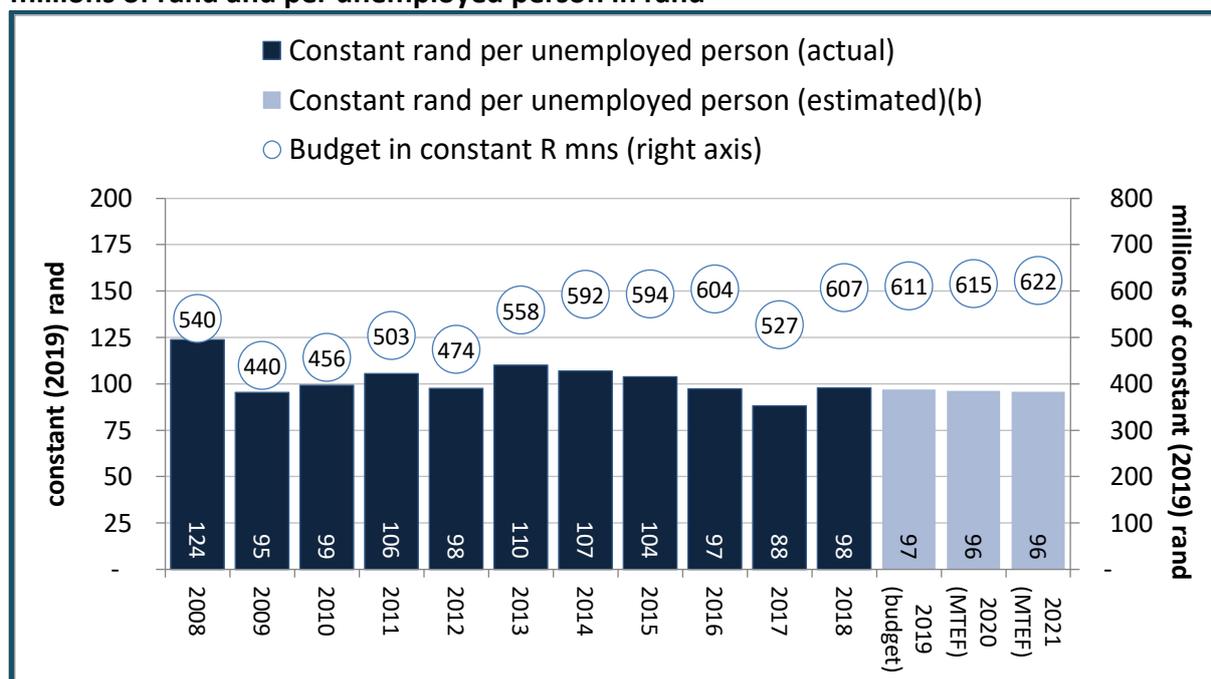


Source: Calculated from Statistics South Africa. Labour Market Dynamics. Electronic dataset. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

In real terms, from 2014 the budget for public employment services grew more slowly than the number of workseekers. Adding targeted services for value chains and communities affected by climate-change related impacts, then, seemed likely to require additional funding.

In constant terms (deflated with CPI), the budget for public employment services increased at 6% a year from 2009 to 2014, then levelled out at 0.6% a year. It is expected to grow by 0.8% a year in real terms from 2019 to 2021. Although real spending per workseeker climbed 2.3% a year from 2009 to 2014, it dropped around 2% annually thereafter. In 2018, it was just under R100 per unemployed person.

Graph 8. Budget for Public Employment Services in constant (2018) rand (a), total in millions of rand and per unemployed person in rand

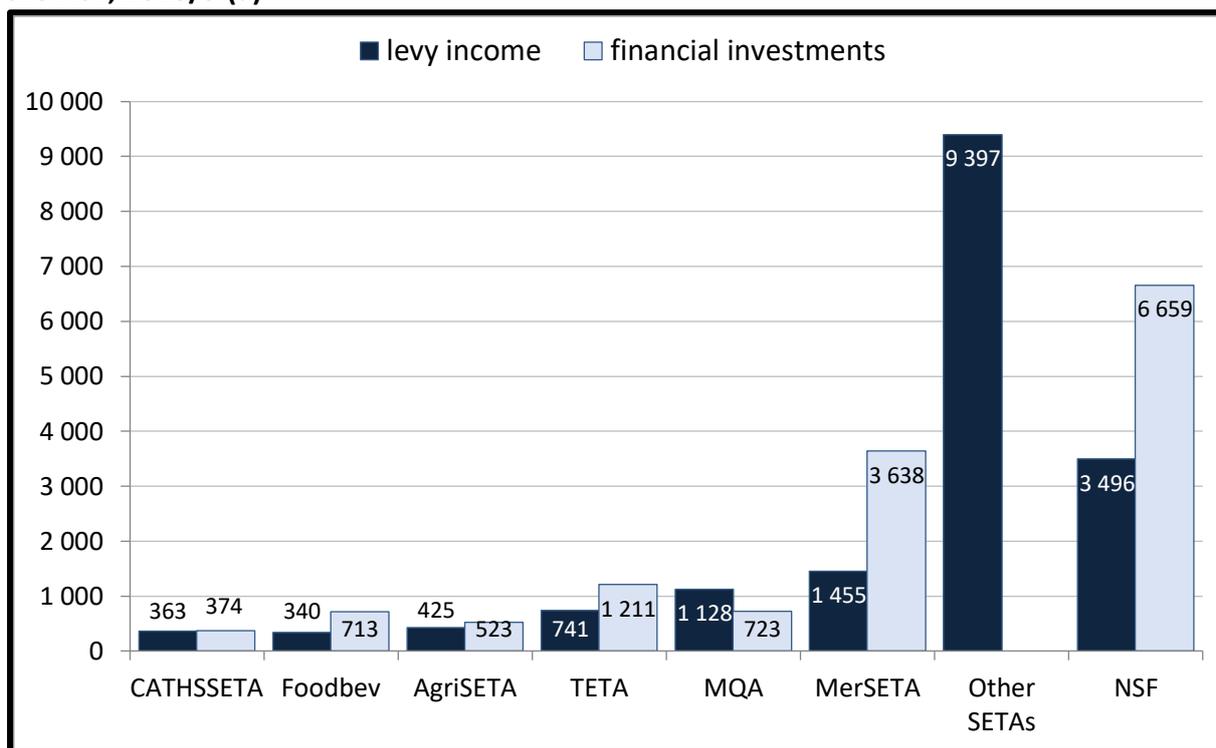


Note: (a) Deflated with March CPI rebased to March 2019. (b) Projected conservatively to grow only at rate of growth in working-aged population. *Source:* Calculated from National Treasury. Estimates of National Expenditure. Department of Labour/Department of Employment and Labour vote in Excel format for relevant years. Downloaded from budget section at www.treasury.gov.za. Data on number of unemployed calculated as average of quarters for the year from Statistics South Africa. Quarterly Labour Force Survey (QLFS) Trends 2008-2019Q3. Excel spreadsheet. Downloaded from www.statssa.gov.za in November 2019.

In addition to placement services and counselling, skills development forms a central component of active labour market policies. In the late 2010s, the main source of financing for occupational training was the skills levy, which was set at 1% of payroll for formal employers whose labour costs exceeded R500 000 a year. The skills levy was transferred to Sector Education and Training Authorities (SETAs). In turn, the SETAs paid 20% into the National Skills Fund, which was managed by the Department of Higher Education and Training and aimed to provide general support for skills development. A fifth of the remaining funds was transferred to businesses that submitted an acceptable skills plan. The remaining resources were allocated by the SETA between projects that benefited both workers in the industry and unemployed people. It was granted based principally on applications from employers, TVET colleges and other organisations.

The SETA system mobilised substantial resources for skills development. The skills levies totalled R17 billion in 2018/19, equal to around a fifth of the budget of the Department of Higher Education and Training (DHET). As the following graph shows, the SETAs relevant to the SJRPs – the Mining Qualifications Authority (MQA) for mining, MerSETA for the auto value chain, Transport Education Training Authority (TETA) for transport, AgriSETA and the Foodbev SETA for agriculture and food processing, and the Culture, Art, Tourism, Hospitality, and Sport Sector Education and Training Authority (CATHSSETA) for tourism – all had substantial financial investments, reflecting accumulated surpluses over the past decade. Together, these SETAs received levy income of R4.45 billion in 2018/19 and held accumulated financial assets worth R7.18 billion. The National Skills Fund (NSF) had R3.5 billion in levy income plus R6.7 billion in financial holdings.

Graph 9. Levy income and financial assets of SETAs relevant to the SJRP value chains and the NSF, 2018/9 (a)



Note: (a) Aggregate figures for SETA financial investments are not available. *Source:* For SETAs and NSF, Annual Reports for 2018/19. For other SETAs, Calculated from figures for SJRP SETAs and National Treasury. DHET Budget Vote. Excel spreadsheet. Downloaded from www.treasury.gov.za in November 2019.

The skills system was not, however, designed to support active labour market policies. This led to a number of disjunctions.

First, the skills system was generally pro-cyclical. Because levies equalled a percentage of payroll, they declined when the industry slowed down, making it more difficult to resource active labour market responses. Moreover, in slower times employers offered fewer learnerships and apprenticeships especially for lower level workers. In any case, the levy system generated lower resources per worker in industries with relatively low wages and many small businesses, such as agriculture and tourism. Lower level workers and smaller producers, however, were most in need of assistance in adjusting to changing circumstances.

In practice, the slowdown in the overall economy from 2015 saw a real decline in total skills levies. In constant 2018 terms⁴, from 2009/10 to 2015/16 they climbed from R12 billion to R18 billion. They then fell back to R17 billion in 2018/19. As a result, the funds available per working aged person nationally declined 2.5% a year from 2015/16 to 2018/9. In 2018 rand terms, they dropped from a high of R490 in 2015/16 to R455 in 2018/19.⁵

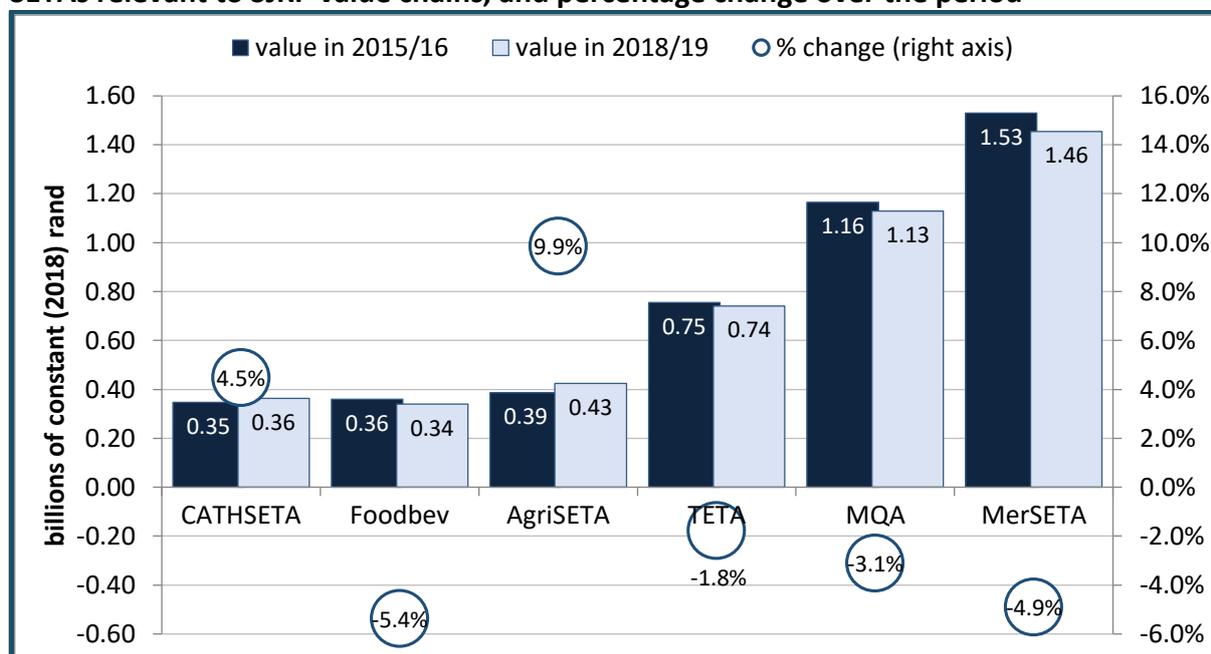
A similar pattern emerged to varying degrees for all of the SETAs in the SJRP value chains except for agriculture and tourism, as Graph 10 shows. The SETAs for food processing and the metals value chain saw the sharpest decline in the group, followed by mining. The counter-

⁴ Deflated with March CPI rebased to 2019

⁵ Calculated from Treasury DHET vote for relevant years. Downloaded from www.treasury.gov.za in November 2019.

cyclical growth in levies for the AgriSETA and the CATHSETA apparently reflected successful efforts to expand the number of registered employers.

Graph 10. Levy income in 2015/16 and 2018/19 in millions of constant (2018) rand (a) for SETAs relevant to SJRP value chains, and percentage change over the period

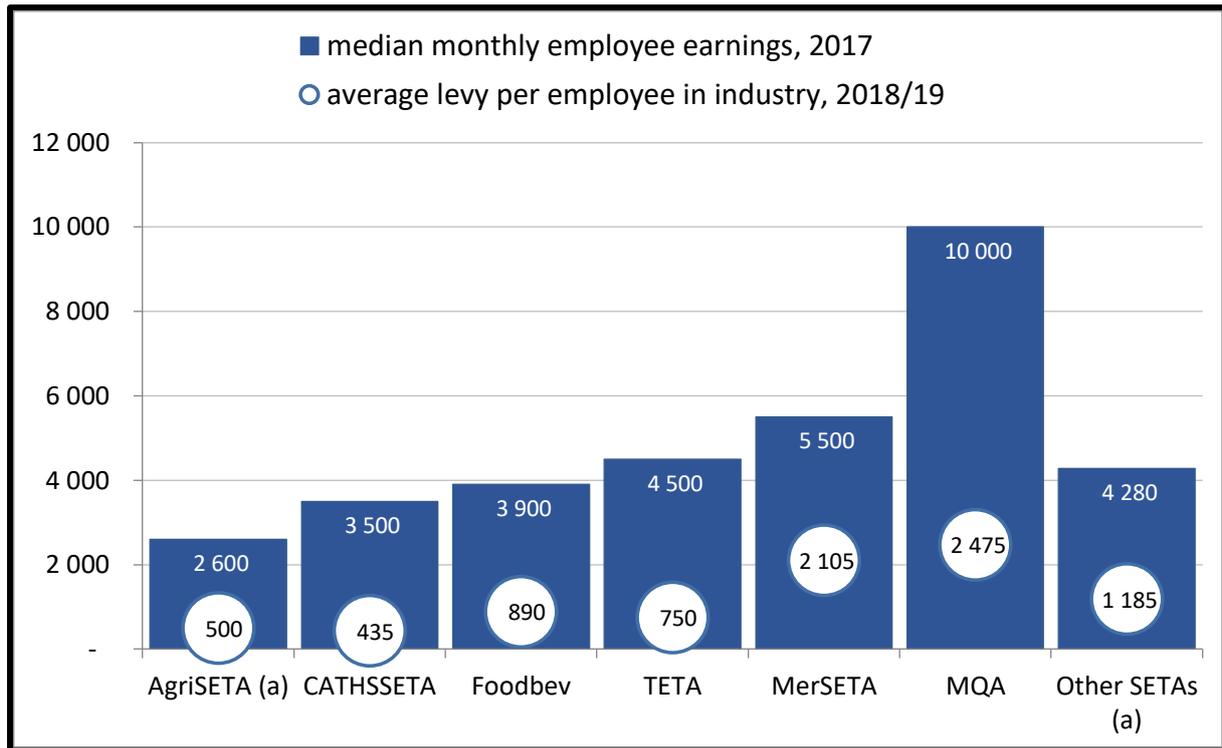


Note: (a) Deflated with CPI for March rebased to 2019. Source: SETA Annual Reports for relevant years.

The mining sector demonstrated the impact of an industry-wide downturn on the skills development system. The MQA's levy income climbed rapidly until just after the commodity boom ended. In constant rand, it rose over 6% a year from 2006/7 to 2013/14. It then essentially levelled out, increasing just 0.2% a year from 2013/14 to 2018/19 (with some intervening dips). During the commodity boom, its expenditure did not keep up with its rapidly increasing income, which enabled it to accumulate substantial surpluses. From 2013, however, it increased its spending on training by 50%, leading to a deficit in 2017/18 and, in 2018/19, a 40% cut in spending. (Calculated from MQA Annual Financial Statements for relevant years, deflated with CPI)

In addition to the pro-cyclical trend in levies, the income by sector tended to parallel median wages. As Graph 11 shows, the industries with the lowest pay tended also to have lower skills levies per employee.

Graph 11. Levies and median earnings per industry for SETAs relevant to SJRP value chains



Note: (a) Median earnings for formal employees only. *Source:* Levies from SETA Annual Reports for 2018/19. Median monthly employee earnings and number of employees per industry from Statistics South Africa. Labour Market Dynamics 2017. Electronic dataset. Downloaded from Nesstar facility at www.statssa.gov.za in November 2019.

Second, the SETA and National Skills Fund mandates were not mandated to prioritise workers facing job losses. Programmes to support unemployed people were generally focused on previously jobless youth rather than retrenched workers (see DHET 2019:33) Moreover, the SETA system did not prioritise companies or regions threatened by downsizing. The National Skills Fund set aside an average of just over R5 million a year for the training lay-off scheme from 2020 to 2025. (NSF 2019b:44)

Again, the MQA illustrated the challenges. In 2017/18, it planned to provide training for 6 000 retrenched miners but found that not one qualified for the planned programmes. It dropped the target in the following year. In 2017/18 it funded the Department of Mineral Resources to help 3 000 retrenched miners to process claims and identify social services. (MQA 2018:44) It emphasised the importance of career guidance, but apparently only to encourage young people with appropriate academic qualifications to enter mining. (MQA 2019:22)

Third, the SETAs were not incorporated consistently into economic policy processes. They were managed by semi-autonomous stakeholder boards and overseen by DHET, which also controlled the National Skills Fund. As a result, measures to support economic diversification for affected communities would end up competing with other applications to individual SETAs or the NSF.

Most of the SETAs said they sought to support training in rural areas, but the extent of this remained unclear. The National Skills Fund provided training for 15 000 rural learners in 2018/19. (NSF 2019:39) In line with the Mining Charter, the MQA funded some skills development in both mining communities and historic labour-sending regions, targeting

unemployed people. In 2018/19, it spent R80 million, or 7% of its levy income (MQA 2019:24), for this purpose, supporting around 1 330 trainees. Many of the projects centred on “portable skills,” mostly construction work. (MQA 2019:47) Still, of the 6 600 learners it verified in 2018/19, two thirds were in provinces with very limited or no historic labour-sending regions (Gauteng, the Western and Northern Cape, and the Free State). None were in the Eastern Cape. (MQA 2019:69)

Finally, the SETAS found it difficult to reach unorganised, informal and poorly educated workers. Yet these workers were precisely the most vulnerable to climate-related impacts. SETA programmes centred on learnerships, apprenticeships and university bursaries, which typically required at least matric, often with mathematics as a subject.

The difficulties TETA encountered in reaching taxi drivers illustrated these challenges. Taxi workers constituted around a quarter of all workers in the TETA scope. In 2019, however, only 45 (mostly metered) taxi companies paid levies, for a grand total of 1.5 million. Only 14 submitted a workplace skills plan to claim their mandatory grant. In these circumstances, taxi training was effectively paid for by other transport workers. TETA used R30 million – 4% of its total revenues – to provide programmes for 10 000 taxi workers. (TETA 2019a)

In agriculture, the sector skills plan noted that many farmworkers as well as gardeners in the historic labour-sending regions did not meet the prerequisites for most learnerships, much less for artisanships or university (AgriSETA 2018:xiii). Yet two thirds of its contracted expenditure for training in 2018/19 went for learnerships and artisanships, and another seventh for university bursaries and internships (AgriSETA 2019:101).

In mining, in 2018/19, 60% of the MQA’s expenditure went for “strategic programmes”, which essentially supported university and Technical and Vocational Education and Training (TVET) students. Some 32% went for artisanships and learnerships. Only 2% went for Adult Education and Training, with a further 3% for unemployed youth and mine community development.

Over the five years from 2020, the National Skills Fund planned to spend R20 billion on training. Just under half would go for workplace programmes, with the rest mostly financing universities and TVET colleges. As noted, even for the workplace programmes, many were not open to vulnerable workers, who typically had low levels of formal education. (NSF 2019b:44)

For the SJRPs, active labour market policies will only work if they are integrated with efforts to generate more economic opportunities through diversification. Skills matching should be undertaken not through database matching, which rarely works, but through (much more resource-intensive) counselling and local agencies. In this context, the SETAs and the NSF could be encouraged to strengthen targeted support for retrenched workers. A central challenge is to develop skills programmes for the most vulnerable workers, such as farmworkers and taxi drivers, who start with low levels of formal education.

6 SOCIAL PROTECTION

The SJRPs require relatively long-run income support for displaced workers and self-employed people to enable them to transition into emerging opportunities, in some cases after training. In the late 2010s, however, the social protection system in South Africa was relatively well resourced, but mostly targeted at people who were physically unable to work, with some very short-term support for formal workers moving between jobs. The SJRPs would require substantial programmatic changes to take advantage of the significant resources available in the social protection system.

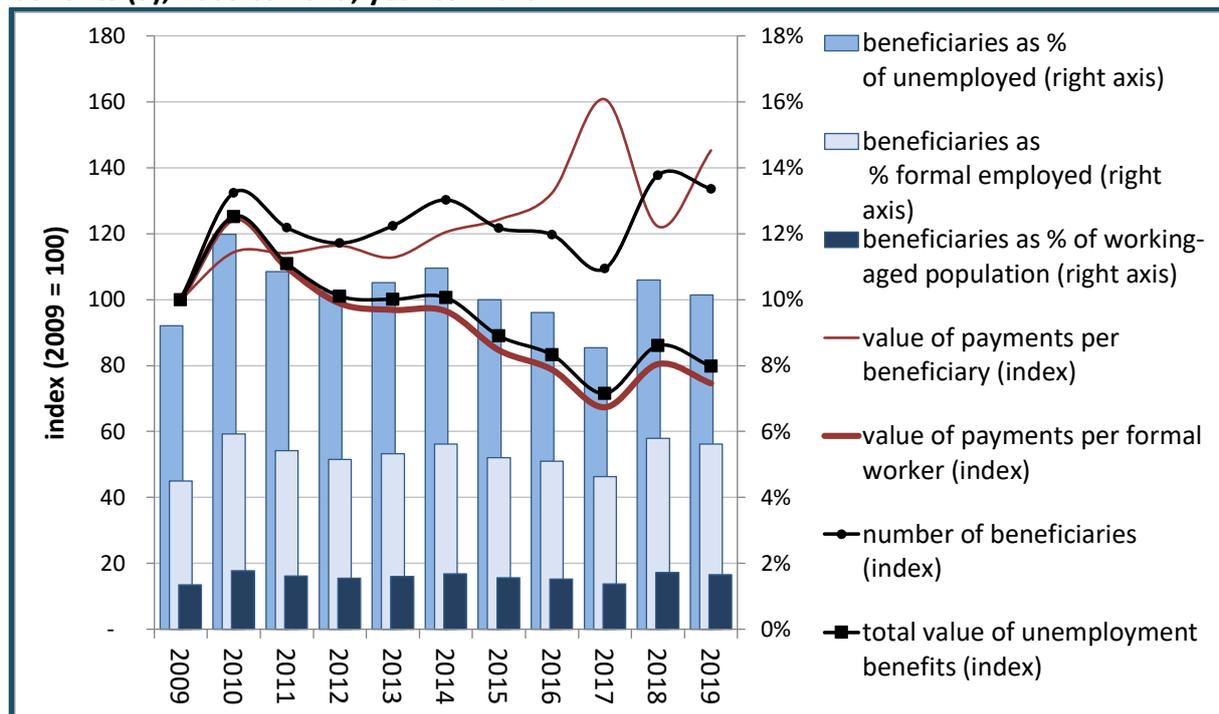
The main forms of social protection for jobless people were the Unemployment Insurance Fund (UIF), social grants and public works schemes. These programmes were not, however, designed to support able-bodied workers who faced a prolonged transition period between jobs. The UIF provided limited support for a year; social grants targeted people who were physically unable to work; and public works schemes aimed primarily at young, unskilled people and were mostly driven by government investment and service projects rather than needs arising from localised downturns.

The UIF provided up to a year's income support for registered employees who lost their jobs due to retrenchment, ranging between 20% and 60% of their lost income. In practice, however, lower level workers were least likely to be members. Moreover, the UIF did not cater for self-employed people, who constituted the bulk of informal workers and would be particularly affected by a slowdown in mining or farm towns, or by droughts in historic labour-sending regions. Generally, for vulnerable workers in regions or industries facing a broad downturn, the limited support provided would be inadequate by itself to establish a new livelihood.

In March 2019, the UIF registered 9.3 million formal workers and 674 000 domestic workers, but only 7400 taxi drivers. (UIF 2019:106ff) That would mean around 80% of formal workers were registered, but only half of domestic workers and around one in 20 taxi drivers.

The available data suggest that the UIF's disbursements for unemployment has remained essentially unchanged since 2009, benefiting between 5.5% and 6% of all formal employees. The value of unemployment benefits, however, dropped from a high of almost R1 billion in 2010 to R634 million in 2018 in constant rand, even as the number of formal workers rose from 10.6 million to 11.3 million and the number of unemployed climbed from 5.2 million to 6.3 million. The number of beneficiaries remained almost unchanged, climbing from 629 000 to 634 000 (UIF 2019:94 and 99).

Graph 12. Indicators of trends in UIF unemployment beneficiaries and unemployment benefits (a), 2009 to 2019, year to March

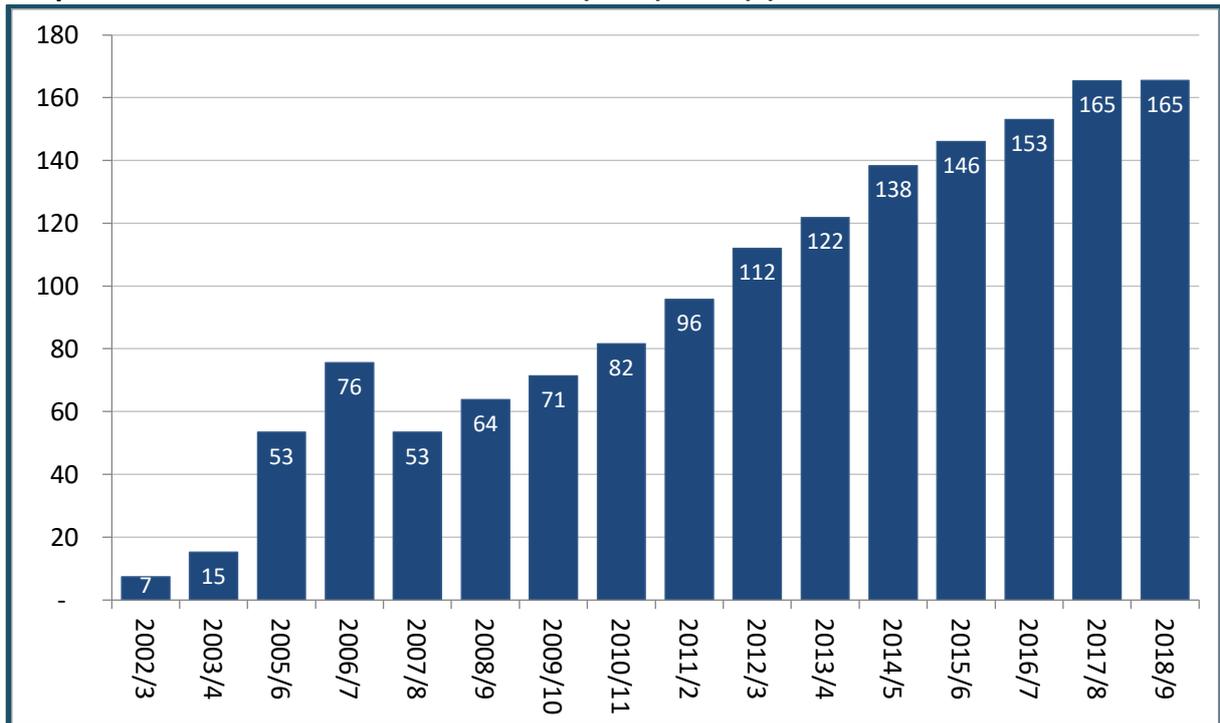


Note: (a) Values deflated using average CPI for year to March. Source: Data on unemployment benefits calculated from UIF. Annual Report 2018/19. Pages 94 and 99. Data on number of formal employees, unemployed and working-age population from Statistics South Africa. QLFS Trends 2008-2019Q3. Excel spreadsheet. Downloaded from www.statssa.gov.za in November 2019.

The stagnation in benefit payments meant that the UIF accumulated large financial assets from the early 2000s. In effect, the statutory levy, at 1% of payroll, was excessive compared to payouts. In theory, these resources could be utilised to support climate-change affected workers.

In 2018/19, the UIF had accumulated assets worth R160 billion. In the decade to 2017, its assets climbed 12% a year in real terms. The growth flattened out in 2018/19, mostly because of a fall in the value of the shares held by the UIF.

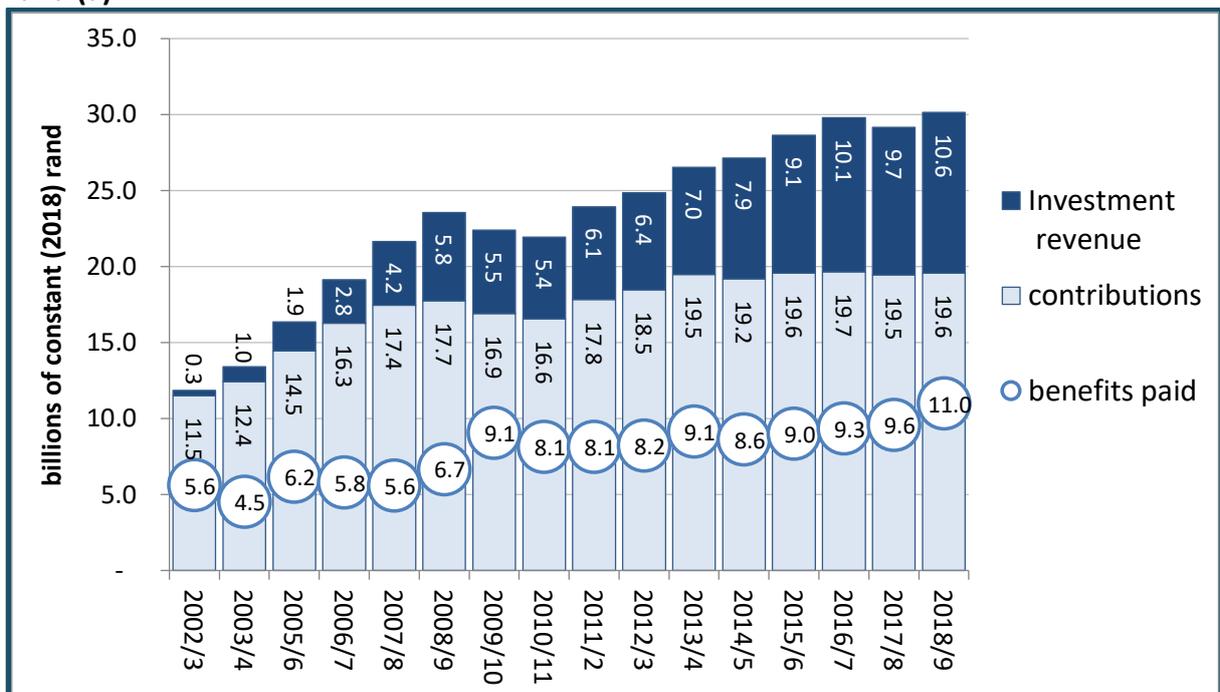
Graph 13. UIF assets in billions of constant (2018) rand (a)



Note: (a) Deflated with CPI for March rebased to 2018. Source: UIF, Annual Reports. Relevant years.

As Graph 14 shows, the UIF ran an annual surplus of close to R10 billion. Its total payouts, which included various benefits in addition to unemployment insurance, absorbed around half of the contributions paid by workers. Besides the surplus it ran on contributions, it earned over R10 billion a year on its investments.

Graph 14. UIF income and payments, 2003 to 2019, year to March, in constant (2018/9) rand (a)



Note: (a) Deflated with CPI for March rebased to 2018. Source: UIF, Annual Reports. Relevant years.

From the late 2010s, the UIF committed to a stronger role in active labour market policies, specifically by funding training for unemployed people to enable them to transition to new employment. In 2018/19, these programmes, called Labour Activation Programmes, reached almost 4 000 workers, or around 0.6% of all beneficiaries. Of the total, 1 700 were supported through the Training Layoff Scheme. The rest benefited from a programme to train the unemployed, which apparently did not necessarily serve retrenched workers. In addition, the UIF planned to work with Productivity SA on measures to save jobs in distressed enterprises, but it had not implemented any projects as of 2018/19 (UIF 2019).

Overall, experience to date suggests that the UIF has succeeded in its core mission of cushioning formal workers facing short-run joblessness. It has, however, failed to implement active labour market initiatives on a meaningful scale. It clearly has sufficient resources to make an impact in supporting the SJRPs, but it lacks capacity to undertake substantial programmes itself.

In contrast to the UIF, social grants effectively reached the majority of low-income South Africans. They were, however, designed to benefit directly only people who were not of working age or who were unable to work. Moreover, the main grants were designed to provide long-run support rather than emergency or transitional assistance.

In February 2018, 17.5 million South Africans, or almost one in three, received some kind of social grant. Grants were provided to people who could not physically work due to age or disability and who earned less than R78 000 a year as a single person, or R158 000 as a couple, and owned under R1.1 million in assets. These income levels made the poorest 60% of the population eligible, although they also had to be unable to work and have limited assets.

In 2018, the maximum old-age pension and disability pensions were pegged at R1 600 a month, while the child support grant was R380. Three out of five grants were for child support, reaching 12.2 million children in early 2018. In addition, there were 3.4 million old-age pensions and 1.1 million disability grants (SASSA 2018). Because old-age pensions and disability grants provided over four times as much as child-support grants, however, they accounted for around 60% of the value of all grants. Both the old-age and disability grants came close to the national and international poverty lines for a couple, while the child support grant would lift half a person out of poverty, using Statistics South Africa's food poverty line.⁶ The World Bank's standard of US\$1.90 a day indicates similar outcomes.

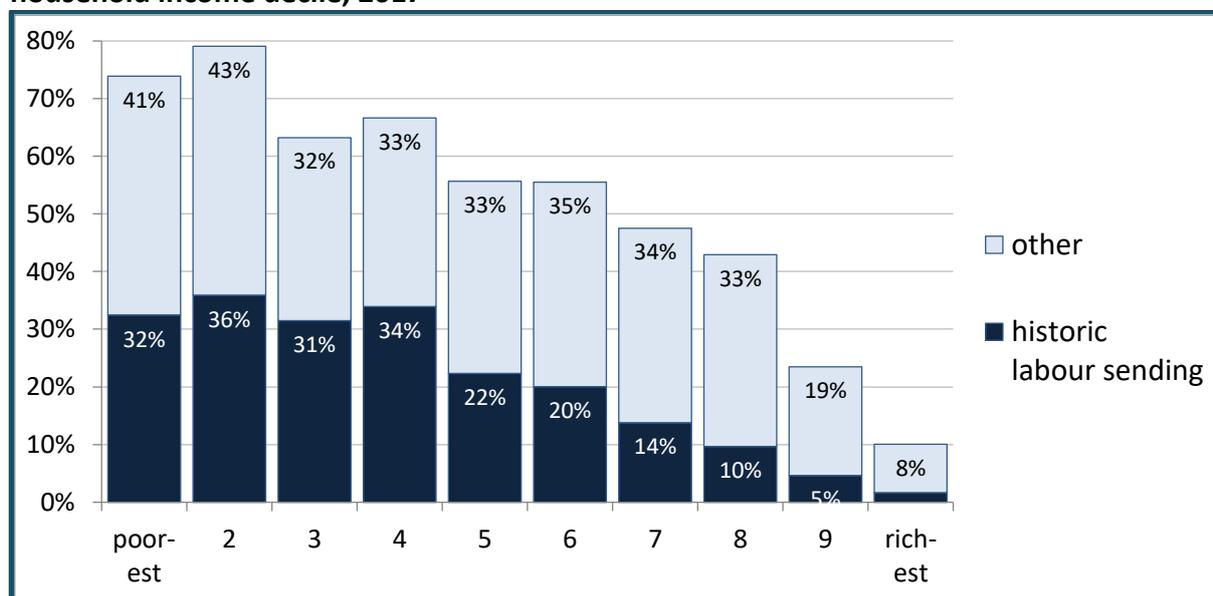
Unemployed people did not benefit directly from social grants, but many, possibly most, depended on them indirectly. In 2017, under 1% of workseekers received an old-age pension or disability grant, although 18% got a child support grant on behalf of a young family member (calculated from Statistics South Africa 2017). But three quarters said they depended on their families for support, and most low-income families received some kind of social grant.

Two thirds of households in the poorest 60% received a grant (sorted by total household income rather than income per person). For these households, given high jobless rates, access to a social pension often spelled the difference between destitution and ordinary poverty.

⁶ In 2015, Statistics South Africa estimated a food poverty line of R501 per person per month in 2011 rand. (Statistics South Africa 2015, p 10) Reinflating this figure using CPI, the poverty line would be around R620 a month per person in 2015. By this standard, the old-age pension could support around 2.2 people a month, and the child grant around half a person.

Social grants accounted for around over a quarter of total income for the poorest 60% of households in 2015, and well over a third for the poorest 30%.

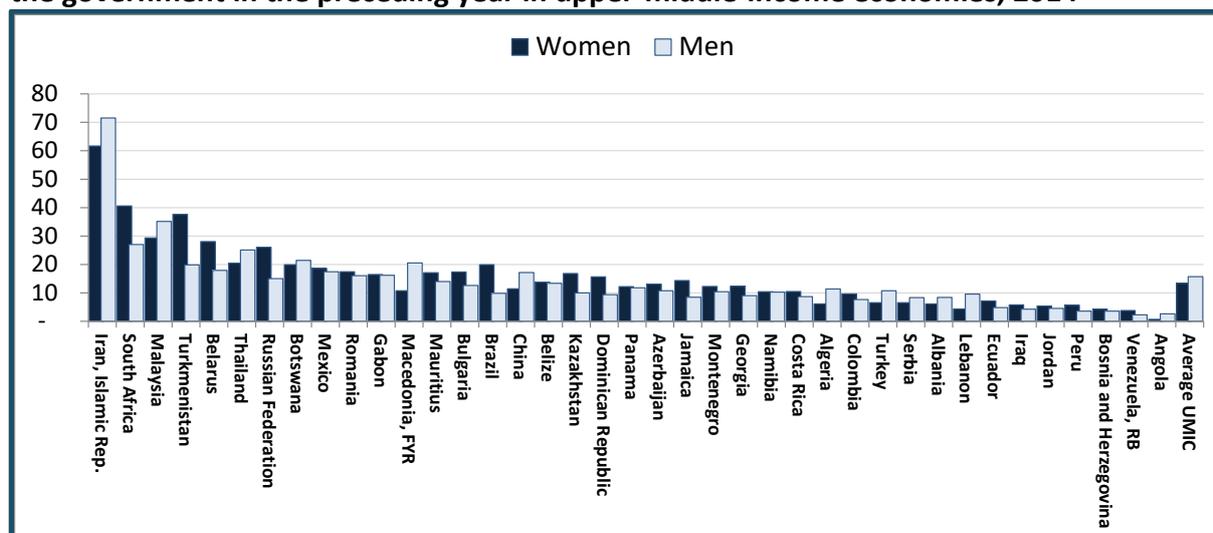
Graph 15. Share of household residents receiving grants per thousand people by household income decile, 2017



Source: Calculated from Statistics South Africa. General Household Survey 2015. Electronic database. Series on household income, child support grant, disability grant and old age pension. Downloaded from www.statssa.gov.za in November 2016.

In terms of the share of households affected, South Africa's income support programme was among the largest of upper-middle-income economies. Almost 35% of South African households received some kind of state transfer, compared to a weighted average of 15% for peer economies. Of course, the other economies had a much more equitable primary income distribution to start with.

Graph 16. Percentage of women and men who said they had received a cash transfer from the government in the preceding year in upper-middle-income economies, 2014



Source: Calculated from World Bank. Gender Statistics. Electronic database. Series on received government transfer in the past year for women and men. Downloaded from www.worldbank.org in December 2016.

Using social grants to support communities and individuals affected by climate-change related impacts would require a significant shift in these programmes. Given high levels of demand and utilisation, the potential for increasing funding for distressed communities and workers seems limited.

The national public works programme, the Expanded Public Works Programme (EPWP), is the only major national programme that provided income support for people who were physically able to work. It aimed primarily to relieve poverty while giving the jobless a chance at productive employment. Activities include providing home-based care, early childhood development programmes and school gardens.

The EPWP aimed to manage the trade-offs between its objectives of social protection, service delivery and accelerated creation of employment opportunities (DPWI 2019b:7 ff). As of 2019, however, it was expected to expand only slowly, after falling 30% short of its growth targets in most of the past five years. Moreover, it was not designed to prioritise or assist communities or workers facing joblessness as a result of regional or sectoral downturns.

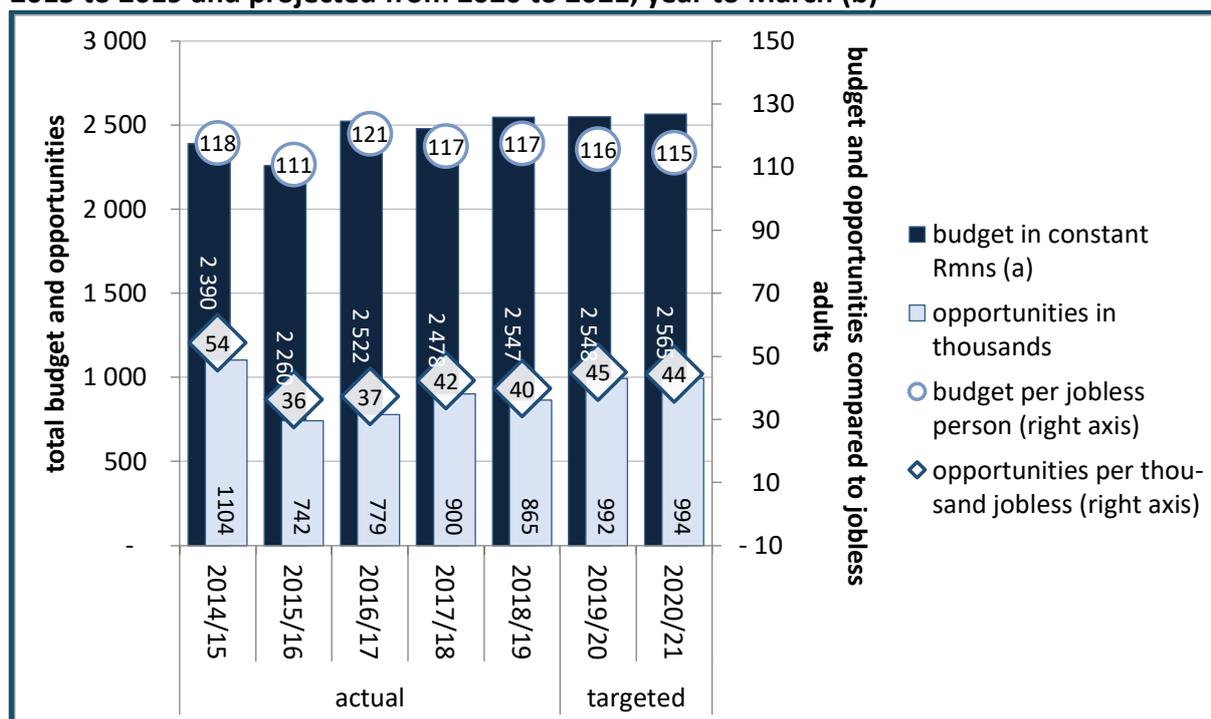
In 2018/19, the EPWP paid an average of just over R130 a day, or around R3 000 a month, with a minimum of R92 a day from November 2019. The average participant was employed for 93 days and earned over R12 000, although the number of days ranged from 76 in infrastructure and environmental work to 141 in the social services. (Calculated from DPWI 2019d, Annexure A) In 2018/19, only nine municipal programmes paid under R100 a day, and they generated only 2% of all work opportunities at municipal level. (Calculated from DPWI 2019d, Annexure G1)

The average monthly pay in EPWP programmes in 2018/19 was 20% below the median wage in 2017 (the latest available data). It was a third lower than the median for formal workers. It was, however, a fifth higher than the informal median and three fifths higher than the median pay for domestic workers (calculated from Statistics South Africa 2017). Still, as with the UIF, three months' pay would not be sufficient to tide most vulnerable workers over the loss of their livelihoods if it resulted from a broader downturn in their community or industry.

In contrast to social grants, the EPWP was not an entitlement. Rather, it provided opportunities for beneficiaries who applied for positions in projects. In turn, funding for projects was based on applications by national and provincial departments, municipalities and non-profit organisations. In 2018/19, the EPWP provided opportunities for around 4% of all jobless working-aged South Africans,⁷ down from 5.4% in 2014/15. In the same period, spending per jobless person in constant rand was essentially flat.

⁷ Including the unemployed, defined as those actively seeking work; discouraged workers, who want paid employment but have given up looking for it; and the economically inactive, who do not want paid work because they are students, disabled or responsible for family care, among other reasons. Given high levels of unemployment, these standard statistical categories are somewhat fluid, since a rise in employment opportunities tends to encourage discouraged and inactive people to seek work.

Graph 17. EPWP budget in constant (2019) rand (a) and employment creation, actual from 2015 to 2019 and projected from 2020 to 2021, year to March (b)



Notes: (a) Deflated with CPI for March rebased to March 2019. (b) Employment opportunities averaged around three months, but varied substantially by sector. Projections of opportunities and spending per jobless person from 2019/20 assume that the number of jobless will rise at the same rate as the working-age population. In the past five years, however, the number of jobless has risen substantially more rapidly. These ratios would decline if the current rate of growth in joblessness persisted. *Source:* Budget data calculated from National Treasury. Estimates of National Expenditure. Vote for EPWP (Programme 3) of the Department of Public Works for relevant years. Figures for employment opportunities from DPWI. *Presentation to Public Works Portfolio Committee on Expanded Public Works Programme (EPWP) progress, 5th March 2019.* Pretoria. Slides 4 and 34.

The projected levelling out in the EPWP from 2018/19 reflected the experience of the previous five years. From 2014/15 to 2018/19, the programme generated opportunities for around four million people, about two thirds of its target. In response, the targets and its budget were adjusted downward. Work-days provided were expected to grow just 1.1% a year from 2019/20 to 2020/25 (calculated from DPWI 2019c:34), compared to growth in the working-aged population of 1,6% a year.

The main factors behind stagnation in the EPWP were the flat budget in real terms, which interacted with the decline in national infrastructure spending from 2016.

As Graph 17 shows the budget for the EPWP as a whole rose on average 0.4% a year in real terms from 2013/14 to 2018/19, although with significant fluctuations over the period. It was expected to grow at the same rate – well below population growth – for the following two years.

Meanwhile, government and SOC investment in infrastructure fell 21% from 2015 to 2018, after growing by 20% over the previous five years.⁸ Over the five years to 2018/19, the

⁸ Calculated from Reserve Bank. Interactive database. Series on gross fixed capital formation in infrastructure by government and SOCs. Downloaded from www.resbank.co.za in November 2019.

infrastructure sector of the EPWP shed 21% of the work-days provided, and the environmental and cultural sector lost 12%. In contrast, the social sector climbed 29%, the Community Work Programme 21%, and non-profit organisations, off a very low base, by 45%.⁹ Nonetheless, somewhat counterintuitively, the EPWP's targets for the five years from 2019 anticipated growth primarily from infrastructure projects (DPWI 2019c:35), even though the EPWP budget for infrastructure grants was projected to grow at only 0.1% a year from 2019/20 to 2020/22.

The reliance on applications meant that the EPWP did not target its programmes strongly on communities in need. It argued that its benefits effectively targeted the poor because it provided inadequate pay to attract highly qualified people and ensured a geographic spread, apparently by granting every municipality, irrespective of size, a minimum of R1 million in 2018/19 (DPWI 2019c:35). In 2017/18, outside of the metros the average grant per municipality was under R3 million. A quarter of municipalities got the R1 million baseline (calculated from DPW 2018).

In sum, none of South Africa's social protection programmes were geared to assisting regions or industries facing a general downturn. The only long-term support came from social grants, which targeted people physically unable to work. The UIF and EPWP generally provided only three months' assistance, and together covered only around 15% of all unemployed people. The UIF, however, had substantial resources that could be utilised in assisting vulnerable groups deal with climate-change related impacts. The Community Work component of the EPWP also provided an effective framework for local mobilisation and collective action, which in turn could improve resilience in vulnerable communities.

7 IMPLICATIONS FOR THE SJRPS

A review of relevant existing programmes points to a gap around measures to assist individuals and communities affected by a downturn. The existing programmes have capacity and in some cases financial resources to assist in key areas, but their procedures and systems would require substantial modifications to support the SJRPs.

The review also points to the importance of establishing dedicated capacity to coordinate the range of state initiatives required for the SJRPs to succeed. The fragmentation of state institutions, each with a somewhat different mandate and sphere of influence, makes it difficult to secure the long-run, coherent assistance that vulnerable workers and communities require to respond effectively to the threat of job losses and downsizing related to climate change.

⁹ Calculated from DPWI. Expanded Public Works Programme (EPWP) Quarterly Report: Report for the Period 1 April – 31 March financial year 2018/19, and Expanded Public Works Programme (EPWP) Quarterly Report: Report for the Period 1 April – 31 March financial year 2014/15. Annexure A. Department of Public Works and Infrastructure. Pretoria.

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