



Report 1



High-level statistical analysis of the plumbing and electrical trades

November 2018 – July 2019

ABOUT THIS PUBLICATION

About this publication

GIZ / SD4GE commissioned two studies aimed at deepening an understanding of the trends and dynamics of plumbers and electrical contractors in South Africa. The objectives of this study included the imperative to strengthen the range of institutions (public, private and not-for-profit) that impact these trades. An additional aim of the research was to provide an overview of current development in these trades, both at industry level and firm level. The findings are useful for better planning informed by greater awareness of the transformations and changes emerging in the specific contexts of industry.

The study produced three publicly available reports. **This first report provides a high-level overview of the available statistics. The research aimed to scan the publicly available statistics to understand better what is available, what is being tracked, and what is changing. This high-level overview also revealed how the two industries are structured, which organisations support these industries and what the dynamics are.**

GIZ/SD4GE commissioned PEM Consulting and Mesopartner Africa to conduct the industry diagnosis. Dr Shawn Cunningham and Annelien Cunningham from Mesopartner led and coordinated the industry diagnosis. A team of researchers from TIPS (Trade & Industrial Policy Strategies) conducted research and statistical analysis. The TIPS team included Asanda Fotoyi, Sajid Sherif, Mbopholowo Tsedu while Saul Levin provided policy insight and guidance.

The research would not have been possible without the help and support of the industry bodies and their members. The Institute of Plumbing (SA) (IOPSA) and Plumbing Industry Registration Board (PIRB) contributed and supported the plumbing analysis. Electrical Contractors Association of South Africa (ECASA) and the National Bargaining Council for the Electrical Industry (NBCEI) supported and contributed to the electrical analysis.

GIZ / SD4GE would like to thank all the stakeholders and industry members for their valuable contribution.

Editor

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Pretoria, September 2019



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Contents

1	Introduction	3
2	High-level statistical analysis of the plumbing and electrical trades.....	4
2.1	Methodological approach.....	4
3	Insights from the high-level literature study.....	4
3.1	Reliable data on the performance of the education system is publicly available	4
3.2	There are huge investments aimed at the education supply side	6
3.3	Informality is pervasive in the South African economy	8
3.4	Small business in South Africa	11
3.5	The effect of the construction sector on plumbing and electrical contracting industries.....	13
4	Summary of the TIPS study	14
5	Unintended results of the research.....	16
6	Conclusion	16
7	Bibliography	17

Figures

Figure 1:	Youth transition pathways	5
Figure 2:	Youth labour market intervention addressing demand, supply and misalignment..	8
Figure 3:	Informal and formal enterprises in South Africa	9
Figure 4:	Education levels in formal and informal business for employers, self-employed and wage workers	12
Figure 5:	Growth index by sector: manufacturing, construction and others	13
Figure 6:	Construction and manufacturing share in the real economy.....	14

1 Introduction

This project concerns the understanding of the trends and dynamics of two trades: plumbers and electrical contractors. In the past, much of the focus of the GIZ/SD4GE was on improving the supply-side issues of (green) skills delivery in South Africa. Despite the attention on improving the quality of education, the GIZ/SD4GE has always had a strong focus on involving the private sector in its work, especially when it comes to the workplace learning that is central to the dual systems approach.

This report provides a high-level statistical industry perspective of the two trades. Our interpretation of the industry analysis is that it is much more than just understanding demand and shifting patterns of uptake of skills. We understand that an industry diagnosis is to provide the GIZ/SD4GE and its stakeholders with insight into, and several perspectives of, the pressures faced within the industries, the firms that comprise the industries and the institutions that promote them. This analysis will make it possible to strengthen the range of institutions (public, private and not-for-profit). It will also inform the GIZ/SD4GE and its stakeholders to better plan for the changes that are emerging. It may even make it possible to detect shifts that have not yet been articulated.

This report provides a high-level overview of the available statistics. Our aim was to scan the publicly available statistics to better understand what is known, what is being tracked and what is changing. This high-level overview also revealed how the two trades are structured, which organisations are identified with the sectors and what the high-level dynamics are.

The second work package homed in on the industry-level dynamics. It took the insights from the high-level study further and looked at the key institutions representing the private sector. Then a firm-level survey was designed to better understand the decisions confronting company owners, and what pressures they were facing in terms of productivity, market changes and staff. The results of the business owner survey for plumbing and electrical contractors are discussed in two separate reports.

The third work package was originally geographically focused on townships and informal enterprises. However, as the project unfolded, PEM/Mesopartner and the GIZ/SD4GE realised that as the main challenge was about transformation and change within the industries, an explicit focus on transformation would be more appropriate. The results of this desktop study was incorporated into the plumbing industry analysis.

The fourth work package brings together the insights, conversations, trends, analysis and recommendations into a set of recommendations for the GIZ/SD4GE. This report is part of this fourth work package.

2 High-level statistical analysis of the plumbing and electrical trades

The terms of reference for work package one saw this work package as mainly a desktop study based on secondary research. In practice, it turned out to be a first broad scan of the two industries targeted to identify direct and indirect stakeholders, potential data sources and to better understand who else is working in this area.

2.1 Methodological approach

The following approach was taken to conduct the high-level industry research.

- Qualitative interviews to identify key issues, data sources and stakeholders. Several meetings were held with the GIZ/SD4GE, IOPSA and the PIRB to understand the landscape, past research that had been done, and current development projects under way. We also attended research briefings by TIPS, the World Bank and the NBI on various topics related to the contract.
- Identification of data sources and research. The identification of data sources began with desktop research into publicly available reports focusing on education and also the plumbing and electrical industries.
- TIPS was subcontracted to identify statistical resources that can be used to better understand high-level trends. TIPS was also instructed to identify how relevant data sources can be used in the future. The discussion of the statistical results is attached as Annexure 1.1 to this report (TIPS, 2019a).
- A series of review meetings were held between PEM Mesopartner, TIPS, IOPSA, the PIRB and the GIZ/SD4GE to refine the results and to drill deeper where it was deemed appropriate. During April a presentation event was held where the NBI and the other GIZ/SD4GE components could participate in discussing the data.

3 Insights from the high-level literature study

This section highlights some of the most significant findings of the desktop survey. The high-level statistical analysis by TIPS (2019a) is attached as Annexure 1.1.

3.1 Reliable data on the performance of the education system is publicly available

Early on in our assignment we were struck by the variety and quality of data that is available regarding education pathways, unemployment, employment and public education. Data on education, employment and economic performance is collected by Statistics South Africa (Stats SA), the DHET and several other research instruments. The DHET publishes data on the performance of the higher education system on an annual basis, which allows comparison and measurement. See for instance DHET (2019).

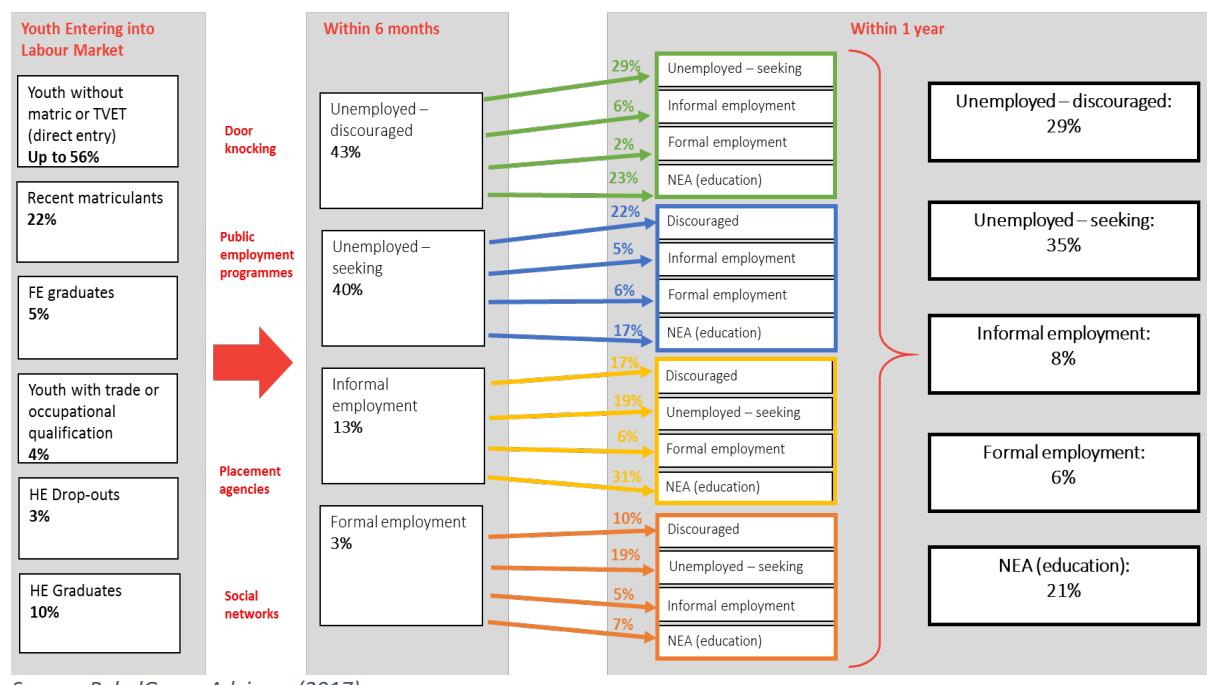
The skills supply and demand in South Africa report (Reddy, Bhorat, Powell, Visser and Arends, 2016) examines the skills supply and demand and analyses how the two interact to inform skills policy to support an inclusive growth path in the country. The data used was largely from

the Statistics South Africa Labour Force Surveys and the Higher Education Management Information System for the 2010 to 2014 period.

The availability of this data raised the question in our minds as to whether public sector stakeholders were using the data to make better decisions. While we cannot say how the data is used for decision making, we are aware that it is widely discussed at seminars, conferences, policy events and in the media. For instance, enrolment in TVET colleges reached 705 397 in 2016, and of the 700 000 students who enrolled for TVET education in 2016, only 4% enrolled in vocational studies. According to the Department of Planning, Monitoring and Evaluation (DPME, 2018), those who attended TVET displayed low employment rates post-TVET; however, national certificates and training with pathways to vocational certificates made an impact on employment prospects, with between 50–60% of those studying finding employment after the skills intervention.

Figure 1 below illustrates the percentage of youth entering the labour market from various educational and training channels (RebelGroup Advisory, 2017). It elaborates on the various entry mechanisms employed by the youth, including large government employment programmes, non-government, public and private placement agencies, social networks and door knocking. Finally, the figure gives an indication of the extent to which young people transition into various states of economic activity/inactivity during their first year in the labour market.

Figure 1: Youth transition pathways



The authors of the report from which this diagram originates comment that a key characteristic of the diagram is the non-linearity of youth labour market transitions. In particular, the diagram illustrates that youth often transition from the education/training

system into either formal or informal employment and then back into unemployment. The authors go on to state that it illustrates how youth often transition from the education/training system into various labour market states and then back into the education/training system.

Of particular significance is the low level of successful youth transitions into formal employment. The authors found that after 6 months, only 3% of labour market entrants are in formal employment. This figure increases only slightly to 6% after a further 6 months in the labour market. At the same time, the high rates of youth becoming discouraged and stop looking for work is of particular concern. Significantly, 43% of youth find themselves unemployed and discouraged only 6 months after exiting the education/training system and entering the labour market. This figure captures the large percentage of youth who get “stuck” along the labour market pathways and are in need of transitional support.

TIPS was briefed to identify data sources that could be used in future by the GIZ/SD4GE and its industry stakeholders (TIPS, 2019a). The Labour Market Dynamics (LMD) survey data (2008–2017) conducted by Stats SA is a nationally representative survey which is an aggregation of the four Quarterly Labour Force Surveys (QLFS) for a particular year (Statistics South Africa, 2019). All non-institutionalised South Africans are eligible for inclusion in the sample. The QLFS tracks dwelling units but takes the form of a rotating panel whereby every quarter 25% of dwellings are rotated out of the sample and replaced with different dwellings. Any one particular dwelling remains in the sample for up to four consecutive quarters. Stats SA provides sampling weights for each dwelling such that when it is applied to an estimation, the results are representative of the entire South African civilian population. Estimates are weighted, except when stated otherwise. Plumbers and electricians are derived from the occupation question asked in the survey which uses the South African Standard Classification of Occupations (SASCO) 2003 codes. A brief description is provided in Textbox 1.

Textbox 1: Plumbers and electricians in the SA Standard Classification of Occupations

Classification 713 represents “Building finishers and related trade workers”. Plumbers are derived from unit code 7136, and type A electricians are derived from unit code 7137. Classification 724 represents “Electrical and electronic equipment, mechanics and fitters”. Unit codes 7241/7242/7243/7245 represent type B electricians. SASCO classifies these electricians differently from those who work as building finishers.

It is important to note that these SASCO classifications are based on self-reports – this means that, for example, someone not formally recognised as a plumber in terms of their qualifications may still be referred to as a plumber in the South African statistics if they do plumbing-related work.

3.2 There are huge investments aimed at the education supply side

Key recommendations from the National Development Plan (NDP) were to expand the college system and further education and training (FET), with a **focus on improving quality (NPC, 2012)**. The NDP recommended a participation rate of 25% that would potentially accommodate about 1.25 million enrolments (NPC, 2012:43). It also aims to improve the

throughput rate to 80% by 2030 and to produce 30 000 artisans per year – however, the country is currently only producing 12 000 qualified artisans per year, significantly below the target.

The TVET sub-programme within the DHET has experienced sustained growth in budget allocations over the years. As can be seen in Table 2 (TIPS, 2019a), the TVET budget grew by an average of 5.8% between 2014 and 2017 (from R6.3 billion to R7.5 billion). This is set to increase to 25% average annual growth between 2017 and 2020 (from R10.7 billion to R14.5 billion).

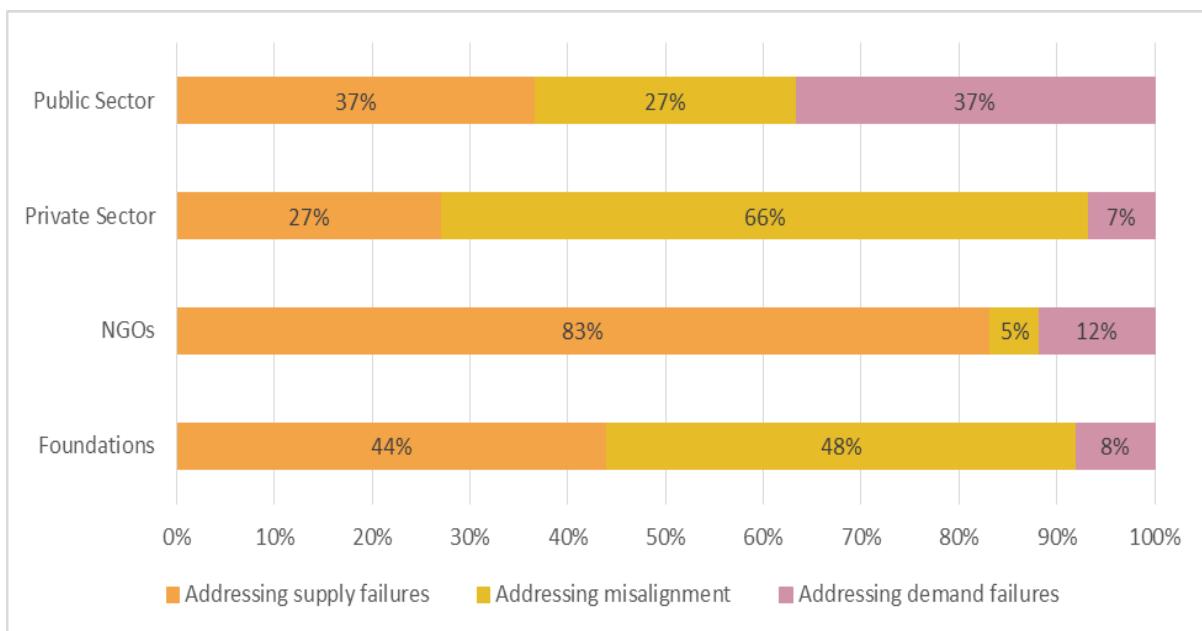
The bulk of the TVET budget (95%) is spent on “Technical and Vocational Education and Training System Planning and Institutional Support”, which covers transfers to TVET colleges and the requisite staffing. More than 17 000 people are currently employed in the public TVET sector in varying capacities.

The fastest-growing budget items between 2014 and 2017 were in Examinations and Assessments, along with the Financial Planning function, which grew by 26% and 52% respectively. Going forward, the fastest growing TVET budget items will be transfers to colleges (growing an average of 25% a year), and Examinations and Assessments (growing at 22% a year) between 2018 and 2021. Interestingly, the TVET Management budget item is continuing on a downward trend, presumably because the TVET colleges are increasingly more independent and self-managed.

The Sector Education and Training Authorities are the most visible organisations, with two (MERSETA and Services SETA) receiving more than R1 billion a year for training. Furthermore, it is estimated that between 2012 and 2015, nearly 70 000 artisans qualified through workplace training opportunities facilitated by the SETAs. The SETAs claimed to have found work-based learning opportunities for over 186 000 learners.

In a report prepared for the Department of Planning, Monitoring and Evaluation, it was found that most government, non-governmental and international support was aimed at the supply side, with a much smaller group focused on closing the gaps between supply and demand, and an even smaller percentage going towards addressing demand failures (RebelGroup Advisory, 2017). The results in Figure 2 show that the only balance between the three types of programme were found in the public sector.

Figure 2: Youth labour market intervention addressing demand, supply and misalignment



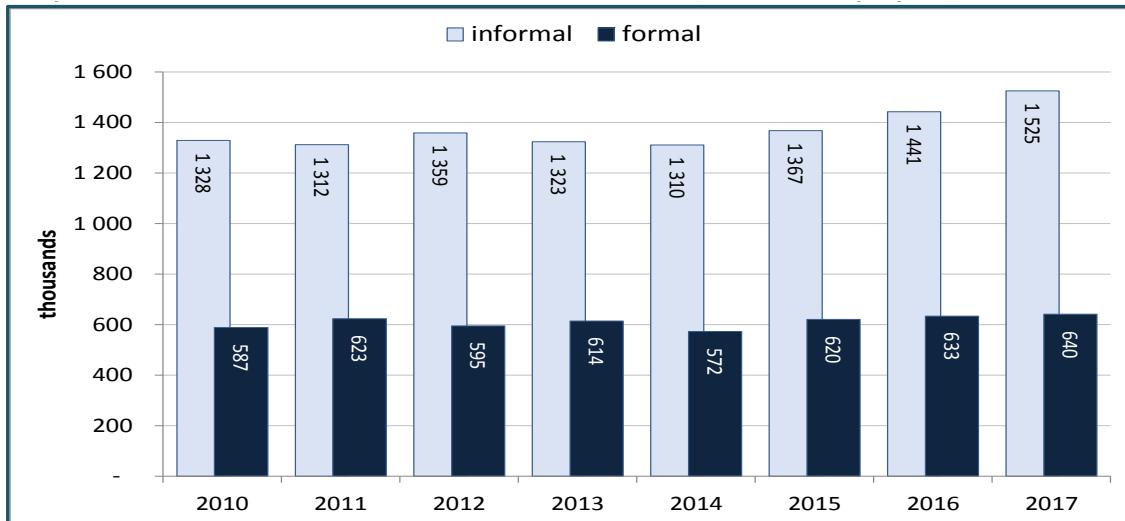
Across all four areas, 68% of programmes are focused on addressing supply-side problems, 21% on misalignment and 11% on demand issues.

3.3 Informality is pervasive in the South African economy

Informality is broadly seen as being undesirable by industry associations, business people and even public officials. However, the most recent World Development Report by the World Bank states that informality is rising globally (World Bank, 2019). While South Africa is trying to “fix” problems with youth unemployment and the broader failures of the education system, globally there is a change in the way people work. Not only is technological disruption affecting low-skilled jobs, but new technologies are also allowing people at the higher end of the skills scale to work in completely new ways. Technology is blurring the lines of the firm. New technologies are allowing more and more people to work independently and beyond narrow confines of job titles or professions. In this emerging future, basic education, human capital development and new social contracts will be very important to unlock capability or enable individuals to contribute to society.

Figure 3 shows that while the number of formal enterprises has slowly grown from 587 000 in 2010 to 640 000 in 2017, the number of informal enterprises has grown faster to the most recent estimate of 1.5 million enterprises. This calculation was done by TIPS (2019b) using the Labour Market Dynamics data of Statistics South Africa (2018).

Figure 3: Informal and formal enterprises in South Africa



Source: TIPS (2019b)

The informal sector is an important temporary refuge for people who may have lost their jobs, or who are trying to earn money on the side. However, it appears that many able people in South Africa are staying indefinitely in informal enterprises. The informal economy is more labour intensive, and it could be said to be more unproductive when compared to formal enterprises.

The low productivity probably has to do with the low skills levels of many of the workers, the low use of technology (in its broader meaning), and the low levels of capital employed. However, worker productivity is also a function of management, and the South African statistics show that often the owners of informal enterprises have low skills like their workers.

Informality is often used to imply that businesses are purposefully avoiding tax and other forms of formal compliance. Sometimes informality is used to imply black or to describe micro retail and other micro enterprise activities. What is sometimes overlooked is that professionals who freelance may also be labelled as informal, or the extra income generated by middle class households beyond full-time employment could also be seen as informal. There are four terms that are often used interchangeably: informal sector employment, informal employment, informal economy and informal sector. While they do appear to be overlapping, there are important differences in the different labels. Textbox 2 disentangles these four labels.

Textbox 2: Disentangling informality

A recent local attempt to disentangle the different uses of the label “informality” was made by Frederick Fourie (2018). Fourie bases his definitions on the deliberations of the International Conference of Labour Statisticians, but points out that the same definitions are also used by Stats SA in their QLFS. Fourie cautions that Stats SA uses a slightly different formulation in the SESE.

Fourie formulates the key concepts as follows:

- **Informal enterprises:** enterprises with or without employees, which are not incorporated and not registered for taxation. Sometimes the definition is limited to unregistered enterprises that have fewer than five employees.
- **Informal sector:** all informal enterprises, their owner-operators/employers and all employees, paid and unpaid, in all economic sectors (manufacturing, retail, etc., including agriculture). It excludes domestic workers and also subsistence agriculture, which is defined as not producing for the market but rather for own use.
- **Informal-sector employment:** an enterprise-based concept, comprising those working in the informal sector as either owner-operators/employers or employees, paid and unpaid. Its focus is employment in informal enterprises.
- **Informal employment:** an employee-based concept which comprises all employees or workers that do not have formal employment contracts or benefits in *both* the informal and formal sectors as well as households. Its focus is on employment conditions and unprotected work.
- **Informal economy:** all forms of informal employment: “all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements” (ILO 2002: 25). Thus the informal economy comprises all informal-sector employment plus informally employed workers in the formal sector and households. It is premised on the analysis of employment conditions rather than on employment opportunities and employment creation.

Informality has different consequences in the economy in general, and in plumbing and electrical contracting in particular. Generally speaking, progressive consumer protection laws and regulations in South Africa are making it harder for people to prosper in the informal sector. In plumbing, the regulations are at this stage mainly focus on the installation and maintenance of hot water systems. However, discussions are already far advanced to extend the regulations to other plumbing functions.

In the electrical field, the regulations are more restrictive because of the danger and liabilities involved in illegal or unregulated electrical work. It is illegal for any person to work on the electrical wiring or systems of a building, or to do any maintenance on electrical equipment if they do not have the appropriate qualifications (Department of Labour, 2009). All suitably qualified persons are required by law to register with the Department of Labour before they may work on electrical equipment or infrastructure. This means that in the electrical field, informality is indeed undesirable.

Furthermore, the existence of the National Bargaining Council for the Electrical Industry of South Africa (NBCEI) in the electrical industry extends all agreements reached between employers and employees to the whole sector. This means that people operating as electrical contractors, or employing persons working in the electrical field, must be registered with the NBCEI and must comply with the wage and work conditions gazetted by the Minister of Labour (Department of Labour, 2017). The gazetted collective agreement covers key points of contention such as short-term duration contracts, making it illegal for employers to hire workers without drawing up a proper contract. The implication is that informal electrical contractors who are informally employing workers are breaking the law on several fronts. An extension of this is that several electrical contractors who are registered for VAT, and perhaps even correctly registered with the Department of Labour, and who are complying with the collective agreement are breaking the law.

3.4 Small business in South Africa

The Presidential Job Summit framework agreement targeted growth in small business as a central way to promote employment and greater economic equality in the long run (NEDLAC, 2018). It is widely acknowledged that South Africa's small business sector is underperforming when compared to many other peer countries¹.

The TIPS Real Economy Bulletin of January 2019 is dedicated to Small Business in South Africa, and provides a very up-to-date and trustworthy assessment of the sector (TIPS, 2019b). TIPS estimates that small businesses contribute about 25% to the GDP of South Africa. Drawing from the Labour Market Dynamics Surveys (Statistics South Africa, 2018), TIPS estimates that in 2017 there were 640 000 formal small businesses, up from 590 000 in 2010. The number of informal enterprises is estimated at 1 525 000, with a strong upward trend in the previous three years. Most of the small businesses are in business services (25%), followed by retail (23%), community and personal services (14%) and construction (14%). While two thirds of the formal small businesses are in the five largest metros, only 20% of informal businesses are operating there.

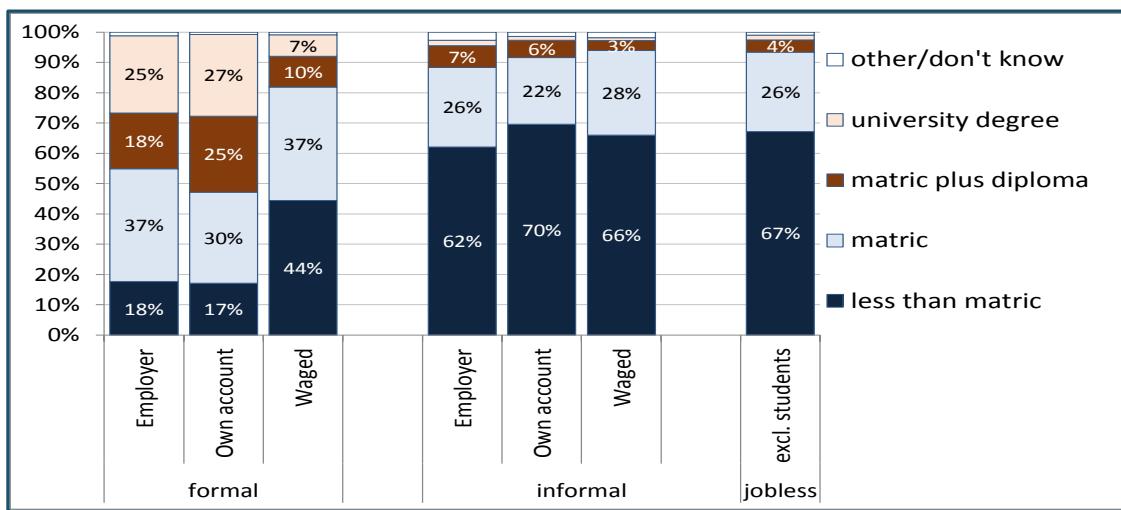
TIPS (2019b:3) found that a quarter of formal small businesses were own-account enterprises, with no permanent employees. Over half of small businesses had between one and nine employees, and only a fifth had between 10 and 49 employees. In contrast, 80% of informal enterprises had no employees, and virtually none had more than four.

Strikingly, small business accounts for 45% of all waged employment, while the informal sector contributes 10%. However, the share of small business is on the decline from previous levels of more than 50%.

With regard to education levels, TIPS (2019b:12) found that in formal small business, owners and self-employed people were substantially better educated than their employees (see Figure 4).

¹ See for instance the Global Entrepreneurship Monitor profile page of South Africa at <https://www.gemconsortium.org/country-profile/108>

Figure 4: Education levels in formal and informal business for employers, self-employed and wage workers



Source: TIPS (2019b:12)

About 50% of formal self-employed workers had a university degree or a post-matric diploma, which includes artisan training. In the informal sector there was hardly a difference in education between the employers and employees, and these education levels were more or less the same as for jobless people of working age.

Defining small business in South Africa

The GIZ/SD4GE requested that we clarify how small business is defined or understood in South Africa.

Over the past two years, the Department of Small Business Development (DSBD) have been working on a new definition for small businesses in South Africa. The previous definition classified small enterprises into four groups: micro, very small, small and medium (the dti, 2004a, 2004b).

The new (draft) definition reduces the different categories of enterprises to three (DSBD, 2018): “*Small, medium and micro enterprises; and two proxies of total full-time employment and total annual turnover.*”

According to the DSBD, “Small enterprise” means a separate and distinct business entity, together with its branches or subsidiaries, if any, including cooperative enterprises, managed by one owner or more predominantly carried on in any sector or subsector of the economy. The new definition takes into consideration the sectoral differences by adding adjustments on the thresholds following the standard industry classification. A further refinement is based on the annual turnover of the enterprise.

In the electricity, gas and water sector, micro enterprises have 10 or fewer employees and a turnover of less than R10 million, while small enterprises have less than 50 employees and an

annual turnover of less than R50 million. Plumbing is included under construction and the same classification for employment and turnover is used.

Stats SA uses different proxies of small businesses depending on whether it is reporting on social statistics or economic statistics. However, it is expected that Stats SA will in the coming years align with the new definition.

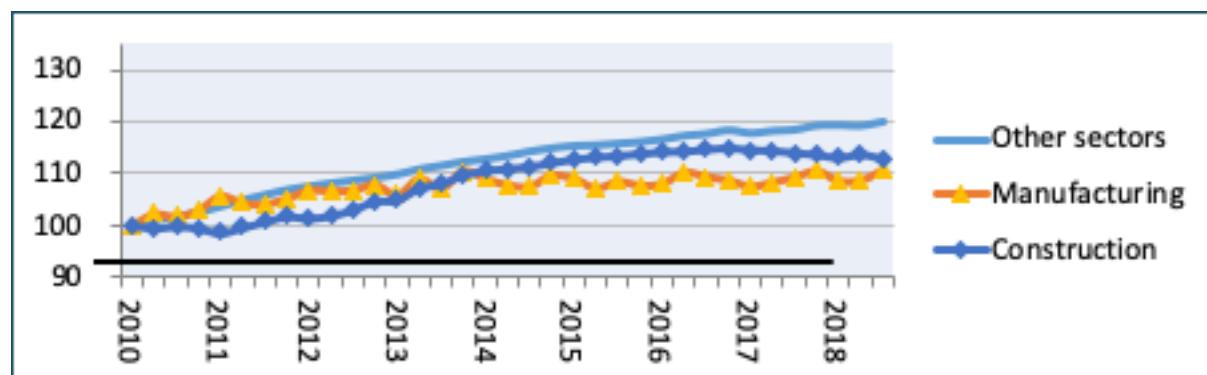
3.5 The effect of the construction sector on plumbing and electrical contracting industries

The TIPS research found that there are just over 2 million crafts or tradespeople employed in all sectors of the economy (TIPS, 2019a). Of these, 466 000 people are employed in the manufacturing sector, while the construction sector employs 811 000 people. The contribution of manufacturing to the GDP is 14%, while the contribution of construction is 4%. Both manufacturing and construction are not performing well in terms of growth.

The construction sector is a good indicator of the country's economic health. It responds to both public and private investment, as well as to disposable income at the level of households. The TIPS research shows that both plumbing and electrical contracting are affected by the performance of the broader construction sector. The construction sector is an important market. However, a decline in the construction sector also leads to increased price pressure (more competition at lower prices) and an increase in new market entrants (both formal and informal).

Following the 2010 FIFA World Cup, large infrastructure projects have been on the decline, with the sector being driven by small firms and individual construction consumption. General government has reduced its spending on economic and social infrastructure over the past two years, with real fixed investment spending by government having fallen by 4.1% between 2015 and 2017 (the dti, 2018). Figure 5 shows the performance of the construction sector in relation to the other sectors, and how this has been declining in the last quarters.

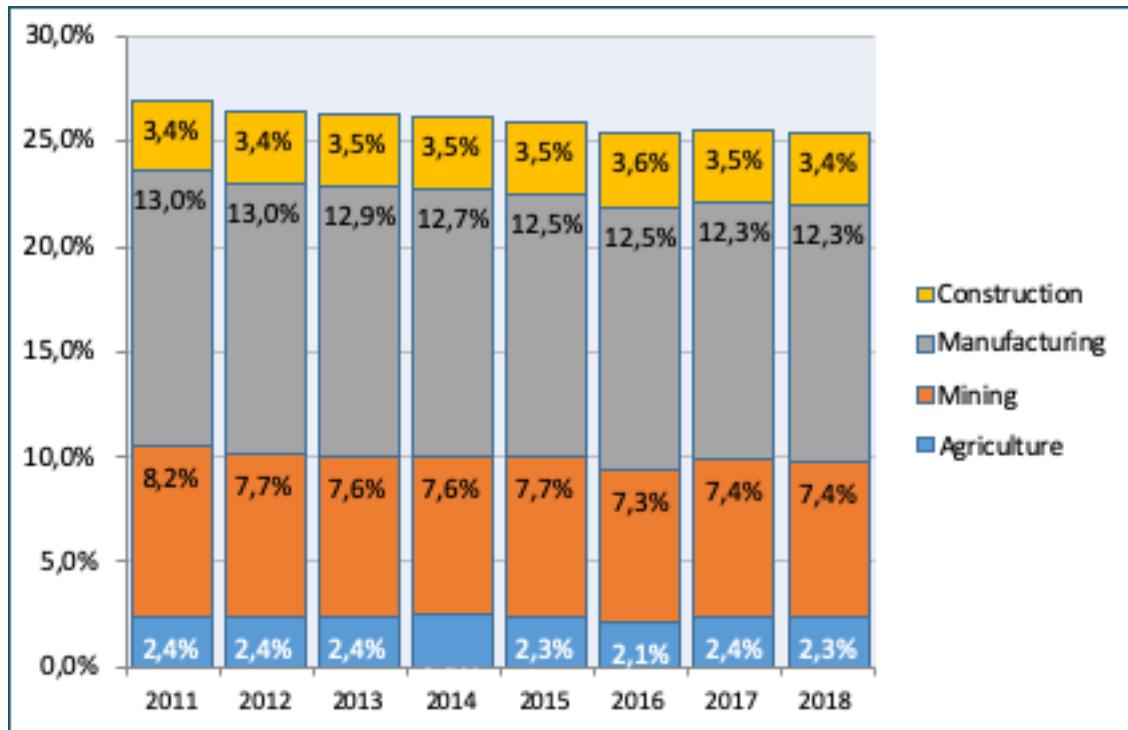
Figure 5: Growth index by sector: manufacturing, construction and others



Source: TIPS Annexure 1.1 calculated from LMD 2008-2017 (TIPS, 2019a).

Figure 6 shows the contribution of the construction and manufacturing sectors to the GDP. Construction contributes about 4%, while manufacturing contributes 13%.

Figure 6: Construction and manufacturing share in the real economy



Source: TIPS Annexure 1.1 calculated from LMD 2008–2017 (TIPS, 2019a).

When engaging with plumbers and electrical contractors, three complaints are frequently heard: first, the competence of graduates and job entrants is low, second, most companies are not looking to add more employees, and third there is insufficient regulation of informal entrants who are competing against existing enterprises.

The decline of the construction sector directly results in an increase of informality and pressure on all the supply chains into the construction sector to reduce employment.

4 Summary of the TIPS study

For the sake of convenience, the summary of the TIPS high-level survey (TIPS, 2019a) is attached as Annexure 1.1.

The analysis first presented the number of plumbers and type A and type B electricians over the period 2008–2017. There was an overall increase in the number of tradesmen throughout the analysis period. This was also the case when considering the proportion of tradesmen relative to the workforce. However, in proportional terms, there were fewer type B electricians in 2017 than there were in 2008.

In terms of the racial composition of tradesmen, Africans were the largest race group. The racial decomposition of tradesmen revealed two prominent findings: (1) The proportion of

Indians working as plumbers decreased substantially between 2008 and 2017, and in any case there were few Indians working as plumbers in the first place. (2) A substantially larger portion of Whites are working as electricians than Whites working as plumbers. There is a greater proportion of White type B electricians than White type A electricians.

The provincial distribution of tradesmen follows expectations whereby the three largest metros in Gauteng, the Western Cape and KwaZulu-Natal, possess the majority of tradesmen. An interesting feature in the provincial distribution of type B electricians is that they exhibit a greater clustering around the three largest metro areas relative to plumbers and type A electricians. This finding is likely to reflect the niche skillset of type B electricians, for which there may be a greater demand in more advanced provincial economies.

The majority of plumbers and type A electricians work in the construction industry and the proportion has increased during the survey period. The proportion of plumbers and type A electricians working in the community, social and personal services industries has substantially decreased between 2008 and 2017. Type B plumbers are spread across a range of industries, but most are found in the wholesale and retail trade industry. A noticeable feature of the industry trends among type B plumbers is that the proportion of type B plumbers working in the financial intermediation, insurance, real estate and business industry has doubled between 2008 and 2017.

The majority of tradesmen work for private enterprises and the majority of those who work in the formal sector work in organisations that employ 50 or more employees. The informal sector is characterised by small organisations with 80% of working in organisations with fewer than five employees. On balance, there was no major shift in the size of the organisations that tradesmen reported working in. However, there was an increase in the proportion of type A electricians in the informal sector who work for organisations that employ between two and four employees.

There are two especially concerning findings of this report: high levels of tradesmen working in informal employment and declining levels of TVET qualifications. This requires more thorough investigation using other sources of data.

The incomes of all tradesmen have increased in nominal terms over the period 2008–2017. Compared to electricians (especially type A), plumbers' incomes are much lower, with the majority earning less than R5 000 a month. Tradesmen who have TVET qualifications or certificates or diplomas tend to earn the most – this is likely due to these sorts of qualifications being necessary to operate in the formal sector. Africans and Coloureds earn similar incomes, while White tradesmen earn the most. This finding follows from the race-decomposed education analysis, which found that high proportions of White respondents have post-school education. A key finding from this report is that although self-employed tradesmen earn more than their employed counterparts, this premium is more pronounced among White tradesmen and tends to be quite small for African and Coloured tradesmen. This finding is likely to be due to a high proportion of African and Coloured respondents working in the informal sector. Although not presented in this report, plumbers are less likely to belong to a

union than electricians. These points taken together are likely to explain the disparity between plumbers' and electricians' incomes.

5 Unintended results of the research

At the request of the GIZ/SD4GE, we formulated some of the unintended results from this first part of our work. These points should be seen as a very early reflection, although this might change as we continue with the rest of the work.

- TIPS found value in offering a service to industry associations beyond their usual work, which is mainly focused on the public sector and policy makers. Many industry associations do not have good data, and TIPS could both assist with identifying available public statistics as well as providing an analytical service to analyse the results of the firm-level survey.
- The role of the industry bodies in the promotion of skills development, professionalisation and becoming effective development organisations was recognised by Mesopartner and brought to the attention of the GIZ/SD4GE. The more we spoke to industry experts, the more we realised that there were many South African-funded and driven programmes which aimed to improve education outcomes and the performance of the selected industries.
- However, at the same time, we realised that organisations such as IOPSA and ECA were working in a relatively isolated way, as they were mainly focused on their members and the regulatory environment. Horizontal coordination with other meso organisations and programmes is only pursued if the synergies are very clear. In the case of IOPSA, the organisation is still relatively under-resourced, and developing partnerships and improvement projects with other organisations takes up the time of a few senior executives. ECA has a more established head office and a regional network to implement programmes. In several instances, programmes implemented by developmental organisations or by the South African government have worked against the business membership organisations.
- The many intermediaries that are responding to market and government failures were identified. This includes the NBI, JET Education and Harambee. The GIZ/SD4GE could negotiate cooperation agreements with these organisations to pursue synergies.
- The low economic growth and the downturn in the construction sector is having a strong effect on the high-level statistics of both plumbers and electricians.

6 Conclusion

This first high-level assessment of the industry and statistics is important as it shapes the scope for the more detailed industry diagnosis of plumbing and electrical contracting enterprises.

The statistical analysis that TIPS did provided some interesting insights, but it also raises many more questions that must be explored in the remainder of this project. In the process of meeting with stakeholders, asking questions, analysing data and double-checking our interpretations, we also noticed some stakeholders making adjustments and already taking action on early findings. We captured some of these unintended results in section 5.

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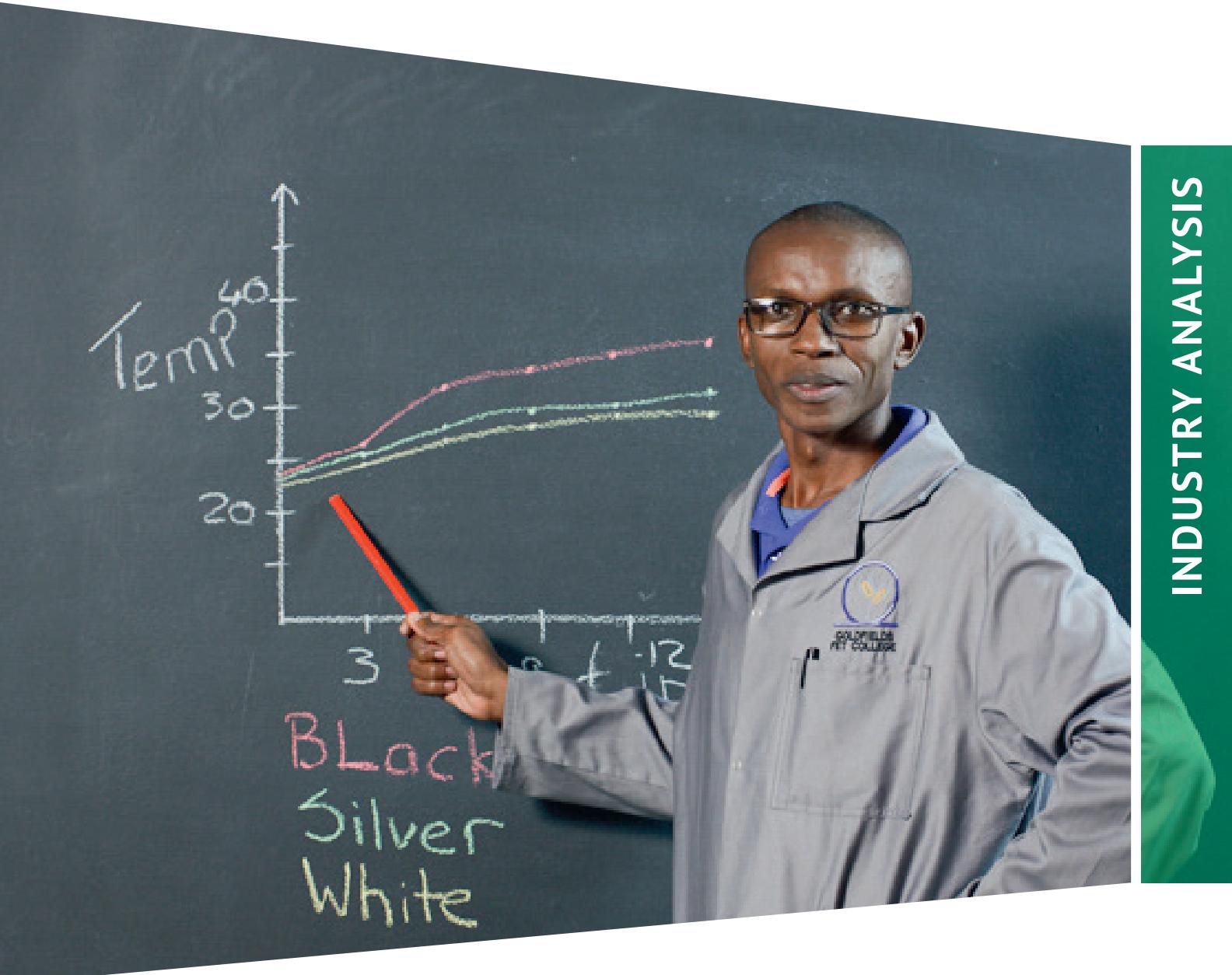
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SKILLS DEVELOPMENT FOR A GREEN ECONOMY (SD4GE)

The Skills Development for a Green Economy Programme (SD4GE) supports a structural change towards more employment-oriented dual TVET approaches in South Africa. It supports the:

- The cooperation of private and public stakeholders to promote dual training approaches
- The implementation of dual training approaches – e.g. the dual system pilot project (DSPP), the centres of specialization (CoS), and dual short courses
- The strengthening of the capability of personnel involved in the implementation of dual training approaches: lecturers, in-company mentors and TVET college management.

On the German side it is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). GIZ collaborates with its national partner, the Department of Higher Education and Training (DHET).



Skills Development for a Green Economy (SD4GE) Programme

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