

# FINAL SECTOR SKILLS PLAN Update 2021/ 2022

31 August 2020

#### **OFFICIAL SIGN OFF**

Final Submission of required SSP Documents as per DHET Guidelines for SSP 2021/2022

It is hereby certified that this Final version of the Sector Skills Plan takes into account all the relevant policies, legislation and other mandates for which merSETA is responsible and accurately reflects the stipulated submission requirements as communicated by the Department of Higher Education and Training (DHET).

This submission comprises merSETA Cover Letter, Continuous Improvement Plan and Final SSP which was developed in accordance with the SSP Framework produced by DHET.

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Strategy and Research Executive	Signature:	

Mr W. Adams

**Acting Chief Executive Officer** 

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Ms K. Moloto Chairperson of the merSETA

**Accounting Authority** 

31 August 2020

## COVER LETTER

#### 31 August 2020

#### To: Department of Higher Education and Training, Directorate: SETA Support

The Manufacturing, Engineering and Related Services Sector Education Training Authority (merSETA) has prepared this final submission of the Sector Skills Plan (SSP) comprising this cover letter and the merSETA Continuous Improvement Plan (CIP) in response to the requirements as set out by the Department of Higher Education and Training (DHET) in the SSP Guidelines: Requirements for SSP Submission 2021/2022.

This letter serves to outline the processes that have culminated in the submission of the merSETA SSP.

#### Updates and New Information:

The analysis undertaken for the SSP report draws on a range of information sources. These sources include:

- The merSETA's Workplace Skills Plans. The WSP data includes employer information, Hard to fill vacancy (HTFV) information, Skills Gaps information, training information and employment information.
- The WSP 2020 collected employee information at individual level which means that the data are no longer aggregated on OFO. The data in the SSP reflects over 5000 levy paying companies.
- WSP data have more stringent data quality controls in place and utilises codes from OFO 2019.
- Data and information from primary research studies and data reports developed internally, these are documented in the research process methods section of the SSP.
- Data from secondary sources such as Statistics South Africa, the Higher Education Management Information System (HEMIS) and industry associations including the National Association of Automobile Manufacturers of South Africa (NAAMSA), MIBCO, SEIFSA, Plastics SA and others have been included.
- Research reports from national research institutions, government institutions, higher education institutions, industry publications and the media has also been utilised.

The following outlines the tasks that have been for the Final submission in August 2020 (indicated in draft submission):

Task	completed	Comment
a)	Econometric Analysis and Interviews in light of COVID-19	Completed – although it is through a qualitative approach due to volatilities in the market
b)	Final Priority Skills List	Completed
c)	Stakeholder Feedback Incorporated	Completed
d)	Updates as per DHET feedback session from 18 August 2020	Completed

Furthermore, this SSP was presented to the merSETA Accounting Authority (AA) for final approval on 24 August 2020. The merSETA notes that the SSP has exceeded the page limit however, the AA has concurred that this was unavoidable in order to submit a value-add SSP for PSET stakeholders who rely on the merSETA SSP to make planning decisions for the supply of skills into the mer sector.

Kind regards

Wayne Adams Digitally signed by Wayne Adams Date: 2020.08.30 14:33:05 +02'00'

Ms Kate Moloto Chairperson of the merSETA Accounting Authority

Mr Wayne Adams Acting Chief Executive Officer: merSETA

#### **EXECUTIVE SUMMARY**

This SSP has been written at a very unique time in the history of South Africa and the world. The COVID-19 Pandemic is a major disruptor on what was already a sector in distress.

A key observation over the past 4 months has been the shift in the economy in line with demands for 4IR in terms of business processes, the new norm in terms of remote working and the threat of mass unemployment. Businesses have had to adapt in a very short period of time, adjusting from almost total suspension of production in lockdown level 5 to production under new health and safety regulations in line with social distancing under lockdown level 3.

In terms of key drivers for the mer sector, the merSETA has noted opportunities for structural economic transformation of mer manufacturing industries particularly through reindustrialisation to revitalise the manufacturing sector, even in a time of COVID-19. Supporting local business development and diversity of manufacturing activities in line with changing customer needs and expectations will put South Africa on steady ground in the future. Automation, digitalisation, environmental sustainability and associated new business models remain key skills drivers. Future skills must be researched more closely for the mer sector. In particular, the skills requirements in a post COIVD-19 economy must be researched.

To meet industry needs, skills interventions must be tailored and implemented using the best and latest technologies related to digital platforms and simulations. A key perspective highlighted in the sector profile of the SSP is the need for bespoke skills interventions for people with disabilities, women, youth, cooperatives, small and micro businesses located in conditions of poverty and who have barriers to access. The social economy is highlighted as a key section of society that is expected to expand due to COVID-19 and it is imperative that the merSETA designs innovative interventions to assist these groups through skills development and bespoke partnerships with PSET institutions.

Monitoring and evaluation is crucial to the success of all SETA interventions and projects. The merSETA has put in place effective mechanisms to ensure it meets its mandate. However, there are still some improvements required to fill the gaps in the system particularly with respect to institutionalising M&E. This will entail reviewing and putting in place effective mechanisms and tools for monitoring, measuring and evaluating outcomes and impact. In addition, effective evaluation of programmes, planning processes, research, systems and organisational processes is required. This will place merSETA in good stead in terms of its mandate and improving its service delivery.

In order to minimise the impact of the pandemic on its current learners, the merSETA has put in place mechanisms to strengthen its partnerships and ensure that learner support is enhanced. Furthermore, it is mobilising its efforts to support enterprises through its partnership with the UIF to expedite TERS funding and reignite the retrenchment assistance programme (RAP) to assist workers who have become unemployed. Having identified the social economy as a key area of focus in its strategy, the merSETA is also putting in place plans to assist entrepreneurs and local businesses to access premises to conduct their business in TVET Colleges and other private training spaces who can offer up their workshops and premises on a part-time basis.

In addition the pandemic has highlighted the need to enhance efforts in line with a technologically enhanced education provision system using e-learning platforms, simulation and expanding the notion of learning factories in lieu of workplaces for workplace based learning.

Overall COVID-19 has expedited efforts to assist the mer sector in the short term, but the SSP highlights that long term planning and monitoring is also required. Enhanced efforts are required to meet the needs of an industry in flux and to focus on the skills required assist the sector in regaining its prominence in the economy.

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#### RESEARCH PROCESS AND METHODS

The merSETA carried various research to develop the Sector Skills Plan (SSP) 2021/2022. The research was conducted through a mixed methodology of qualitative and quantitative techniques that include different sampling techniques. The qualitative research focused on the collection of primary data whilst the quantitative data research process consisted the analysis of secondary data. The main activities which can be seen as part of this process include, amongst others, the analysis of Workplace Skills Plans (WSPs), labour market and industry research projects, Chamber research report findings, desktop research, secondary data analyses, and consultations with the SSP committee, Governance and Strategy Committee and Chamber Committees. The review of these documents assists the merSETA to establish the economic performance and trends by sub-sector, demographic transformation status and spatial location of employers.

The Workplace Skills Plan forms the largest, most reliable source of information from merSETA stakeholders directly and it is analysed for vacancies, employment information, unfilled vacancies, and number of companies, Pivotal skills plan, OFO codes and Chamber statistics. The WSP data consists information at individual employee level which yields more accurate information with respect to occupations and job titles. The data represents information from over 5000 companies. As mentioned in the cover letter, WSP data further The WSP data includes employer information, Hard to fill vacancy (HTFV) information, Skills Gaps information and training information. Secondary data information was drawn from sources such as Statistics South Africa, the Higher Education, Management Information System (HEMIS) and industry associations including the National Association of Automobile Manufacturers of South Africa (NAAMSA), MIBCO, SEIFSA, Plastics SA and others have been included.

Торіс	Nature of Study	Purpose	Data Collection Methods	Sample Size/ Data Source	Timeframe
Workplace Based Learning (WBL)Tracer Study	Qualitative	To understand the outcomes of WBL programmes within the manufacturing, engineering and related (mer) sectors and to explore and document key features, trends, challenges and outcomes of WBL programmes	Telephonic interviews and online surveys	928 beneficiaries	August 2019 – July 2020
Торіс	Nature of Study	Purpose	Data Collection Methods	Sample Size/ Data Source	Timeframe
MerSETA Covid-19 Stakeholder Survey	Qualitative	Econometric Analysis and Interviews in light of COVID-19	Online survey	merSETA Stakeholder database	29 April 2020 – 17 July 2020
Chamber Survey	Qualitative	Chamber reports on COVID-19 to augment Chamber information with respect to economics and skills development	Focus groups across six chambers	Chamber committee representatives	August 2020

Research conducted that feed into the SSP:

Artisan Learning Pathway	Qualitative	To understand the impact of learning pathways	Stakeholder interviews	Traced learners from the merSETA database using stratified sampling methods	November 2018 – August 2020
Retrenchment Assistance Programme	Qualitative	To assess the processes, outcomes and impact of the RAP to make informed decision making internal to the merSETA and advise stakeholders on the sustainability of RAP and its value in the sector and the economy	Stakeholder interviews	Data base of RAP beneficiaries and key respondents	January 2020 – October 2020
Understanding Economic Complexity in the merSETA Space with a Focus on SMME's	Mixed Methods	To understand the economic complexity in the mer-sector and assess the skills capabilities needed to diversify the economy and identify key players for achieving better economic outcomes in terms of job creation, transformation, better livelihoods and sustainability of the sector	Stakeholder interviews, online surveys	merSETA Stakeholder database and desktop research	June 2019 – February 2020
Atlas of Occupations for the merSETA Sectors	Qualitative	To provide the learners, workers and skills planners with a reference guide to occupations and jobs that are in demand in the merSETA 6 Chambers	Interviews and focus groups	merSETA Stakeholder database	March 2019 – December 2020
Lived livelihoods: Education advancing entrepreneurial livelihoods.	Qualitative	Understand the way(s) in which education and training can expand sustainable livelihoods gained through entrepreneurship in manufacturing, engineering and related trades and occupations	Interviews and focus groups	40 students and graduates	May 2018 – June 2020
Learning work through a student- driven association	Qualitative	To develop new and innovative ways of responding to youth unemployment and work- based learning among TVET College students	Case studies, interviews and focus groups	TVET Students and desktop research	July 2018 – March 2021
Understanding Green Partnership within the manufacturing,	Mixed methods	To understand how the merSETA stakeholders interpret concepts related to the green economy and how the interpretation changes over time as the economy changes.	Workshop, stakeholder interviews	merSETA Stakeholder database, training providers and Chambers	March 2019 –March 2021

engineering and related sectors					
Retrenched Workers Feasibility Study	Qualitative	Find innovative mechanisms that support retrenched workers, unemployed youth and workers with disability to access opportunities the labour market.	Stakeholder interviews and surveys	Convenience sampling, merSETA contact info	July 2019 – July 2020
Black Industrialist Project	Mixed Methods	To understanding the skills development needs of Black Industrialists such that they become globally competitive in the context of the 4th industrial revolution	Stakeholder interviews, workshop and online surveys	merSETA Stakeholder database, convenience sampling	March 2019 – April 2021
Chamber SSP Workshops and COVID-19 Reports	Mixed Methods	To better understand the Skills Development needs of the Chambers and how COVID-19 has impacted the sectors.	Workshops, Interviews, Secondary data analysis	6 merSETA Chambers	15 July 2020 to present.

## 1. SECTOR PROFILE

#### **1.1 INTRODUCTION**

This section of the SSP presents the profile of the mer sector. It depicts the scope of coverage in terms of the Standard Industrial Classification (SIC) of its sub-sectors (Chambers), gives an overview of the value chains for each of the Chambers and highlights key role players. Furthermore the chapter profiles the sector in terms of its economic performance and provides a profile of the employers and employees. The key data sources utilised comprise merSETA WSP data (2020), COVID-19 survey data, workshop and interview information as well as desk research.

#### **1.2 SCOPE OF COVERAGE**

The merSETA comprises 6 Chambers or sub-sectors which describes the industrial activities of enterprises according to their Standard Industrial Classification (SIC) codes (see Figure 2).

Overall the sectors under the merSETAs' scope of coverage is demonstrated in Figure 1 classified by SIC codes at 1 and 2 digit level. In terms of economic sectors the merSETA supports activities in: manufacturing; wholesale, construction; retail and motor trade; and financial intermediation, insurance, real estate and business services sectors.

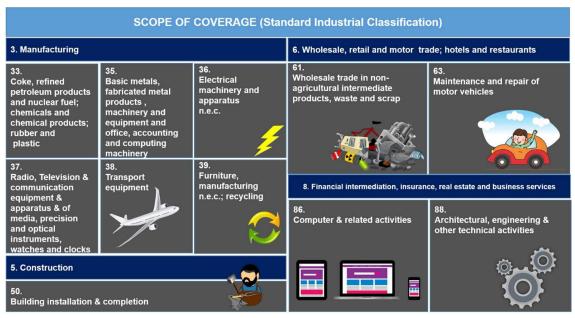


Figure 1: Scope of coverage (Standard Industrial Classification)

The merSETA until recently arranged its sectors into 5 Chambers but as reported in the SSP 2020 – 2025, these have been revised into 6 Chambers after consultation with stakeholders to allow for more focused efforts on skills required by sector value chains, allowing for critical analysis of skills needs enabling the clustering of skills and career pathing. To this end the Chamber previously referred to as the Motor Chamber has been split into the Motor Retail Chamber and the Automotive Components Chamber. Each of the 6 Chambers are depicted below in Figure 2.

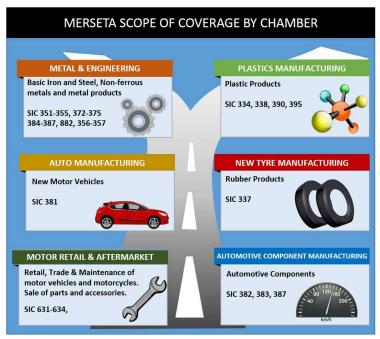


Figure 2: merSETA scope of coverage by chamber

## Metal Chamber

The metals sector represents the largest of the sectors under the merSETA scope of coverage, a simplified value chain is depicted in Figure 3. This value chain consists of raw materials, iron production, steel production, and refining, manufacturing and final products.

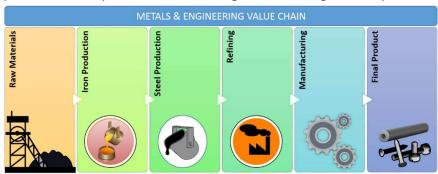


Figure 3: Metals and engineering value chain

The metal and engineering sector entails capital equipment, foundries, transport equipment, metal fabrication and related sub-sectors. The metal and engineering sector is an important sector in manufacturing because it produces machinery and equipment used in production and critical to all forms of manufacturing inputs.

## **Plastics Chamber**

Plastics sector is well developed and is one of the most dynamic industries in South Africa. It is comprised of polymer producers and importers, converters, machine suppliers, fabricators and recyclers that caters for both domestic and international markets. The leading markets for plastics in South Africa are packaging, building and construction, and the automotive industries (DTI, 2019). Plastics are used in a vast array of different applications such as preserving and protecting food and

medicines, electronic devices like computers and smartphones, helping make transport more fuelefficient. The overall value chain for the sector is represented in the Figure 4 below.



Figure 4: Plastics value chain

## New Tyre Manufacturing Chamber

The new tyre sector forms a significant role in the automotive assembly and component manufacturing sector in South Africa. The different types of tyres produced in the country include tyres for passenger, commercial, agricultural, mining, construction and industrial vehicles and associated machinery (Bridgestone, 2019). There are four multinational manufacturers of tyres in South Africa, which includes Goodyear, Bridgestone, Continental Tyres and Sumitomo Rubber (merSETA, Supply and Demand Study, 2018). The overall value chain is depicted below.

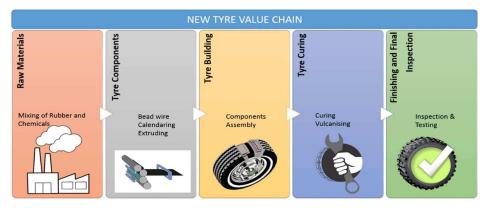


Figure 5: New tyre value chain

#### Automotive Sector

The automotive sector is the cornerstone of South Africa's industrial base which accounts for over 5 % of the country's Growth Domestic Products. The automotive sector consist of the Original Equipment Manufacturers (OEMs), tyre manufacturing and motor retail and components companies that a linked to each other through the automotive production and distribution value chains. This sector is represented in three of merSETA's chambers: auto manufacturing, auto component manufacturing and motor retail and aftermarket.

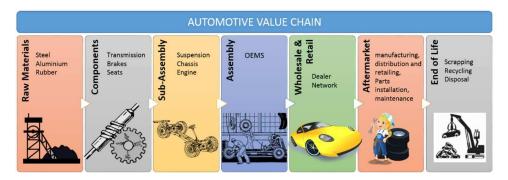


Figure 6: Automotive value chain

## Auto Manufacturing Chamber

Due to the capital requirements and technical nature of producing vehicles there are only a handful of Auto OEMs in South Africa, all of which are international brands (merSETA Supply and Demand Study, 2018). South Africa's main sites for automobile production are the Eastern Cape, specifically Port Elizabeth and East London, Gauteng, specifically Rosslyn and Silverton (Pretoria) and KwaZulu-Natal (KZN), specifically Durban (merSETA Supply and Demand Study, 2018). The Auto Sector has some of the largest scales of operation of all the sectors. The value chain for this Chamber is presented below in Figure 7.

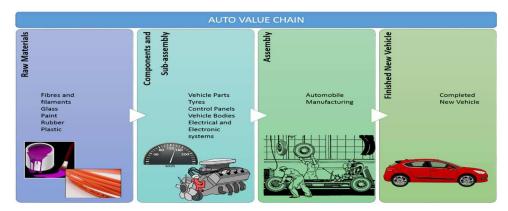


Figure 7: Auto manufacturing value chain

#### **Automotive Components Manufacturing Chamber**

The Automotive Components Manufacturing Chamber comprises manufacturers that produce vehicle components, parts and equipment. Components are sold to independent parts sellers and after service providers. Due to the increased resource needs and skills required to produce some components (i.e. compliance to meet the standards of Auto OEMs), major employers in this sector tend to be larger businesses. Components that are manufactured relate to various phases of the auto value chain from upstream manufacturing of casts, to downstream trimming (merSETA Supply and Demand Study, 2018). The components manufacturing sub-sector is one of the key sub-sectors in South Africa's reindustrialisation and localisation efforts.

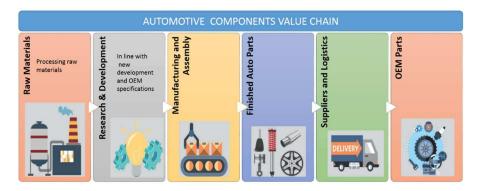


Figure 8: Auto component manufacturing value chain

## Motor Retail & Aftermarket Chamber

The motor retail sector is a key part of the automotive sector. It is this sector that is responsible for the retail sale, maintenance and repair of motor vehicles, parts and accessories. The Motor Retail value chain is presented below in Figure 9.

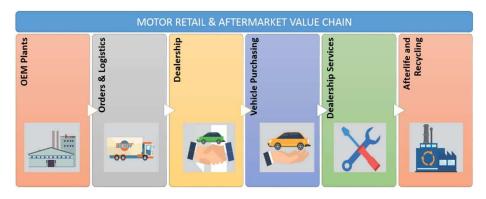


Figure 9: Motor retail and aftermarket value chain

## **1.3 KEY ROLE PLAYERS**

The key role players in skills development for the mer sector comprise government, industry bodies, organised employers, labour unions and civil society. Education and training institutions are the key mechanism through which skills are provided to the sector in partnership with these key role players. In addition, the merSETA has recognised the importance of the social economy in its scope of coverage as organisations in these sectors contribute to the labour market and the economic fabric of society such as cooperatives, non-governmental organisations, mutual benefit societies and social enterprises. All these role players have a critical role to play in building an integrated PSET system that is responsive to the needs of employees, employers and national priorities. This is core to the implementation of the NSDP.

The diverse skills development needs of the South African economy requires a well-coordinated and integrated post school system. This system should also be inclusive, and is shaped by 3 key policy documents adopted for the skills development sector. These are the NPPSET (2019-2030), the White paper on Post School Education and Training (WPPSE) and the National Skills Development Plan (NSDP).

The NNPSET, which derives its mandate from the WPPSET is a roadmap for the development and strengthening of post-education and training from 2019-2030. The plan acknowledges that we do not have adequate and diverse education opportunities for all those who leave school (on completion of grade 12 or earlier). Therefore, the central importance of the plan is the recognition that more post school opportunities are needed outside the higher education sub-system. The NPPSET focuses on education in high demand that are needed for economic growth, will provide opportunities for employment of large numbers of people and support social development priorities. Therefore PSET system must work collaboratively across all platforms to ensure that the labour market and the economic trajectory of the country is monitored such that relevant education and training interventions can be implemented. Taking this into account, the NSDP tasks SETAs with:

- Understanding the demand and signalling the implications for supply;
- Steering the system to respond to skills supply;
- Supporting the development of the intuitional capacity of public and private education and training institutions.
- Performing system support functions and managing the budgets and expenditures linked to the SETA mandate.

The role players highlighted below work together within the PSET system to enable the merSETA to achieve its mandate, they all play and integral part in the supply of relevant skills into the labour market and through the partnerships approach adopted by the merSETA to ensure the outcomes of the NNPSET, WPPSET and NSDP are brought to fruition.

ORGANISATION TYPE	NAME OF ORGANISATION	ROLE		
	Department of Higher Education and Training (DHET)			
	Department of Trade and Industry (DTI)	Government's role is to ensure adequate policies and legislatio		
Government	Department of Science and Technology (DST)	are in place to facilitate sustainable economic development as well as address social issues.		
Departments	Department of Environmental Affairs (DEA)	These institutions drive national priorities and skills development		
	Department of Planning, Monitoring & Evaluation	should be rolled out in support of the national vision.		
	Department of Small Business Development			
	Higher Education and Training Institutions	These training institutions are responsible for skills provision to		
Education and	TVET Colleges	the labour market. They are the key delivery mechanisms for a		
Training Institutions	Community Education and Training Colleges	differentiated PSET system and should be supported to provide skills to support economic growth.		
	The Steel and Engineering Industries Federation of			
	Southern Africa (SEIFSA)			
Employer Organisations	Automobile Manufacturers Employers Organisation (AMEO)			
	Retail Motor Industry Organisation (RMI)	Employer organisations represent members in collective		
	National Association of Automobile Manufacturers	bargaining, data and information gathering and skills		
	(NAAMSA)	development.		
	National Association of Automotive Component and Allied Manufacturers (NAACAM)	In line with many of the national priorities, these organisations are important for the regulation of the sector as well as ensuring		
	Automotive Industry Export Council (AIEC)	the interests of employers and workers.		
	The South African Tyre Manufacturers Conference			
	(SATMC)			
	Plastics South Africa (PlasticsSA)			
Professional Organisations Engineering Council of South Africa (ECSA)		Its core functions are the accreditation of engineering programmes, registration of persons as professionals in specified categories, and the regulation of the practice of registered persons. Professional organisations ensure that professionals are of a high quality and that their skills are up to date and relevant.		
	National Bargaining Forum (NBF)	The Labour Relations Act provides for the self requiretien of		
Barra ini a Garra ila	Metal and Engineering Industries Bargaining Council (MIEBC)	The Labour Relations Act provides for the self-regulation of industries through the medium of Bargaining Councils. Bargaining Councils deal with collective agreements, solve labour disputes,		
Bargaining Councils	Motor Industry Bargaining Council (MIBCO)	establish various schemes and make proposals on labour policies		
	Bargaining Council for the New Tyre Manufacturing Industry	and laws (DoL, 2016).		
Labour Organisations	National Union of Metalworkers South Africa (NUMSA)			

#### Table 1: Key Role Players in PSET

ORGANISATION TYPE	NAME OF ORGANISATION	ROLE		
	Chemical Energy Paper Printing Wood and Allied workers Union (CEPPWAWU)			
	Metal and Electrical Workers Union of South Africa (MEWUSA)	Unions play a significant role in advocating and fighting for worker's rights, skills development and improving conditions of		
	Solidarity	employment and advocating for transformation among other		
	LIMUSA (Metal Workers Trade Union)	things.		
	United Association of South Africa (UASA)			
	Motor Industry Staff Association (MISA)			
	Non-governmental Institutions (NGOs)	These organisations play a significant role in communities and		
Civil Society	Community Based Organisations (CBOs)	assist the state in terms of providing services required by the		
civil society	Faith Based Organisations (FBOs)	community. These organisations are partners for skills development within communities.		

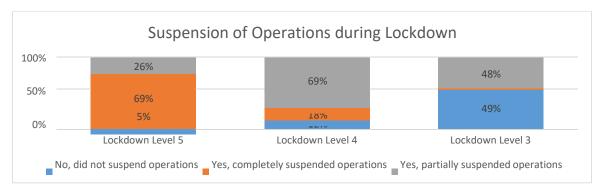
The key role players identified above play a critical part in realising the outcomes of the NSDP (Government Gazette, 2019). Many of the organisations are partners with the merSETA in ensuring that skills are improved, there is adequate career awareness, there are links between education and the workplace, workers embark on lifelong learning and that there are opportunities to support entrepreneurship and cooperative development through skills development. A critical component of the NSDP is the need for community development through the community college system and not for profit civil society organisations and social change entities. The social economy is integral to community development, fostering social cohesion, inclusion and solidarity (National Social Economy, Draft Green Paper, 2019). Compared with other countries, South Africa has a relatively low skilled workforce, with a smaller proportion of the community achieving a secondary level education. Statistics show that those with little education are more likely to unemployed than their more highly skilled counterparts (OECD, 2019). With the onset of the COVID-19 pandemic, many companies in the mer sector have either shut down or have had to retrench workers or reduce the incomes of workers (merSETA data, 2020). This means that unemployment levels will increase even further, particularly among those with lower skills levels. The OECD (2019) have lamented the fact that there exist very few opportunities for adults to attain additional skills through formal education and training or through the skills levy system. To this end the role of community colleges becomes ever more important to support those in the informal and social economies. The role of civil society and the community colleges will require additional focus and support to assist with skills interventions in a post COVID-19 economy.

#### **1.4 ECONOMIC PERFORMANCE**

Following a decade of economic weakness, there were positive signs that the 2019/20 South African economy had begun to gain lost ground. This came in the form of policy inertia and uncertainty previously constraining investment and confidence had begun to lift. After shrinking sharply in Q1 of 2019, the economy rebounded from a low base to record positive growth of 3.1% in the second quarter. The medium-term outlook for the South African economy is subdued, supported by a gradual improvement in confidence, more effective public infrastructure spending and a better commodity price outlook than previously assumed (National Treasury, 2019). However any positive momentum generated in the early part of the year has been over shadowed by the COVID-19 pandemic, and the forced lockdown by the South African Government, leaving millions with a restricted earning capacity. According to the Stats SA business impact survey of the COVID-19 pandemic, the manufacturing sector has been significantly impacted as a result of the lockdown restrictions. Out of 279 manufacturing companies responding to the survey (between 30 March and 30 April 2020) 48.4% were temporarily closed, 6,1% permanently closed, 36,9% continued to partially operate and only 8,6% continued to operate at full capacity. With regard to manufacturing turnover in the same period (30 March – 30

April 2020) 91.7% indicated a below normal turnover, while 6.1% had a normal turnover and only 2,2% recorded an above normal turnover for this period.(Stats SA, 2020).

The survey administered by the merSETA in June 2020 has demonstrated similar results in terms of the impact of COVID-19 lockdown restrictions. The sample comprised of 530 respondents operating within the mer sectors. Initially, operations were completely suspended during lockdown level 1 with operations returning to mostly only partial suspension during lockdown level 3.

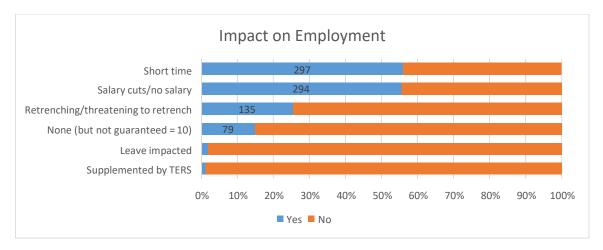




With regard to South Africa's economic outlook for 2020, the Moody's rating agency recently cut its forecast for our economy to a 6.5% contraction in fiscal 2020, saying the country's R500 billion rescue package will weaken its public finances and constrain government's ability to provide support to state-owned firms. With the impact of the weak economy on revenue, the ratings agency now expects the government to record a budget deficit of 13.5% of GDP in fiscal year 2020 (Money Web, 2020). Based on these concerns and predictions Moody's has finally dropped South Africato sub-investment grade at Ba1. "This new Ba1 rating reflects downside risks to economic growth and fiscal metrics, that could lead to an even more rapid and sizeable increase in the debt burden, further lowering debt affordability and potentially weakening South Africa's access to funding (Investec, 2020)."

The second survey conducted by StatsSA on the impact of the COVID-19 pandemic on the indicator "access to financial resources", 38.3% indicated a decrease in access to financial resources 37.7% indicated access to financial resources remaining the same, and 30% of businesses indicated they had applied for financial assistance using government relief schemes. Twenty while nine point seven percent indicated they can survive less than a month without any turnover, while 55.3% can survive between one and three months, with 61.9% indicating that they are not confident their businesses have the financial resources to continue operating throughout the COVID 19 pandemic. Key workforce indicators were: that most companies had laid off staff to cope with COVID 19 in the short term, and most were expecting to decrease their workforce size, the highest decrease being in enterprises with less than 10 employees (48%), followed by those with 10 to 49 employees (33%) and those with 50 to 249 employees (10%).

Results from the merSETA survey however indicated that the biggest impact on employment was workers being placed on short time and salary cuts. About a quarter of the sample indicated that they have either retrenched or are considering retrenchment of workers due to the financial strain brought on by the COVID-19 pandemic.



## Figure 11: COVID-19 Impact on Employment

Overall it would seem that the financial impact of the pandemic has been the highest concern for most businesses, however they tend to place workers on short time and cut salaries rather than to let go of workers through retrenchments.

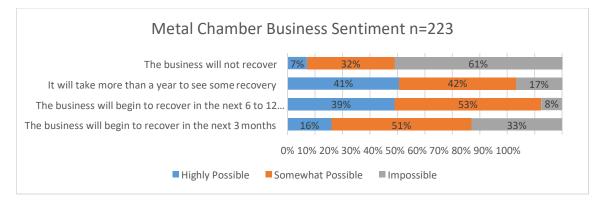
## 1.4.1 Economic Performance by Sector

In the next sub-sections, we explore the economic performance of the mer sectors under the merSETA scope of coverage.

## 1.4.1.1 Metals Sector

The metals sector is arguably the most well-developed and largest manufacturing sector in South Africa, representing roughly a third of the overall manufacturing of the country (DTI, 2019), and contributes close to 30% of the manufacturing GDP. In the recent years, the metals sector has experienced a consistent decline largely due to challenges that include: high volatility in production, lack of new investment and poor fixed-capital stock, an increasing share of imported intermediate inputs, a high imports-domestic demand ratio and high dependency on exports, as well as high interdependence with the mining, construction and automotive industries (SEIFSA, 2019).

The Steel and Engineering Industries Federation of Southern Africa (SEIFSA) has noted the devastating decline in the manufacturing sector stating that of the -16.3% deceleration, 36.6% was made up of a deceleration in the sub-components of the metals and engineering sector (SEIFSA, 2020). This comes on the back of increasing operational costs and a fluctuating exchange rate. Most, if not all businesses are in survival mode, concentrating efforts on their immediate needs rather than the needs of the broader sector (SEIFSA, 2020). The overall sentiment in the sector seems somewhat negative. Consultative workshops in the sector, while not well attended echoed this negativity with the emphasis on the fact that firms are just trying to survive and focus on production. The merSETA survey reflects a mix of sentiment across the sector with around 40% indicating that the sector could recover in a year or more. A third of firms indicated that there is a possibility that they will not recover however the large proportions of firms indicating that there is a somewhat possibility of recovery indicates an uncertainty during this time.





In this tumultuous time, the sector has welcomed the ruling by the high court in favour the DTIC (Department of Trade, Industry and Competition) on the matter of localisation by supressing the imports of certain designated products which will spur local production. The sector is however, discouraged by a slowdown in the Producer Price Index (PPI) for intermediate manufactured goods, a proxy for selling price inflation in the Metals and Engineering (M&E). This does not seem like good news for beleaguered businesses in the Metal and Engineering cluster of industries, especially against the backdrop of increased volatility in imported input prices. Statistics SA data shows that on a year-on-year basis, the PPI for intermediate manufactured goods slowed from 1.9 % in August 2019 to 0.5 percent in September 2019. Correspondingly, the PPI for final manufactured goods for the broader manufacturing sector also registered a slowdown of 4.1 % year-on-year in September 2019. This slowdown in the PPI for intermediate manufactured goods prevents businesses from leveraging on the improvements in trading opportunities (SEIFSA, 2019).

The local Metal and Engineering environment has been tough for local businesses, caused by a relatively stagnant demand, rising materials prices, increasing input costs (including electricity costs), oscillating political will and a generally downward revision of real GDP growth prognostic since 2018. As a result, companies in the broader manufacturing sector and its diverse Metals and Engineering (M&E) industry are finding it increasingly difficult to stay competitive, which is reflected in the monthly economic data such as the producer price index, the business expectation index and the Absa purchasing managers' index (PMI), which has largely been in the stagnation since December 2018.

The sector exported R259 billion's worth of output in 2019 (a decrease of R8 billion from 2018) and imported R378 billion's worth of products (an increase of R8 billion), resulting in an expanded trade deficit of R118 billion (State of Metals and Engineering Sector 2020-21, 2020).

The continuous influx of imported steel into the domestic economy remains a great concern for companies operating in the metals and engineering sector, in spite of a relative reduction in import volumes, owing to the protection measures for the upstream steel industry announced by the Government, import penetration remains a cause for concern. Although the establishment, through interest rate subsidy, of a R1.5 billion downstream steel industry competitiveness fund over three years has relieved some pressure from a number of structural factors (SEIFSA, 2019).

Steel production dipped and domestic consumption was generally low over lockdown levels 5 to 3, while administered prices of raw materials have steadily been increasing (Steel and Engineering Industries Federation of Southern Africa (SEIFSA). The South African steel industry "suffers from structural problems" that existed before COVID-19, with "a slow and gradual degradation of the

country's economic environment" making the local steel industry increasingly uncompetitive (Engineering News, 2020).

The current state of the steel industry calls local policymakers and decision makers to promote the concept of buying local and encouraging all State-owned businesses to adhere to using products and inputs designated for local production. Given the COVID-19 context and existing challenges facing companies in the local steel value chain, there is clearly a need to rethink relevant policy measures in the steel industry in line with the 'new normal (Engineering News, 2020).

## 1.4.1.2 Plastics Sector

The plastics sector has come under heavy criticism lately due to the negative effects waste plastics have had on the environment. The world seems to be advocating for a "life without plastics". It is specifically single use plastic products that are seen as the major contributor to the negative environmental impact (News24, 2019). South Africa has also seen this culture being implemented in many of its major shopping malls opting for "plastic free" bags (PlasticsSA, 2019). In light of this drive to reduce the effects of plastics, Japan and South Africa signed an agreement (August 2019) to fund a plastic recycling initiative termed MARINE (Management of waste, Recovery of marine litter, Innovation and Empowerment). This initiative forms part of a larger Osaka Blue Vision, which seeks to reduce ocean plastic litter to zero by 2050 (PlasticsSA, 2019).

Plastics South Africa has emphasised the need for government to become more involved in the implementation of proper waste management strategies. In addition the sector has embraced the circular economy, producing products with a strategy for recycling, repurposing and up cycling (design for recycling). The sector body Plastics SA believes that working in partnership with government, producers and retailers, new technologies can be put in place to change behaviours and reduce the impact that plastics has had on the environment. This in turn also produces the opportunity to develop new skills for new opportunities in the sector. Efforts put in to the recycling campaign have seen South Africa surpass the recycling rate of Europe. These efforts have resulted in work for 58 100 workers comprising waste pickers, entrepreneurial collectors and other formal jobs (Plastics SA, 2019). The sector has really rallied behind finding sustainable solutions to mitigate the problems and also promote the responsible use of plastics for the good of the economy.

Challenges experienced by the sector include the lack of advanced manufacturing practices and the slow technological upgrading, skills shortages and the lack of downstream focus on R&D efforts. The industry needs to focus its attention to the newly emphasised "circular economy" which should become the plastics industry's new roadmap to sustainable growth (merSETA Supply and Demand Study, 2018). Previously sustainability growth was limited to recycling waste and its methods, however with a circular economy emphasis, the focus is on adapting products and processes before plastic even becomes waste.

Furthermore, the competitiveness of the local industry has been negatively impacted by factors such as the impact of the COVID-19 pandemic, cost of polymers, proximity to markets, relatively small local and regional market, and electricity pricing as well as inland location of production facilities in the case of exports. The competitive landscape is also changing dramatically with international players establishing themselves in the South African market (as is evidenced by the disposal of Astrapak to RPC plc, Boxmore to Alpla, and Nampak Flexibles to Amcor and Afripack to Constantia Flexibles). Therefore, a number of local players are now looking to position and strengthen themselves as this situation is expected to continue.

Since the COVID-19 pandemic, the plastics manufacturing industry has seen a dramatic increase in demand for products across the sector. During the lockdown period it was essential to have workers in their manufacturing facilities in order to maintain an uninterrupted supply of products. Business sentiment in the sector seems positive with about half of respondents indicating that the sector could recover in 6 to 12 months (figure 13). Consultation with the sector has revealed that whist the portion of the sector that is producing PPEs is doing extremely well, this is only over the short term to medium term. The packaging sector is doing well, similarly, the bottling sector (consumer products and drinks) is doing well due to the ban on alcohol sales and a shift in demand to soft drinks. The sector that has been producing throughout the lockdown period. Plastic piping, which is closely linked to the construction industry is under severe pressure and also subject to retrenchments, lay-offs and short time. The recycling value chain is negatively affected and will not recover this year.





The plastics industry provides employment to an estimated 60 000 workers, only some of them have jobs that allow them to work from home. Manufacturers of basic and essential plastic packaging, hygiene and health products needed a steady supply of raw materials during the lockdown, which saw many complimentary industries operating over the lockdown period. Special care was taken to ensure they produce their products in a hygienic environment and that their workers are also protected from possible COVID-19 infections (Southern African Polymer Technology, 2020)

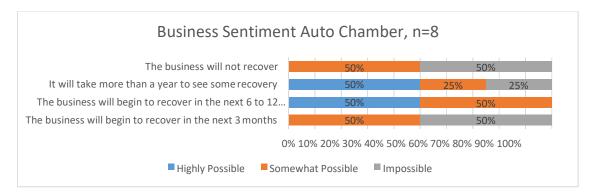
Some of the products plastic manufacturers are capable of producing to assist in the fight against the COVID-19 pandemic, include ventilators, face masks, various equipment for healthcare workers, containers and bottles for hand sanitizers and soaps, infection control bags, clinical waste bins, antiinfection soluble laundry bags, and polythene sheeting. This does create opportunity for plastic manufacturers in our weakening economy (Plastics SA, 2020)

## 1.4.1.3 Automotive Sector

The automotive industry contributes around 6.4% to GDP, comprising 4.0% manufacturing and 2.4% retail (Automotive Export Manual, 2020). In 2019, the industry recorded investments of R7.3 billion by the seven OEMs with further commitments of R40 billion up to 2025. The industry accounts for 29.9% of the country's manufacturing output and 14.3% of South Africa's total exports (Automobil, November 2019).

The impact of COVID-19 has had devastating effects on the entire automotive value chain. In the second quarter of 2020, new car sales decreased by 64.8% compared to the same time period in 2019 (NAAMSA, 2020). In terms of employment, the sector shed just under 500 jobs to record a total of

around 25 900 positions. The lockdown measures instituted had a negative effect on the industry both locally and globally. While there have been predictions that the sector should see recovery in the second half of 2020, there have been predictions that could drop to the same levels seen 20 years ago (NAACAM, 2020). This view is supported by the findings of the merSETA COVID-19 firm survey. Overall the sentiment across the OEMs that submitted information was that it would take up to a year or more to see some recovery in the sector (figure 14), in the consultative workshops, employers felt that it would take around 2 years to recover to pre-COVID-19 conditions.



## Figure 14: COVID-19 Auto Chamber Business Sentiment

NAAMSA announced that in March 2020, the domestic new vehicle sales declined sharply by 29,7% and total vehicle exports were also negatively affected with a decrease of 21,5%, compared to the corresponding period last year (March 2019). The effects of COVID-19 are further compounded by persistent and recessionary pressures our economy in the recent past. During current COVID-19 uncertainties production investment initiatives activities have been halted.

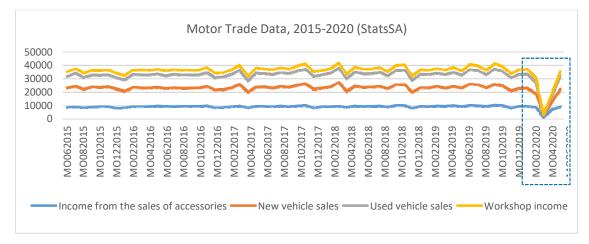
Even though all steel-using sectors are affected by the lockdown measures, the mechanical machinery and automotive sectors are highly exposed to a prolonged demand shock, as well as to disruption in global supply chains (Automotive Industry Development Centre (AIDC, 2020). Taking into account anticipated 6.1% decline in South Africa's economic growth owing to the COVID-19 pandemic, new vehicle sales will probably fall by 20% and 23% in 2020. Local vehicle production will probably track this decline (Engineering News, 2020)

According to Engineering News (2020) government's assistance is required. Currently South Africa's Automotive Masterplan, as governed and incentivised in the Automotive Production and Development Programme, aims to boost growth and create jobs by more than doubling yearly vehicle production to 1.4-million vehicles by 2035, and to increase locally manufactured components content on these vehicles from the current 39% to 60%. However, currently OEMs and components manufacturers will this year "likely not be able to adhere to the manufacturing and employment requirements to qualify for certain incentives".

## 1.4.1.4 Motor Retail and Aftermarket Chamber

The motor retail and aftermarket sector is a large employer in South Africa, employing around 360 000 people (QES – motor trade, 2018). According to the StatsSA motor trade sales data, sales decreased 49.1% in the second quarter of 2020 when compared to 2019. Sale of new vehicles reduced by over 50% contributing 15.7% to overall reduction, used vehicle sales fell by 51% contributing 9% points and accessory sales fell by 40% contributing 6.8% points. The COVID-19 pandemic has negatively affected the motor retail and after market sectors. The lockdown period has fundamentally altered consumer behaviour with respect to driving and maintenance of vehicles. With the economy having ground to a

halt under lockdown level 5, the demand for motor retail and after sale services also slowed significantly. Profit margins among motor vehicle dealerships is low in comparison to turnover, with margins reported at 1.5 to 2% of turnover. The figure below demonstrates that across the trade activities, there was an increase between January and February 2020 and a dramatic decline between March and April, with recovery seen in the last two months under reduced lockdown restrictions.



#### Figure 15: Motor Trade Data 2015 - 2020

Consumer woes due to rising fuel prices and the overall sluggish economy has increased. Adding to this the current impact of the COVID-19 pandemic and reduced economic activity have had a significant impact of the motor retail and after sales services. Those who opt to purchase motor vehicles are tending to buy used vehicles. In addition, the sector has seen a change in consumer behaviour with respect to vehicle maintenance –they tend to utilise informal workshops due torising costs and this informal or home-based industry has been on a steady incline.

In consultation with the sector, it seems that larger companies have had to lay-off workers or retrench due loss of revenue. It is estimated that formal employment is down by 20% - 30% and to date about 25 dealerships either closed or merged with other dealerships.

It is foreseen that the recovery in the economy will be slow and that it will take 18 months to two years to return to pre-COVID-19 activity levels. This slow turnaround may result in the need to reskill workers in different areas. According to the merSETA COVID-19 survey, these sentiments were echoed with a high proportion of firms estimating that it will take more than a year to recover (figure below).

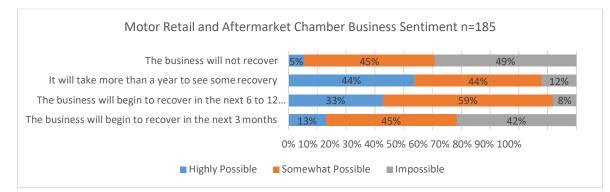


Figure 16: COVID-19 Motor Retail and Aftermarket Chamber Business Sentiment

The Chamber intimated that the transport sector will see permanent changes due to COVID-19, these include:

- Sales of vehicles to increasingly take place online IT skills and systems are important;
- New sales customers are buying down (cheaper entry-vehicles due to lack of cash flow and aversion to debt during the pandemic);
- New first-time buyers in the smaller vehicle market in an effort to avoid using public transport and become susceptible to COVID-19; and
- Growth in mobile businesses and the need to have connectivity on the move.

Furthermore, the Chamber highlighted that businesses will struggle to adapt to changes and the sector will see a lot of diversification and consolidation in the market.

Two positive developments were recorded by the Chamber. Firstly, workshops and service centres at dealerships have resumed to operating at near full capacity. This is most likely due to pent-up demand during lockdown and could taper off in the short term. Despite a reduction in sales, owners have been servicing their vehicles. Similarly, auto body repairs also saw an increase in demand due to relaxed lockdown restrictions but this upsurge tapered off quickly.

In addition, the Chamber postulates that small businesses (especially those that have been in existence for more than two years) are resilient and agile – they have the ability to adapt and survive even in difficult times. They have smaller wage bills are more versatile and innovative.

## 1.4.1.5 Automotive Components Manufacturing

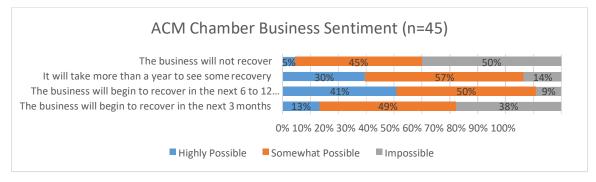
The automotive components manufacturing sector in South Africa is well established but has room to grow. The sector benefits from governments support for local manufacturing through the SAAM (South African Automotive Masterplan) which aims to develop the industry by 2035. The automotive value chain accounts for a substantial proportion of total manufacturing. Around 30% of value addition in the local manufacturing sector is derived from the vehicle assembly and automotive components manufacturing value chain (NAACAM, 2018). The Automotive Components Manufacturers (ACMs) provide a wide range of parts such as catalytic converters and exhaust systems, trim, harnesses, electronics, just-in-time assemblies, bearings, shocks, filters, plugs, machined and plastic components, tyres, and toughened glass to the OEMs as well as the export market. According to NAACAM (2018), vehicles and components are exported to over 155 international markets.

The expansion of South Africa's car manufacturing industry is central to government's economic development strategy but the COVID-19 crisis has forced car makers into survival mode and could push ambitious growth plans of the South African Automotive Masterplan out of reach. According to (Independent Online, 2020) National Association of Automobile Manufacturers South Africa (NAAMSA) indicated that the overseas headquarters of some local component manufacturers were possibly looking to shift production to factories outside South Africa, if they thought the need arises due to the restrictions of the lockdown on manufacturers. Looking at new vehicle sales for May 2020 still reflects a substantial decline of 27 496 units or 68,0% from the 40 428 vehicles sold in May last year compared to the aggregate domestic sales of 12 932 units in May 2020, this was a noteworthy improvement from the April 2020 performance. Although export sales, at 10 819 units, also registered a big fall of 19 333 units or a decline of 64,1% compared to the 30 152 vehicles exported in May last year, is an improvement on April 2020 considering that many of the vehicle manufacturers commenced production in June 2020 (NAAMSA, 2020).

In consultation with sector representative, it was established that that the industry is currently operating at 50% capacity or lower with short-time across the sector. Labour unions have also

indicated that there are retrenchments planned but the extent of these were not clear. This comes on the back of changed production requirements from OEMs and force majeure being invoked, leading to shedding jobs<sup>1</sup>. Substantial rationalisation of staffing levels is likely in the next 6 months.

A very long recovery period is expected to before the sector will return to 2019 levels. It was indicated that international sentiment is that it may take up to 15 years for recovery; however the sector consensus is that it will take three to five years. The sentiment as reflected in the COVID-19 survey indicates relative uncertainty with most respondents indicating a somewhat possibility of recovery across all time periods, a third indicating highly possible recovery in more than a year and 40% indicating recovery in less than 12 months.





Key challenges arise around volatility of the market. Orders status are changing rapidly with short response times to meet demand levels, making it difficult to make long-term decisions - this results in knee-jerk reaction from the sub-sector (with stop-start operations) which makes resource (especially human resource) planning very difficult and negatively impact on training.

## 1.4.1.6 New Tyre Sector

South Africa's four tyre manufacturing firms, Bridgestone, Continental, Sumitomo and Goodyear are global brands and therefore have a substantive footprint. These companies however feed directly into the automotive value chain and changes in that industry impacts on the tyre sector too. Since the lockdown period started, there has been less of a demand for new tyres as people are not on the move and there has been sizeable decrease in demand for tyres from the OEMs with that sector recording contraction figures between 25 to 40 percent (Engineering News, 2020). According to Sumitomo Dunlop CEO, Riaz Haffejee, the sector could see recover in as little as 6 months to a longer time period of 5 years. Accordingly, consultation with the New Tyre Chamber as well as the COVID-19 survey suggests that the sector will see recovery in 6 months to a year (n=8).

Besides the COVID-19 pandemic, the sale of illegal reused tyres is on the increase, creating a disruption in the market. The local tyre manufacturing industry must compete with 200 importers of tyres of various brands, many of which are not compliant with regulation. The number of not fit-for-use tyres has been on the increase as a survey conducted in 2014 recorded that 47% of second-hand tyres were

<sup>&</sup>lt;sup>1</sup> where retrenchment is a form of dismissal due to no fault of the employee. It is a process whereby the employer reviews its business needs in order to increase profits or limit losses, which leads to reducing its employees. The employer must give fair reasons for making the decision to retrench and follow a fair procedure when making such a decision or the retrenchment may be considered unfair.

not fit-for-use. In 2019 this study was repeated and statistics reveal currently 61% of second-hand tyres sold are not fit-for-use. This could potentially increase the number of accidents on our roads endangering the lives of our citizens (Engineering News, 2019).

## 1.5 EMPLOYER PROFILE

WSP data collected up to the end of July 2020 yielded 6566 respondent enterprises. These include levy exempt companies, entities that operate as training providers, non-profit organisations, universities and TVET colleges and other training providers as well as entities that do not belong to the mer sector. Entities that are either unknown or operate outside of the mer sector have been removed the analysis. The final sample includes 5070 companies and 536164 employees.

The sample represents a majority of levy paying employers. Where possible, companies have been manually assigned into the appropriate chamber based on their main business activity.

The mer sector comprises a majority of small enterprises with 3 243 small enterprises that employ 71 727 employees. The majority of employees (363 838) are employed by only 650 large enterprises and 1 177 medium enterprises that employ 100 604 employees.

In terms of the chamber breakdown of enterprises and employees, the figure below shows that the Auto chamber comprises 11 large companies made up of the 7 auto manufacturing OEMs as well as bus and truck OEMs. Typically the New Tyre Chamber comprises the 4 large tyre manufacturers, in the sample this year there were many rubber products manufacturers and therefore the chamber accounts for 64 companies<sup>2</sup>.

The Metals Chamber is the largest employer in the mer sector and accounts for more than 50% of all large companies across all the Chambers, it also accounts for the majority of small and medium enterprises. After the Metals Chamber, the Motor Retail and Aftermarket Chamber accounts for 117 large, 315 medium and 1137 small companies, they are the second largest employer. The Automotive Components Manufacturing Chamber is a newly established chamber and accounts for 497 companies and around 55 000 employees.

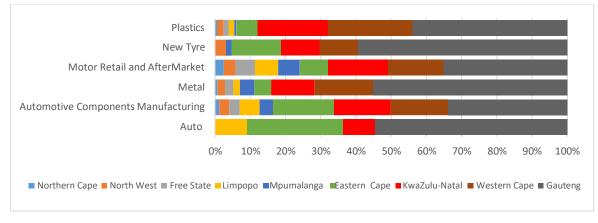
Chamber	Large Enterprises	Employees	Medium Enterprises	Employees	Small Enterprises	Employees	Total Enterprises	Total employees
Auto	11	22371					11	22371
Automotive Components Manufacturing	79	40792	86	7943	332	5939	497	54674
Metal	358	189472	637	54412	1604	36908	2599	280792
Motor Retail and After Market	117	78684	315	25856	1137	24339	1569	128879
New Tyre	13	7234	19	1915	32	840	64	9989
Plastics	72	25285	120	10475	138	3699	330	39459
Grand Total	650	363838	1177	100601	3243	71725	5070	536164

Table 2. Enter	nrisa siza h	v chamher a	nd employees
Table 2. Enter	prise size d	y chamber a	nu employees

<sup>&</sup>lt;sup>2</sup> Consultation with the Chamber indicated that the 4 tyre manufacturers are the only companies that make up the Chamber, however the SIC code assigned to the merSETA refers to rubber products – thus the additional 60 companies and the actual scope of coverage must be further investigated.

#### **Provincial Distribution of merSETA Companies**

In terms of the provincial distribution of the companies within the merSETA five Chambers as seen in Figure 18, most are concentrated in Gauteng, the Western Cape, KwaZulu-Natal and the Eastern Cape. The metal sector also has a footprint in the Northern Cape and Mpumalanga. The Motor Retail sector shows a footprint in all other provinces as do the other sectors, but to a lesser degree. The Auto Chamber has a limited footprint with its OEMs situated in the Eastern Cape, KwaZulu-Natal and Gauteng.





## 1.6 LABOUR MARKET PROFILE

In total, the WSP data accounts for about 536 164 employees with 68% of workers working in large companies and 19% working in medium-sized companies, small companies only account for 13% of total employment as per the 2020 WSP data.<sup>3</sup> The statistics based on the WSP data are therefore representative of the designated companies who participate in the merSETA mandatory grant process.

#### **1.6.1** Provincial Distribution of Employees

The geographical distribution of employees is likely to follow the geographical distribution of the sector as a whole, with employment concentrated in Gauteng, KwaZulu-Natal, the Western Cape and Eastern Cape. These provinces account for 90% of all employees in the sector.

Province	Employees	%
Gauteng	311065	58%
KwaZulu-Natal	71821	13%
Western Cape	57792	11%
Eastern Cape	41923	8%
Mpumalanga	18931	4%
Limpopo	13479	3%
Free State	10448	2%
North West	7985	1%
Northern Cape	2720	1%
Grand Total	536164	100%

#### Table 3: merSETA Provincial Distribution of Employees (WSP data, 2019)

#### 1.6.2 Workforce by Occupational Category and Chamber

<sup>&</sup>lt;sup>3</sup> While the validity and reliability of the reported data in the WSP is viewed by some with speculation, this data set is by far the most detailed sector based data available to the labour market.

The majority of employees in the mer sector are trades workers or operators (40%), and significantly 18% find themselves in elementary occupations. In the new tyre and plastics sectors, just short of 60% of workers are at this level. Managers, sales workers and professionals are the smallest categories respectively.

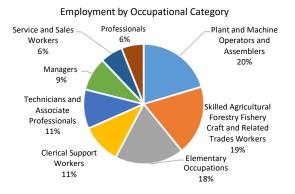
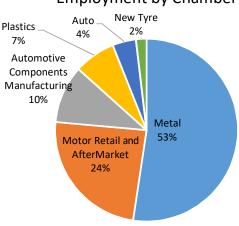
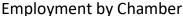


Figure 19: Employment by Occupational Category

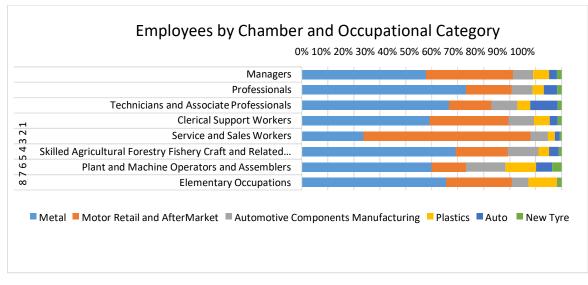
The metal chamber accounts for around half of all employees in the sector. Motor Retail and Aftermarket accounts for about a quarter of employees followed by automotive components manufacturing at 10%. Plastics, Auto and New Tyre chambers respectively account for 7%, 4% and 2% of employees.





#### Figure 20: Employment by Chamber

The figure below shows employees by chamber and occupational category. The metal sector, being the largest accounts for the majority of occupations across all the chambers barring service and sales workers who are predominately employed in the Motor Retail and After Sales Chamber.



## Figure 21: Categories of employees by Chamber (merSETA WSP, 2020)

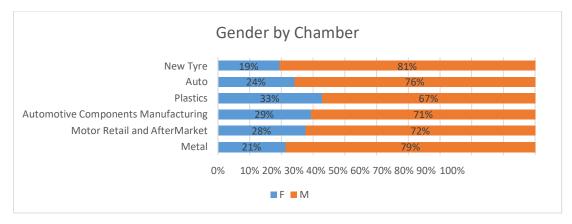
If we look at the data slightly differently, in the table below, we see that the majority of Chambers have employees at occupational levels below service and sales workers with a higher concentration at operator and elementary level. Only the Auto Chamber has around 30% of workers at technician level. Most employees across all the Chambers are involved in the production process on the shop floor.

Occupational category	Metal	Motor Retail & After Market	Automotive Components	Plastics	Auto	New Tyre	Grand Total
Managers	8%	13%	7%	8%	7%	9%	9%
Professionals	7%	4%	5%	4%	7%	6%	6%
Technicians and Associate Professionals Clerical Support Workers	11% 10%	7% 13%	10% 10%	7% 9%	27% 8%	9% 9%	11% 11%
Service and Sales Workers	3%	16%	4%	2%	2%	3%	6%
Skilled Agricultural Forestry Fishery Craft and Related Trades Workers	21%	16%	22%	10%	17%	11%	19%
Plant and Machine Operators and Assemblers	19%	11%	30%	33%	31%	39%	20%
Elementary Occupations Total	20% 100%	19% 100%	12% <b>100%</b>	28% 100%	1% <b>100%</b>	15% 100%	19% 100%

#### Table 4: Employees by Occupational Category and Chamber

## 1.6.3 Race and Gender Distribution of Employees

Race and gender are important indicators of transformation in the sector. The mer sectors are male dominated with 75% males and 25% females represented. Last year we reported that in most sectors, the representation of women was less than 25%. This year however it seems that there have been improvements in female representation. The plastics chamber has a third of their workforce represented by women, followed by Automotive Components Manufacturing at 30% and Motor Retail at 28%. The Metal and New Tyre Chambers have lower representation of women.



#### Figure 22: Gender of Employees by Chamber

When considering the gender split in terms of occupational category, there is improved representation at occupational levels at sales worker and above. A third of professionals are women followed by 30% at technician level and 55% at clerical worker level. Women are least represented in the skilled trades (10%), an area that merSETA can work to improve on.

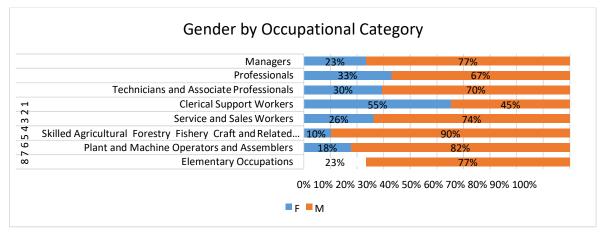


Figure 23: Gender Distribution of Employees According to Occupational Groups (merSETA WSP, 2020)

In terms of race, there has been no change in the composition of the workforce since the last SSP update. The sector does not reflect the demographics of the country, and does not seem to be moving in that direction. In South Africa, Black Africans represent 77% of the population, Whites, 9% and Black Coloured, 9% and Black Indian/Asian representing less than 3%. In the merSETA data, a total of 60% of merSETA employees are Black African, more than a fifth (22%) are white. Black Indians/Asians constitute 5%, while Black Coloureds constitute 13%. The sector thus demonstrates overrepresentation of White people with Black people underrepresented.

Table 5: Race Distribution of merse (A Employees (merse (A WSP, 2020)					
RACE	FREQUENCY	%			
Black African	321261	60%			
White	117889	22%			
Black Coloured	67120	13%			
Black Indian / Asian	28229	5%			
Grand Total	534499	100%			

Table 5: Race Distribution of merSETA Employees (merSETA WSP, 2020)

The data as reflected in the figure below, also reveals that transformation in the sector is slow with Black racial groups still occupying lower occupational categories. For managers, 61% are white, 20% Black African and 10% Indian/Asian. For professionals, the data show shows 43% White, 39% Black African and 9% Coloured and Indian/Asian. For technician, clerical workers and sales workers around 50% are Black African and around 30% are White with Coloured and Indian/Asian race groups accounting for the remaining 20%. Skilled craft workers comprise 62% Black African and 20% White, 14% Coloured and only 4% Indian/Asian. Operator and Elementary occupations are 80% Back African and only 5% White, very few Indian /Asians are represented (<3%) and around 15% are Coloured.

Transformation efforts have not yielded significant results in adjusting the top level occupations in favour of Black people, even the skilled trades have an overrepresentation of White workers. This could signify a lack of structural transformation in the economy with White people still able to access not only higher levels of education but also higher level occupations.

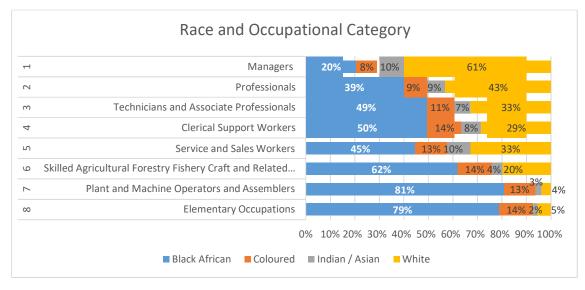


Figure 24: Racial Distribution of Employees by Occupational Group (merSETA WSP, 2020)

It would seem that equity constraints are not significant in the recruitment process because at the higher level, recruitment of white people is offset by the high volumes of Black people recruited at lower levels. The merSETA will have to review its transformation strategy in light of this and perhaps this requires more strategic partnerships in industry to promote diversity and transformation to ensure more women are represented as well as more Black Africans. Bursaries and skills development support initiatives should be scaled up in favour of women and Black race groups. Supply side challenges must be reviewed carefully in light of the strategy to enable access and the ability to meet minimum entry requirements for professional and management level programmes

## 1.6.4 Age Distribution of Employees

The majority of employees in the mer sector are aged between 26 and 45 years. The age profile of workers is different across the different occupational categories. Elementary workers represent a higher proportion of youth. As the categories increase workers are clustered around age 24 – 46. Occupational categories 1 to 5 do not have a pronounced apex – the curve is flatter, representing fewer individuals across older ages. Managers in particular demonstrates that there are more managers at higher ages, the majority falling between the ages of 35 to 55. This is due to the positive correlation between age, skill and experience.

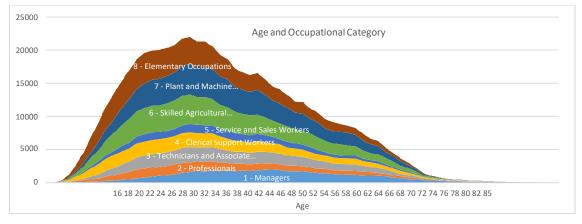


Figure 25: Age and Occupational Group of Employees (merSETA WSP, 2020)

There is a significant proportion of workers aged 50 to 62, these will exit the sector in the next 3 to 15 years. With the current pandemic, businesses who are considering laying off or retrenching workers may target these age cohorts, especially those with lower level occupations.

## 1.6.5 Disability

According to merSETA WSP data, merSETA organisations employ approximately 7479 disabled people which represents less than 2% of all employees.

In terms of type of disability, the majority are unspecified disabilities (45%) followed by physical and cognitive/intellectual disabilities.

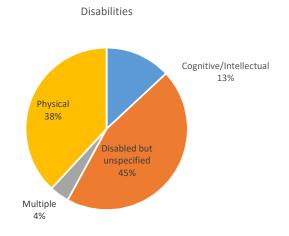
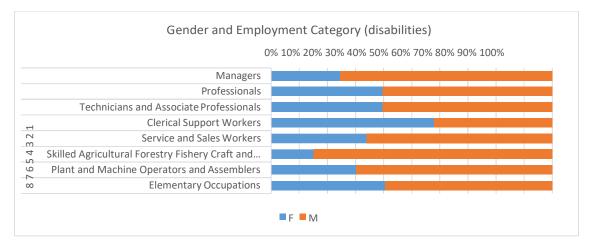


Figure 26 Employees with Disabilities by Type of disability (merSETA WSP, 2020)

More males with disability are employed in the sector (62%) and women represent 38% of workers with a disability. The majority of males with disability trades' workers and the majority of women are clerical workers.





According to primary research evidence from the merSETA, there are key challenges for persons with disabilities that ultimately results in high dropout rates and low completion of programmes. Additional support is needed to ensure success for disabled people on skills interventions. Intervention should be of high quality and suited to the needs of the individuals participating in the programmes.

#### **1.7** The Social Economy

The Social Economy is a people-centred approach to economic development based on the principles of sustainable economic activity that stimulates socially and environmentally responsible growth by leveraging and simultaneously building solidarity and social inclusion (Green paper, 2019). As part of the profile of its sector, the merSETA is cognisant of the social economy and the role played by enterprises in the small, medium and micro sector, the cooperatives sector and the informal sector. In these sectors we find marginalised people who tend to live in poverty and embark on activities for survival, the youth and women make up a substantial proportion of this sector. About one in every six people in South Africa finds themselves in the informal sector and the COVID-19 pandemic is set to increase this statistic.

In terms of the small and micro enterprise sector, primary research data suggests that enterprises span the spectrum of formal yet low scale to informal and survivalist. They are employers to a very small workforce and can be sole traders or have one or two employees. In the mer sector there is also a space in which entrepreneurs can be classified as leaders, creators and innovators, however they require special support to become successful.

Entrepreneurship and being entrepreneurial is something that has become synonymous with small business development and allowing people to access some sort of livelihood. Primary data from the merSETA youth diaries study has shown that youth have qualifications, skills and experience in the mer sectors yet they are unable to access formal employment or to formalise their businesses. Coupled with this is evidence that these enterprises are entrenched in the community through family and social networks, making the social economy a central issue in terms of support.

More than just training is needed, people in these sectors require access to information and funding. Many have expressed little knowledge of the merSETA and its programmes. An ecosystem approach is recommended which should include access finance, access to operational efficiency support, access to markets and entering value chains and access to training.

#### 1.8 Conclusion

Under the constraints of the COVID-19 pandemic, the mer sector is under immense strain, more so than previously reported in the 2019 financial year.

Global economic trends have proved to heighten the negative effects in the domestic market particularly in the metal sector. Efforts to reindustrialise will have to increase. In line with the NDP, NSDP and most government strategies, it is key to concentrate on localisation, to be considerate of the social economy and policies to improve the prospects of medium, small and microbusinesses. Plans and policies that were already on the table will have to be expedited, for example the Automotive Master Plan, support in terms of incubation hubs and bringing smaller components manufacturers up to par with international standards is key. Furthermore, workers who have been marginalised due to the negative effects of the pandemic will require support to re-enter the labour market through support mechanisms to access available opportunities, particularly in terms of self-employment.

Metal sector could benefit from policy reform to spur local demand. Global demand is largely affected by economic conditions and commodity prices. The sector must monitor international conditions and ensure that South Africa can benefit from international trade agreements, or adopt protective policies to stimulate the local economy across the manufacturing value chain.

Despite uncertainty around the employment brought on by the COVID-19 pandemic, the majority of companies in the sector have reported that they are optimistic about recovery in the next 6 to 12 months. As such workers should be supported to retain their jobs which despite the precariousness of the economy, short time and reduced salaries are something that will have to be monitored through the labour organisations. Given this situation, skills development support in terms of stipends for learners should be implemented. For those not in formal employment, there is a need to better understand the intricacies of the informal sector, looking at independent trades' workers, the youth and specific requirements of support. Entrepreneurship remains a key mechanism to support sustainable livelihoods.

New technologies and changing business practices are key drivers under the current context. It is essential that even workers in large companies should be able to remain viable in the market through lifelong learning and empowering themselves as the wold evolves to ever more precarious job roles.

Concerning is the fact that a significant number of workers in the sector operate at elementary and operator levels who will be particularly impacted due to the negative effects of the pandemic.

#### 2 KEY SKILLS CHANGE DRIVERS

#### 2.1 Introduction

This chapter highlights the key skills drivers which influence the demand and supply of skills across the mer sector, this in turn has implications for skills development. The key skills change drivers identified include reindustrialisation and localisation, new and emerging technologies, environmental sustainability, supporting the transformation and diversity agenda and changing customer needs and expectations. The chapter provides an overview of the key polices and strategies shaping skills development and the development of the mer sector. New economic and social policies that will have shape the development of the sector, economy and society then discussed as these also have implications for skills development. This chapter therefore outlines the key characteristics that is

shaping the skills needs of sector (skills drivers), it then reviews national priorities and their implications on skills followed by a summary table which brings the sectoral drivers and the national imperatives together so as to inform SETA interventions, projects and programmes. This chapter is informed by desk research as well as interview and workshop inputs.

#### 2.2 Factors Affecting Demand and Supply

#### 2.2.1 Change Drivers impacting on demand and supply in the mer sector

The mer sector operates in a complex economic, social, technological, environment and legal environment that demands a responsive skills development ecosystem to support the growth and development of the sector. To understand some of these key skills drivers, the merSETA has embarked on a number of primary research projects that will be key in informing skills planning. The key skills change drivers in industry unpacked in this chapter are drawn from the economic complexity research in the mer sector, 4IR report for the metal chamber, atlas of occupations interim report, skills supply and demand report, and the green skills report among others. Industry and government reports and strategies were also used as a secondary source of data. The section below addresses the disruptors and the skills change drivers for the six chambers of the merSETA.

## Key skills change drivers in the Metal Sector

The global metals industry is recovering from one of its most difficult periods in decades. Market volatility and a downturn in commodity prices have created a new normal where cost cuts, automation and operational efficiency are vitally important (World Economic Forum, 2020). Meanwhile, industry-specific issues related to regulation, geopolitical risk, legal limits on natural resource use, shareholder activism and public scrutiny have created additional challenges.

The COVID-19 crisis has put further pressure on the steel industry. This crisis has refocused attentions on challenges such as unemployment, particularly among the youth. This calls for urgent intervention not only to halt the scourge but also to ensure that social ills (like criminal activity) are not perpetuated as a result (Rasool, 2020).

In the Fourth Industrial Revolution (4IR), steel and metals manufacturers have an opportunity to transform their operational model by implementing digital technology, to improve operational efficiency, customer service, inventory levels and profit margins (World Economic Forum, 2019). Economic pressures and emerging technologies have placed pressure on organisations and workers in terms of skills, requiring updated curricula and an increase worker flexibility. From a skills development perspective the implications are that the propagation of the 4IR could undermine inclusive growth due to negative growth, high unemployment and scarcity of relevant high-tech skills. Lower-skilled workers will become more vulnerable, requiring re-skilling or up-skilling to stay relevant. Therefore, in order for the government to create jobs, the integration of new technologies such as artificial intelligence should be introduced, while preparing the existing workforce for the type of work which will be required in an automated economy (Mabasa, 2019).

## Key skills change drivers in the new tyre sector

The South African tyre industry a key support to the domestic automotive industry. Similar to the automotive sector, the new tyre sector is also experiencing drivers in respect to technological advancements. Investments in new technology will create a need for a new generation of skilled operators. The new machines require different skills such as the ability to use digital applications and related computer-based technologies. Key forces driving skills implications in the sector include the following:

- Green knowledge and sustainability
- Incorporation of the latest technology, innovation and research; and
- Legislation and regulation related to carbon emissions

As the automotive sector advances, the new tyre sector needs to keep pace with producing tyres to meet the demands of new vehicle conditions such as the recent advances in tyre technology which includes Goodyear's futuristic Oxygen photosynthesis tyre, and Michelin's puncture-proof airless concept tyre (Mahomedy, 2019).

The sector also keeps pace with the demands of the green economy for instance Bridgestone has announced the launch of Enliten, a new innovative lightweight tyre technology that represents a reduction in material and rolling resistance performance to contribute to the reduction of a vehicle's CO<sub>2</sub> emissions, while providing the same wear life as a standard original equipment tyre. This technology will benefit car manufacturers, drivers and the environment, while also improving the vehicle's handling and stability (Bridgestone, 2019).

The Tyre market is growing partly due to the increase in urbanization, per capita income and altering lifestyle. The rise in population is another factor affecting the growth of the market. The Tyre market will grow rapidly owing to the strong growth in the automobile industry (Bridgestone, 2019). As such, suitably qualified engineers, technicians and artisans are in demand in this sector. This trend requires support for opportunities to continuously up-skill workers in the sector to meet the high level skills demand of modern day manufacturing. Therefore, government and business are attempting to increase the competitiveness of the manufacturing sector through modernisation and advanced manufacturing (Digital Journal, 2020). This will be particularly important in the COVID-19 context, as this sector employs mostly elementary and operator level workers, these workers need to have the skills to keep pace with the advances in the sector.

#### Key skills change drivers in the Plastics Sector

The South African plastics market is well developed throughout the plastics value chain and caters to both local demand and export markets. Within plastics the value chain the two sub-sectors that fall within the merSETA scope, includes manufacturers and recyclers. South Africa's Industrial Policy Action Plan- 2018/2019-2020/21 identifies the plastics sector as important to the manufacturing capacity of the economy. Moreover, having recycled 46.3% of plastic waste in 2018, plastics industry association Plastics SA aims to recycle 48% of plastic waste by the end of 2019, despite economic challenges (Engineering News, 2019). The plastics sector is also key in the automotive value chain, Ford, one of the 7 OEMs in the motor industry operating in South Africa, for example recycles 1.2 billion plastic bottles every year for vehicle parts, on average 300 bottles per vehicle.

According to Plastics SA the current COVID-19 crisis has left no sector or industry untouched. With the country in a national lockdown, waste reclaimers suddenly have unexpectedly found themselves unable to put food on the table, as economic activity was limited to essential food and health products or services only. While responding to the COVID-19 pandemic, key areas of opportunity for growing the plastics sector while increasing employment include: the automotive interior and exterior products; food packaging; medical product; buildings pipes, flooring and building sheet; and electrical and electronics cables, appliances and casing components. The following disruptors were identified in the plastics sub-sector:

- New breed of workers which are high skilled and technology savvy
- Research, innovation and development capability
- Growing interest in environmental sustainability

• Changing mental models that de-stigmatise the notion of not having a full-time job

#### Key skills change drivers in the Automotive Sector

The automotive sector plays a critical transformative role that contributes directly to the sustainable development of the country's productive economy. The automotive sector in South Africa accounts for 113 000 direct jobs and its value chain beyond car bodies and components is extensive (Automotive Export Manual, 2019). For this reason, the sector is one of the focus industries for the Department of Trade and Industry, supported by the Automotive Master Plan 2035.

The automotive industry is already grappling with rapid change and disruption created by the COVID-19 pandemic and faces an unprecedented economic crisis that is rapidly unfolding and stabilising the sector (Deloitte, 2020). Rapid technological advances in the global automotive manufacturing landscape have changed how the vehicle and automotive component manufacturer's function, from product design and development to production optimisation, to techniques selected to penetrate new markets, and in delivering products to customers (Automotive Export Manual, 2019).

From a skills development perspective the sector will have to keep pace with rapid advances in technologies such as AI, robotics and big data. In addition new technologies require significant research and development which can be costly as this will require the skilling and re-skilling of the country's labour force, as well as investigating new manufacturing potential to ensure a smooth transition. South Africa also continues to face stiff competition from low wage, high-productivity countries in vehicle production. Supportive policies and regulations, incentives and boosting investor confidence will remain key in ensuring that South Africa remains an attractive investment for the automotive sector.

#### Key skills change drivers in the automotive component manufacturing sector

The automotive component manufacturing sector is one of the sub-sectors that has been identified as pivotal in the growth of the South African automotive sector and one of the catalyst to the growth of the South African economy. Presenting the automotive sector business plan on behalf of the automotive sector at the Business Unity South Africa Business Economic Indaba in 2019, Toyota SA President and CEO, Andrew Kirby highlighted that the automotive sector business plan will focus on improving local capability to manufacture specialised components. The plan responds to the Automotive Masterplan aim to boost local content levels of domestically assembled vehicles to 60% up from around 38% currently.

Transformation of the auto industry to be more inclusive and deepen value addition within the local supply chains is also one of the priorities identified by the Automotive Masterplan. In response, the DTI and seven OEMs have launched a R6 billion investment to create jobs while strengthen the local manufacturing value chain.

The onset of the COVID-19 pandemic has brought a myriad of challenges to the sector – in particular is the volatility of small businesses. In an interview with Eye Witness News (EWN, 2020), Renai Moothilal, executive director of NAACAM, lamented that the pandemic threatens to undo some of the efforts to boost sector development, particularly in regards to boosting employment. Mr Moothilal expressed that government should put further incentives in place such as levy waivers and support in the payment of utilities and wages to ensure the survival of firms as well as maintaining an appetite for international firms to continue production activities in South Africa. The sector is very precarious at present and the pandemic in the short to medium term, it will focus efforts on strengthening

local content which will require implementation of technologies in line with international standards. Advances in this sector driven by technology and global value chain, skilling and re-skilling workers will remain key.

### Key skills change drivers in the motor retail sector

The motor retail sector which contributes 2.5% of the 6.9% contribution of the automotive sector to the economy and is central to the success of the automotive sector. Similar to the auto sector, the motor sector will have to keep pace in terms of the technological demands for motor vehicle components, maintenance and after sales services. This sector and its future development are challenged by the growth of a digital economy such as the application of robotics, automation and artificial intelligence. The drivers of change in this sector include new technologies and vehicles as well as structural shifts in market demand (electric vehicles), as consumers become more environmental conscious. As such, South Africa needs to prepare for a more technology driven type of education and skills ecosystem. Due to the COVID-19 pandemic the following disruptors have been identified:

- Cars are becoming spaces to work, to shop online, to watch movies, to connect to medical professionals and this will result in fully-connected digitised cars
- New forms of mobility, which will include current options such as Uber, Lyft and better public transport but also sharing applications like ZipCar
- Changing nature of work which will mean fewer trips and thus less dependence on vehicles, which makes new mobility options more attractive
- Technology innovation (e.g. electric and autonomous cars) (Industry News, 2020).

According to National Automobile Dealers Association (NADA, 2020) COVID-19 has had a huge macro and micro economic impact globally and in South Africa. The interrupted supply into the local market will cause a decline of sales, which will inevitably lead to job loses. According to David Thomas, Dealers SA founder in the time of the global COVID-19 crisis "digital solutions that enable car purchases while avoiding human contact is one area that will give this market a much-needed boost". The global COVID-19 pandemic has once again proven that the ability of any sector to survive in the digital driven 4th industrial revolution will depend on its ability to adapt new technologies and models of doing business.

Moreover, the ability of the motor sector to understand changing consumer needs, preferences and behaviour has become key in the growth and survival of the sector. A customer centric approach as consumers become more discerning needs to be at the centre of the motor retail sector.

Across all the sectors under the merSETA scope of coverage, it would seem that there is an overarching sentiment of that the sector is precarious due to the COVID-19 pandemic, however the pandemic has accelerated the need to align with newer technologies, agility to adapt to new ways of working and also resilience in terms of navigating the many negativities experienced in the recent past. Ultimately the manufacturing sector must be re-built, it must diversify its operations and keep pace with international trends in production. At the same time issues of environmental sustainability, the needs of ever more discerning customers has come to the fore. These have a direct impact on skills. Workers require up-skilling, re-skilling and lifelong learning.

#### 2.3 POLICY FRAMEWORK AFFECTING DEMAND AND SUPPLY OF SKILLS

Skills Development in South Africa is governed under the Skills Development Act No. 97 of 1998, which has subsequently been amended a number of times. The Department of Higher Education and Training

(DHET) is responsible for managing and developing all higher education and skills development training.



#### 2.3.1 Policies impacting on skills development for the mer sectors

#### Figure 28: Policies impacting skills development in the mer sector

Several national policies give direction to the mer industries, including: the New Growth Path, the National Development Plan, and the National Industrial Policy Framework and the associated Industrial Policy Action Plan. The figure above outlines some of these policies.

Collectively, the aim of these policies is to encourage employment-intensive growth (Bhorat, & Rooney, 2017; Williams, Cunningham & De Beer, 2014). They all have at their core; key levers to ensure continued economic growth, job creation, sustained livelihoods, social justice and access to decent living conditions through human and community development. These plans draw a focus to the following key issues, which the merSETA needs to respond to through various interventions:

- Inclusive growth and transformation of the national economy
- Employment creation (including self-employment) and entrepreneurship
- Supporting the informal, small and community based enterprises
- Community and youth development
- Environmental sustainable economic development
- Gender equality and sustainable development

The merSETA acknowledges the significance of national strategies in driving imperatives that are central for the growth and development of South Africa's civil and business sectors.

# 2.3.2 Policies impacting on skills development for PSET

#### The National Skills Development Plan (NSDP) 2030<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> The merSETA is cognizant of the fact the NSDP was heavily influenced by the White Paper on Post School Education and Training and therefore has not reviewed this separate from the NSDP.

Promulgated by Minister Pandor on 06 February 2019, in terms of the skills development act, locates skills development in an integrated PSET system which is demand-led in order to assist economic growth and structural transformation. The result of planned action and transformation should ultimately lead to a South African labour market that is skilled and capable. Further to this the current minister of Higher Education, Science and Technology, Mr Blade Nzimande announced in July 2019, the completion of the National Plan for PSET (NPPSET) which is developed as a roadmap for the development and strengthening of the PSET system.

The key principles of the NSDP speak about developing the country across all sectors through inclusive growth and income generation as set out in the NDP, NGP and IPAP within an equitable and integrated system. Its key beneficiaries are the currently employed workforce and new entrants to the labour market seeking work experience. Skills development is seen as a system that works through collaboration within the public and private sectors to provide quality education and workplace experience to allow for adequate articulation between programmes and qualification offerings. Support is therefore key for both learners and employers to ensure an efficient, informed approach to education through standard processes (levy system and SETAs) and enabling technologies. All players in the PSET system will be held to the highest standards in terms of governance, quality of provision, sector analytics and research for demand led interventions, which will be supported by quality councils and education and train institution who are well organised and well resourced. These institutions are in turn supported by the SETAs as intermediaries. Strengthening the role of the SETA as an intermediary body will therefore remain pivotal in successful implementation of the NSDP. The eight outcomes of the NSDP are noted below:



Figure 29: NSDP outcomes

Post-School Education and Training (PSET) is critical to South Africa's future skills development, it dramatically improves the employment prospects of young people and raises their income earning potential. In addition, broadening the skills base would be socially and economically transformative, and promote economic and employment growth (Government Technical Advisory Centre, 2019).

# Green paper on the social economy

The draft Green Paper proposes the following overall policy position for consideration: While facilitating the growth of the Social Economy, its characteristics of solidarity, social cohesion, social inclusion, self-organisation and self-sustainability should be nurtured. Regulation and financial incentives should be focused, supportive and incisive. The range of measures to be considered to stimulate the social economy include measures to enable the Social Economy to benefit from the Fourth Industrial Revolution (4IR) while promoting employment-creation as a response to potential job losses as a result of the introduction of 4IR technologies, needs to be prioritised. SETAs including

the merSETA have a critical role to play in enabling the social economy to meaningfully participate in the new economy through relevant skills interventions. The merSETA is in the process of exploring the feasibility of partnering with TVET colleges and other training centres to provide community based entrepreneurs and informal workers with access to their workshops and equipment for work and training purposes.

#### National strategic plan on gender-based violence & femicide

Gender-based violence and femicide in South Africa has reached alarming levels. The National Strategic Plan (NSP) on Gender Based Violence and Femicide (GBVF) sets out to provide a cohesive strategic framework to guide the national response to this scourge. The purpose of the strategy is to provide a multi-sectoral, coherent strategic policy and programming framework to ensure a coordinated national response to the crisis of gender-based violence and femicide by the government of South Africa and the country as a whole. The department of Higher Education and Training has responded by developing a policy framework to address gender based violence in the PSET institutions and to provide a monitoring instrument for the department to assess the implementation of the Policy Framework. The merSETA is determined to support the fight against gender-based violence in South Africa, which has reached crisis levels. The merSETA will therefore seek opportunities for partnerships in this regard.

#### 2.4 STRATEGIC MEASURES TO SUPPORT DEMAND AND SUPPLY OFSKILLS

In this section we summarise the sectoral drivers and alignment to national strategies to inform strategic measures. As a precursor to its overall strategy the merSETA have developed its strategic outcomes in line with national policies. The merSETA strategic outcomes are as follows:



#### Figure 30: merSETA outcomes

These outcomes assures the merSETA and its stakeholders that it is able to address the key challenges faced by the sector through skills interventions which will assist both employees and employers to access better livelihoods and become more competitive in the labour market and the larger national and international economies.

In summary the following key drivers and their impact on skills are presented on the table below.

# **Table 6: Sectoral Drivers and Impact on Skills Development**

Sectoral Drivers	Implications for Skills Development
<ul> <li>Sectoral Drivers <ol> <li>Reindustrialisation and localisation</li> <li>Reindustrialisation and localisation is key in stimulating economic growth, employment and developing potential in both local manufacturing value chain and increased participation of South African markets in the global manufacturing value chain.</li> <li>The COVID-19 global crisis has once more highlighted the importance of a sound local manufacturing base for sustaining the domestic market while creating opportunities for the export of critical products</li> <li>The need to industrialise through the growth and diversification of the manufacturing sector features prominently in South Africa's economic policy framework (DPRU, 2020).</li> <li>In the aftermath of the COVID-19 pandemic, the sector will struggle. Building economic complexity offers opportunities to diversify and create employment opportunities.</li> <li>New and emerging technologies</li> <li>New technologies and changes to the way business is conducted in the sectors brought about by advanced methods in 4IR.</li> <li>Full-time jobs will diminish and the <i>gig economy</i> will grow.</li> <li>As companies try to streamline and optimise their process and operations including the reduction of full time employment</li> <li>National plans and strategies call for support for accessing markets, structural transformation and using technologies to improve the business sector as well as improving efficiencies in the public sector for demand led interventions.</li> <li>Business leaders should: <ul> <li>Reimagine 4IR as a unique opportunity</li> <li>Reposition discrete and disconnected programs as a system-wide, unified set of approaches.</li> <li>Realign toward achieving both scale and impact.</li> <li>Reframe the possibilities for marginalized youth.</li> </ul> </li> <li>Remote and teleworking will become the 'new norm' and critical in limiting the impact of the COVID-19 global crisis.</li> <li>The new way of working demands companies to adopt flexible and people centred approach to w</li></ol></li></ul>	<ul> <li>Implications for Skills Development</li> <li>Skill interventions are required in support of the DTI's IPAP, SEZs and designated trades.</li> <li>Government ambitions for economic growth should be supported through key partnerships for skills development and the private sector.</li> <li>Skills to support entrepreneurship and SMEs and community based enterprises in the social economy are key.</li> <li>The merSETA has a key role in facilitating this process of industrialisation through manufacturing diversification and increasing complexity through the facilitation of skills development interventions that ultimately enable growth along this industrialisation pathway.</li> <li>Interventions should be about assisting job preservation and growth through realignment of skills where necessary as the country has seen massive retrenchments and company closures.</li> <li>The 41R has the potential to raise global income levels and improve the quality of life for populations while developing a skills strategy in line with future demands (World Economic Forum 2016).</li> <li>Jobs with a direct impact on the organisations intellectual property will remain stable,</li> <li>The gig economy calls for an agile, skilled and flexible workforce.</li> <li>New or improved curricula must account for broad areas with respect to: predictive analytics, artificial intelligence, additive printing, and the internet of things (5G), automation and robotics.</li> <li>Professions in the future will typically center motor manufacturing technicians, wind turbine service technicians, flexible app developers, computer programmers, artificial intelligence and robotics specialists, and cloud computing specialists among others.</li> <li>Skilling will overtake credentialing as businesses will hire people who posses the attitude and skills to get the job done.</li> <li>Online learning will grow exponentially. Short courses and micro-learning will gain traction as a legitimate form of learning.</li></ul>
<b>3.</b> Environmental sustainability South Africa views green economy as a sustainable development path based on addressing the interdependence between economic growth, social protection and the natural	<ul> <li>Greater efficiency in the use of energy, water, and materials is given South Africa's struggle with energy generation currently. Skills around</li> </ul>

Sectoral Drivers	Implications for Skills Development
ecosystem (Environmental affairs, 2019). The South African government has put in place initiatives aimed at supporting energy and resource efficiency to promote sustainable development. The circular economy can be seen as an economic model that minimises resource input and waste generation. There should be a focus on facilitating environmentally sustainable "green" practices.	<ul> <li>cleaner energy sources are thus critical in South Africa's adoption of cleaner energy production.</li> <li>Opportunities exist to up skill small businesses participating in the upstream recycling value chain (collection and distribution of waste) to participate in the upstream value chain where recycled material is further processed and used in the manufacturing of other products.</li> </ul>
The focus on marine transport manufacturing has the opportunity to deepen component manufacturing and rebuild domestic capabilities, facilitating reindustrialisation and localisation.	• Creating greater awareness and advocacy for green skills and green technologies in the sector is key as the first step to the road to greening the mer sector.
The way in which business is conducted is changing globally, in line with green technologies and this presents new opportunities. Green is said to be the new "gold". It has had unprecedented success as it provides a quantifiable metric to people's efforts towards Sustainable development (The Master Builder, 2019).	• To ensure the relevant skills are developed for the circular economy, curriculum design and development of new qualifications and occupations should take into account developments in sustainable manufacturing, energy and resource efficiency.
	<ul> <li>Initial findings from the green skills research project identify the need to raise awareness to understand the green economy. What was also apparent is the need for up-skilling and transforming current jobs to be greener.</li> </ul>
<ul> <li>Supporting a diverse and inclusive labour market system</li> <li>High demands of structural change may exclude many in the workforce due to limited skills, to be truly inclusive those who are unable to access the labour market should also have opportunities to be up-skilled and re-skilled to access a decent and sustainable livelihoods.</li> <li>The South African government has strongly emphasised inclusivity (poverty, disability and breaking barriers to access), community development, youth development and support for small and informal business.</li> </ul>	<ul> <li>Increasing workforce with skills for emerging, transforming, or new occupations and skills</li> <li>Skills development support should be of a high quality and it should also ensure an offering of bespoke packets of support to break barriers to entry and succession once enrolled.</li> <li>A partnership model in line with NSDP is required. Civil society partnerships and regional focus areas should be developed where communities can access skills development opportunities through either community education centres, TVET colleges or higher education institutions.</li> <li>As the COVID-19 is disruptive employees will need to engage in life-long learning and acquire skills faster to remain in jobs. The ability to adapt to the changing nature of work is essential as this will mean much more than the number of qualifications an individual has.</li> </ul>
5. Changing customer needs and expectations Customers more than ever have become more discerning and are increasingly demanding quality services and products, convenience, product design choices and flexibility. The rise of the digitally discerning customer "who is open to digital, is aware of its benefits and who expects it to deliver on its promise" has added a new twist. Customer satisfaction and retention is increasingly dependent on positive user experience (Atos, 2020).	<ul> <li>The Fourth Industrial Revolution has changed the way customers interact, their tastes and expectation around product and service support. Customer experience, product design and development, digital sales and marketing skills will increasingly become key.</li> </ul>

#### 2.5 CONCLUSION

The manufacturing, engineering and related services sector continues to experience shifts due to global and domestic economic developments, technology advances and innovation. The SETAs in partnership with other role players have a significant role to play in responding to some of these shifts through relevant skills development interventions. The World Economic Forum future of jobs of Tomorrow: Mapping Opportunity in the New Economy report (2020) identified the seven key professional clusters with emerging prospects across in the future these include Data and AI; Care Economy; Green Economy; Engineering and Cloud Computing; People and Culture; Product Development; as well as Sales, Marketing and Content. Collectively, these professions are set to yield 6.1 million new job opportunities in the coming three years. These findings are consistent with findings from this chapter as discussed above. Developments in the digital driven Fourth Industrial Revolution, environmental sustainability, national priorities such as economic transformation and reindustrialisation and disruptions as a result of the global COVID-19 pandemic will define new priorities in the sector.

#### **3** OCCUPATIONAL SHORTAGES AND SKILLS GAPS

#### 3.1 INTRODUCTION

This aim of this chapter is to highlight skills supply and demand issues as well as to identify the occupational shortages and skills gaps in the sector. The data was sourced from multiple datasets and documents such as the merSETA WSP data, merSETA research, desktop research and Statistics South Africa as well as interviews with merSETA stakeholders. DHET reports on statistics for the post school sector, Ministerial speeches and other department documentation were utilised in this chapter

#### 3.2 SECTORAL OCCUPATIONAL DEMAND

#### 3.2.1 Hard to Fill Vacancies

The WSP 2020 data provides information on hard to fill vacancies (HTFVs) based on a template provided by the DHET.

Of all the WSPs submitted, 4761 companies filled out the skills requirements section pertaining to HTFVs. Most 3857 (81%) companies indicated that they did not have any HTFVs due to them being able to easily fill vacant positions (65%) or not having any vacancies to fill (35%). The table below shows the number of vacancies by occupational group. In total, companies indicated 4636 vacancies. The majority of these were for skilled trades' workers, sales workers, machine operators and managers. This shows that there were more opportunities for artisans and sales workers with relatively little demand for clerical workers and elementary workers. A key observation here is that the elementary workers represent a significant portion of the workforce but they have the least opportunities for work. The vacancies required also require mid-level skills rather than high level skills and qualifications as those required for managers and professionals.

Occupational Group	No. Vacancies	% HTFVs
Managers	502	11%
Professionals	378	8%
Technicians and Associate Professionals	309	7%
Clerical Support Workers	97	2%
Service and Sales Workers	1053	23%

#### Table 7: HTFVs by number of vacancies (WSP, 2020)

Occupational Group	No. Vacancies	% HTFVs
Skilled Trades Workers	1712	37%
Plant & Machine Operators & Assemblers	526	11%
Elementary Workers	59	1%
Total	4636	100%

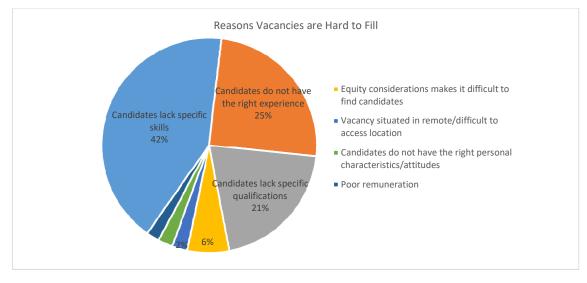
The table below shows the HTFVs by occupational group for companies that indicated they require these vacancies. The vacancies are only those that had 20 or more unfilled seats (this is used as a proxy for heightened demand despite limitations in the vacancy data as described in the preceding paragraph). This means that employers were not able to fully fill their recruitment requirements at the time of data collection. It is evident from the table that the majority of HTFVs that remain unfilled is at skilled trades' worker level and professional level.

Occupational	OFO Code	OFO Occupation	Total	Unfilled	
Category	OFO CODE		Vacancies	Vacancies	
Managers	2019-121901	Corporate General Manager	105	62	
Wallagers	2019-122102	Sales Manager	180	59	
	2019-214101	Management Consultant	54	52	
	2019-214401	Mechanical Engineer	51	26	
Professionals	2019-242101	Industrial Engineer	48	23	
	2019-243301	Industrial Products Sales Representative	64	21	
Technicians and Associate Professionals	2019-331201	Credit or Loans Officer	48	22	
Service and Sales Workers	2019-522302	Motorised Vehicle or Caravan Salesperson	930	318	
WORKERS	2019-522303	Automotive Parts Salesperson	76	39	
	2019-651202	Mining Blaster	296	258	
	2019-651302	Automotive Motor Mechanic	377	143	
	2019-651403	Boiler Maker	129	112	
	2019-652301	Metal Machinist	61	51	
Skilled Trades	2019-652302	Steel Fixer	150	50	
Workers	2019-653101	Diesel Mechanic	76	49	
	2019-653306	Millwright	49	33	
	2019-671101	Fitter and Turner	43	27	
	2019-671202	Electrician	60	27	
	2019-684201	Welder	102	23	
Plant & Machine Operators &	2019-714202	Engineering Production Systems Worker	411	70	
Assemblers	2019-718905	Plastic Compounding and Reclamation Machine Operator	21	20	

#### Table 8: Hard to Fill Vacancies by Occupation (merSETA WSP, 2020)

#### 3.2.2 Reasons for Hard to Fill Vacancies

Overall, the reasons for difficulty in filling vacancies are a lack of specific skills, a lack of experience and qualifications as demonstrated in the figure below.



#### Figure 31: Reasons for HTFVs<sup>5</sup>

Different occupational categories present different reasons for the HTFV. A lack of specific skills are prevalent across all categories but seem more prevalent among elementary workers, operators and professionals. A lack of experience seems more prevalent in sales, clerical and managerial positions. A lack of qualifications seems most prevalent in HTVs for the trades and technicians – an area that merSETA specialises in. While demonstrating low prevalence across the board, equity considerations seems to have a higher impact in recruiting for professional, technician and management positions. Candidates not having a good attitude and poor remuneration do not seem to be reasons for difficulties in recruiting.

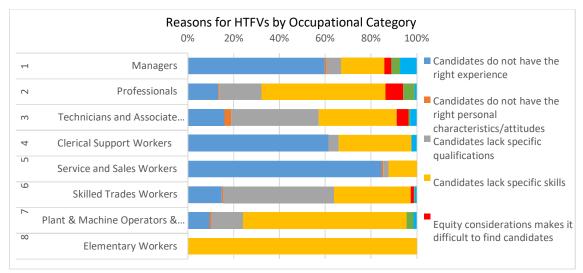


Figure 32: Reasons for HTFVs by Occupational Category

#### 3.2.3 Skills Gaps in the sector

<sup>&</sup>lt;sup>5</sup> Table of specific reasons for HTFVs by Occupation can be found in Annexure 1

According to the DHET SSP framework, skills gaps refer to "skills deficiencies in employees or lack of specific competencies by employees to undertake job tasks successfully to required industry standards. Skills gaps may arise due to lack of training, new job tasks, technological changes, or new production processes, to list a few. The term 'top up skills' also refers to skills gaps and usually requires a short training intervention".

Throughout this document the notion of future skills has been noted in light of globalisation and competitiveness, re-industrialisation and skills for 4IR. The COVID-19 pandemic has tended to exacerbate the 4IR in that companies had to adopt new technologies rapidly to ensure continued production under social distancing regulations. In order for workers to keep pace and remain viable over time, they need to possess key skills that will allow them to be more successful in their work and more marketable to relevant sectors. Commentary of expert practitioners in the sector have reiterated the difficulties in terms of firstly ensuring learners have access to a workplace but secondly that newly developed qualifications take far too long to be developed and registered making it difficult for SETAs and industry to respond. COVID-19 has made this more challenging as social distancing as well as company closures further impeded the number of workspaces available as training spaces.

The PSET fraternity including the QCTO, NAMB, SAQA and the SETAs need to act with expedience to ensure continued training in the time of COVID-19. Workers and learners alike need to possess certain critical/top up skills to adapt to the ever changing demands of the workspace. A key concern among stakeholders has been the lengthy and bureaucratic processes to develop and update curricula across the PSET system, including the HEIs. Without combined efforts to expedite processes across the system as a whole, the efforts of SETAs alone will not assist the sectors, workers and new labour market entrants.

The analysis below reviews skills gaps. Respondents on the WSP questionnaire were asked to identify skills gaps for each occupational category. The top 5 skills gaps by occupational category are demonstrated in the table below.

skills gaps	Managers	Professionals	Technicians and associate	Clerical Support Workers	Sales and Service Workers	Skilled Trades Workers	Machine Operators	Elementary Workers	Grand Total
Planning and organising	445	376	396	461	360	336			2374
Problem Solving		294	406	369	272	402	336		2079
Management and Leadership	914	492	343						1749
Supervisory skills	418	397	489			350			1654
Technical (job-specific)						560	459	307	1326
Project Management	478	417	351						1246
Office Administration				637	270				907
Teamwork				262			327	286	875
Production						398	406		804
Occupational Health and Safety							331	336	667
Marketing and Sales					488				488
Legal, governance and risk	348								348
Customer Service					324				324
Financial and Accounting Skills				315					315
Reading writing and numeracy								277	277
Communication (oral)								266	266

The table shows the top 5 skills gaps for each occupational category in the columns. Managers have gaps in management and leadership, project management, planning and legal, governance and risk. Skills gaps are clustered at the top of the table and affect many occupations, these gaps are planning and organisation, problem solving, management and leadership, supervisory skills, technical skills and project management respectively. Office administration was identified for clerical and sales workers. Teamwork was identified for clerical workers, operators and elementary workers. Technical skills was identified for the technical occupations of the trades, operators and elementary workers. Reading, writing, numeracy and oral communication skills were deemed as gaps for elementary workers

The reasons for skills gaps are outlined in the figure below. It would appear that overall new work processes and new technologies are the main drivers of skills gaps. A lack of experience, lack of qualifications and new products seem equally important in terms of the reasons for skills gaps.

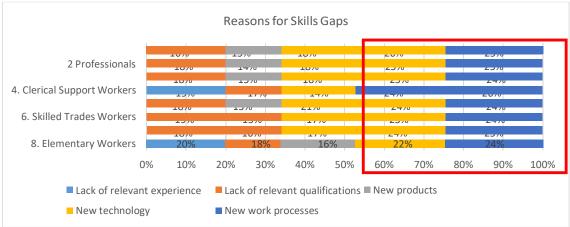


Figure 33: Reasons for Skills gaps by occupational group (merSETA WSP, 2020)

# 3.3 EXTENT AND NATURE OF SUPPLY

# 3.3.1 The State of Education and Training Provision

This section looks at the provision of education and training of skills with the focus specifically on merSETA accredited qualifications. Therefore, skills supply include a consideration of both the skills of the current labour force and those of the future labour force. Further to this, this section also reviews provision in higher education, TVET colleges and skills programmes. It assesses the gaps in the supply pipeline in order to help identify where the merSETA can most effectively intervene.

The South African workforce continues to battle challenges such as the skills gap, a high youth unemployment rate and economic uncertainty, which present challenges for both organisations and job seekers alike. Although, the root of unemployment is not only a lack of jobs; a key underlying issue is the inadequately educated workforce which is the main challenge of the post-school education and training.

#### **Higher Education and Training**

Higher Education Institutions (HEIs) provide the requisite high-level skills for the mer sector. One of the biggest challenges is that previously disadvantaged universities have not developed engineering faculties, implying that the pipeline of graduates is limited to universities that have traditionally produced engineers (ECSA Report, 2019). Overall there has been a steady increase in the number of learners enrolling at HEIs, in 2018 there were over 1.22 million students enrolling (DHET, 202). In

terms of graduations, over 220 000 students graduated in 2018, representing a 7.7% increase in the number of graduates compared to 2017. The majority of graduations were in the fields of science engineering and technology, business management, humanities and education respectively.

It was postulated that in 2020, 26 public universities would provide access to 201 042 new students wishing to pursue their studies across all general, technical and professional fields including business and management, science, engineering, agriculture and technology, humanities, social Sciences, the arts and education. In addition, of the 201 042 new entrants, 16 152 new entrants will enrol in engineering programmes (DHET Report, 2020).

The Higher Education Minister Blade Nzimande has recently announced in a media briefing that COVID-19 continues to take a heavy toll not only on the health, but on people's ability to learn and develop. The emergence of the COVID-19 pandemic, has highlighted the lack of online teaching experience, early preparation and support from educational technology teams.

# **TVET Colleges**

TVET colleges play a pivotal role in addressing South Africa's skills needs and cater for a wide spectrum and growing numbers of students. TVET colleges provide technical and vocational education and training programmes to learners who have completed at least grade 9 at school level. The TVET colleges have been identified by the government as a vehicle to improve pass rates and expand the number of qualified people entering the workforce. Arguably, government's intention to improve TVET colleges support includes the following (DHET Report, 2020):

- The Support in ensuring transformation with regards to relevant and responsive curricula;
- Lecture development;
- Improved administration; and
- Management and government of TVET colleges with the aim of producing employable young people with high quality occupational and vocational education and training skills.

The recently launched 25 year review by the Department of Planning, Monitoring and Evaluation suggests that the TVET college system can improve its standing in the hearts and minds of South Africans by guaranteeing demand for its graduates and positioning itself to providing skills needed for the fourth industrial revolution (4IR). In 2018, enrolments in public TVET colleges reached over 650 000, a 4.5% improvement compared to 2017. Substantially, around 220 000 students enrolled in private colleges bringing the number or enrolments to around 900 000 (DHET, 2020).

Notably, the sector education and training authorities (SETAs) continue to do their part in advancing the TVET college system. TVET colleges form a critical component of the current training capacity of artisans. Considering the need to boost the annual production of artisans to 30 000 by 2030, activities focused towards artisan development remain critical.

Minister of Higher Education, Science and Technology, Blade Nzimande, has urged young people to consider alternatives to university by considering technical, vocational, educational and training (TVET) colleges.

# **TVET Centres of Specialisation (CoS)**

A Centre of Specialisation is a department within a public TVET college campus dedicated to training and address the demand of priority trades needed for the governments National Development Plan (College of Cape Town, 2019). The Centres of Specialisation (CoS) is a national programme aimed at building the capacity of the public TVET college system to deliver trade qualifications while building the much-needed skills for Strategic Integrated Projects (SIPs) of government's infrastructure programme (DHET Report, 2020).

The National Skills Fund, supported by the Sector Education and Training Authorities and other donors are funding the development of the CoS. The new occupational qualifications comprise three components: theory, practical/ stimulated training work experience (SSACI, 2019).

The DHET is also applying the model of selecting certain colleges to focus on particular trades, to lay the foundation for differentiation in the college system. And whilst some other colleges may later specialise in the same trades, it is desirable that others develop expertise in other trades and occupations to reduced duplication and increased quality specialisation (College of Cape Town, 2019). To this end, the 'dual system' (where learners rotate between the college and the workplace) is being tailored to meet specific South African conditions, to produce the 'artisan of the 21st century', or the A21 artisan (NEPAD, 2019). In addition employers are also expected to take part in apprentices and send them to colleges between February and March. Four Employer Associations, which include the Retail Motor Industry (RMI), Steel and Engineering Industry Federation (SEIFSA), Institute of Plumbing (IOPSA) and South African Institute of Welding (SAIW), are part of this ground-breaking initiative (DHET Report, 2020).

College sites are providing training in order to develop artisans with industry partners in 13 priority trades comprising skills sets in brick laying, electrician, millwright, boilermaker and automotive mechanics to name a few (DHET Report, 2020). Therefore a pilot programme has been implemented to expose students to workplace practices during training so that they become work ready once qualified (SA News, 2020). Subsequently the pilot programme is at the point of implementation and with colleges ready to begin rollout; the pilot life cycle key results are as follows:

- Twenty-six delivery sites in 19 public TVET colleges are committed to the pilot;
- Trained-49 facilitators/ TVET college lecturers;
- Recruited 518 apprentices, all of whom will begin their theory and practical skills components and workplace rotations, the first 16 students started in March 2019; and
- Over 90 employers (including municipalities and government departments) across the thirteen trades have either committed to workplace hosting or are in process discussions.

#### Learnerships and Apprenticeships

Since its inception, the merSETA has registered 87 599 apprentices on apprenticeships and 95 505 learners on learnerships. The predominant trades attained through apprenticeships include motor mechanic, diesel fuel injection mechanic, electrician (engineering), fitter and millwright. In the same period, a total of 53058 apprentices qualified as artisans in the sector and another 53072 learners successfully completed their learnerships (QMR, 2019). The most dominant learnership programmes include production technology, metals production, welding application, automotive repair and maintenance and automotive components: manufacturing and assembly (QMR, 2019).

The annual registration and completion figures for apprentices and learnerships since 2002 are shown in Figure 34 and Figure 35 below. It is clear that apprenticeships and learnerships form a crucial part of the supply of skills to the sector. Therefore, the merSETA continues to support the uptake of these learning pathways and continues to monitor trends in registrations and completions.

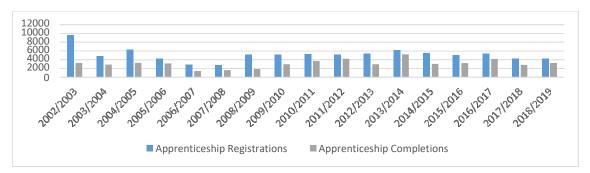


Figure 34: Apprenticeships Entered and Certified (merSETA QMR, 2018/19)6



Figure 35: Learnerships Entered and Certified (merSETA QMR, 2002-2019) 7

# **Skills Programmes**

A skills programme is a structured learning programme that is occupationally based and when completed it will constitute a registered National Qualifications Framework (LMIP Dictionary on Skills Supply, 2017). To elaborate further provision is undertaken by a training provider accredited by an ETQA (Skills Development Act No. 97 of 1998). A skills programme may specify the sequence in which the unit standards must be achieved and the practical workplace experience that forms part of the programme. The Department of Higher Education and Training developed strategies to address skills and artisan shortages in the country (DHET, 2019a).

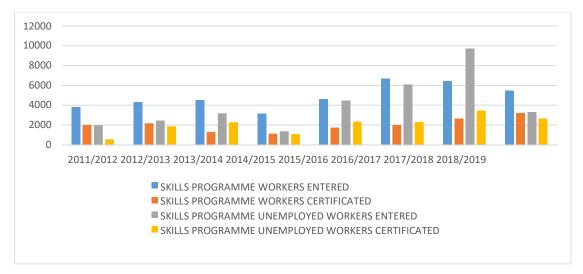
According to a report issued by the Statistics on Post-School Education and Training (2017), the 2017/18 cohort indicates that merSETA recorded the highest number of persons who completed artisanal learning programmes with 7 938 competent learners. The merSETA complies with the overarching government policies which are fundamental to its mandate. In the 2017/18 financial year, 269 147 learners were registered for SETA- supported learning programmes in South Africa.

A total of 177 477 or 65.9% of the learners who were registered for SETA-supported programmes in the 2017/18 period were certified with the majority being for skills programmes (DHET, 2017).

Skills programmes continue to form an important part of training and development, they offer short and focused skills interventions. The figure below shows workers and unemployed works entered and certificated between 2-11 and 2019. It seem that more workers are enrolling and becoming certificated in the latter years demonstrating higher demand and higher success rates.

<sup>&</sup>lt;sup>6</sup> Final QMR data for 2019/20 is not yet completely captured and has been excluded from the analysis.

<sup>&</sup>lt;sup>7</sup> Final QMR data for 2019/20 is not completely captured on the mer system and has been excluded.



# Figure 36: Skills Programme Registrations and Completions: 2011/2012-2018/2019 (merSETA QMR, 2019)

Furthermore, the figure above indicates that the skills programme of workers and unemployed workers entering the programme is often the highest however, those who are certificated tend to be less than the number of registering individuals.

#### **Community Education and Training**

The Community Education and Training (CET) gives an individual the opportunity to develop basic literacy skills such as reading, writing and basic problem solving. In the completion of the training, individuals receive a nationally recognised certificate and with this qualification improves an individual's chances of finding a suitable job or provide growth within an organisation (Western Cape Government, 2018). Moreover, Community Education and Training Centres contribute in creating alternative education and training pathways.

The White Paper stipulates that by 2030, community colleges should be enrolling 1 million students. The importance of lifelong learning is signalled in the NDP and is a critical link to community education and training. The NDP specifies that all sectors of society need to set up lifelong learning initiatives to ensure that citizens have ample opportunities to develop their skills and gain a deeper understanding of the ever-changing environment in which they live. Furthermore, Community colleges will support the achievement of three of the NSDS III goals: to address the low levels of youth and adult language and numeracy skills; to support cooperatives, small enterprises, worker initiated, NGO and Community training initiatives; and to build career and vocational guidance (NPPSET Report, 2019).

Community colleges will help to balance out the pressure on the TVET and higher education subsystems, which are under constant and relentless pressure to expand beyond current capacity and funding. They will provide a necessary expansion of post school opportunities and an alternative choice for young people and adults who have left school, while providing progression opportunities for those who have already left schooling (DHET Report, 2019).

#### **Participation in CET**

A substantial 19% of the sector's employees are employed as elementary workers and likely to have formal education levels below NQF level 4. The sectors educational levels increase overtime even at lower occupational groups this is confirmed by sector interviews as well as merSETA research. According to (Fourarge, Trudie & de Grip, 2010) low-educated workers invest less in training or

because they have lower economic returns to on the job training and lesser willingness to participate in training courses, due to distinct economic preferences and personality traits.

Literacy remains a concern in South Africa due to low levels of formal education in organisation. The fact that a worker has literacy or numeracy skills at level 1 or 2 on the five level all scale does not necessarily mean that they are unable to perform their job in a satisfactory manner at present. Some jobs do not require much use of literacy or numeracy skills, and some workers whose literacy skills are low may still have the essential knowledge that is required for the tasks they need to carry out at work. People whose foundation skills are low are more likely than people with higher skill levels to have difficulties with tasks at work that require reading, writing or maths, with learning new knowledge and skills or with adapting to changes at work (Department of Labour, 2020). According to StatsSA, almost 15% of adults over the age of 20 are regarded as functionally illiterate in 2017 and 70% of grade 4 learners have difficulty reading for meaning in any language; this was attributed to a lack of access to reading material (UCT News, 2019).

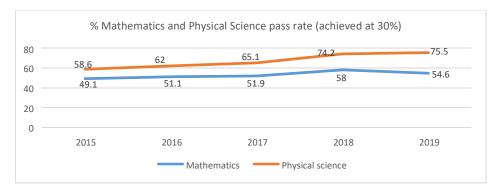
For the merSETA it will be imperative to pay cognisance to the high proportion of workers who are working at elementary level and the likelihood that adults in the sector could have lower level of literacy than their level of education; furthermore new entrants into the sector may have similar characteristics which may be compounded by limited numeracy skills. Skills Supply side challenges

# 3.3.2 Basic Education and Training

The basic education and training sector as the feeder into the PSET sector seems to be improving overtime; the achievements of the class of 2019 confirm that the standard and quality of the South African examinations system is improving annually and stabilising.

The education sector has listed eleven priorities for this administration, which include inter alia, improving the foundational skills of literacy and numeracy; implementation of a curriculum with skills and competencies for a changing world; dealing decisively with the quality and efficiency through the implementation of standardised assessments; urgent implementation of the two-years of Early Childhood Development before Grade 1, promote school safety, health and social cohesion and complete an integrated Infrastructure Development Plan (NSC, 2019).

The sector still faces some challenges including the lack of study material, large number of learners in classes and inadequate teaching staff. The South African government announced that changes will be made to improve the curriculum, recognising the importance of skills for a changing world, making reference to the need of 4IR (NSC, 2018). It seems as if the changes that were made are becoming more effective looking at the 81.3% – the overall pass percentage of the class of 2019 - a 3.1% improvement on the previous year of 78.2% (Business Tech, 2020). Referencing to some areas where there were poor performance, it was recommended that the NSC school subject report should be used to help education stakeholders to identify subjects in which performance was poor to ensure that appropriate interventions are introduced. Early identification of poor performance will thus, help these stakeholders to maintain high levels of performance (NSC, 2020). The 2019 year represent the 6th cohort to be exposed to the CAPS curriculum.



#### Figure 37: Maths and Science Pass Rates

When comparing the average pass rate of mathematics and physical science for 2015 to 2016, mathematic increased from 49.1% to 51.1% and physics science increased from 58.6% to 62%. The pass rates seem to be increasing continuously since 2015 for both subjects with physical science increasing with 74.2% to 75.5% in 2018 to 2019. Although mathematics had 3.4% declined from 58% to 54.6% in 2018 to 2019. The figure shows that physical science pass rates increased by 3.1% between 2016 and 2017 and almost 10% increase between 2017 and 2018 (NSC Examination Report, 2018). Thus far, physical science pass rate constantly keep increased year by year. However, the pass rate is achieved at 30% and insufficient for the demands of the curricula required to enter training at PSET level for the sector. Learners will require additional support.

#### **Quality of Provision in the PSET Sector**

Education and training in the sector is mainly through the PSET system and merSETA accredited programmes. The White Paper for PSET, released in 2013, gives effect to the commitments set out in the National Development Plan 2030. It guides and steers the PSET system by setting outcomes and targets for each of these sectors. The targets for the university sector are to reach a headcount enrolment of 1.6 million by 2030 (DHET, 2013). In the college system, the target is to increase enrolments in TVET colleges to 2.5 million. The Post-School Education and Training (PSET) landscape in South Africa comprises of 26 universities providing undergraduate and post-graduate qualifications, 50 TVET colleges providing vocational and occupational qualifications and a vast number of private institutions, 9 new community colleges (incorporating all the former Public Adult Learning Centres); private higher education institutions and colleges (DHET, 2019).

TVET and private colleges constitute another key subsector of the PSET system. The NDP emphasises that TVET colleges should play a critical role in skills development, with the aim of reducing skills shortages and thereby also youth unemployment (DHET, 2019a). Further to this expanding enrolment at technical and vocational education and training (TVET) colleges to 2.5 million by 2030 is articulated in the WPPSET. Moreover the Technical and Vocational Education and Training (TVET) colleges are undervalued and misunderstood by their role and purpose.

Evidently in the 2020 academic year NSFAS reflected a low number of applications received from TVET colleges. This stipulates that South Africa has not yet positioned TVET education and the associated criticality of skills development as an imperative choice for national development ideals. The following challenges for TVET colleges are further outlined below:

#### Policy Incoherence

Policy incoherence remains a biggest structural issue facing Post School Education and Training. The Department of Higher Education and Training identified a number of systemic blockages, including the

lack of synergy between the various post-school subsystems and a lack of clarity in relation to the role expected of the skills development system. Articulation between TVET's and the labour market, and between the colleges with universities and Sector Education and Training Authorities (SETA's) is not very clear (IoL News, 2020).

### Course Differentiation

The issue of curriculum offering at Post School is also crucial. It appears that despite the reforms at TVET colleges the curriculum offering has been put at the backburner, while other issues such increased access to funding are prioritised. It is important for students to be offered occupationally relevant courses in line with the industry needs (DHET, 2019).

#### Institutional Capacity

The capacity of management and lecturers remains a concern and partnerships with industry remain weak and even non-existent at some colleges. A national programme involving all major stakeholders is required to solve these challenges. Therefore, social partners such as industry, implementing agents and researchers need to be brought in to help improve the capacity of the TVET system (Mail and Guardian, 2020).

#### **Open Learning**

In light of the Covid-19 pandemic online self-guided learning could solve some of the current teaching problems and address the educational backlog. In addition, open learning is a flexible learning system, including distance education, resource-based learning, and all of the preceding forms of learning based on open learning principles. Open learning seeks to remove all unnecessary restrictions to learning and it seeks to remove all unnecessary restrictions. The challenge is that self-guided online learning is doomed to fail, in South Africa particular with socio-economic disparities, more so in key subjects like mathematics and physical science where prior knowledge, conceptual understanding and self-motivation to succeed are critical (IoL News, 2020).

The current lockdown has suddenly compelled teachers to adopt predominantly online, blended learning teaching practices which involve instructional resources and face-to-face facilitated activities. Further to this the recent recognition by the South African government that science, technology, engineering and mathematics are important in the Fourth Industrial Revolution has had little effect on the skills development of teachers, infrastructure or modernisation of resources in schools.

# **Competition for Skills with Other Sectors**

The manufacturing and engineering sector competes with other sectors to attract engineering graduate whose skills are sought out in the sector such as Construction, Human Resource Management, Finance and Information Communications Technology (ICT). The movement of skilled artisans and engineers across the sectors also pose a supply-side challenge for the manufacturing, engineering and related services sector. To elaborate further Consulting Engineers of South Africa has reported that the sector has experienced a huge attrition of engineers leaving the industry and joining the banking sector and immigrating to other parts of the world because South African qualified engineers are generally well accepted internationally and attests to the quality of engineers with South African postgraduate qualifications (Business Report, 2019). In addition attractive working conditions in other sectors may be a pull factor for engineers, technicians, artisans and professionals in the mer sector.

The merSETA has embarked on a tracer study in association with the DHET and the other SETA's in order to track and trace learners who completed the workplace based learning (WBL) component of their training at least 1 year after completion. Tracer Studies are considered an important tool to help with sectoral skills planning and the understanding of broader national social perspectives. The study helps provide information on where learners end up, after graduating from the learning institutions or programmes and follows their success in the labour market. This study reports on labour absorption, impact of education to gain insight for improvement, learner appetite to embark on additional training and learner ambitions with regards to their careers.

According to the merSETA 2019 Tracer Study, completing learnerships resulted in a 36% increase in employment for beneficiaries who were unemployed pre-learnership. The results for those who were employed prior to a learnership however yielded disappointing results, it showed a 19% decrease from (98% to 79%) in employment for beneficiaries who were employed prior to completing learnership.

Apprenticeship and internship completers tended to have improved employment levels with a 36% and 54% increase in employment once completed. The vast majority of beneficiaries who completed WBL programmes and were employed, are employed in the manufacturing and related services sector.

#### 3.4 FUTURE SKILLS

This section focuses on how skills demand can be expected to change further in the future. The emerging occupations identified suggest that higher-skilled management occupations and higher-skilled occupations related to technological change are emerging (Skills Supply and Demand Report, 2020).

The WEF report presents a table of emerging occupations for South Africa. These are occupations for which demand is expected to increase in the country over the period 2018–2022. The listed occupations were the occupations most frequently cited by survey respondents within companies that are operating in South Africa.

The table identifies emerging occupations and skills challenges

Occupations	Skills
Software and applications developers and analysts	Analytical thinking and innovation
Sales and marketing professionals	Creativity, originality, and initiative
Managing directors and chief executives	Active learning and learning strategies
General and operations managers	Technology design and programming
Data analysts and scientists	Complex problem-solving
Financial and investment advisers	Leadership and social influence
Assembly and factory workers	Reasoning, problem-solving, and ideation
Sales representatives, wholesale and manufacturing,	Critical thinking and analysis
technical and scientific products	
Industrial and production engineers	Resilience, stress tolerance, and flexibility
Human resources specialists	Emotional intelligence
Data analysts and scientists	Big data analytics, block chain development, AI, software
	design, coding, drone technology, cyber security
Robotic engineers	Social media
Software engineers and coders	Business modelling
Block chain, cyber security, AI specialists,	Strategy
forensic investigators, app developers	
Social media specialists	People and conflict management

Table 10: Occupations and Skills O	Challenges
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The emerging occupations identified suggest that higher-skilled management occupations and higherskilled occupations related to technological change are emerging (Skills Supply and Demand Report, 2020).

The World Economic Forum report (2018) notes that the future of jobs is not singular. It diverges by industry and sector, influenced by initial starting conditions around the distribution of tasks, different investments in technology adoption, and the skills availability and adaptability of the workforce. As a consequence, different industries experience variation in the composition of emerging roles and in the nature of roles that are set to have declining demand.

The NEDLAC report (2019) considers the key drivers of change in different sectors and industries in South Africa. To elaborate further, sectors and industries in the future will change as a result of the identified drivers of change. Automation, demographic changes, and globalisation are noted in the report as the three broad drivers of change across sectors that are likely to result in some occupations and activities disappearing.

Sector or Industry	Emerging Occupations	Occupations becoming redundant
Informal Economy	Gig-like service providers	N/A
	Personal security service	
	providers	
	Occupations related to informal banks	
	(stokvels)	
	Day-care specialists	
	<ul> <li>Crafters (related to the 'maker'</li> </ul>	
	movement)	
	Elderly care specialists	
	<ul> <li>Networking specialists</li> </ul>	
	<ul> <li>(connecting people)</li> </ul>	
	Home-care specialists	
	<ul> <li>(Social) media specialists</li> </ul>	
	<ul> <li>Data analysts for informal sector</li> </ul>	
	App developers to connect informal	
	traders and service providers	
Education	Designers of learning offers for mobile	Registration clerks
	devices	<ul> <li>Accountants and bookkeepers</li> </ul>
	Curated knowledge specialists	Mediocre teachers
	Learning progress analysts	Teachers that just share content
	Transition coaches (preparing people for	Librarians
	next jobs)	Facilities teaching outdated skills and
	Special needs education facilitators	materials
	Blended learning designers	Proof readers
	Al coders for teaching and	Printing press operators
	learning	Statistics assistants
	Cross-disciplinary integrator of knowledge	Education that is not
		personalised or customised
		Office and admin clerks
		Attendance control clerks

#### **Table 11: Emerging and Redundant Occupations**

Sector or Industry	Emerging Occupations	Occupations becoming redundant
Manufacturing	<ul> <li>Digital manufacturing workers</li> <li>Worker experience creators</li> <li>Factory automation workers</li> <li>Value chain 'greeners'</li> <li>Digital fluency trainers</li> <li>Production line worker coaches and reskillers</li> <li>Creators and facilitators of customised offers</li> <li>Supervisors of autonomous things</li> <li>African markets analysts</li> </ul>	<ul> <li>Cargo and freight agents</li> <li>Inspectors, testers, sorters</li> <li>Machine setters and operators</li> <li>Procurement clerks</li> <li>Packaging and filling machine</li> <li>operators</li> <li>Machine feeders and off bearers</li> <li>Assembly line workers</li> <li>Payroll and timekeeping clerks</li> <li>Timing device adjusters</li> <li>Mould makers</li> <li>Mechanical drafters</li> <li>Patternmakers</li> <li>Painting and coating workers</li> </ul>
Automotive	<ul> <li>Non-fossil-fuel energy technologists</li> <li>Cyber security experts</li> <li>Digital fluency trainers</li> <li>Production line worker re-skillers</li> <li>Value chain 'greeners'</li> <li>In-vehicle infotainment system</li> <li>Developers</li> <li>System optimisers</li> <li>Robot engineers</li> </ul>	<ul> <li>Assembly line workers</li> <li>Welders, cutters, solderers, braziers</li> <li>Procurement clerks</li> <li>Inspectors, testers, samplers</li> <li>Crane, hoist, and winch operators</li> <li>Automobile testers</li> <li>Car sales people</li> <li>Mechanics and diagnosticians</li> <li>Machine setters and operators</li> </ul>

Existing occupations may be augmented by these technologies, while new tasks and occupations are also expected to emerge altogether. Across sectors and industries, occupations that are expected to decline in importance are mainly those that involve routine tasks and those that may be made redundant by automation and other types of technology.

#### 3.5 SECTORAL PRIORITY OCCUPATIONS AND INTERVENTIONS

In this section of the report, we identify priority occupations for the mer sector. Overall, HTFVs are not a good indicator of sector priorities as they tend to represent immediate demand and are subject to economic conditions and company policy, e.g. freezing headcount or expanding portfolios rather than additional recruitment requirements. Primary research has been utilised to compile the list of priority occupations as well as inputs from the sectors themselves. It should be noted that the list below is the overall list of priorities and is ranked based on demand across the Chambers in terms of vacancies, desk research and sector inputs as well as embarking on some initial engagements with the sectors priorities as identified by the DTIC master plans which are currently being developed.

The Table below represents the sectoral priority occupations for 2021/2022.

# Table 12: Priority Occupations

Table	12: Priority Occ	upations						
				Auto Components		ail		
				<u></u>		Motor Retail	re	
~				ŭ	a	or	New Tyre	Plastics
Rank	OFO	Occupation	Auto	uto	Metal	lot	e v	last
<u>~</u> 1	2019-214101	Industrial Engineer					z	A X
2	2019-214101	Engineering Production Systems Worker	х	X X	X X	X X		x
3	2019-653101	Automotive Motor Mechanic		^	x	x	х	^
4	2019-652301	Metal Machinist		x	×	×	^	x
5	2019-032301	Mechanical Engineer	x	x	×	^		x
6	2019-214401	Millwright	X	x	X	x		x
7	2019-071202	Quality Manager		x	x	x		x
8	2019-121101	Finance Manager		×	×	×	x	^
9	2019-311904	Manufacturing Technician		^	x	×	x	x
10	2019-242303	Human Resource Advisor			x	x	x	x
10	2019-242303	Sales Manager			X	x	X	x
11	2019-651302	Boiler Maker		x	x	*		x
12	2019-031302	Corporate General Manager	v	×	x	х		X
13	2019-651202	Welder	х	x	x	x		
14	2019-653306	Diesel Mechanic		^	×	×		
15	2019-243301	Industrial Products Sales Representative		x	x	×		
10	2019-243301	Electrician		X	x	x		x
17	2019-671208	Transportation Electrician		x	x	x		X
10	2019-331201	Credit or Loans Officer		X	x	x		x
20	2019-331201	Sales and Marketing Manager		x	x	X X		X
20	2019-652201	Toolmaker		x	x	*		x
21	2019-643202	Vehicle Painter		×	x	х		X
22	2019-653303	Mechanical Fitter		x	x	^		x
23	2019-033303	Rubber Production Machine Operator		x	×	х	x	×
25	2019-312201	Production / Operations Supervisor (Manufacturing)		^	х	^	x	x
25	2019-312201	Safety, Health, Environment and Quality (SHE&Q)			^		^	^
26	2019-226302	Practitioner			x	х		x
27	2019-643201	Industrial Spray painter		х	x	x		~
28	2019-311401	Electronic Engineering Technician		x	x	~		x
29	2019-432201	Production Coordinator		x	x			x
30	2019-431101	Accounts Clerk		~	x	х	х	~
31	2019-524903	Sales Clerk / Officer		х	~	~	x	x
32	2019-132104	Engineering Manager	х		х		x	
33	2019-652302	Fitter and Turner	~	х	x	х	~	
34	2019-522303	Automotive Parts Salesperson	1		x	x		$ \square$
35	2019-242101	Management Consultant			x	x		
36	2019-684904	Panel beater				x		
37	2019-642702	Refrigeration Mechanic			х	X		
38	2019-432101	Stock Clerk / Officer				x		х
39	2019-431102	Cost Clerk		х		х		
40	2019-251201	Software Developer			х	х		
41	2019-132401	Supply and Distribution Manager		х	X			
42	2019-311301	Electrical Engineering Technician		х	х			
43	2019-121905	Programme or Project Manager			х			х
44	2019-671204	Lift Mechanic			X	х		
45	2019-411101	General Clerk			X	X		
46	2019-332302	Purchasing Officer	х		х			
47	2019-241102	Management Accountant	x		X			
48	2019-651403	Metal Plate Bender		х	X			
49	2019-714208	Plastics Manufacturing Machine Minder		x				х
50	2019-671202	Millwright			х			
L			1	1			1	

Rank	OFO	Occupation	Auto	Auto Components	Metal	Motor Retail	New Tyre	Plastics
51	2019-351201	ICT Communications Assistant			х			
52	2019-712101	Metal Processing Plant Operator			х			
53	2019-311801	Draughtsperson			х			
54	2019-714202	Plastic Compounding and Reclamation Machine Operator						х
55	2019-524901	Materials Recycler						х
56	2019-734402	Forklift Driver			х			
57	2019-642701	Air-conditioning and Refrigeration Mechanic			х			
58	2019-132402	Logistics Manager		х				
59	2019-313501	Metal Manufacturing Process Control Technician			х			
60	2019-215101	Electrical Engineer			х			
61	2019-311501	Mechanical Engineering Technician			х			
62	2019-311201	Civil Engineering Technician			х			
63	2019-214605	Metallurgist			х			
64	2019-325705	Safety Inspector			Х			
65	2019-214104	Production Engineering Technologist	х					
66	2019-652205	Master Toolmaker		х				

\*\* the occupation Motorised Vehicle or Caravan Salesperson demonstrated a high demand but this is attributed to general sales and in moor retail it was found that these people require technical product knowledge, in addition it is not a desirable occupation and experiences high churn. For these reasons it has been excluded. The sectors agree that the sales manager position is of a higher priority and candidates are quite scarce.

In terms of interventions for the identified occupations, the majority are for skilled trades' workers which would therefore require an apprenticeship or learnerships. This is followed by professional and managerial level positions which requires bursaries for HEI qualification/s or skills programmes to elevate existing skills and skills gaps. There is also a demand for skills at the operator level which would typically require learnerships or skills programmes. There are very few occupations at clerical and sales worker level. As demonstrated in the vacancies analysis, these tend to have high number of vacancies but these are quickly filled – high churn is experienced in these occupations.

The majority of workers in the mer sector have low level occupations and therefore low level skills. This presents a concern under the COVID-19 crisis as it is these occupations which are at risk of being subjected to layoffs and retrenchments. Across most sectors there continues to be a threat of further retrenchments looming if the sectors are not able to operate at full capacity and if the economy is not stimulated it will be difficult to retain workers. Elementary and operator level workers will require up-skilling to be able to access employment or become self-employed.

One of the merSETAs' key skills priorities has been to develop an agile and adaptable workforce. Therefore efforts are required to ensure the up-skilling, multi-skilling and trans-skilling of workers so that they have more autonomy in the labour market and their skills are absorbed. The key changes presented in the future skills section of this report must be taken into consideration in compiling a strategy to assist all workers in the sector and not only develop skills that are identified in the priority skills list. This notion was supported by the sectors in consultation, many expressing that agility is key and that the concept of soft skills and emotional intelligence is becoming an ever increasing requirement to navigate the world of work.

Across all the sectors, COVID-19 has raised the need for heightened awareness to reduce infection rates. Occupational Health and Safety training has been conducted but many sectors indicated that

they require additional support in terms of training in this regard due to the costs of training, PPE and social distancing protocols.

Furthermore there is heightened need to move to digital platforms to embark on blended and distance learning going forward. Workers would therefore require the skills and equipment to be able to participate in training initiatives going forward.

#### 3.6 CONCLUSION

This chapter reflects on the categories of skills development needs in the merSETA sector that have been alluded to in the previous chapters.

Skills challenges are of key importance as these tend to hamper the SETAs' efforts in terms of producing skills of the quality and volume required by the sector.

Overall, a range of factors will impact on the future of skills supply and demand in the sector. These factors include future growth of the economy, the implementation of interventions aligned with national strategies including transformation, a demand for higher level skills in the sector and the demand for better the quality of skills supplied including skills gaps.

Future skills must be researched more closely for the mer sector, particularly in terms of forecasting in a time of COVID-19. Given the developments of COVID-19 which have fast tracked the world into the future of work. To meet industry needs, interventions must be tailored and implemented using the best and latest technologies related to digital platforms, simulations and virtual reality.

Automation and technological advances require re-skilling, up-skilling and multi-skilling. Stakeholders have highlighted the demand for interventions fit for provision of skills for the future, but at the same time the sector must produce skills now for skills that are becoming redundant. Ultimately, merSETA must become ever more innovative regarding skills provision, taking on for itself agility and adaptability by better servicing both learners and employers. This requires leadership with respect to unpacking issues highlighted in this SSP and deliberating on acceptable approaches through current interventions and innovations as well as identifying key partnerships or projects to support sector demands.

Finally, there is need for up-scaled efforts to secure shared and inclusive growth, transformation of ownership and management control and empowerment through decent jobs, especially in labour-intensive sectors.

# **4 PARTNERSHIPS**

#### 4.1 INTRODUCTION

Partnerships are the vehicle through which the merSETA is able to fulfil its skills development mandate. Partnerships are funded through discretionary grants and are therefore subject to the conditions of the discretionary grants and projects policy of the merSETA. Compliance is required related to the scope and the legislative and regulatory requirements of all its discretionary programmes, projects and partnerships.

All partnerships are informed by the strategic priorities of the merSETA as set out in its Sector Skills Plan, Five Year Strategic Plan and Annual Performance Plan. These plans in turn are aligned to national priorities of development and transformation to address social and economic demands. The merSETA defines partnerships as, "a contractual arrangement between one or more parties where the parties agree to a common education, training and/or skills development purpose, aligned to national or sector specific strategic imperatives" (merSETA Discretionary Grants Policy, 2019).

This chapter aims to analyse the types of partnerships that the merSETA has embarked on, while highlighting best practice learnings in terms of partnership successes and challenges. Furthermore it will unpack the components of a best practice model and conclude with the discussion of potential future partnerships in line with national imperatives and sectoral needs, in a time of the COVID-19 pandemic.

# 4.2 ANALYSIS OF EXISTING PARTNERSHIPS

The partnerships presented in this section arises from a summary of current partnerships in the merSETA system. As at 31 March 2020, the merSETA had embarked on more than 150 partnerships. These contractual arrangements and their implementation are monitored at a high level by the Finance and Grants Committee, a sub-committee of the Accounting Authority.

The purpose of partnerships can be quite varied, but they mainly serve to assist the SETA in fulfilling its skills development mandate. To this end the partnerships are all related to the merSETA strategy in terms of its strategic focus areas, in line with the outcomes of the NSDP. Partnerships are governed by either a Memorandum of Agreement or a Memorandum of Understanding. According to the merSETA grants policy, the following is understood in terms of these:

- Memorandum of Agreement (MoA): legal agreement between two or more parties for the execution of agreed project objectives, setting out the terms and conditions of the agreement, and clearly indicating the milestones, deliverables and associated disbursement of funds.
- Memorandum of Understanding (MoU): legal agreement that is bilateral or multilateral, written and binding with a common intent. It has to establish the terms and conditions to cooperate on a particular project or programme of projects in order to enable and promote education, training and skills development interventions. The MoU should have an indication of convergence between parties and should lead to specific agreements or MoAs.

Partnership are often clustered by the type of partner, however on looking at the partnerships at the merSETA, it emerges that there are two main intentions for partnerships. First is the intention to develop skills for a skilled and capable workforce, which sees the SETA partnering with TVET Colleges, Higher Education Institutions, Government Institutions and International Agencies to develop skills for a mer sector that is responsive, adaptable and agile. Second is the intention to develop research and innovation projects in support of labour market intelligence and skills planning, innovations for skills development and sectorial drivers in line with global trends and advanced technologies. For the latter, partners include private consultants and specialised entities housed within universities and other publically funded institutions.

# 4.2.1 Types of Partners and Reasons for Partnering

# 4.2.1.1 TVET College Partnerships

TVET Colleges are critical for the development of skills to strengthen the economy. They accommodate a large number of learners and are tasked with supplying high quality skills to the labour market. They rely on assistance to reach their potential in terms of improved capacity and quality. These institutions are also the vehicle through which skills to support infrastructure projects are to be developed, while the Centres of Specialisation act as key partners in delivering identified occupational programmes. The merSETA have partnered with TVET colleges in an attempt to turn them into institutions of choice for school leavers. Partnerships with TVET colleges are aimed at:

- Promoting the quality and responsiveness of TVET teaching, learning and assessments.
- Facilitate access to learning opportunities so that TVET graduates can either gain artisan status or become employable, this includes Recognition of Prior Learning (RPL).
- Develop skills required to meet the demands of new and sophisticated technologies.

The merSETA has partnerships with most TVET colleges totalling 41 college partners. The majority of these partnerships focus on learning pathways towards achieving trade-tested artisan status through bursaries, learnerships and apprenticeships. These all have a workplace based learning (WBL) component, so the partnership is also linked to employers/accredited workspaces.

On average these partnerships last around three years, with the longest being five years and the shortest being one year. A complete list of all these partnerships is provided in the annexures section of the SSP.

The table below lists all merSETAs' TVET College Partners:

TVET Colleges partnered with merSETA				
BOLAND TVET COLLEGE	LETABA TVET COLLEGE	TALETSO TVET COLLEGE		
BUFFALO CITY TVET COLLEGE	MAJUBA TVET COLLEGE	THEKWINI TVET COLLEGE		
CAPRICORN TVET COLLEGE	MALUTI TVET COLLEGE	TSHWANE SOUTH TVET COLLEGE		
COASTAL KZN TVET COLLEGE	MOPANI SOUTH EAST TVET COLLEGE	TUT-INSTITUTE OF ADVANCE TOOLING		
COLLEGE OF CAPE TOWN TVET	MOTHEO TVET COLLEGE	UMFOLOZI TVET COLLEGE		
EAST CAPE TRAINING CENTRE	NKANGALA TVET COLLEGE	UMNGUNGUNDLOVU TVET COLLEGE		
EASTCAPE MIDLANDS TVET COLLEGE	NORTHERN CAPE URBAN TVET COLLEGE	VUSELELA TVET COLLEGE		
EHLANZENI TVET COLLEGE	NORTHLINK COLLEGE	WATERBERG TVET COLLEGE		
EKURHULENI EAST TVET COLLEGE	ORBIT TVET COLLEGE	WEST COAST COLLEGE		
EKURHULENI WEST TVET COLLEGE	SEDIBENG TVET COLLEGE	WESTCOL TVET COLLEGE		
ELANGENI TVET COLLEGE	SEKHUKHUNE TVET COLLEGE	INGWE TVET COLLEGE		
ESAYIDI TVET COLLEGE	SOUTH CAPE TVET COLLEGE	KING SABATA DALINDYEBO TVET COLLEGE		
FALSE BAY COLLEGE	SOUTH WEST GAUTENG TVET COLLEGE	LEPHALALE PUBLIC TVET COLLEGE		
GERT SIBANDA TVET COLLEGE	GOLDFIELDS TVET COLLEGE			

#### Table 13: TVET Colleges partnered with merSETA

# 4.2.1.2 Higher Education Institution (HEI) Partnerships

As per the NSDP, SETAs have a pivotal role to play in bringing the education fraternity and industry closer together. As a SETA grounded in vocational training, the merSETA has used HEI partnerships to support lecturer development for TVET colleges, provide experiential learning and skills for the 4IR. Table 14 below, provides an overview of

Table 14. Her Partners and Scope of Work				
Higher Education Institution	Scope of Work			
Cape Peninsula University Of	ICT skills in SME sector			
Technology	Experiential Training (P1 & P2)			
reciniology	Recruit, select, contract and register continuing students			
Central University Of Technology,	Experiential Training (P1 & P2)			
Free State	Recruit, select, contract and register continuing students			
	Experiential Training (P1 & P2)			
Durban University Of Technology	Experiential Training (P1 & P2)			
Mangosutho University Of				
Technology	Experiential Training (P1 & P2)			
Nelson Mandela University	166 Bursaries			

 Table 14: HEI Partners and Scope of Work

Higher Education Institution	Scope of Work		
	Development of TVET Lecturers and trainers		
	Skills for Industry 4.0		
	TVET-Marine programmes		
Rhodes University	Skill Development Programmes		
Stellenbosch University	21 Bursaries		
Stellenbosch Oniversity	Work Integrated Learning		
Tshwane University Of Technology	Experiential Training (P1 & P2)		
	Development of a PG Dip for lecturers		
University Of Western Cana	Extended Curriculum Programmes		
University Of Western Cape	The establishment of an Interactive Digital Centre HUB inclusive of a virtual 3-D		
	learning platform		
University Of Cape Town	Apprentices-3		
	Recruit, select, contract and register continuing students		
University Of Johannesburg	40 Honours, 5 Masters & 2 PhD students		
University Of Pretoria	Recruit, select, contract and register continuing students		
University Of South Africa	Experiential Training (P1 &P2)		
Oniversity Of South Africa	Career Development framework		
University Of The Free State	Funding of various innovation, research, and support programmes		
	Skills for Industry 4.0		
University Of The Witwatersrand	Skill programme to develop research skills		
University Of Venda	Funding of various innovation, research, and support programmes		
Vaal University Of Technology	Candidacy (Graduate Development)-30		
Walter Sisulu University	WSU turnaround strategy in support of the Minister of DHET's five key priorities.		

#### 4.2.1.3 National and Provincial Government Partnerships

The merSETA partners with government departments for skill development purposes to develop artisans and up-skill the youth and marginalised individuals such as prisoners.

Partner	Scope of Work
	Apprenticeships
Office of the Premier (KZN, LP, NW, EC, FS)	Skills Programmes
	Internships
	Apprenticeships
Department of Basic Education (GP, MP)	Skills Programmes
	Internships
	Apprenticeships
Limpopo Department of Public Works	ARPL
	Learnerships
Department of Correctional Services (EC, GP, KZN)	Skills Programmes
Department of Economic Development, Tourism and Environmental Affairs KZN	ARPL

**Table 15: Government Partners and Scope of Work** 

#### 4.2.1.4 International Partnerships

The merSETA has partnered with international agencies in an effort to keep abreast of developments in key sectors to assist in the development of national apprenticeship training as well as experiential learning. There are currently two such partnerships:

Institution	Scope of Work
BRITISH COUNCIL	To link selected TVET colleges with United Kingdom colleges in terms of curriculum development, management capacity building and TVET lecturer development.
CHINESE CULTURE AND INTERNATIONAL EDUCATION EXCHANGE CENTRE	To offer the TVET students internship in China through undergoing training at Chinese Institutions and work placement on Chinese companies.

#### **Table 16: International partnerships**

#### 4.2.2 Research and Innovation Partnerships

The merSETA research agenda is guided by the NSDP in terms of its support for skills development and targeted interventions to stimulate economic growth. At the merSETA, decision making is guided by credible research. Overall, research is executed through organisation-wide efforts; however the Strategy and Research Division within the merSETA is at the helm of research collaborations, partnerships and projects. The table below demonstrates research through a partnership delivery model to inform skills planning, sectoral trends and innovations which will help the sector keep pace sectoral needs and 4IR in terms of its service delivery offering.

Research Partner	Scope of Work		
Human Sciences Research Council	Understanding the skills development needs of Black Industrialists		
Jet Education Services	PSET Collaboration and Learning Opportunities and Utilisation of		
Jet Education Services	Data		
Mzabalazo Advisory Services	Artisan Learning Pathways Evaluation Study		
Nelson Mandela University	Youth Livelihoods in the EC		
Nelson Mandela University	Learning work through a student-driven association		
NUMSA	Chamber Research		
NOMSA	Feasibility study: Retrenched Workers Project		
Plastics SA	Chamber Research		
RedFlank	Evaluation of the Retrenchment Assistance Programme (RAP)		
SEIFSA	Chamber Research		
Stellenbosch University (School Of Public Leadership)	Understanding Green Skills in the MER Sector		
DPRU, University Of Cape Town	Economic Complexity in the MER Sector and the role of SMMEs		
University Of The Witwatersrand,	Atlas Occupations – reference guide on occupations for the MER		
Johannesburg (Real)	Sector		
Urban Econ	Tracer Study Project – Destinations of learners completing Workplace		
	Based Learning		

#### Table 17: Research Partnerships

#### 4.3 ANALYSIS: UNDERSTANDING BEST PRACTICE AND CHALLENEGES IN PARTNERSHIPS

Since its inception, the merSETA has done well in terms of fulfilling its mandate with partnerships being the key to successfully meeting skills development targets. Research, development and innovation projects have benefited from the working relationships established through partnerships.

Collaboration, communication, continuous monitoring and flexibility are highlighted as key components for successful partnerships. Unsuccessful partnerships can result in low throughput rates, wasted funds, poor quality outputs and a lack of trust between partners and a sector that does not hold the work of the SETA in high regard.

#### 4.3.1 Demand Led Partnerships and Proactive Partnerships

The majority of the merSETA partnerships are funded through discretionary grants. For the mostpart merSETA has followed a demand-led approach with regards to their partnership model. This means that potential partners would approach the merSETA through a discretionary funding application, the partner would propose projects, programmes and partnerships in line with the broader merSETA strategy. The merSETA would then review the applications and award funding in line with proposal and the proposed outputs, be it learning interventions, sector projects, research or a combination of these. This demand-led approach was meant to ensure that the sector is able to self-regulate and drive skills development in line with its own needs, funding the skills and projects that are needed to keep the sector going in terms of productivity as well as national imperatives. Often, these partnerships are not fully conceptualised, they inflate the potential outcomes – especially with regards to learner numbers and they do not have a negotiated approach to ensure that all parties are fully on board and willing to see the agreement to fruition.

On the other hand partnerships can also be proactive. In this approach, the merSETA, identifies key projects and programmes aligned to national imperatives to serve the sector as well as national priorities of development and transformation to meet social and economic demands. The proactive approach allows the merSETA to seek out potential partners to see the project or programme to fruition. The proactive approach requires more time and consideration on the part of the merSETA to negotiate with partners on roles and responsibilities, administration, monitoring and delivery before the agreement is finalised.

# 4.3.2 Best Practice Learnings

For partnerships to work, the partners must be willing to participate fully and in line with the terms of the agreement. There must be adequate capacity to carry out all the tasks required to be completed and there must be effective mechanisms in place to adequately monitor activities for the duration of the partnership.

The components of conceptualisation, planning, negotiation, specifying roles and expectations are critical to a successful partnership. The duration of the partnership is also important because the body of work and the intended outcomes of the partnerships must have adequate time to develop to its full potential. Flexibility of the partners within the partnership agreement is also critical to success.

#### 4.3.2.1 Successful Partnerships and Challenging Partnerships

The table below demonstrates the best practice that emerges from successful and challenging partnerships. These factors have been highlighted by merSETA managers responsible for partnerships and projects, collected through focused discussion and a short questionnaire. In addition insights were extracted from Kraak (2018) on Research Chairs established by SETAs. This study proposes a more balanced approach through evaluation of both internal and external factors that impact on partnerships, as such the partners themselves will be consulted to weigh in on best practice and learnings. A model of a good partnership was developed based on the best practice findings from successful partnerships<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> Examples of successful and unsuccessful partnerships are available in Annexure 2. Names of partners are removed to protect institutional anonymity and due to future plans to implement a full evaluation study in which the perceptions of partners will be examined

Best Practice Factors	What is it?	Challenging Partnership	Successful Partnership
Conceptualisation	This refers to forming the concept or idea. The parameters of the partnership in terms of scope and required outputs should be detailed. The concept presents a sound understanding of the requirements in terms of time, cost and capacity to deliver the end product.	The concept is poorly defined. The partners do not adequately account for their abilities to follow through on the requirements and within the parameters of the scope. Project risks are not adequately addressed	The concept is thoroughly defined. The concept is elevated to a strategic level and demonstrates its importance in relation to skills development to benefit both beneficiaries and the sector. Risks are highlighted ahead of time with mitigation strategies.
Planning and Negotiation	Detailed planning and negotiation between partners is recommended before the agreement is finalised.	Lack of a detailed plan. Lack of understanding with regards to the rollout and how the outcomes will be achieved on time and on budget.	The partners understand the scope and are able to produce a detailed plan of action to achieve the desired outcomes. Partners agree that the plan is reasonable and achievable.
Partners' Roles are agreed and documented	The parties understand their responsibilities for the duration of the project. These are detailed and documented in the agreement between parties.	Parties are unsure of the roles and responsibilities. There is a lack of accountability which leads to mistrust and a lack of delivery.	Roles are clearly defined and linked to deliverables. Milestones are agreed and funds disbursed once parties are in agreement that the requirements for each phase or deliverable has been met.
Administration and Monitoring	Parties are clear on the management and monitoring processes as documented in the agreement.	There is no agreed management process to keep the project on track and monitor progress against the agreed time frames and plans.	The merSETA has found it useful to have a project management committee and project steering committee in place. The project management committee (PMC) manages the day to day operations of the project ensuring all administrative process are monitored. The project steering committee (PSC) has an oversight role to ensure that the project is unfolding as it should and remains within its scope.
Tenure vis-à-vis Outputs	There is a well thought out time frame for the project to ensure timeous delivery of outputs.	Project tenure is not well considered either too long or too short to meet the requirements captured in the agreement. The objectives of the project is not aligned to its strategic or long term focus	The time frames of the project are well suited to its intentions. It is considerate of the volume of learners and the requisites for their success. In the case of research, there is considerable consideration of the intent of the research partnership, either a short project is required to assist informed decision making or longer term agreements are required to delve into concepts linked to new innovations, new curricula and sectoral development.
Flexibility of the parties to achieve intended	Projects are seldom without challenges however the parties should have a flexible approach in terms of working towards a	Lack of presence and willingness of parties to ensure the success of projects. Difficult to meet with the required	Parties are flexible and avail themselves to trouble shoot problems and ensure the project meets its objectives.

management committees due to a lack of

responsibility and credibility.

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credible output.

outcomes

#### 4.4 TOWARDS A BEST PRACTICE MODEL

The figure presented below demonstrates the best practice findings which can be incorporated into a basic model for partnerships. It comprises two parts with the majority of the effort assigned to the pre-planning and setting up phase. Once all the groundwork has been laid in terms of planning, the implementation and monitoring phase ensures that the partnership adheres to the agreed roles, objectives, accountabilities and outputs until the partnership is concluded. The merSETA has reported that in order to sustain best practice, all agreements should have a close out report which documents key challenges, opportunities and recommendations for future work on projects of a similar nature.

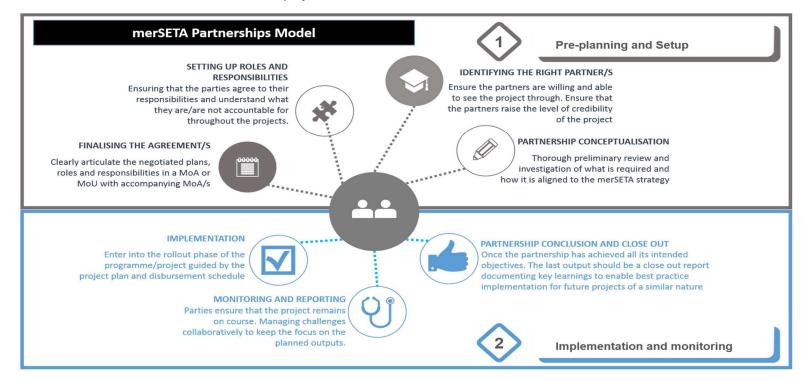


Figure 38: Partnership Model

#### 4.5 PLANNED PARTNERSHIPS

In the preceding sections of this report, the impact of the COVID-19 pandemic is evident in terms of its ramifications on the mer sector and the work of the merSETA. Partnerships will be a mechanism through which the SETA is able to address the impact of COVID-19. In this section of the report we document the initial conceptualisations of partnerships in the midst of the pandemic. The opportunity that COVID-19 presents is to accelerate and lay foundation for long-term sustainable solutions, implementable initiatives that will geared towards contributing to stabilising existing entrepreneurial activities in the formal and other informal economies to mitigate the collapse of the mer economy, as well as catalyse new diversified entrepreneurial activities for a new economic pathway. In the case of merSETA, localisation of production as encapsulated in government's reindustrialisation strategy is key, and partnerships be guided by this strategic directive. In addition, it is imperative that the merSETA grows internal capacity for project management. The initiatives expressed in this partnerships chapter as well as for new partnership initiatives requires additional project management capabilities. Initially this function may be contracted in and this additional capacity must include the development of models and concomitant skills transfer so that merSETA officials will not be dependent on contracted capacity in perpetuity as project management will become core to the work of the SETA.

#### 4.5.1 merSETA COVID 19 initiatives

#### 4.5.1.1 Ensuring Learner Stipends are still availed for learners on merSETA programmes

The merSETA Accounting Authority approved the ring-fencing of R360 million for stipends for workbased learners. The current survey being run by the LMI-SSP research will assist in determining actual quantification of those traditional training companies that are to commit to continuing training of registered learners<sup>9</sup>. Continuing to avail stipends to continuing learners could also be viewed as our contribution to addressing the loss of income, and, hunger issues, even if temporarily.

#### 4.5.1.2 Expediting TERS Funding

Increase the merSETA budget allocation for TERS (TLS) funding. Recently, through engagement the merSETA and UIF arrived at commitment from UIF to expedite UIF payment of the wage component of the scheme for those businesses that have opted for business rescue. An increase of the current merSETA allocation for the skills development component should be considered. An enhancement of the current arrangement should include the transfer of skills of business practitioners assigned to business rescue, so that such skills will be available in enterprises on an ongoing basis to monitor and develop innovative solutions for productivity and process improvement. Such skills would be valuable for enterprises committed to re-investing in new technologies and new product diversification should opportunities present themselves. Preliminary research indicates that productivity and process enhancement skills can be availed through top-up skilling of qualified trades, technician and industrial engineering occupations. Furthermore, the merSETA and UIF should consider extending the timeline for TERS (UIF) and merSETA commitments for companies opting for business rescue to at least 12 months. Other possible issues may be those such as employers and labour negotiating changes to Conditions of Services (CoS) during the TERS-merSETA supported intervention. The TLS research and

<sup>&</sup>lt;sup>9</sup> Learners affected encompasses learners on learnerships, apprenticeships, internships, candidacy, UoT WIL, TVET to artisan placements and RPL top up candidates.

evaluation recommends that the development of policy is an imperative as the TLS. There are other recommendations in the report which will available.

### 4.5.1.3 Retrenchment Assistance

The merSETA has proposed to increase the Retrenchment Assistance Programme (RAP) budget allocation. The RAP could be enhanced to become a basket of a broader range of support that includes services such as career guidance and counselling; access to development finance and business support (public and private for RAP participants interested in self-employment opportunities); commitment towards the development of former employee self-employment initiatives. The international benchmarking study on RAP type programmes would be valuable in providing substance for a feasible approach and basket of RAP enhanced assistance that can be designed, developed and piloted.

Note: An enhanced TERS and RAP should also look to the utilisation of TVET colleges to support skills development of workers.

# 4.5.1.4 Small Business Development in the Motor Retail and After-sales Market and other mer industries

RMI initiative to develop small and informal businesses in the after- sales market business activity in township and rural communities. The merSETA has decided that the model should be adopted or adapted by other organised employer associations and organised labour organisations to support the development of SME and cooperatives in the respective merSETA industries. To this end the merSETA will invite proposals for its employer and labour stakeholder organisations.

#### 4.5.1.5 Empowering Youth In the Informal Sector

The research involving 40 marginalised youth from urban townships used the "diaries" methodology to investigate ways in which education and training in areas related to engineering occupations can expand entrepreneurial livelihoods for marginalised youths. These youths have had either formal or informal learning in engineering related fields and are trying to generate livelihoods of various forms in urban townships. This study provides indications that part-time studies provision by TVET colleges would be of value for both engineering studies and entrepreneurship skills. A selection of TVET partners should be approached to conceptualise, design and develop a project to test and implement.

#### 4.5.1.6 Utilising Public Training Spaces for Community Development

The merSETA is in the process of engaging with PSET public education and training institutions and private training centres to identify feasible options for the use of their facilities as spaces for stimulating the growth of community based enterprises. Given the current economic context, growing unemployment is a serious concern. These current circumstances have placed pressure on the state to come up with sustainable solutions to empower informal workers and encourage entrepreneurs to increase their earning potential. Many skilled workers do not have the financial means to invest in equipment and machinery to either start or grow viable businesses. There is a need for workshops, equipment and machinery to assist informal workers and entrepreneurs to provide services and produce their goods. This creates an opportunity for TVET Colleges, UoTs and other training centres to avail their premises, offering a sustainable solution, while empowering the local community. Some Technical and Vocational Education Training (TVET) Colleges, private training institutions and company training centres have a wealth of resources that have a great potential to be used to benefit communities within their vicinity. There are a number of community based enterprises who may benefit from access to facilities, workshops and laboratories that have equipment and machinery, that

may be financially out of reach for business and training purposes. To grant access to such facilities may be of great economic benefit to informal workers and entrepreneurs alike. The merSETA will be running a rapid 4 month investigation to determine the feasibility of such an initiative and the final report will make recommendation of what is possible including ascertaining whether there is a need for any policy changes/adaptations to enable implementation.

#### 4.5.1.7 Stimulus for Small Enterprises and Cooperatives

In an effort to support the economic stimulus of small enterprises and cooperatives, would provide graduates the opportunity for practical work experience supported by mentor-specialists in these organisational functions whilst establishing their cooperative enterprises. The government has an economic cluster programme to grow small business and cooperatives. The Ministers of Health, Higher Education Science and Innovation, Employment and Labour, Small Business Development, Trade, Industry and Competition are all working together on a project to create sustainable economic inclusion of small enterprises and cooperatives. This would include the increase of the production of PPE, sanitizers and related goods. The intention is that such a project would also boost government strategy to grow domestic industrial capacity with a strong emphasis on innovation, going beyond just the production of PPE. SETAs are expected to make their contribution to this project through their skills development mandate. The merSETA has indicated in its strategic plan and annual performance that skills for small enterprises, cooperatives and other kinds of income generation activities located within economically marginalised communities, will be an area of key focus. Having already set targets and budget in its Annual Performance Plan, it will be necessary for the merSETA to accelerate implementation, while considering boosting the current budget allocation through the utilisation of surplus funds. Small enterprises and cooperatives need to be supported with other operational functions such as human resource management, marketing, financial management, and business process optimisation to name a few. Research has shown that graduates within disciplines related to these functions take longer to find employment than those graduating in the STEM disciplines, and this becoming more challenging as the financial and business services industry is haemorrhaging jobs. This creates an opportunity for the merSETA to support the establishment of cooperatives with graduates from these disciplines to provide services to manufacturing small enterprises and cooperatives in communities.

#### 4.5.1.8 Supporting Digital Platforms for Skills Development

The merSETA vision of a digitally based skills development system would be one that goes beyond the provision of online training content and learning materials but includes features such as simulated training, virtual reality applications and learning factories, online mentoring, online project work, online assessments, self-driven incremental credentialing and the use of a range of technology solutions that could be developed in South Africa. Fortunately there are pockets of innovation initiatives in the PSET system including the merSETA ICT4APP pilot project. A digitally based skills development system that brings together the collaborative efforts and resources of our TVET colleges, HEIs, training centres and training employers. Such an initiative would be of value to both the employed and unemployed of the labour force in the long-term. The merSETA will be conducting an investigation in the next four months on the feasibility of simulated and virtual reality online training that could be delivered by TVET colleges, HEIs (especially UoTs) and private training providers. The establishment of learning factories would be included in the project. Fortunately the merSETA has two project the ICT4APP and the East Cape Midlands College Learning Factory project that are in development. The experiences thus far of these projects will contribute to the value proposition to be

designed and developed. The acceleration of the piloting and testing of these pockets of digital based learning innovations would go a long way to putting the merSETA on a path of putting in place digital based learning for its engineering related qualifications.

#### 4.5.1.9 Supporting Innovations with regard to fighting the COVID-19 Pandemic

This innovation project is conceptualised against the background of the merSETA strategic intent as encapsulated in the merSETA 5 year strategy primary strategic focus areas described as follows:

- Responding to the needs of new technologies and changing business processes related to the Fourth Industrial Revolution (4IR).
- Promoting innovation in line with socio-economic, technological and structural transformation, as well as the circular, green and blue economies.
- Influencing curriculum change and innovation for the education and training system (both institutional and workplace based-learning).
- Supporting structural transformation (ownership, control, and management) through promoting entrepreneurship, small and medium enterprises (SMEs), localisation, and uplifting the role of the manufacturing sector in inclusive growth.
- Conceptualising partnerships that are responsive to merSETA priorities.

#### 4.6 CONCLUSIONS

For the merSETA, partnerships presents the main mechanism for achieving its strategic objectives and to deliver high quality services to its stakeholders and learner beneficiaries.

The merSETA has established national and international partnerships to facilitate skills development, improve its understanding of the sectors to improve skills planning and keep abreast of innovations in the sector.

While there have been some challenges with respect to partnerships, the merSETA has noted many successes through its partnerships and will work to continually strengthen partnerships to meet and exceed its mandate. Working towards an accepted partnership model in collaboration with stakeholders is of key importance to achieve greater efficiencies.

The COVID-19 pandemic has brought the urgency of efficiency and targeted interventions to the fore. The merSETA will have to ensure that it can rapidly respond to the sector to assist in relief efforts, implement new skills development interventions in line with the demands of the 4IR and ensure that communities and workers impacted by the pandemic are still able to participate in meaningful interventions to empower them to make a positive contribution to the sector and their communities.

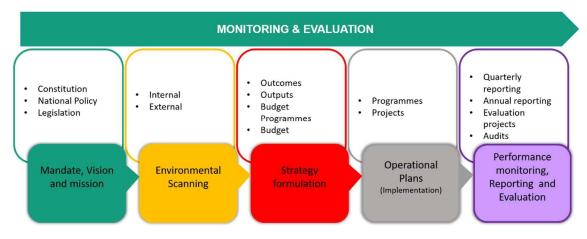
# 5 SETA MONITORING & EVALUATION

# 5.1 INTRODUCTION

The merSETA Monitoring & Evaluations (M&E) framework was developed to improve both the operational and organisational performance as well as to track the results and impact of its skills development interventions. This framework has been instrumental in institutionalising monitoring and evaluation in the merSETA. The purpose of this chapter is to highlight the role of M&E in supporting merSETA's approach to skills planning, as well as how strategic priorities (set out in the merSETA SSP) are translated in the entire planning value chain of the SETA. It will also recommend strategies to improve efforts to meet these skills priorities, as well as systems for planning in the SETA.

#### 5.2 THE MERSETA APPROACH TO M&E

Monitoring and Evaluation at the merSETA goes beyond the compliance reporting of performance. It adopts a results-based approach by focusing on performance and the achievement of results (outputs, outcomes and impact). The role of M&E in the strategic planning process/value chain is highlighted in Figure 39 below.



#### Figure 39: Role of M&E in the strategic planning process

Monitoring and Evaluation plays a key role in scanning the mer sector, planning, implementation of programmes and projects and the reporting of achievements:

**Environmental scanning/ monitoring:** Monitoring economic, social, technological, legal and environmental developments in the mer sector so as to better understand the context to inform the development of credible plans that are responsive to the sector and national priorities.

**Strategy formulation:** The merSETA strategy planning process comprising of five linked components (the Sector Skills Plan, Strategic Plan, Annual Performance Plan, Operational Plan and SLA) is underpinned by a strong monitoring and evaluation process. The formulation of outcome and output targets is underpinned by an understanding of a complexity of factors that include among other things monitoring of past trends.

**Implementation**: The successful implementation of programmes, projects and activities identified through the planning processes on time and within the budget requires constant monitoring and evaluation to improve current and future management of outputs, outcomes and impact. Monitoring and evaluation is key in tracking progress, identifying the scope for improvement and better understanding the challenges and opportunities.

### **Reporting:**

Reporting is key in improving transparency and enhancing oversight over the financial and nonfinancial performance of the merSETA. The merSETA has implemented a procedure for annual and quarterly reporting to facilitate effective performance monitoring, evaluation and corrective action.

### 5.2.1 Key systems supporting M&E

The following systems have been critical in supporting the institutionalisation of a monitoring and evaluation system at the merSETA:

**Quality Management System** The merSETA has implemented and continuously maintaining a Quality Management System in line with ISO 9001:2015 international standard to strategically benchmark, provide guidance and support to the merSETA in ensuring that the outcomes and outputs are in line with the merSETA Quality objectives. Measurement, monitoring, analysis, and evaluation are critical for the assessment of the performance of the quality management system (QMS). This is critical in supporting the merSETA in meeting its stakeholder and regulatory requirements as well as improving its effectiveness and efficiency on a continuous basis. The merSETA Quality Management System (QMS) also ensures that risk management activities are incorporated into the planning process and monitored for successful achievement of the merSETA outcomes and outputs. The ISO 9001:2015 requirements identify performance evaluation as a critical performance indicator for the entity that needs to be monitored, analysed, and evaluated. The merSETA has, therefore, adopted internal audits assessments and management reviews as tools and mechanisms to ensure that the processes are functioning as per the planning requirements.

**Knowledge Management System.** The merSETA has implemented a knowledge management system for promoting the effective *management* and *governance* of information and *knowledge* as a strategic asset for guiding planning, strategic decision making and operational efficiency within the framework of merSETA's outcomes and outputs. The merSETA knowledge management system has been instrumental in driving the digital transformation agenda to transform organisational activities, processes, competencies and models to fully leverage the changes and opportunities presented by digital technologies.

**Labour Market Information System:** the merSETA has established a *labour market information system* for coordinating, collection, processing, storage, retrieval, and dissemination of labour market information. The M&E system is a critical component of the merSETA labour market information system and through strengthening data management systems as discussed later in this chapter, the system will be repurposed to provide credible data for skills planning in the mer sector.

**Applied Research and innovation system**: The merSETA has established an applied research and innovation system that *designs* and *tests innovative* and scalable solutions towards solving skills related problems identified through applied research. Monitoring and evaluation plays a key role in identifying systemic challenges and blockages in the skills development ecosystem which can then trigger ideas to be further researched through applied research and further tested through the innovation system. A significant example is the ICT4APP which was conceptualized after data from M&E processed showed challenges in the traditional apprenticeship system. The merSETA and the CSIR Meraka responded to this challenge by using a 4IR paradigm to re-imagine and develop a high quality new apprenticeship skills development process in South Africa that is more efficient, accessible, and scalable and that prepares apprentices for Industry 4.0. This initiative is set to be instrumental in developing skills for the sector in light of challenges such as the shortage of workplaces and a new dynamic presented by the COVID-19 pandemic.

**Quality assurance system:** The quality assurance system is a critical component of programmes and projects implementation. Going forward, a strong focus will be to ensure the quality assurance of merSETA funded interventions, to ensure alignment to industry expectations. The quality assurance system is also critical in ensuring that learners receive quality training. This is consistent with the NDP and NSDP vision of ensuring that South African citizens have access to quality education and training, to enhance their capability to be active participants in developing the potential of the country.

#### 5.3 USING DATA AND INFORMATION TO SUPPORT RESEARCH AND SKILLS PLANNING

The merSETA M&E Framework provides a set of principles and a clear roadmap on how M&E functions should be executed across the organisation. This cycle consists of the following main steps (Figure 40): collect, analyse and validate performance information in relation to the Strategic Plan and APP. At each phase key data and information is reviewed and analysed and qualitative inputs are recorded to strengthen planning. At each juncture there should be mechanisms in place to keep the SETA on track in terms of its strategic and performance imperatives.



The processes of the organisational wide M&E at the merSETA are summarised in Figure 40 below:

#### Figure 40: merSETA organisational wide M&E process

#### 5.4 STRATEGIC PRIORITIES CAPTURED IN THE STRATEGIC PLAN AND ANNUAL PERFORMANCE PLAN

The merSETA strategic planning process consist of five linked components, the Sector Skills Plan, the Strategic Plan, The Annual Performance Plan, Service Level Agreement (SLA) and the Annual Operational Plan. The Sector Skills Plan forms the foundation of the planning process and informs the Strategic Plan and Annual Performance Plan. The strategic priority actions that were identified in the 2020/21 SSP update and guide the development of the 2020/21 SP and APP are summarised below. The extent to which these have been addressed is also highlighted in table 19. The strategic priorities identified in the 2020/21 SSP informed the merSETA Accounting Authority strategic session which was instrumental in developing the new five year strategy (2020/21 – 2024/25) and the 2020/21 AP. The merSETA is also implementing several projects and programmes to address these priorities through Discretionary Grant funding. Ongoing monitoring and evaluation of these programmes is therefore critical in ensuring that these strategic priorities are met. The newly appointed Accounting Authority and its sub-committees is set to play a key role in monitoring the implementation of these priorities.

Priorities identified in the SSP and captured in the APP/SP	Extent to which priorities were addressed			
The social economy and community development	merSETA supported 1 827 entities (civil society, CBOs, trade unions, small businesses, NLPEs, CBOs, cooperatives, NGOs in support of the social economy and community development)			
A demand led skills development system driven by the economy, socio-economic context as well as other national priorities.	DG Funding allocation and partnerships were driven by the sectoral priority list and strategic priorities e.g. around structural transformation,			

Table 19 : Implementation of priorities identified in the 2020/21 SSP, SP and APP

	research and/or innovation solutions, quality improvement of teaching and learning in PSET)
The future of jobs, future skills and demand for labour due to	Innovative projects such as PSET cloud project,
changes in business models, globalisation, technology,	green skills project and atlas of occupations
consumer markets, local and international regulations.	focused on the future of jobs.
Changing trends in education, training and curriculum driven	Innovative projects such as the ICT4APP have been
by innovation, new knowledge, process and product changes	implemented using a 4IR paradigm to re-imagine
in the workplace, regulation, global trends and demand for	and develop a high quality new apprenticeship
certain skills.	skills development process in South Africa that
	prepares apprentices for Industry 4.0
Advancing local manufacturing driven by technology,	The 6 <sup>th</sup> chamber automotive components
innovation, sustainability, globalisation and changing global	subsector was formed as a key chamber in
manufacturing value chains.	response to the prioritisation of components
	manufacturing in driving localisation
Strengthening the concept of SETA as an intermediary body	1 434 partnerships entered with TVET, HEIs,
	employers, government departments to
	strengthen the role of the SETA as an intermediary.
Supporting structural transformation to promote inclusive	Projects such as the Black industrialist project,
growth, employment and growth of the local manufacturing	targeted at structural transformation were
sector.	implemented.

#### 5.5 MEASURES TO STRENGTHEN ACHIEVEMENT OF SKILLS PRIORITIES

The merSETA in the 2019/2020 financial period managed to meet the majority of its performance targets and address priorities that were identified in its strategic documents through implementing various programmes projects and projects. The monitoring and evaluation unit continues to monitor the implementation of these initiatives. Where challenges in meeting the skills priorities have been identified, the merSETA puts measures in place to address them.

The COVID-19 pandemic has affected the sector, resulting in industry being hesitant to take up WBL learners (due to the economic uncertainty and fears of a looming recession). This will impact both new registrations and completions. In response the merSETA is investigating opportunities to use simulated learning and learning factories as workspaces. In the face of deindustrialisation the merSETA is also looking into ways of using small business as spaces for training while advancing the community development and strengthening its response to supporting the social economy.

**Reconstitution of chambers** - The merSETA has positioned itself to effectively respond to the NSDP by reconstituting its chambers to promote their responses to industry and worker needs through consideration of the value chain approach or other best practices in driving the implementation of the NSDP. In the 2020-21 financial year, the merSETA added a sixth chamber (automotive components manufacturing) this sub-sector has been identified as key in reindustrialisation and localisation. Chambers play a key role in advancing the merSETA skills development agenda in their respective sub-sectors including the conceptualisation and monitoring the implementation of identified priorities.

**The merSETA business model** - The merSETA continuously reviews its grant and funding mechanisms to respond to the changing priorities. The Discretionary Grant funding mechanism for example is increasingly targeting funding of projects that respond to merSETA strategic imperatives and skills priorities as informed by research (including evaluation studies).

**Partnerships** discussed in detail in the previous chapters remain key in strengthening the achievement of skills priorities.

**Improving programme design implementation** - The merSETA will continue using evaluation studies to improve program design and implementation. Evaluation studies will help to identify areas of improvement and ultimately help merSETA to set goals more efficiently. The framework provided by ISO 9001:2015 needs to show through meaningful and relevant data analysis from the evaluation studies to determine where targeted improvements can be made and risk mitigated to support further research and planning.

**Innovation in delivering of skills priorities** – The I COVID-19 pandemic has resulted in the economy shrinking, resulting in unemployment and deindustrialisation. This has caused merSETA to look at innovative ways of delivering its skills priorities. In light of the closure of various workspaces, the merSETA is currently looking conducting a feasibility study to explore using simulation training and learning factories as a key to unlock more training spaces in the mer sector. The SETA is also looking at the feasibility of partnering with TVET colleges and other training centres to explore the possibility of using their workshops and facilities as work and training spaces for stimulating the growth of community based enterprises to support sustainable livelihoods.

**Strengthening internal processes** - The merSETA has also developed their performance information reporting procedure, which details the process to be followed to collect, collate, verify and store performance information. This enhancement of merSETA's performance information reporting will to ensure reliability, validity, accuracy, completeness and traceability of actual performance achievements for quarterly management reporting, while informing annual reporting, compliance reporting and strategic decision making.

**Strengthening career advice and guidance** – The evaluation of the merSETA career advice and guidance through various processes indicated gaps which led to the merSETA implementing a renewed approach to career advice and guidance. For example, in line with supporting one of merSETA strategic outputs to facilitate diverse career development, advice and guidance related services, the merSETA has partnered with UNISA and the South African Career Development Association (SACDA) to implement indigenous career management interventions for youth and adults. The objective of the indigenous career management project is to empower people to identify life patterns, design career objectives and manage their careers.

Strengthening internal data management and government systems for strengthening monitoring, evaluation and reporting - The importance of effective data and information management at merSETA cannot be over emphasized. The merSETA has recognised that its data and information as strategic assets for strengthening planning, strategic decision-making, performance reporting, governance and operational efficiency. The merSETA has made a decision to strengthen systems for managing its data and information resources in an efficient manner to achieve its outcomes and outputs as defined in its strategy. Data has arguably become one of the most valuable assets in modern organisations. Good data is important for improving planning, decision making and reporting. Data management and governance is increasingly becoming an important function within modern organisations and the merSETA has recognised effective data management and governance as an enabler for effective planning, monitoring, reporting and evaluation to support decision making. The Post School Education and Training Collaboration and Learning Opportunities in the Utilisation of Data (PSET-CLOUD) project in partnership with JET Education Services is one such initiative that is set to strengthen the data management and governance ecosystem for better planning, decision making and management of the merSETA and broader PSET system. The purpose of the project is to establish an integrated digital ecosystem that will strengthen, integrate, coordinate and improve efficiencies through planning, governance and management of the PSET ecosystem. This system is also envisaged to strengthen Monitoring and Evaluation, which is one of the critical areas identified in the NSDP.

#### 5.6 CONCLUSION

This chapter has outlined the merSETA's approach to Monitoring and Evaluation include systems, implemented to support M&E. It demonstrates that the while there is a good grounding for the role of M&E in the organisation, there is still some improvements required to fill the gaps in the system particularly with respect institutionalising the M&E, reviewing and putting in place effective mechanisms and tools for monitoring, measuring and evaluating outcomes and impact. Together with organisation-wide institutionalisation of methods and effective evaluation of programmes, the merSETA is confident that M&E will continuously improve and thereby assist in improving planning processes including research systems and organisational processes of the merSETA.

## **6** STRATEGIC SKILLS PRIORITY ACTIONS

### 6.1 INTRODUCTION

This chapter consolidates the key economic, labour market, and skills change drivers that should inform the merSETA skills development priorities. It also provides a set of skills development priority actions from which realistic and achievable plans can be developed and implemented. Following the adoption of the SSP the AA has the responsibility to put in place a 5 year Strategic Plan (SP), Annual Performance Plan (APP) and Service Level Agreement (SLA). These then become the basis upon which the CEO and management develop an operational plan inclusive of programmes and projects to be implemented.

#### 6.2 SUMMARY OF FINDINGS FROM PREVIOUS CHAPTERS

This SSP has tried to position its data and information in the context of the current state of national crisis brought on by the COVID-19 pandemic.

From the first chapter it is evident that keen oversight is needed to track the impact of the COVID-19 pandemic on what was already a sector in distress. Critical findings in the chapter have raised the concerns of an expedited shift in the economy in line with demands for 4IR in terms of business processes, the new norm in terms of remote working and the threat of mass unemployment, particularly among the youth and elementary workers. Furthermore the difficulties across all domestic sectors in navigating the global economy in terms of competition, export costs, import costs, a weakened currency and lack of investment due to low business confidence does not bode well for the domestic market. However the pandemic does bring with it opportunities for reindustrialisation and innovation to once again revitalise the manufacturing sector. Efforts to diversify the manufacturing of goods in the sectors is currently being explored by the merSETA and promises to at least identify potential areas of growth. Even planned investments across the sectors are hampered due to the impact of COVID-19 on employers and the costs associated with the plans to assist small businesses such as those envisioned in the SAAM. There will be further complexities in terms of the trajectory of the sector and therefore merSETA should conduct additional research to better track the sector and forecast its potential to further customise its training offering in line with the needs of the sector.

Chapter 2 presented the main skills change drivers for the mer sector, in addition key national imperatives were highlighted within the national policy context. These drivers include the following:

- Reindustrialisation and localisation
- New and emerging technologies
- Environmental sustainability
- Supporting a diverse and inclusive labour market system
- Changing customer needs and expectations,

Chapter 3 reflected on the categories of skills development needs in the mer sector. Overall, a range of factors will impact on the future of skills supply and demand in the sector. These factors include future growth of the economy, the implementation of interventions aligned with national strategies including transformation, a demand for higher level skills in the sector and the demand for better the quality of skills supplied including skills gaps. Future skills must be researched more closely for the mer sector, particularly in terms of forecasting in a time of COVID-19. To meet industry needs, interventions must be tailored and implemented using the best and latest technologies related to digital platforms, simulations and virtual reality. The chapter however also highlighted supply side challenges and the impediments of the PSET sector to deliver high quality, diverse and fit for purpose skills to the labour market. The tracer study highlighted that the majority of learners fare well in the labour market once they have graduated however the level of employment are not as high as they could be. The future of the world of work is changing and it is vital to tailor skills programmes such that learners can take up opportunities in line with these shifts.

Chapter 4 raised the importance of the partnerships model to achieved successful outcomes for the sector and its learners. Without good partners who are willing to put in the effort to see skills projects and programmes to fruition, the mandate of the SETA is dead in the water. Efforts must be exerted in formulating partnerships proactively to ensure success and deliver high quality, relevant skills to the labour market.

Chapter 5 demonstrated that the merSETA has improved in terms of its M&E processes to ensure it meets its mandate. However, there are still some improvements required to fill the gaps in the system particularly with respect institutionalising the M&E, reviewing and putting in place effective mechanisms and tools for monitoring, measuring and evaluating outcomes and impact. Together with organisation-wide institutionalisation of methods and effective evaluation of programmes, planning processes including research systems and organisational processes will be improved.

## 6.3 SUPPORTING SYSTEMS FOR SKILLS PRIORITIES

In order to build a stronger SETA that is responsive to the changing skills development ecosystem, the merSETA needs to strengthen its systems to support the development and implementation of a responsive strategy in times of uncertainty. These include:

## 6.3.1 Research and innovation systems

Rapid changes in the sector require that the merSETA strengthens its research and innovation system for investigating, conceptualising and designing, testing and implementing innovative and scalable solutions towards solving skills related problems identified through research and other processes. The research and innovation system is critical in strengthening the role of the SETA as a driver of change/ transformation and innovation in the skills development ecosystem.

## 6.3.2 Data management and governance systems

The recognition of data as a strategic asset for strengthening strategic planning, strategic decisionmaking, performance reporting, governance and operational efficiency calls for the need to urgently implement efficient data management and governance systems. The data management and governance system will play an important role in enabling the merSETA to harness, streamline and manage its data and information resources in an efficient manner to achieve the outcomes and outputs as defined in the merSETA strategy. A collaborative approach is required in the development and implementation of an effective system.

## 6.3.3 A strengthened monitoring and evaluation system.

The implementation of an improved M&E system requires a renewed approach to how the organisation manages its data and records, greater collaboration beyond compliance to performance information and changes in human behaviour. Strengthening of supporting systems such as quality assurance, records management, quality management and management information systems is also critical.

## 6.3.4 Partnerships, learning networks and collaboration systems

It is clear that the role of partnerships in the development and implementation of skills development programmes and initiatives will remain pivotal in light of the disruptions in the world of work and education caused by recent developments as a result of the global COVID-19 pandemic. The merSETA should use its partnerships more strategically and endeavour to participate in relevant learning networks, building systems for collaboration and learning as important vehicles for promoting an integrated approach to developing as well as implementing targeted, bespoke skills development initiatives. These should be relevant to the needs of the worker, employers, sector industries, community and national priorities. Partnerships, learning networks and collaboration systems should be used more to develop and implement transformative and innovative solutions to the challenges and opportunities confronting the skills development ecosystem, the mer sector and the economy and society.

## 6.3.5 A strengthened governance, administrative and resourcing system

The development and implementation of systems, processes and mechanisms for enabling the merSETA to fulfil its mandate in these unprecedented times need to be supported by a strong governance, administrative and resourcing system. Governance structures should continue playing an important role in representing the interests of the sector, monitoring implementation as well as providing leadership in driving change and innovation in the sector. A strengthened merSETA governance system would enable governance structures to play an important role in not only delivering skills to the sector but also in influencing policy to be responsive to change and innovation in education, training and skills development. The funding mechanisms of the SETA should be reviewed such that focus is on quality and impact for the short, medium and long term skills development of current and future employees and the current and future growth trajectories of the mer industries/businesses. Critical is ensuring that funding mechanisms deliberately support the achievement of the outcomes of the National Skills Development Plan and the skills needs that will contribute to the structural economic transformation and growth of the mer industries.

## 6.4 RECOMMENDED ACTIONS IN SUPPORT OF NATIONAL STRATEGIES

## 6.4.1 Supporting Structural Economic Transformation through growth and inclusiveness

In order to deliver on this action, reindustrialisation is key in stimulating the growth of the economy. The COVID-19 pandemic has once more proven the critical role manufacturing plays in sustaining an economy. Opportunities have been created to diversify the South African manufacturing base to support local demand at the same time creating opportunities for international markets during the COVID-19 crisis through global manufacturing value chains. Initial findings from the merSETA economic complexity research have pointed out that manufacturing diversification is one of the key strategies that South Africa can adopt in its reindustrialisation. As the economy becomes complex in terms of product diversification job opportunities are created which require skills development interventions to prepare the current and future workforce to take up the opportunities created. From the research conducted, the components manufacturing sector and other related sectors that have a

well-established local and global manufacturing value chains have a great potential to assist South Africa with its reindustrialisation efforts.

In addition, supporting SMEs, cooperatives, entrepreneurs and other community based enterprises is key to support job creation and sustainable livelihoods in the social economy. Recessionary conditions as a result of the economic meltdown caused by the global pandemic will have a far reaching impact in the economy and society. This coupled with deindustrialisation will result in massive job losses in the sector. Skills development initiatives to support the creation of economic opportunities and sustainable livelihood for the youth, women, and people living with disabilities, township, rural and marginalised communities are therefore required.

The merSETA has taken a decision to prioritise the funding of projects that address the needs of the social economy and community development. The merSETA should consider broadening access also through locally based education and training social change entities (e.g. training CBO/NGOs). Innovative way of supporting rural provincial/regional beneficiaries through partnerships with government and other entities should also be considered.

The combination of stagnant growth and rising unemployment means that South Africa's economic trajectory is unsustainable (National Treasury, 2019). Government has implemented strategies for promoting economic transformation, supporting labour-intensive growth while creating a globally competitive economy through supporting black industrialists, SMEs, cooperatives, entrepreneurs and other forms of businesses. The effective implementation of these strategies will require that SETAs partner with other role players in developing and implementing relevant skills development initiatives to support the growth and development of black industrialists, women in manufacturing and other forms of business. The need for support through an ecosystem of a range of support mechanisms besides skills only is linked to promoting the role of the social economy in the inclusive growth agenda.

# 6.4.2 Skills for occupations of the future and for employment opportunities in emerging and new economies

Disruptions in the labour market as a result of changes brought by advances in manufacturing in the 4IR, the COVID-19 pandemic and the growth of the gig economy require that South Africa re-evaluates the notion of jobs and occupations. New jobs and occupations are expected to emerge in the new economy driven by localisation, economic patriotism, a strengthened informal sector and infrastructure development and maintenance. SETAs as facilitators of skills development need to be at the forefront of identifying these changes so as to prepare the labour market.

## 6.4.3 Advances in education, training and curriculum

This is driven by technology, innovation, the future of work regulation, local and global trends requires that the SETA and its skills development partners looks into innovative ways of ensuring that they continue to deliver programmes that are relevant and responsive to the sector's needs. The global COVID-19 pandemic has redefined the world of work and education and SETAs and other players in the skills development ecosystem cannot be oblivious of that fact. Some of the rapid changes also require a responsive regulatory framework. This however requires changes in policy and regulation to create an enabling environment for innovation in training, education and curriculum. The SETA therefore needs to position itself as an influencer of policy to respond effectively to these developments.

# 6.4.4 Strengthening the role of the SETA as an intermediary body to facilitate the transformation and responsiveness of the skills development ecosystem

SETAs as intermediary bodies are uniquely positioned to drive change in the skills development ecosystem. Various research conducted by merSETA and engagement with merSETA stakeholders have identified challenges and opportunities for improvement in the skills development value chain and system. Funding of initiatives aimed at driving the transformation or innovation in the skills development ecosystem to improve efficiencies will therefore need to be encouraged and supported. The SETA should partner with other leaders and innovators in civil society, government and HEIs to lead change in key areas such as digital transformation and other reforms.

### 6.5 CONCLUSION

The COVID-19 pandemic has compounded the complexities in which the merSETA must achieve its mandate. A looming global recession and an economy in distress presents the backdrop of the current sectoral context. The merSETA however has intentionally aligned its planning to the opportunities presented by the pandemic and is committed to putting in place its planned interventions in light of the current economic climate.

The merSETA has tried to respond to the pandemic with expedition through revising its budgets and planning to assist the sector by leveraging its ability for effective partnerships. In doing this the merSETA cannot lose sight of the key national imperatives to which it is aligned, hence the strategic priority actions are very much in keeping with these intentions.

As reported in this SSP, the sector has not experienced significant growth in the recent past, the sector was already on a downward trajectory. The youth, marginalised communities and the social sector are most vulnerable. Already in survivalist mode, these sections of the sector risk being plunged into destitution at a rapid pace. The merSETA service offering requires extra effort in terms of its design to suite all recipients of support in this new and ever changing reality. Willing and engaged social partners are needed to assist the SETA in achieving its vision of closing the skills gap by providing relevant skills to empower workers to navigate the new normal.

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OFO Code	Occupation	Total Vacancies	Total Unfilled Vacancies	
		Candidates do not have the right		
2019-121901	Corporate General	experience	102	61
	Manager	Candidates lack specific skills	2	1
		Equity considerations makes it difficult to find candidates	1	C
		Candidates do not have the right experience	65	36
		Candidates lack specific qualifications	4	1
2019-122102	Sales Manager	Candidates lack specific skills	14	3
2013 122102	Sures Wanager	Equity considerations makes it difficult to find candidates	58	4
		Vacancy situated in remote/difficult to access location	39	15
		Candidates do not have the right experience	3	2
		Candidates lack specific qualifications	28	11
2019-214101	Industrial Engineer	Candidates lack specific skills	16	10
		Vacancy situated in remote/difficult to access location	10	0
		Candidates do not have the right experience	19	6
		Candidates lack specific qualifications	7	1
2019-214401	Mechanical Engineer	Candidates lack specific skills	5	5
2013 211101		Equity considerations makes it difficult to find candidates	6	4
		Poor remuneration	14	10
		Candidates do not have the right	14	10
2019-242101	Management Consultant	experience	3	2
	Consultant	Candidates lack specific skills	51	50
		Candidates do not have the right experience	19	9
		Candidates do not have the right personal characteristics/attitudes	1	1
2019-243301	Industrial Products	Candidates lack specific qualifications	4	3
2019-243301	Sales Representative	Candidates lack specific skills	29	3
		Equity considerations makes it difficult to find candidates	7	3
		Vacancy situated in remote/difficult to access location	4	2
		Candidates do not have the right experience	1	1
2019-331201	Credit or Loans	Candidates lack specific qualifications	45	21
2013-331201	Officer	Candidates lack specific skills	1	0
		Equity considerations makes it difficult to find candidates	1	0
	Motorised Vehicle or	Candidates do not have the right experience	619	306
2010 522202		Candidates do not have the right personal characteristics/attitudes	12	3
2019-522302	Caravan Salesperson	Candidates lack specific skills	297	9
		Equity considerations makes it	297	9
		difficult to find candidates	2	C

OFO Code	Occupation	Reason for not filling vacancy	Total Vacancies	Total Unfilled Vacancies
		Candidates do not have the right	12	24
2019-522303	Automotive Parts	experience Candidates do not have the right	43	24
	Salesperson	personal characteristics/attitudes	10	0
		Candidates lack specific skills	23	15
		Candidates do not have the right		_
		experience	10	5
		Candidates lack specific qualifications	2	1
2019-651202	Welder	Candidates lack specific skills	81	11
		Equity considerations makes it difficult to find candidates	5	4
		Vacancy situated in remote/difficult to access location	4	2
		Candidates do not have the right	4	Ζ
		experience	11	8
2019-651302	Boiler Maker	Candidates lack specific qualifications	15	9
		Candidates lack specific skills	103	95
2040 (54402	01 J 51	Candidates lack specific qualifications	50	50
2019-651403	Steel Fixer	Candidates lack specific skills	100	0
		Candidates do not have the right		
		experience	3	0
		Candidates do not have the right personal characteristics/attitudes	2	2
2019-652301	Metal Machinist	Candidates lack specific qualifications	9	6
		Candidates lack specific skills	45	42
		Equity considerations makes it	45	42
		difficult to find candidates	2	1
		Candidates do not have the right experience	10	8
		Candidates lack specific		
2019-652302	Fitter and Turner	qu+D23alifications	2	1
		Candidates lack specific skills	28	18
		Vacancy situated in remote/difficult to access location	3	0
		Candidates do not have the right		
		experience	112	61
		Candidates do not have the right personal characteristics/attitudes	4	3
2019-653101	Automotive Motor Mechanic	Candidates lack specific qualifications	133	57
2019-055101		Candidates lack specific skills	121	21
		Equity considerations makes it	_	_
		difficult to find candidates Vacancy situated in remote/difficult	5	1
		to access location	2	0
2019-653306		Candidates do not have the right experience	36	26
		Candidates lack specific qualifications	28	16
	Diesel Mechanic	Candidates lack specific skills	9	6
		Vacancy situated in remote/difficult		
		to access location	3	1
2019-671101	Electrician	Candidates do not have the right experience	22	7
		Candidates lack specific qualifications	6	2

OFO Code	Occupation	Reason for not filling vacancy	Total Vacancies	Total Unfilled Vacancies
		Candidates lack specific skills	29	16
		Poor remuneration	3	2
	Millwright	Candidates do not have the right experience	12	9
2019-671202		Candidates lack specific qualifications	23	14
2019-071202		Candidates lack specific skills	6	5
		Vacancy situated in remote/difficult to access location	8	5
2019-684201	Mining Blaster	Candidates lack specific qualifications	278	248
2019-684201		Candidates lack specific skills	18	10
2019-714202	Plastic Compounding and Reclamation			
	Machine Operator	Candidates lack specific skills	21	20
2019-718905	Engineering Production Systems Worker	Candidates do not have the right experience	2	2
		Candidates do not have the right personal characteristics/attitudes	1	1
		Candidates lack specific qualifications	2	2
		Candidates lack specific skills	403	63
		Equity considerations makes it difficult to find candidates	1	0
		Poor remuneration	2	2

# Internal Questionnaire: Partnerships

## 1. Successful Partnerships

Type of Partner	Purpose of the Partnership	Start Date	End Date	Reasons for success
HEI	Institutional development of Engineering Faculty	30 <sup>th</sup> March 2015	31 <sup>st</sup> March 2020	Regular contact between Project Managers; Executive oversight and
HEI	Collaborate with Post graduate School to provide bursaries for Honours, Masters and PhD students in engineering disciplines	11 <sup>th</sup> March 2016	31st March 2020	interest; Clear deliverables linked to merSETA Technical Indicator Descriptors; Ring-fenced project management; Link to Strategic Plan of the HEI; Attention to detail for both parties, roles and responsibilities monitored.
International Agency	Support of TVET colleges linked to United Kingdom (UK) Vocational Colleges (co-funded).	31-03-2015	31-03-2021	TVET participating in the project were selected based on the request for information. These colleges undergone an evaluation and there their commitment to the project was self-driven and committed to achieve deliverables.
HEI	Training to vocational teachers to improve the quality and increase the number of SET entrants. Research and Development	31-03-2017	31-03-2020	The project deliverables were well monitored by the CLO responsible for this project. The project meetings were arranged and held as per plan.

# 2. Unsuccessful partnerships

Type of partnership	Purpose of the Partnership	Start Date	End Date	Reason for lack of success
HEI	No clear purpose stated in the MoU? (No due diligence on contracts)	22/03/2016	31/03/2018	No alignment to the merSETA Technical indicator descriptors existed at the time of the initiation of this agreement. A sum of money was agreed and then later apportioned between programs envisioned at the project Previous success in a WIL Project has not been established; there seemed to be lack of coherence between implementation units at the institution. No success track record had been established
Government Department	Training learners involved in the departments programmes.	31-03-2017	31-03-2020	The project was initiated by the departments regional office and their Head Office did not support it despite follow ups by merSETA
TVET College	Artisan training	24-03-2017	31-03-2020	The college did not implement the project and they were not responsive to our follow ups.