

CONSTRUCTION SECTOR SKILLS PLAN



JUNE 2014



NAMIBIA TRAINING AUTHORITY

MESSAGE FROM CHIEF EXECUTIVE OFFICER

We are pleased to present you with the Sector Skills Plan (SSP) for the Construction Industry. The aim of this SSP is to guide and inform skills development initiatives in this industry from a skills planning perspective. Sector skills planning is a relatively new process for the Namibian Training Authority. We have therefore adopted a developmental approach to this process. We have aligned the SSP to *Vision 2030*, *NDP4* and the *National Human Resources Plan: 2010 - 2025* of Namibia. Our SSP should resonate with our national vision and policy goals of our government.

Over the last few months we have consulted widely with stakeholders. Many who attended our workshops and focus group sessions participated enthusiastically in the SSP deliberations. We are very encouraged by this, and would like to build strong stakeholder partnerships. The SSP is a living document that should be subject to continuous change and improvement. It should be owned by industry stakeholders.

We have asked the research team to produce a user-friendly plan that will be easily read, understood and applied. The intention is not to write a thesis or peer-reviewed academic journal, but rather to produce a document that will be used by all interested organisations and individuals. We will achieve this without compromising the integrity of the research. We want practitioners and managers in the workplace to read the document.

The primary target audience are employers, managers, unionists, public policy-makers and planners, researchers, career counsellors and education managers as well as others who have an interest or stake in this industry.

We have made a strong start by putting a workable plan on the table for skills development in the construction industry. We are committed to improving the skills of construction workers and new entrants. Let's join hands and take this industry to new heights.

We hope you contribute to the further development of the SSP in future iterations.

Best wishes!

Ms Ester Anna Nghipondoka
Chief Executive Officer
National Training Authority

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CONSTRUCTION SECTOR SKILLS PLAN

1. INDUSTRY DEMARCATION

According to the International Standard Industrial Classification of All Economic Activities (ISIC) the scope of industry coverage for construction is as follows:

DIVISION	GROUP	CLASS	DESCRIPTION	
Division 41			Construction of buildings	
	410	4100	Construction of buildings	
Division 42			Civil engineering	
	421	4210	Construction of roads and railways	
	422	4220	Construction of utility projects	
	429	4290	Construction of other civil engineering projects	
Division 43			Specialized construction activities	
	431		Demolition and site preparation	
			4311	Demolition
			4312	Site preparation
	432		Electrical, plumbing and other construction installation activities	
			4321	Electrical installation
			4322	Plumbing, heat and air-conditioning installation
			4329	Other construction installation
	433	4330	Building completion and finishing	
	439	4390	Other specialized construction activities	

Source: UNO Revision 4

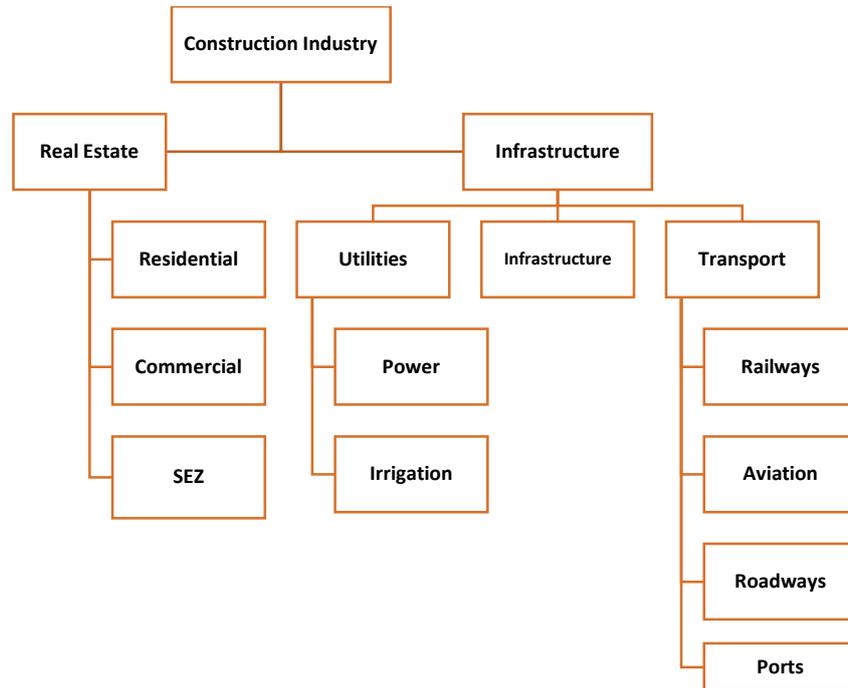
- The construction industry is strategically important for Namibia, providing building and infrastructure on which all sectors of the economy depend. It is a fast growing generator of employment in the economy. The industry represents a diverse field of disciplines with participants involved in commercial, civil, residential and institutional work. These participants include multi-national building and civil contractors, but the bulk consists of smaller contractors and SMMEs employing a handful of employees. In addition, the industry also includes the retail and wholesale building material trade along with other manufacturers and suppliers of construction materials and equipment.

2. INDUSTRY SEGMENTATION

The construction sector can be broadly classified into 2 sub-segments:

- 1) Real estate (Residential, Commercial/Corporate, Industrial and Special Economic Zones (SEZs))
- 2) Infrastructure (Transportation, Urban development, Utilities)

Industry Segmentation



- The industry is divided into two major segments: real estate and infrastructure.
- Real estate includes contractors who build commercial, residential and other buildings.
- Infrastructure includes heavy and civil engineering construction contractors who build sewers, roads, highways, bridges, tunnels and other national infra-structure projects. Speciality trade contractors perform specialised activities related to all types of construction such as carpentry, painting, plumbing and electrical work.
- The construction industry was previously the preserve of large South African companies, however, recently there has been Chinese interest and activity and involvement in the construction industry.
- Five major Chinese construction companies present in Namibia are: China State Construction; China Nanjing International (Namibia) Pty Ltd; New Era Investment; China Zhengtai and China Jiangxe (Namibia Tender Board, 2008). Since these, more Chinese companies have entered the market¹.

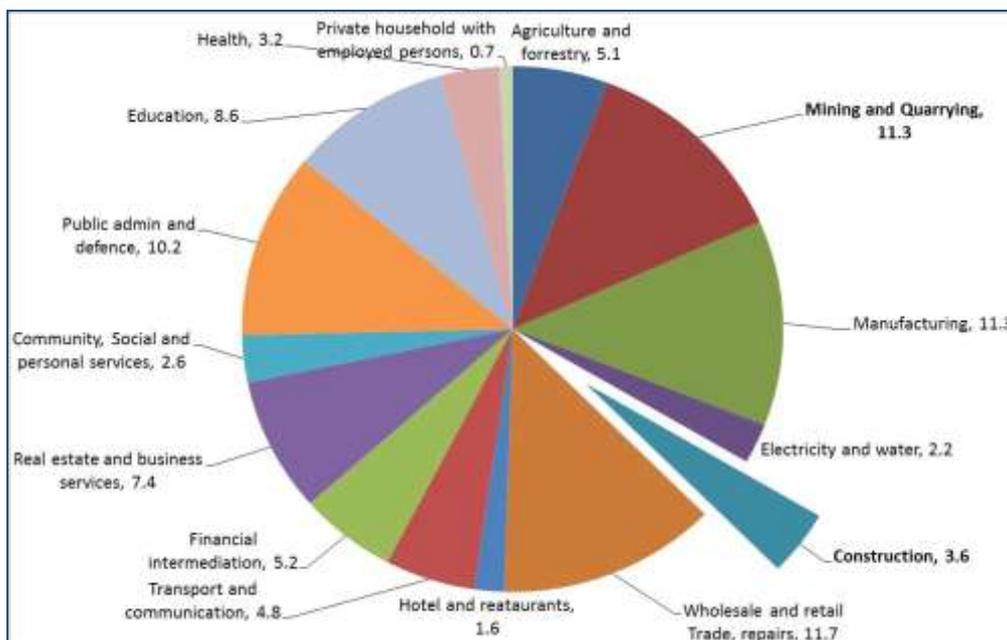
¹ www.mbendi.com

3. GOVERNMENT POLICY

- According to NDP 4 construction is expected to grow strongly, with high investment from both government and the private sector.
- Given the focus on large-scale investment and growth in transport and manufacturing, there will be considerable spill-over into the construction sector. These positive multipliers will also have a large impact on jobs, creating an estimated 23 500 additional positions over the NDP4².
- According to Namibia Vision 2030³ using an estimated 1 500 houses being built each year, and assuming a backlog of 37 000 houses by projecting in five year intervals to the year 2030, indicates that Namibia may be able to meet its housing needs by the year 2025. This is based on the assumption that the country can keep up with any increased urbanisation and population growth rates. However, using a backlog figure of 80 000 houses, Namibia would have provided for only just over half of the population’s housing needs by the year 2030, if it builds 1 500 houses each year. If 3 000 houses are built each year, the housing needs might be met by the year 2020.
- The sector is adopting labour-based road construction and maintenance, as a means of employment-creation and the alleviation of poverty, while maintaining effectiveness and efficiency.

4. ECONOMIC HIGHLIGHTS

Industry Contribution to GDP



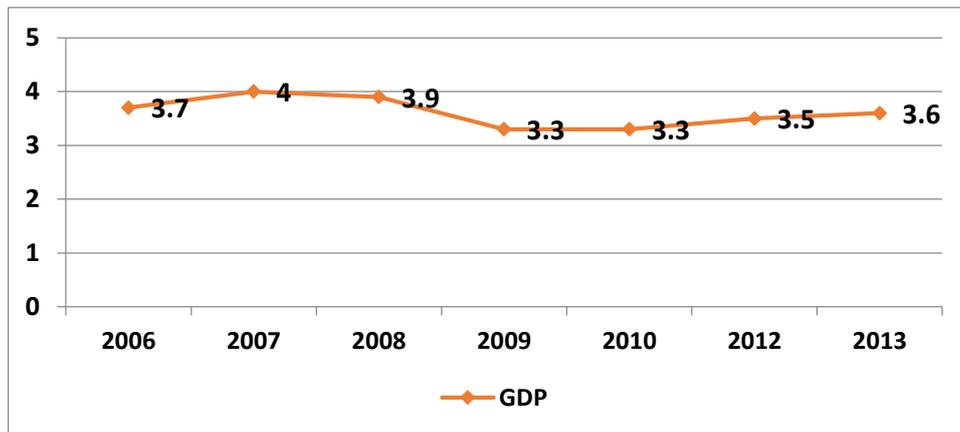
Source: National Human Resource Plan (2012)

² Office of the President, undated, NDP 4

³ Office of the President, 2004, Vision 2030

- Construction remains buoyant at 3.6%. The construction industry is well poised to benefit from the housing backlog N\$ 320 million expected to be allocated into the National Housing Enterprise (NHE). Growth in construction is to be underpinned by increased investment in real estate development, roads, water supply, and airport and port development.

GDP Construction in Percentages



Source: National Human Resource Plan (2012)

- The performance of the construction sector over the last 7 years has been flat.
- The construction sector is expected to register a stronger growth in 2015 due to private sector investments in mining as well as public sector investment in construction works.

Economic Outlook for Construction
The construction industry remains the brightest spot in domestic demand due to mineral mega projects scheduled over the medium term. The industry is projected to grow in 2014 due to oncoming of new projects such as the mass housing project, Nampont expansion and continuation of the projects already started.
The construction sector was the main driver of domestic growth in 2012. It is estimated to have expanded by 8%, buoyed by increased government spending on public works through the Targeted Intervention Programme for Employment and Economic Growth (TIPEEG) and increased investments in real estate development (e.g., shopping, hotels and apartment complexes).
TIPEEG, which was rolled out by the government in March 2011, seeks to address Namibia's high unemployment rate by creating and retaining more than 100 000 job opportunities over a three-year period, starting in the 2011/12 financial year.
It will cost NAD 14.6 billion (USD 1.6 billion), with the money spent on infrastructure and other public works programs targeting agriculture, tourism, transport, sanitation and housing ⁴ .
Improving the business climate and further investment in infrastructure, including the expansion of Walvis Bay Port and the construction of the Trans-Kalahari Railway, are critical if Namibia is to achieve this objective.

⁴ Bank of Namibia. December 2013. Quarterly Bulletin

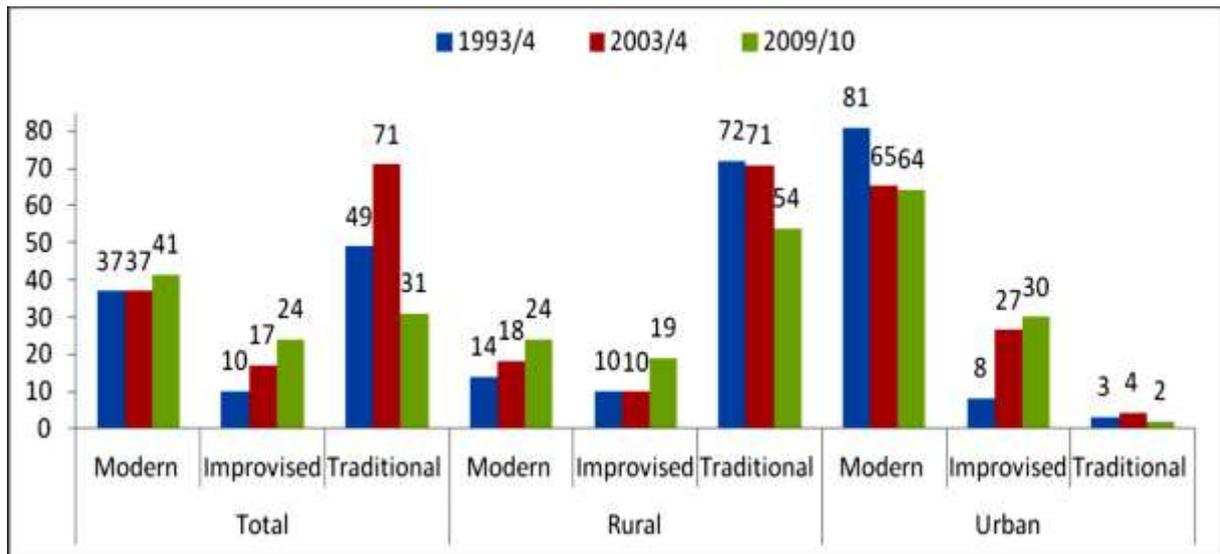
Construction and rehabilitation of rail infrastructure (which is maintained by the government) is essential to achieve NamPort’s growth objectives.
Opportunities in the construction of new power stations.
Growth in the tourism sector is fuelling construction and the development of new lodging in both urban and remote areas.
While the construction sector is dominated by Namibian, South African, and Chinese companies, there may be opportunities for firms that can provide specialized eco-friendly equipment and supplies – water and sanitation, energy, hygiene, etc. – for new lodges in remote areas.
The major projects envisaged are the construction of Neckartal Dam in Karas Region, Walvis Bay Desalination Plant, water extension pipelines and earth dams.
In the health sector, construction and renovation of health facilities in various parts of the country.
In agriculture, horticulture development and construction of grain storage facilities and veterinary clinics.
N\$546 million is allocated for the administration of justice, construction and renovation of court structures and reducing the backlog of cases in our courts.
There are allocations to the police are to cater for construction of new police stations, accommodation facilities and recruiting and training new members of the force.

Source: Namibia Statistics Agency, Labour Force Survey (2012); Chamber of Mines Annual Report 2013; US Commercial Service, 2013, Doing business in Namibia.

Housing

- NDP4 aims at 60% of households to be living in modern housing from the 41% in 2010. Given the trend over the years, this target may be met as modern housing occupancy has improved.
- The graph indicates that though modern occupancy has improved at the aggregate level, it declined in urban areas from 81% in 1994 to 64% in 2010. This downward trend could be attributed to the increased prices for modern housing in urban areas. The improvised housing occupancy rate has also increased from 10% in 1994 to 24% in 2010. This could be attributed to internal migration leading to expansion of informal settlements in urban areas.

Percentage of households by type of dwelling (NHIES)



Source: NSA 2003, 2006, and 2011

- To attain the affordability target, there is need to accelerate the social houses and other low cost housing projects that are planned to be constructed by end of 2014. Consideration should also be given to Local Authorities and building enterprises subsidies such that the price of land and housing is reduced especially for lower cost houses. Furthermore, auctions that are strictly for low income groups where special preference could be drawn to first time buyers need to be encouraged.

5. LABOUR MARKET PROFILE

Occupational Breakdown (2012)

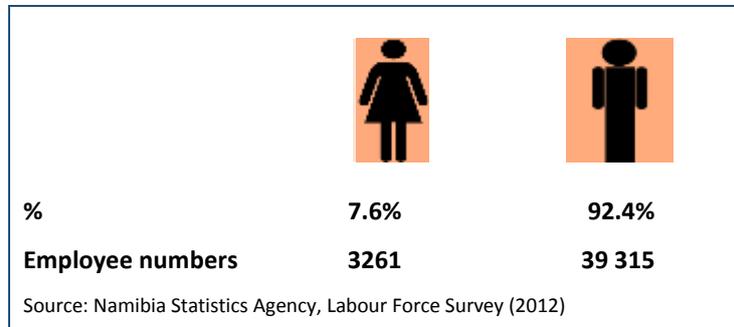
Occupational Category	Employed	% of Total
Legislator & Managers	1 405	3.3
Professional	388	1
Technicians & Managers	745	1.6
Clerks	441	1
Service & Sales	490	1.2
Craft & Trades	36 026	85
Operators	975	2.3
Elementary Workers	2 055	4.6
Total	42 525	100

Source: Namibia Statistics Agency (2012)

- The bulk of the workforce is made up of craft and trade-related employees according to the Labour Force Survey 2012.
- The challenge is to determine to what extent craft & trades employees are actually artisans instead of elementary worker, as it is expected that the majority should have been in the elementary workers category.

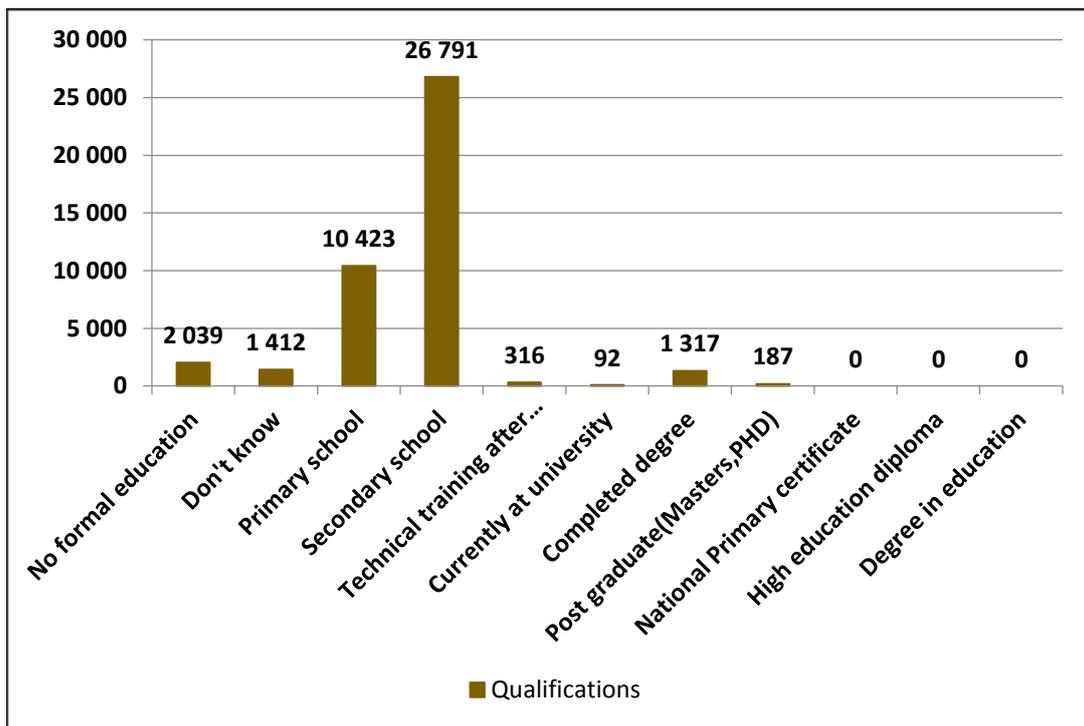
- The percentage of 1% for professionals is low, but it could well be that these employees are also captured in Legislator and Managers which appears high.

Gender Breakdown



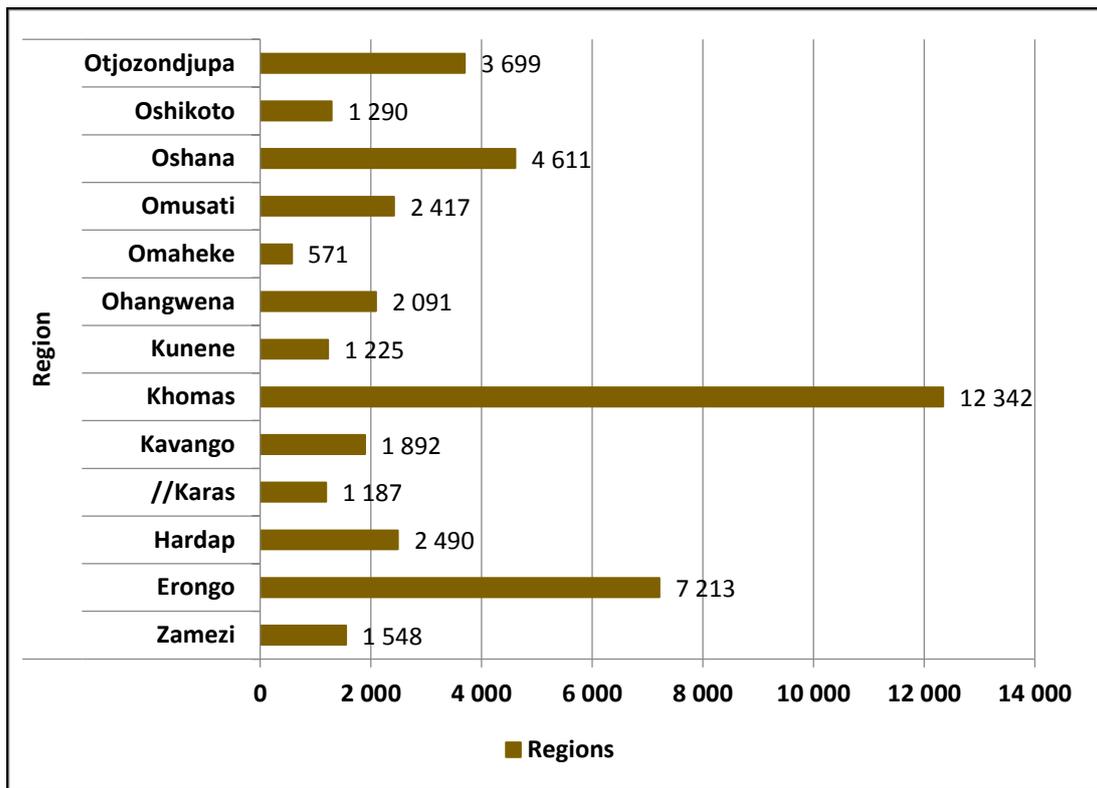
- There are serious gender disparities in the industry that should be addressed.

Employee Qualifications (2012)



- Most employees have a secondary and primary education which is expected of the industry.

Regional Employee Breakdown (2012)

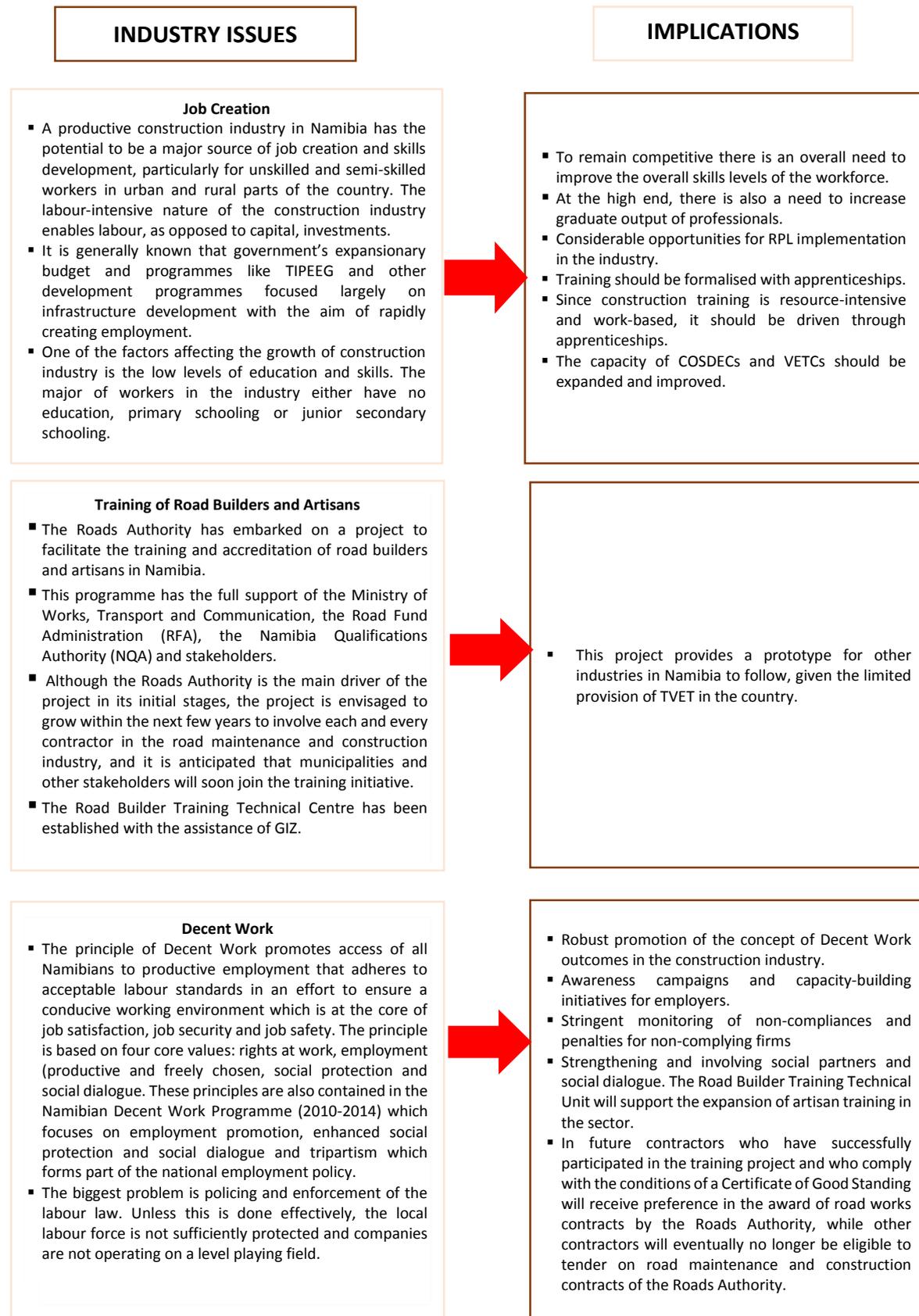


Source: Namibia Statistics Agency (2012)

- The industry is heavily concentrated in Khomas, Erongo, Otjozondjupa and Oshana.

6. CHANGES DRIVERS

Key change drivers in the industry.....

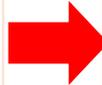


INDUSTRY ISSUES

IMPLICATIONS

Women in Construction

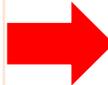
- The industry employs too few women. Hiring and retaining women at all levels increases a company's pool of skills, especially at a time when shortages exist.
- However, the sector lags other industries in employing skilled women, with only 7.6% of roles filled by women compared to 92.4% filled by men.
- Entrenched and outmoded attitudes towards women's roles and career prospects remain.
- Many of the companies we spoke to were aware of the need to redress the gender balance and are taking steps to do so. At the same time, they recognise that more commitment to change is needed.



- Many more women are needed in this industry.
- To attract women requires a concerted effort.
- For women, this means highlighting opportunities for them as early as high school, being accountable for diversity, providing flexibility in company culture and roles, and addressing unconscious biases.
- In parallel, there should be a focus on supporting women in the regions by training to provide long-term, stable regional workforces.

Graduate Outputs

- Namibia is not producing enough young people with relevant skills.
- Namibia produces too few engineers, other professionals and artisans each year.
- In addition, the existing artisans are not formally certified.
- The training levy provides an opportunity for companies that do not train to train workers, whilst companies that do train to increase skills training.



- With productivity in mind, there should be a focus on skilling labourers, certifying and improving the skills of artisans and expanding the base of professionals.
- Local labour should be employed wherever possible.
- Foreign companies should be required to provide mandatory training to locals or pay for not training locals.

Occupational Health and Safety

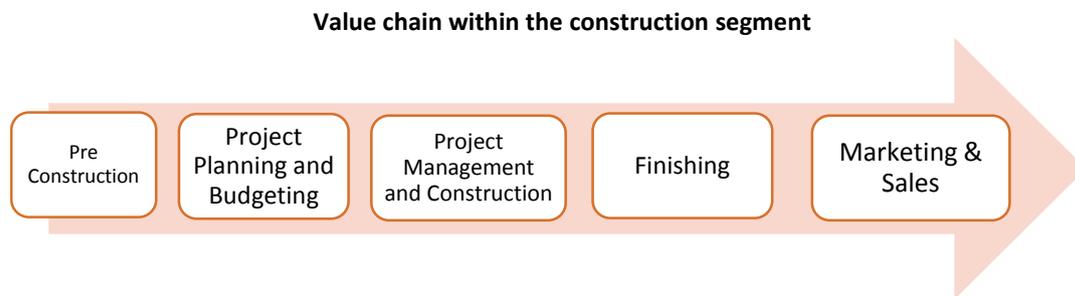
- Implementation of requisite OHS laws and regulations is a top priority for the industry to safeguard the interests of all, particularly the exposure of workers to fatalities.
- There should be a particular focus on OHS training by the industry.



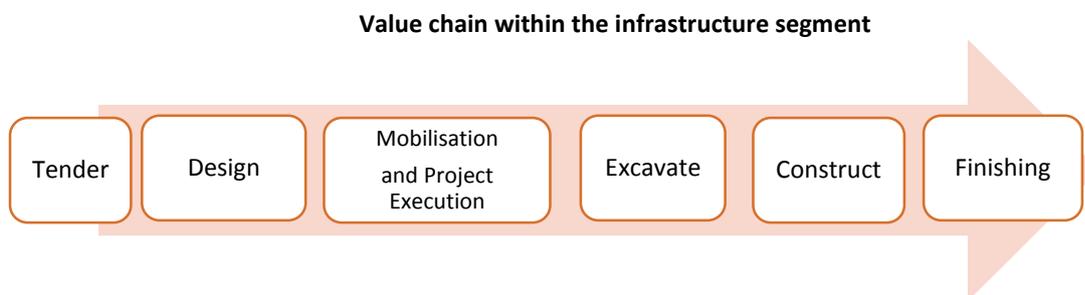
- Need for continued investment in OHS training for all workers in the industry.
- All construction qualifications accredited by the NTA should possess a component of OHS.
- The capacity of co-operatives and associations in this sector should be strengthened with a particular focus of making skills development accessible to this group.

7. VALUE CHAIN

The value chain within the construction segment can be represented as below:

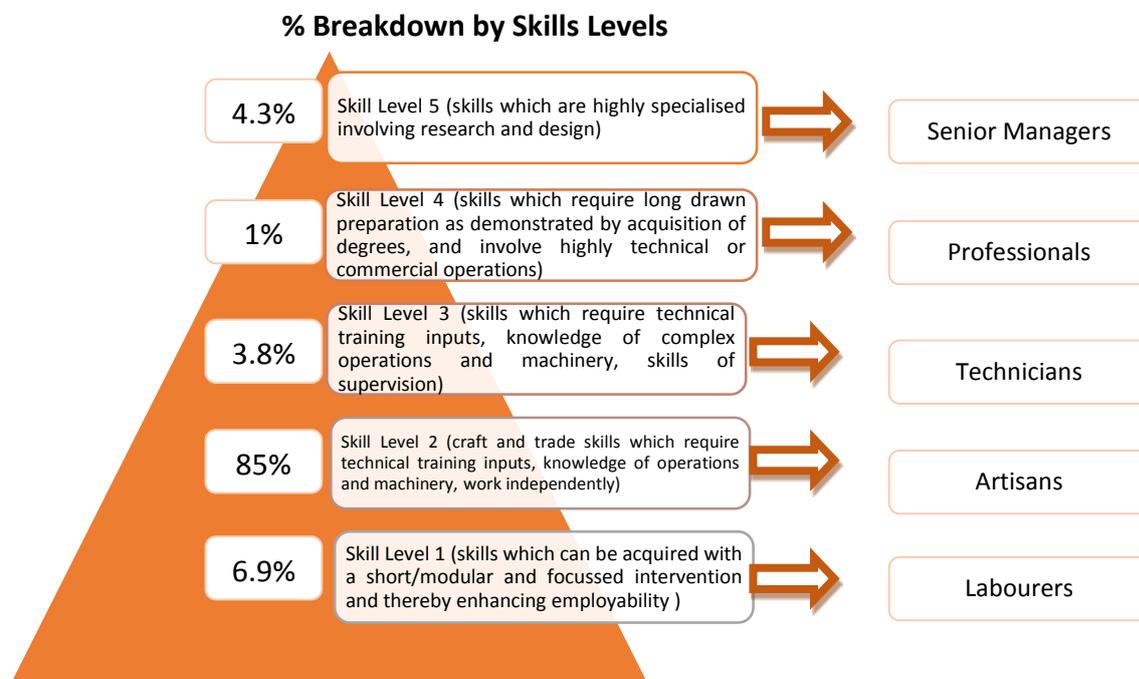


The value chain within the Infrastructure segment can be represented as below:



8. SKILLS LEVELS

Based on the value chain, the following skills are in demand:



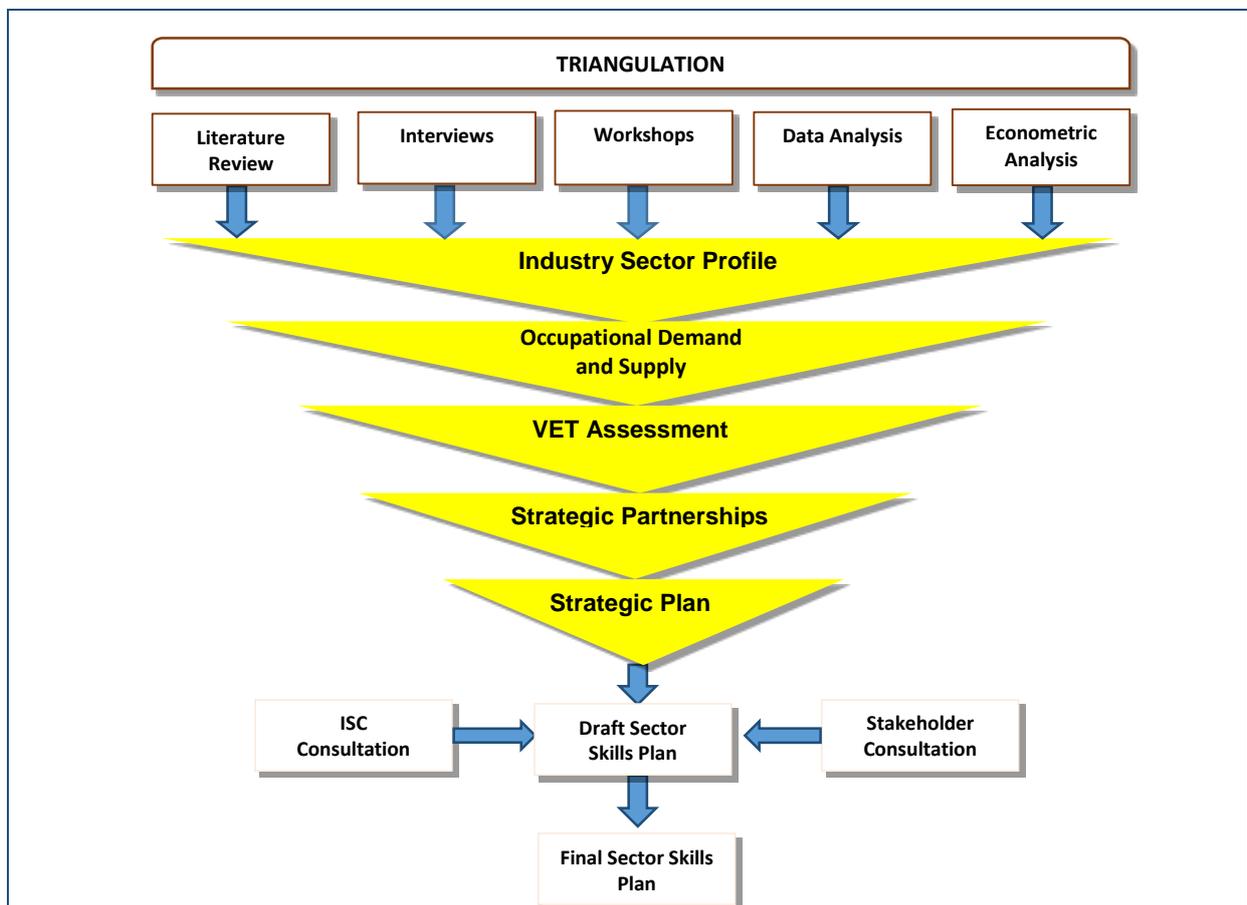
Source: Statistics Office, 2012, Labour Force Survey

It is to be noted that, while a large proportion of the workforce falls in the lower portion of the pyramid, there would be skill building required at a workplace and construction-site level. This being said, the Skill Level 2 would be area where substantial skill building efforts would be needed.

9. RESEARCH DESIGN AND METHODOLOGY

A well-considered research design, using appropriate methods, is essential to identify and anticipate occupational shortages in designated industries. The design is based on a mixed method approach, which brings together different research methods. This approach uses qualitative and quantitative research techniques. The chosen method is intended to ‘triangulate’ different information sources to identify occupational skills shortages. This ensures the credibility and legitimacy of the sector skills plan.

The research design is set out as follows:



- Multiple data sources are used in order to identify occupational shortages and skills gaps in the labour market.

- Information is gathered on the occupational labour market, demand and supply of occupations, skills gaps, VET assessment and strategic partnerships to develop a strategic plan for the industry sector.
- Stakeholder consultations take place at all stages in the SSP development cycle.

Data Collection: Data was collected from the following sources:

Review of existing data and information sources
Literature search of studies in the sector
Analysis of industry market reports
Review of national strategies
Annual Reports of employer associations and companies
Interviews with key informants in the sector
Group discussions with stakeholders
Revision of the Sector Skills Plan
Presentation of SSP to Industry Skills Councils
Adoption of SSP by NTA

To add further value, qualitative research methods were used. Various focus group consultations with stakeholders were held in the development process.

The following research techniques were employed to make a determination on occupational demand:

Interviews: Interviews were conducted with key informants in the industry sector. These individuals were assumed to possess deep knowledge, understandings and insights of skills development in their respective sectors. The interviews were conducted using a semi-structured interview schedule. This kind of interview is partially structured with open-ended questions to elicit information that would not be obtained by closed questions. The interviewer is free to deviate from the questions so long as the issues are covered by the conclusion of the interview.

Workshops: Workshops were held with a larger group of industry sector experts to ascertain their views on skills developments in their respective industry sector.

Literature Review: A review of literature was conducted in the industry sector. Industry publications such as company annual reports, research studies, employer newsletters,

economic reports, sector studies, and risk analysis reports were examined to establish evolving trends and skills needs in the industry sector.

Econometric Forecasts: The National Planning Commission undertakes econometric forecasting. The findings were used in this study as research evidence.

By using multiple research methods, it is possible to draw comparisons, establish occupational trends, identify occupational shortages, and make decisions based on the weight of supporting evidence rather than subjective inclinations.

Data Analysis: Data is analysed from a comprehensive array of market-based measures (signals and indicators) in the economy for proposing interventions in education and training. Reliance on a composite of labour market signals, rather than on a single forecast, allows the researcher to form judgments on the basis of the weight of evidence.

The identification and interpretation of labour market signals require a basic understanding of the analytical processes which can be applied to occupational supply and demand. It also implies the availability of reliable labour market data for: guiding education and training decisions; managing training systems; and planning for education and training.

10. SKILLS IN DEMAND

This section provides information on skills demand or skills shortages for 2015 and 2020. The information is gathered from the econometric forecast conducted by the National Planning Commission and is given by occupational category. This forecast has been carried out in 2013 and 2014.

The findings of the econometric forecast is supplemented by interviews, meeting, workshops and a literature study with a view to provide a holistic picture of skills shortages in the industry sector.

The table below indicates shortages per occupation or occupational category over two periods.

Shortages per occupation over two periods

Occupations	Shortages 2015	Shortages 2020
Managers		
Construction Project Manager	50	100
Site Manager	80	160
Foreman	100	180
Environmental Manager	20	30
Engineering Manager	30	50
Contract Manager	30	50
Finance Manager	40	60

Occupations	Shortages 2015	Shortages 2020
Architect	10	20
SHE&Q Manager	100	180
Professionals		
Structural Engineer	20	40
Civil Engineer	20	50
Mechanical Engineer	30	60
Electrical Engineer	30	40
Material Engineer	20	40
Environmental Engineer	30	60
Mechanical (Incorporated Engineer)	100	150
Electrical (Incorporated Engineer)	100	150
Civil (Incorporated Engineer)	100	150
Land Surveyor	30	50
Landscaper	30	60
Quantity Surveyor	40	80
Urban and Regional Planner	30	50
Technicians		
Construction supervisor	80	100
Electrical Engineering Technician	100	140
Draughtsperson	60	100
Mechanical Engineering Technician	100	180
Civil Engineering Technician	100	150
Artisans		
Electrician	150	250
Earth Moving Operator	60	120
Crane and Hoist Operator	30	40
Forklift Driver	200	300
Lift Operator	30	60
Surveyor Operators Draftsman	40	80
Welder	300	450
Painter	400	600
Bricklayer	1000	2000
Roofers	200	300
Carpenter	500	1000
Plasterer	200	400
Plumber	300	600
Concreteer	200	300
Floor Layer/Tile Setter	150	300
Earth Moving Operator	100	150
Truck Drivers (Specialised)	200	300

11. SKILLS SUPPLY

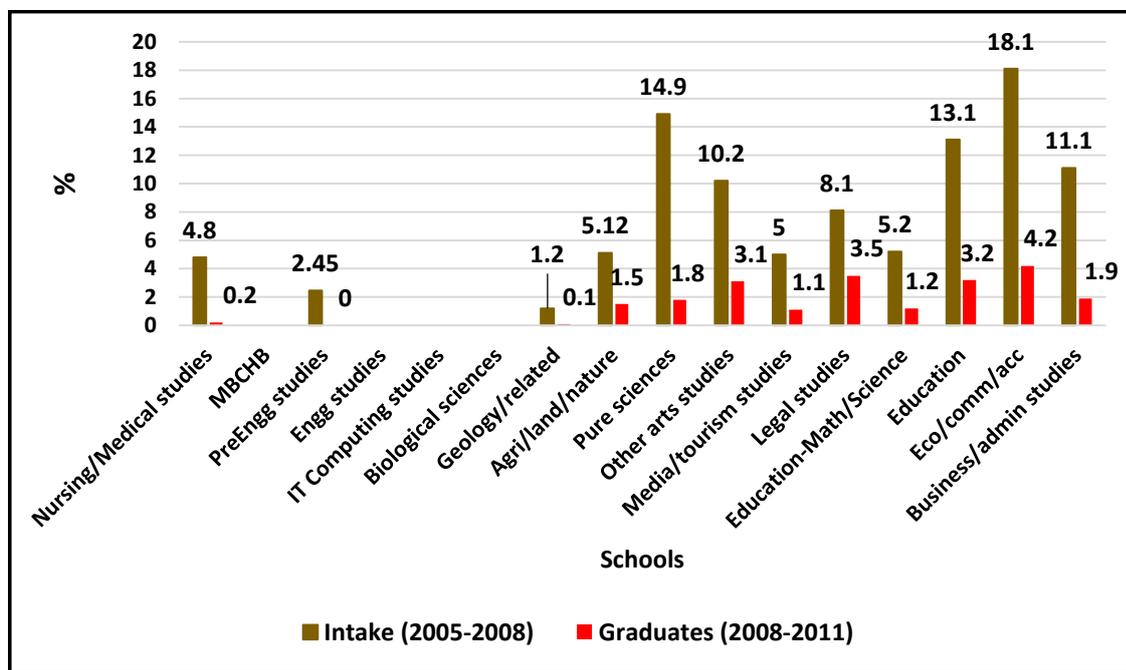
Higher Education

- This section focuses on the supply of skills from Higher Education and Training (HET) Institutions and Vocational Training Centres (VTCs).
- The data of HET graduates from the engineering, information technology and science schools (faculties) is analysed because these graduates tend to be absorbed by the industry.
- There are two public HET institutions, the University of Namibia (UNAM) and the Polytechnic of Namibia (PoN).
- VET provision in Namibia is provided through public, parastatals and private vocational training centres (VTCs). In addition, there are public Community Skills Development Centres (COSDECs), KAYTEC and the Katatura Youth Enterprise Centre. Training is also offered through non-profit and private training providers on a smaller scale.

University of Namibia (UNAM)

The figure below provides intake (2005-2008) and graduates (2008-2011) for all schools. However, for the purpose of this industry, the discussion will focus on engineering and IT and science.

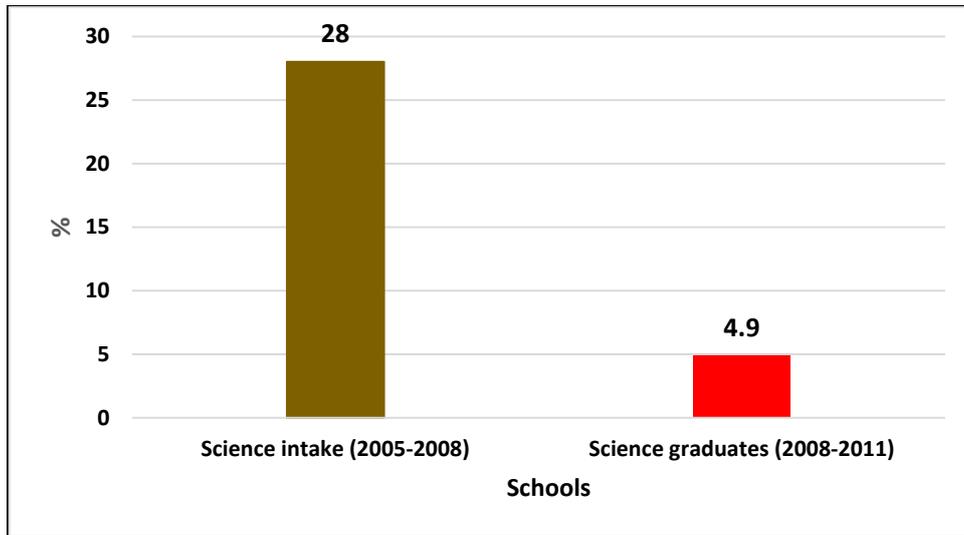
Intake (2005-2008) and graduates (2008-2011) by school



Source: Insight Namibia Report 2012/2013

- There is minimal to no intake in the school of engineering and IT studies for the period (2005-2008).
- Whilst there is a 14.9% intake for science for the same period, the graduation rate of 1.8% is very low.

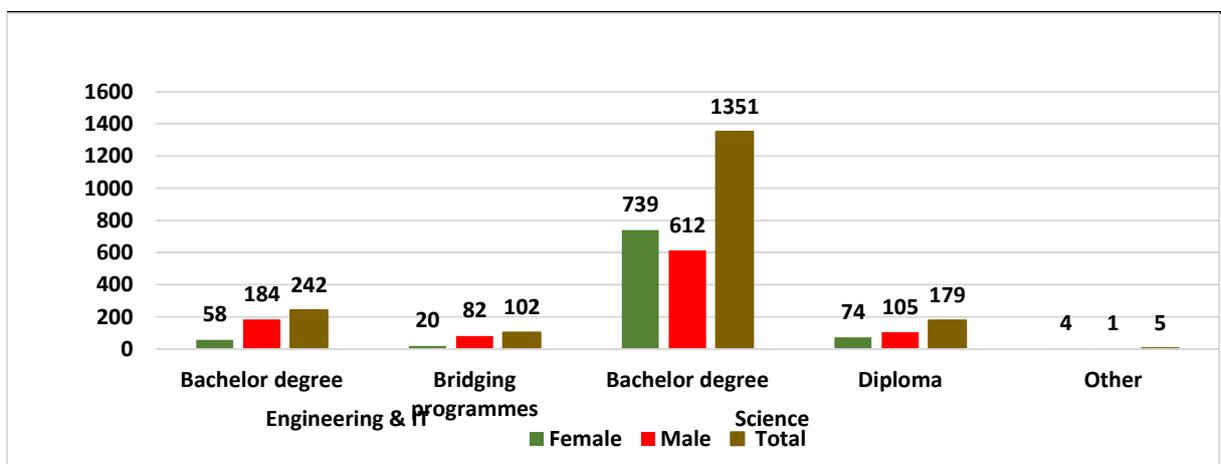
Intake (2005-2008) and graduates (2008-2011) by school



Source: Insight Namibia Report 2012/2013

- The figure above provides further support to the low science graduate rates (4.9%) despite a 28% intake.
- The total undergraduate enrolment at UNAM for 2013 was 17 536. This comprised 10 897 females and 6639 males. A total of 1 879 students, comprising 10.7% of the total student enrolment, undertook programmes in engineering and information technology and science. While this is minimal, it does indicate slow but gradual progress in relation to the 2005-2008 intake.
- The figure below provides a breakdown of undergraduate enrolment by school, qualification type and gender for 2013.

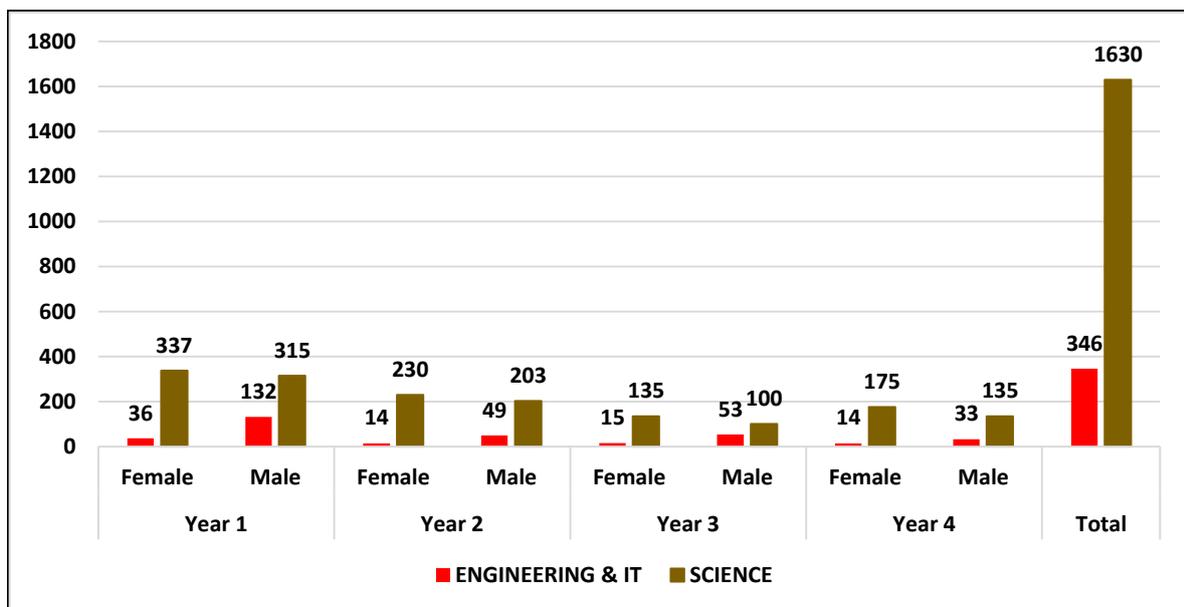
UNAM- undergraduate enrolment by school, qualification type, gender, 2013



Source: UNAM Student Enrolment Report, 2013

- Engineering and IT which includes bachelor degrees and bridging programmes has 0.7% females and 4.0% males. Science which includes bachelor programmes, diplomas and other has 7.5% females and 10.8% males.
- Gender disparity is an issue. This needs to be addressed in order to move towards gender equity in the industry.
- There is a major difference in the engineering and IT enrolment (18.3%) in comparison to science (81.9%), hence confirming the shortage of skills in this industry sector. The higher science intake for this year in comparison to the 2005-2008 indicates progress in this school, a positive sign for the industry sector.
- The figure below provides a breakdown of student enrolment as per school and gender from year one to year four.

UNAM- undergraduate enrolment by school, period of study and gender, 2013



Source: UNAM Student Enrolment Report, 2013

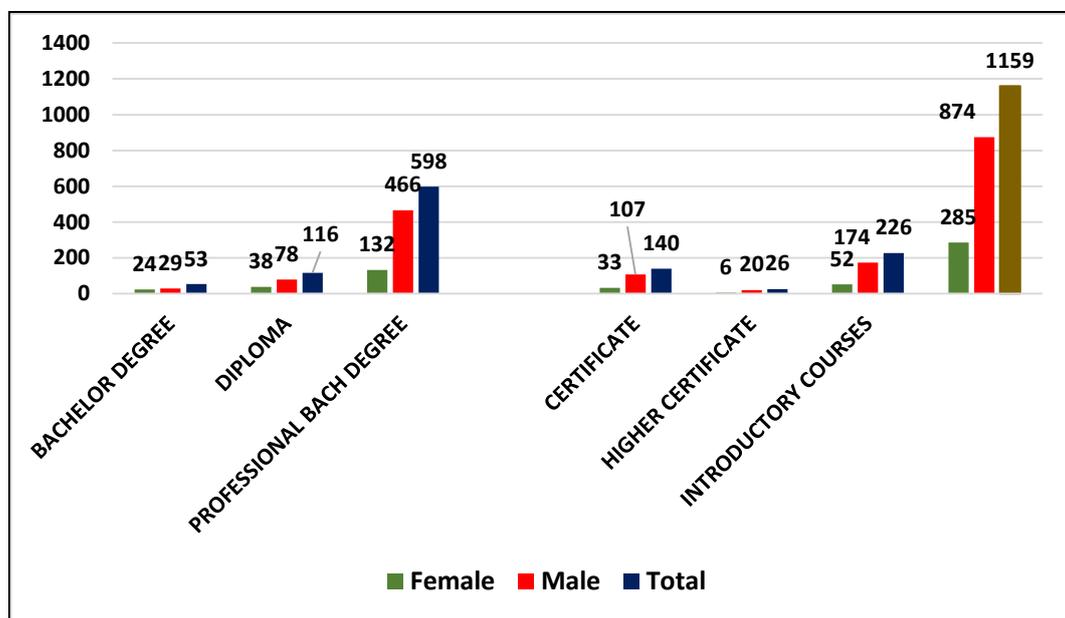
- There are 36 female students in engineering and IT intake in year 1 by year 4 it's down to 14, while male year 1 intake is 132 and by year four is 33.
- The dropout rate from year to year is very high, hence impacting negatively on the throughput rate and increasing the skills shortages in the industry.
- Female science intake in year 1 is 337 and by year 4, it's down to 175, while male year one intake is 315 and by year 4 is 135.
- While there is minimal gender disparity in science programmes, the decline in student numbers from year to year is very high, impacting negatively on the throughput rate and increasing the skills shortages in the industry.
- About 47 students reach the final year of engineering and IT and 310 in the sciences which further highlights the need to increase enrolments.

Polytechnic of Namibia (PoN)

- Polytechnic of Namibia (PoN) enrolled 13 130 students in 2013. A total of 1 159 students, comprising 8.8% of the total student enrolment undertook programmes in the school of engineering.
- The female enrolment is 285 comprising 4% of the total female enrolment, while the male enrolment of 874, compromises 14.9% of the total male enrolment.
- The low enrolments (8.8%) specifically for females indicate a reluctance to take engineering qualifications. This should be addressed as a priority.

The figure below provides a breakdown of undergraduate enrolment by school, qualification type and gender for 2013.

PON undergraduate enrolment by school, qualification type and gender, 2013

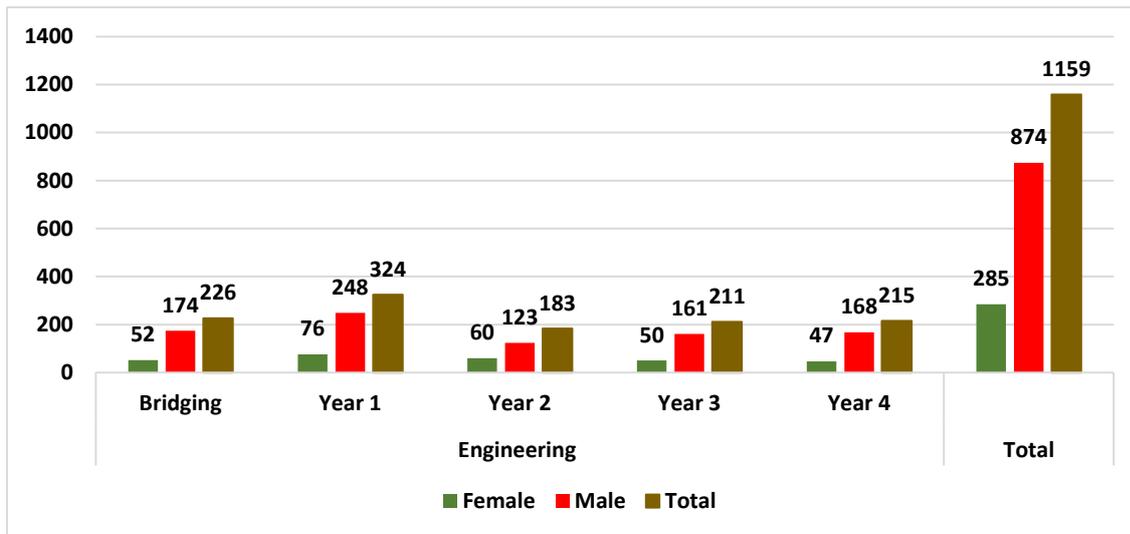


Source: Polytechnic of Namibia, 2013

- Apart from the bachelors degree, there is major gender disparity in male and female enrolment for all other qualifications.
- Female students should be encouraged to take on qualifications offered in the engineering and science fields

The figure below provides a breakdown of undergraduate enrolment as per school, period of study and gender.

PoN- undergraduate enrolment by school, period of study and gender, 2013



Source: PoN (2013)

- Female enrolment at the bridging year was 52 (18%) and at year 4 was 47 (16.5%), while male enrolment at the bridging year was 174 (20%) and at year four was 168 (19%).
- Although the enrolment figures in total are low, there is progress to year 4, anticipating a good throughput rate. The same applies for males.

The Findings

- The data from UNAM and PoN does not present an encouraging picture of enrolments and graduate rates of students in engineering and IT and science programmes required by the industry.
- Female enrolments are lower than males in both institutions.
- Due to a lower rate reaching the final year, there's a need to increase enrolments.
- According to David (2013)⁵ at least 26% of graduates who finish their tertiary education end up unemployed. This is according to a tracer study conducted by the National Council of Higher Education (NCHE) in 2011.
- Out of the 5 000 (4700) graduates from UNAM and PoN, 1 500 do not have jobs.
- 60% of PoN graduates have taken up jobs that are not linked to their studies.
- 27% say they have not found employment closely related to what they had studied.
- About 24% of graduates say they have had better prospects in their jobs, which are not related to what they had studied.
- 11.7% of graduates from UNAM, who have completed their respective courses, have not landed any jobs.

Vocational Education and Training (VET)

- The VET system is implemented with the intention of addressing skills shortages in the country, particularly technical skills at artisan level.

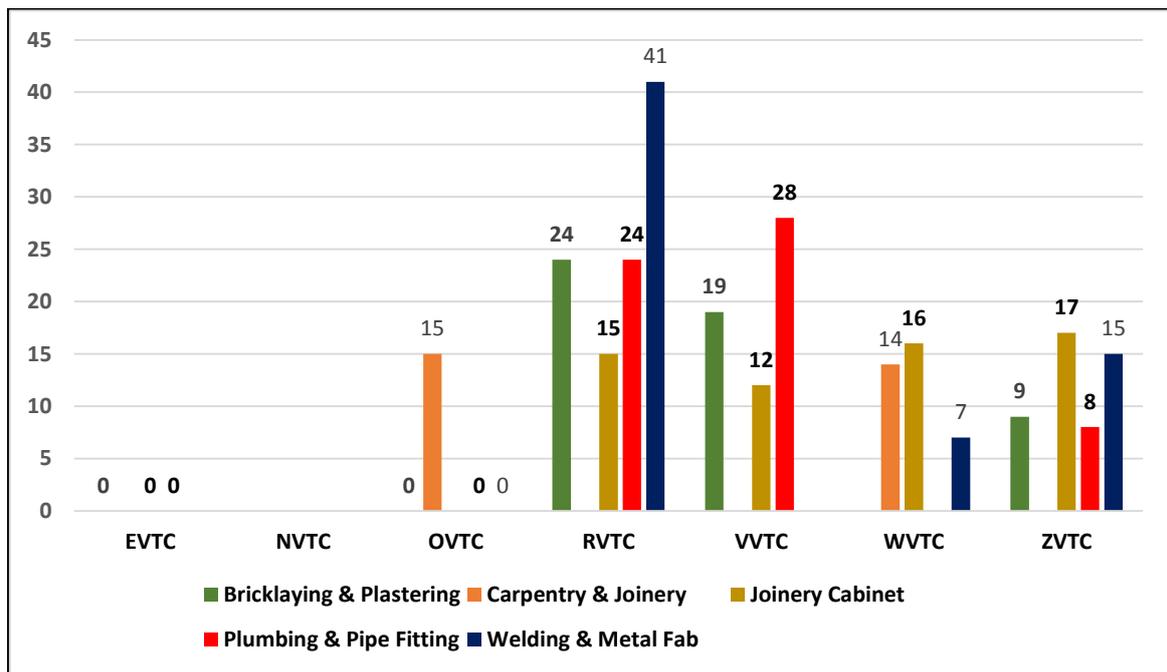
⁵ Aurelia David, The Namibian, 2 September 2013.

- Vocational Training Centres (VTCs) in Namibia consist of both state and privately managed institutions.
- The NTA currently oversees the VTCs. Until a few years ago, vocational training was not yet in the focus of the Ministry of Education and substantially underfunded. Even though this has changed recently, most vocational training is still carried out informally in the enterprises without any formal diploma issued for the learner or quality standards being set.

Vocational Training Centres (VTCs)

- Graduates of public and private VET institutions generally transition directly to the labour market.
- In addition, Community Skills Development Centres (COSDECs) graduates also seek employment. However, COSDECs offer mainly unaccredited skills programmes and therefore add little value to the construction industry.
- Enrolments at public VET Colleges for trades in the construction industry are illustrated for 2013 from data supplied by the NTA below:

Trainees per trade by level 3 at public VTCs, 2013



Source: NTA, 2013

The figure above reveals the following:

- the enrolments at the VTCs is very low, with two colleges having no trainees in the trades mentioned and one college having trainees for just one trade;

- the very low trainee enrolments at level 3 is an indication that the graduate throughput rates is also going to be low, hence the shortage of qualified VET graduates entering the labour market;
- this situation further exacerbates the present skills shortage in almost all trades related to construction;
- total headcount enrolments is low relative to the outputs of Grade 9 (in the region of 46 389);
- the situation gets worse when enrolments for grade 11 and grade 12 comprising 34 255 and 19 082 are considered;
- demand for VET far outstrips supply. Only about 3% of those who complete grade 10 can gain admission to VTCs. The participation of marginalised and designated groups as well as employed rural and urban youth should be increased;⁶ and
- there is insufficient physical capacity for VTC institutions to accommodate students exiting from the general schooling system.

The Role of the Roads Technical Training Unit in Vocational Training

The Roads Technical Training Unit (RTTU) was established in April 2007 as a joint initiative between the Roads Authority and GIZ. The objective of the project is to develop and implement nationally recognized vocational training programs for the Road Builders /Artisans and SMEs in the road construction and maintenance industry. Since April 2007 significant progress has been achieved, namely:

- a qualifications framework for the road construction and maintenance industry is developed;
- 155 Unit Standards(US) registered on National Qualification Framework (NQF);
- 22 qualifications are registered on NQF;
- 155 curriculum modules are developed;
- 51 training learning and assessment material are developed;
- 65 trainers, assessors and moderators are trained;
- one Namibian training service provider obtained NQA accreditation;
- 1,507 road builders including SMEs have undertaken accredited training across various skills areas (456 SME, road builders 997, RPL 54);
- 4,655 road builders including SMEs have undertaken informal skills training in various skills areas (as bases for further formal training) SME's 4,251, road builders 404;
- assist in development of National Recognition of Prior Learning (RPL)Policy; and

⁶ Government of Republic of Namibia. ETSIP Report. 2007. P.35.

- RTTU is recognized by NQA and NTA and the industry as lead model for vocational training development in Namibia.

Below is the latest draft Qualification Framework for Road Construction and Maintenance, according to the different tasks, National Vocational Certificate Levels and the respective positions.

DRAFT QUALIFICATIONS FRAMEWORK						
	National Vocational Certificate L2		National Vocational Certificate L3	National Vocational Certificate L4		National Vocational Certificate L5
Bitumen road maintenance	Labourer	Lead labourer	Blader (operator)	Foreman/supervisor <ul style="list-style-type: none"> • Routine maintenance strand (Bitumen road maintenance, blading operations, road marking, concrete operations, road reserve operations) • Periodic maintenance strand (gravel road, salt road) • Road construction strand (layer work, Surfacing, Road marking. Concrete operations. Road reserve operations. Crusher operations). 	General Foreman (could serve as an entry level for student at the Polytechnic of Namibia)	
Blading operations						
Concrete operations	Labourer	Lead labourer				
Material testing	Material tester (assistant)					
Road reserve operations	Labourer	Lead labourer	Heavy plant transporter Heavy plant operator			
Road construction						
Road surfacing	Labourer	Lead labourer	Paint truck equipment controller			
Road marking	Side car operator	Paint truck driver				
SME contracting	SME Contractor			SME Contractor		

Source: Roads Training Technical Unit, 2013

Private VET Providers

- There are a number of small private training providers offering mainly unaccredited skills programmes. The private VET College sector is about 10% of the size of the public VET College sector.
- The situation is also dire at Private VET Providers. Enrolment figures for 2013 are given below:

Private VET enrolments, 2013

Name of the VTC	Male	Female	Total
Namibia Construction Skills Academy	436	91	527
NATH	47	17	64
Danida Training College	2	13	15
Transnamib	39	0	39
Centre's name Industrial Craft Training Institute	13	0	13
ILSA independent college	90	87	177
Total	627	208	835

Source: NTA Database

- The private sector's role in VET is limited and considerable effort should be made to stimulate involvement.
- Such an initiative should be weighed against the institutional capacity of the NTA to improve the quantity and quality of VET provision.
- It enrolled roughly 835 students with a male to female enrolment ratio of 1:3.
- The private VET College sector is highly undeveloped and cannot support the transition to a knowledge-based economy unless there is a move to grow this sector and increase its absorption capacity.
- Graduate figures for private providers are not available.

KAYEC Tracer Study (VET)

- A tracer study of 606 graduates was conducted by a VET institution, KAYEC Northern, for the period 2010 and 2012. The purpose of the tracer was to track graduate destinations⁷.
- KAYEC students tend to reside in regions where unemployment is higher than the national averages.
- The tracer study found that 48% of graduates it tracked have gone on to a full vocational training course with a vocational training centre (including NIMT). The destinations of graduates are as follows:

Training being followed by KAYEC graduates

VTC	NAMCOL	College	University	COSDEC	School
48%	17%	15%	12%	8%	2%

Source: KAYEC Tracer Study, October 2013

⁷ KAYEC Trust, 2013, Tracer Study

- While 48% are furthering their vocational training, nearly one fifth (17%) are seeking to improve their school grades through study with the Namibia College of Open Learning (NAMCOL). Notably, some have gone on to university (12%) or college (15%) study. Clearly KAYEC has proved a stepping stone in helping their graduates to extend their academic or vocational qualifications.
- For the 36% who have gone into work, just over half (54%) have found paid employment and 46% have gone into self-employment. While the 54% in paid employment is marginally higher than the national average of those in paid employment, the 46% in self-employment is considerably higher than the 14% who nationally are in self-employment.

NCHE Tracer Study (HET)

- The National Council for Higher Education (NCHE) commissioned a tracer study of graduates from the University of Namibia and the Polytechnic of Namibia who completed their studies in the years 1999 - 2008. The main purpose was to gain information on the current employment and economic status of the graduates, and their assessment of the relevance and quality of their education within their work context. The views of employers of graduates were obtained.⁸
- In total 26% of graduates from UNAM and PoN responded. Forty-three employers were interviewed in both public and private sectors.
- Some of the major findings of the tracer study graduates include:
 - About 50% of graduates obtained employment by applying for a vacant position.
 - 4 out of 5 began the search for employment before graduation. However, nearly 4 out of 5 only obtained work in their second year after completing their studies.
 - Most graduates contacted up to 3 employers before their first employment.
 - However, 23% of UNAM graduates, compared to 15% of PoN graduates contacted only one employer before finding employment.
 - The field of study and area of specialisation were felt to be the most important factors in obtaining employment.
 - More than 60% of graduates received on-the-job training.
 - Nearly 60% of graduates had not changed their employer since graduation.
 - 78% of UNAM graduates, 70% of PoN graduates, and 92% of those who hold qualifications from both institutions, work for a public employer (including local authorities.)
 - Only 1% of graduates are self-employed.

⁸ NCHE, 2011, Tracer Study

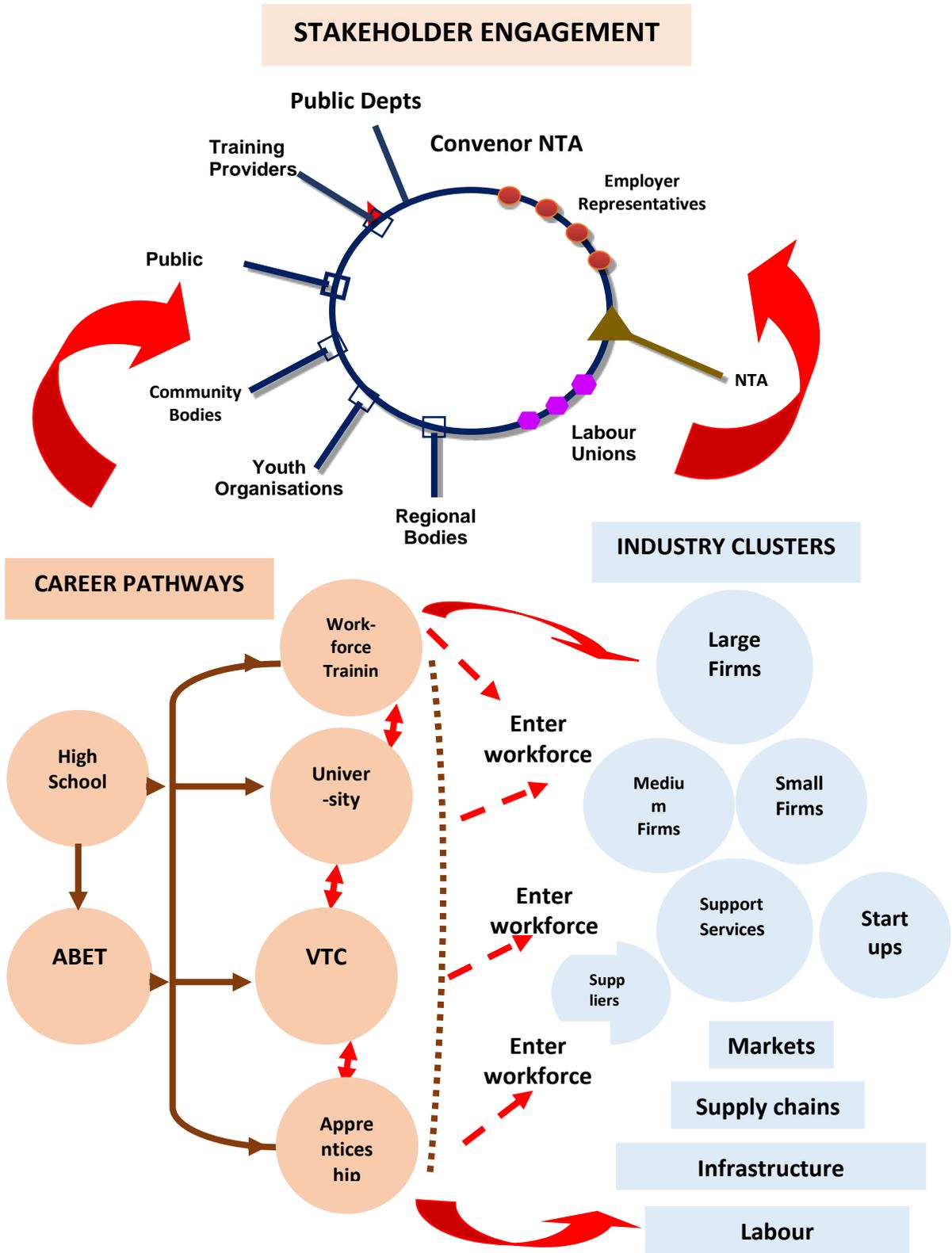
- 11.7% of UNAM graduates and 14.4% of PoN graduates are unemployed and seeking employment. This is cause for concern, not least considering the enormous public and private investment in a graduate.
 - There is a tendency for the monthly earnings of UNAM graduates to be slightly higher than those of PoN graduates. This is may be because UNAM graduates on average have higher qualifications than those from PoN.
 - Most graduates considered the course content of their major subjects to be the most useful element of their study programme for their current work.
 - Most graduates feel that they have been able to realise the career that they expected at the time of graduation, that they are using the skills acquired during their studies, and that their position and status is appropriate for their level of education.
 - However, some 60% of PoN graduates have taken up work not linked to their studies; 27% mentioned that they could not find a job closely linked to their studies, while 24% felt that they had better career prospects in their current job. To some extent this speaks of the flexibility of PoN graduates.
- Some of the major findings from employers include:
 - Employers do see benefits from the employment of graduates.
 - However, some employers feel that graduates are not adequately prepared for work. They are seen to lack experience of the workplace.
 - Most employers are apparently not satisfied with the level of written English of graduates. In part this may relate to the level of English with which students enter higher education.
 - According to employers, most graduates are interested in further studies, a tendency that they are willing to support financially and in other ways.
 - It seems that a significant proportion of employers do not feel that they have sufficient in-depth contact with institutions of higher learning, although some satisfactory relationships do exist.
 - It appears that higher education institutions are doing little research in collaboration with employers.
 - Finally, it must be noted that this was the first attempt to conduct a tracer study of graduates in Namibia. It has been shown that such tracer studies are feasible and valuable for the improvement of higher education.

The Findings

- The VET Sector in Namibia (public and private) is not adequate to meet current and future enrolment needs because it is too small.
- With the exception of NIMT, there are quality concerns at VTCs and COSDECs.
- Programmes in the VET sector should resonate with the demand needs of the labour market.
- Since the bulk of the Namibia workforce will need to be trained at VTCs, there is a need for considerable capital expansion.
- An insufficient number of graduates are exiting VTCs.
- The research on tracking should be expanded to all VTCs to get an idea of the relevance of programmes and the confidence of employers.
- There are concerns with the workshop equipment and the quality of trainers expressed in workshops and interviews.

A NIMT model should be considered for other industries which essentially require an adoption of a VTC.

12. STRATEGIC PARTNERSHIPS BETWEEN EDUCATION AND INDUSTRY



INDUSTRY PRIORITIES	ACTIONS
Stakeholder Engagement	
<ul style="list-style-type: none"> ▪ Stakeholder partnership should be formed by the industry to address common skills needs and generate co-ordinated solutions that benefit all stakeholders. ▪ Stakeholders working together create career pathways based on industry needs for workers. 	<ul style="list-style-type: none"> ▪ Stakeholders work together to identify education and training problems and propose solutions through qualifications and programme development. ▪ Stakeholders devise career pathways. ▪ Better utilising of skills and improving the quality of jobs. ▪ Gearing skills development to the specific needs of the industry
Industry Cluster	
<ul style="list-style-type: none"> ▪ Firms in an industry cluster benefit from synergies of association of related to shared infrastructure, supply chains, labour, markets and innovation. ▪ Industry cluster increases bargaining power. 	<ul style="list-style-type: none"> ▪ Pooling of resources for education and training in the industry cluster. ▪ Developing industry standards or benchmarks. ▪ Fostering and adapting new areas of growth.
Career Pathways	
<ul style="list-style-type: none"> ▪ Inputs from industry clusters inform stakeholder discussions. ▪ Effective career pathways requires co-ordination across education and training programmes by the NTA in order to offer a clear sequence of industry coursework and credentials to job seekers. ▪ Workers graduate with industry credentials that enable them to get work. ▪ Workers can progress vertically and laterally in their careers. 	<ul style="list-style-type: none"> ▪ Developing sector skills plans to improve the performance of the industry. ▪ Creating a skilled and adaptable workforce. ▪ Employment progression and career definition.

13. STRATEGIC PLAN

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
STRATEGIC PRIORITY 1: BUILDING EFFECTIVE STAKEHOLDER PARTNERSHIPS FOR SKILLS DEVELOPMENT IN THE INDUSTRY SECTOR				
<i>RATIONALE: Stakeholder partnerships are increasingly becoming the adopted approach to meeting industry needs for skilled workers and workers' need for better jobs. Stakeholder partnerships are forged with industry, government agencies, education institutions, labour, and community organisations to focus on the workforce needs in an industry within a labour market. Partnerships address current and emerging occupational needs and skill gaps. It offers a mechanism to focus scarce resources on industries that are major job providers in an area, as well as to focus comprehensively on the workforce skills, from entry level to advanced, required in the economy. Partnerships provide a means for the NTA and VET institutions to engage directly with industry across traditional boundaries better aligning training programmes and resources. Partnerships help to reduce inefficiencies and streamline state efforts by co-ordinating various projects and braiding various funding streams intended for the same purpose.</i>				
1.1.	Promote partnerships and linkages with employer bodies, education institutions, government agencies, and civic groups to respond to industry and local training needs, build better networks and design responsive training interventions.	<ul style="list-style-type: none"> ▪ The NTA develops a policy implementation framework to promote stakeholder partnerships. ▪ Guidelines and training interventions to support the development and management of partnerships are developed and measured. ▪ The number, type and outputs of partnerships are evaluated and recorded. ▪ Agreements are entered with partners on training projects linked to promoting local economic development. 	NTA/VET institutions/Employer Bodies/Labour Unions/Community Groups/Government Agencies/International Donors	TBA
1.2.	Establishing and strengthening stakeholder relationships.	<ul style="list-style-type: none"> ▪ Support to establish a Co-operative Learning Unit in each public VET institution is provided. ▪ Workshops to inform stakeholder of different partnership modalities and develop successful partnerships are held in all regions. 		TBA
1.3.	Information is disseminated to partners to keep them abreast of NTA activities to promote skills development.	<ul style="list-style-type: none"> ▪ Information on NTA and ISC activities, training levy, sector skills plan, occupations in high demand and skills gaps in the industry sector 		TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
		are communicated to stakeholders.		
1.4.	Encourage industry training clusters where large, medium and small firms in a single industry come together and benefit from synergies of association related to shared skills training, instructors, facilities, benchmarking and best practices.	<ul style="list-style-type: none"> NTA facilitates development of industry training clusters. The number of training industry clusters established. 	NTA/DTI	TBA
1.5.	Encourage public-private partnerships and investment (PPPs) in the VET sector to increase intake capacity and programme choices.	<ul style="list-style-type: none"> NTA develop a discussion document on PPPs with a view to approval and implementation. 	NTA/Ministry of Education	
STRATEGIC PRIORITY 2: Increasing access to occupationally-directed learning programmes to support come to industry growth				
<p>RATIONALE: To become an industrialised country, Namibia needs to address the problem of skills shortages across all sectors of the economy. The issue of Namibia's skills shortages and mismatches have been well documented since independence. There are considerable skills shortages for middle level artisanal skills and high level professional skills that must be mitigated to transition Namibia to a knowledge-based economy in accordance with Vision 2030. The problem of skills shortages is more pronounced among marginalised groups and in the rural communities. High unemployment, particularly for youth, sits alongside job vacancies pointing to structural unemployment in the labour market. By increasing access to occupationally-directed learning programmes, labour market outcomes of the unemployed, marginalised and youth are improved considerably. Access to learning programmes and recognition of prior learning for employed workers can also improve their skills, productivity and promotional opportunities.</p>				
2.1.	Occupations in high demand and skills gaps of the industry sector should be prioritised to expand access and allocation of resources (Refer to skills demand list).	<ul style="list-style-type: none"> Occupations in high demand are mapped to qualifications and career pathways in the industry sector contributing to improved relevance of training and greater mobility and progression. Qualifications and accredited training programmes for occupations in high 	ISC/VETCs/COSDECS/NTA/NQA/Ministry of Education/Ministry of Labour and Social works/Donor Agencies	TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
		<p>demand are developed, if they do not exist.</p> <ul style="list-style-type: none"> ▪ Strategies for fast-tracking the development of new qualifications to meet occupational shortages are developed and implemented. ▪ The number of students enrolled for occupational training programmes in high demand are increased annually to meet the demand-side needs of the labour market. ▪ Accredited short skills courses geared towards addressing skills gaps (top up skills) of employees are developed. 		
2.2.	<p>Relevant apprenticeships and traineeships should be developed with the support of industry for occupations in high demand currently not registered under the apprenticeship and traineeship scheme.</p>	<ul style="list-style-type: none"> ▪ A campaign to promote apprenticeship and traineeship in firms is devised. ▪ Competency standards for new apprenticeships and traineeships are developed. ▪ Performance of apprentices and trainees monitored and evaluated. ▪ A national databank of instruments for assessment and moderation of artisan trade tests and traineeship programmes is developed. ▪ A national database of registered assessors and moderators is developed. ▪ Number of apprentices and trainees in VET institutions is increased annually. 		TBA
2.3.	<p>Traineeships and apprenticeships at all public VET Centres will have a liaison officer</p>	<p>The VET institutions are required to deliver the following:</p>		TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
	whose job will be to ensure that the role of the trainee or apprentices both at the workplace or training centre are monitored.	<ul style="list-style-type: none"> ▪ Theoretical training to trainees or apprentices is provided at VETC. ▪ Assessment process of trainees or apprentices undertaken. ▪ Ensure all trainee or apprentices have log books and that supervisors at the workplace sign off the logbook. ▪ All traineeship and apprenticeship contracts are in place. ▪ Provision of traineeships and apprenticeships in firms are increased. 		
2.4	Capacity of COSDECs is improved to offer accredited training programmes.	<ul style="list-style-type: none"> ▪ An improvement plan is developed to upgrade COSDECs to offer accredited training programmes. ▪ The capacity of COSDECs is expanded to accommodate a diverse student population. 		TBA
STRATEGIC PRIORITY 3: Improving the efficiency and effectiveness of the VET sector				
<p>RATIONALE: <i>The VET sector has a contributory role to play in transforming Namibia into an industrialised nation with improved quality of life for all Namibians. VET institutions should be geared to address occupational shortages in the country, particularly for technical, technological and employability skills at artisanal level. Currently the VET system is small, underfunded, undifferentiated with poor quality outputs. In this respect it is not meeting the growing needs of students, employers, workers, and marginalised sections of society. Most of the VET institutions are faced with the problem of where demand for places exceeds the supply-side capacity of institutions. There are a large number of young people that should be accommodated in VET institutions and become equipped with the requisite knowledge and technical skills for productive employment and self-employment. In addition to expansion of the VET sector, access should be made for employed workers wanting to enrol on training programmes at VET institutions whilst in employment. Equally important is the need to align the VET sector to the country's overall developmental agenda with links to various strategies such as Vision 2030, NDP 4 and the National Human Resource Development Plan. This will enable the VET sector to contribute more effectively to the goal of inclusive growth and development, and contribute to reducing unemployment and poverty.</i></p>				
3.1.	Expand capacity (institutions and infrastructure) to provide training to address occupations in high demand and skills gaps, enabling improved productivity, economic growth and the ability of	<ul style="list-style-type: none"> ▪ An audit of VET institutions earmarked as key providers of industry training is undertaken to establish what improvement, upgrading and expansion is needed. ▪ Approval and funding for such upgrading and improvements are obtained. 	NTA/Ministry of Education/ISC/VETC/COSDECs	TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
	the workforce to adapt to changes in the labour market.	<ul style="list-style-type: none"> ▪ An audit of potential institutions to become training providers is undertaken to create the required training capacity to meet occupational demand. ▪ Funding for upgrading and improvements for such institutions is obtained. 		
3.2.	Expand student access and increase the range of training programmes at existing VET institutions in trades and occupations that are critical for economic growth and industry competitiveness.	<ul style="list-style-type: none"> ▪ Student intake at existing VETC facilities is increased using a range of delivery modes (full-, part-time, distance and blended). ▪ Increase the number of accredited private training providers in the VET sector for national qualifications. ▪ A baseline of current training by firms in the industry should be established and a 3 year stretch targets of the number of workers in firms that should be trained by VET institutions should be set. 		TBA
3.3.	Promote differentiation in the VET sector in terms of programme mix and target population.	<ul style="list-style-type: none"> ▪ Grade 9 learners, employed workers, youth and unemployed adults should be accommodated by VET Centres and COSDECs and progressively increased annually. 	NTA/Ministry of Education/ISC/VETC/COSDECs	TBA
3.4.	Develop training programmes to grow the pool of VET instructors and improve the subject knowledge and competencies of existing VET instructors.	<ul style="list-style-type: none"> ▪ An audit to establish the number and profile of existing VET instructors is undertaken to determine capacity constraints. ▪ Establish what upgrading and retraining they require to meet CBET and other requirements to be registered as competent instructors with the NTA. ▪ Create the capacity to provide train-the-trainer programmes for those 		TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
		trainers requiring retraining and upgrading. <ul style="list-style-type: none"> ▪ Number of new VET and existing VET instructors that underwent training. 		
3.5.	Improve the capacity of VET managers to run institutions effectively and efficiently.	<ul style="list-style-type: none"> ▪ Professional development programmes are offered in: leadership, organisational development, performance management, strategy, marketing, finance, human resources, client relationships management and finance. ▪ The number of VET Managers trained are increased annually. 		TBA
STRATEGIC PRIORITY 4: Supporting workplace-based skills development in firms in the industry sector				
<p>RATIONALE: Planning and implementing skills development in the workplace is essential to identifying current and future workforce needs in firms. The business environment is dynamic, competitive and can change quickly. Firms that support skills development of employees are in better position to grow their business, improve productivity, support job creation and economic development. Skills development motivates employees to do better in the workplace and support business objectives. For policy-makers and education institutions to develop training solutions that meet the needs of firms, employers should communicate workforce training needs to supply-side institutions in the labour market. This will contribute significantly to building the capacity of the VET sector to deliver training programmes that align to workforce needs and ensure work ready graduates that have both the skills and knowledge required by employers.</p>				
4.1.	Encourage firms to invest in upgrading the skills of their employees above 1% compulsory training levy.	<ul style="list-style-type: none"> ▪ A baseline is established of training activity in firms in the industry. ▪ Number of firms offering training to employees is increased annually. ▪ Number of employees receiving training is increased annually. ▪ Number of firms spending in excess of 1% of payroll on training is increased annually. 	NTA/Firms	TBA
4.2.	Develop the capacity of individual firms to engage systematically in workforce skills planning and implementation.	<ul style="list-style-type: none"> ▪ The NTA develops a workforce skills planning programme firms to undertake the following: <ul style="list-style-type: none"> ○ Identify workforce training needs ○ Align business objective to skills development ○ Develop a workplace skills 		TBA

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
		<ul style="list-style-type: none"> plan and training report ○ Advise firms on top-up skills, occupations in high demand, accreditation, sourcing training providers, apprenticeships and traineeships, RPL and the use of the training levy ○ Appointing s skills development facilitator ▪ The programme is delivered in all regions annually. 		
4.3.	Promote skills development in small businesses.	<ul style="list-style-type: none"> ▪ A national database of small businesses supported with skills development is established and the impact of training reported on. ▪ NTA through skills planning research identify the skills needs of small and emerging businesses in their industry and promote relevant training programmes through incentives. 		TBA
STRATEGIC PRIORITY 5: Addressing unemployment and employability skills to eradicate poverty and build sustainable livelihoods				
<i>RATIONALE: High unemployment, particularly for youth, is a major challenge for Namibia. The other challenge is high levels of poverty among the population. To transform Namibia into an industrialised country with improved living standards it is necessary to eradicate poverty, high unemployment and underdevelopment. Skills development provides opportunities for the unemployed and marginalised to acquire employability and self-employment skills. The training of workers in the informal economy on basic and generic skills (such as literacy and numeracy) as well as entrepreneurial skills facilitate the transition from self-employment in the informal economy to micro-enterprise development in the formal economy.</i>				
5.1.	The Skills Fund is effectively used to address unemployment, develop employability and entrepreneurship skills, and build	<ul style="list-style-type: none"> ▪ Develop and implement training projects that target the unemployed, marginalised and rural communities to secure employment and 	NTA/NGOs/VETC/COSDECs	

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
	sustainable livelihoods.	<ul style="list-style-type: none"> build sustainable livelihoods. ▪ Numerical targets to reach vulnerable groups are set annually. ▪ NGOs working in local communities are supported. ▪ Link programmes such as TIPEEG with skills development. ▪ Training activities to improve employability and entrepreneurship skills are designed and offered. 		
5.2.	Support the development of low skill, low wage workers for skills development and career advancement	<ul style="list-style-type: none"> ▪ Number of training projects focused on low skill, low wage workers implemented. ▪ Number of worker given recognition of prior learning. 		
STRATEGIC PRIORITY 6: Establishing institutional research capacity for national skills planning				
<p>RATIONALE: <i>There is a need to build institutional skills research capacity and improve labour market diagnosis within the NTA, Industry Skills Councils and VET Centres to analyse skills imbalances and make appropriate funding allocations. The NTA has an important role in conducting industry skills research, gathering statistics and disseminating findings to the public. Their close contact with government agencies, industries and VET institutions puts them in a good position to skills trends, undertake national training needs studies, develop baseline labour market indicators and postulate solutions. Strong research capacity will improve the capacity of decision-makers to determine industry skills needs and guide education and training investments effectively and efficiently. By establishing institutional research capacity, an evidence-based policy-making culture will be developed in the skills development environment.</i></p>				
6.1.	Develop a three year Research Strategy and Implementation Plan (2014-2017) that will include the following: institutional research aims and objectives; research activities; capacity-building interventions; information management; establishment of a research committee; and	<ul style="list-style-type: none"> ▪ Research strategy and implementation plan approved by NTA Board. ▪ One national skills conference per year. ▪ One tracer study and one employer survey every two years consecutively. ▪ A sector skill plan per industry sector is updated annually. ▪ Occupational mapping analysis per industry is undertaken. ▪ Two industry sector workshops are held annually. 	NTA/ISC/Board	Research Strategy and Implementation Plan approved by 30 May 2014.

NO	ACTIONS	SUCCESS INDICATORS	LEAD AGENCY	DUE DATES
	communication and dissemination of information.	<ul style="list-style-type: none"> ▪ Number of staff research training interventions. ▪ Number of research partnerships developed. ▪ Research Committee established. ▪ Number of research internships recruited. 		
6.2.	Strategic planning in VET institutions and COSDECS are responsive to labour market shortages	<ul style="list-style-type: none"> ▪ The research skills of VET education managers are improved to analyse training needs in local labour markets. ▪ VETCs and COSDECS conduct employer surveys and tracer studies annually. 		TBA
6.3	Industry skills research is required to inform sound decision-making, monitor industry labour market trends, and measure the impact of interventions and funding allocated.	<ul style="list-style-type: none"> ▪ Research on relevant areas are commissioned and conduct as agreed by the ISC and distributed to stakeholders. 		TBA