

agriculture, forestry & fisheries

Department: Agriculture, Forestry and Fisheries **REPUBLIC OF SOUTH AFRICA**

VOCATIONAL EDUCATION AND TRAINING (VET) STRATEGY

FOR

AGRICULTURE, FORESTRY AND FISHERIES

February 2018

Table of Contents

Acronymsiv
EXECUTIVE SUMMARY1
1 Introduction
2 Background
3 Policy framework
3.1. The present education and training policy framework
3.2. The location of VET in the broader education system
3.3. National Development Plan: 2030 (NDP)
3.4. Integrated Development Plan for Agriculture, Forestry and Fisheries (IGDP) and the Agricultural Policy Action Plan (APAP)
3.5. National policies for Vocational Education and Training
3.6. National Skills Development Strategy III (NSDS)
3.7. Operation Phakisa11
4 Rationale for a VET strategy for Agriculture, Forestry and Fisheries
5 Strategy development process
6 The AFF sectors and their labour markets – demand for VET
6.1. Labour market and related VET programmes supported by AgriSETA
6.2. Labour market and related VET programmes supported by FoodBevSETA
6.3. Labour market and related VET programmes supported by FP&MSETA21
6.4. The future of the AFF labour markets
7 VET actors and their roles in the VET system – governance
7.1. Regulatory bodies
7.1.1 The South African Qualifications Authority (SAQA)
 7.1.2 The Quality Council for Trades and Occupations (QCTO)
7.2. Sector Education and Training Authorities
7.2.1. The Agriculture SETA (AgriSETA)
7.2.2. The Fibre Processing and Manufacturing SETA (FP&M SETA)
7.2.3. The Food and Beverage Manufacturing Industry SETA (FoodBev SETA)25
7.2.4. TETA (Transport SETA)
7.3. Education and Training Institutions 26 7.3.4. Community Colleges 27
7.5.4. Community Coneges
 The status of the VET system and its programmes
8.2. Financing the VET system
8.3. Performance of the current VET system
8.3.1. The role of the private sector in the governance and provision of VET
8.3.2. Autonomy of public TVET Colleges and Agricultural Training Institutes34
8.3.3. Systems performance and management
8.3.4. Reach and inclusivity
learning
9. International Benchmarking

10.1. The Vision for Vocational Education and Training and the future VET system	10. Vision and objectives of an effective VET system	
Strategic Objective 1: Effective governance of the VET system serving AFF 45 Strategic Objective 2: Relevant VET programmes 46 Strategic Objective 3: Institutionalised workplace-based learning 47 Strategic Objective 4: Financing the VET system 47 11. Initiatives of the VET strategy 48 Strategic Objective 1: Effective governance of the VET system serving AFF 48 Strategic Objective 2: Relevant VET programmes 53 Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 60 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 13.4. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partn		
Strategic Objective 2: Relevant VET programmes 46 Strategic Objective 3: Institutionalised workplace-based learning 47 Strategic Objective 4: Financing the VET system 47 11. Initiatives of the VET strategy. 48 Strategic Objective 1: Effective governance of the VET system serving AFF 48 Strategic Objective 2: Relevant VET programmes 53 Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 59 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 60 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 63 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.2. Implementing partners 63 <tr< td=""><td></td><td></td></tr<>		
Strategic Objective 3: Institutionalised workplace-based learning 47 Strategic Objective 4: Financing the VET system 47 11. Initiatives of the VET strategy. 48 Strategic Objective 1: Effective governance of the VET system serving AFF 48 Strategic Objective 2: Relevant VET programmes 53 Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing provincial-level NETSAFF structures 60 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.2. Implementing partners 63		
Strategic Objective 4: Financing the VET system 47 11. Initiatives of the VET strategy. 48 Strategic Objective 1: Effective governance of the VET system serving AFF 48 Strategic Objective 2: Relevant VET programmes 53 Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure - a unique structure for each province. 61 12.3.2. The augmented provincial structure - a unique structure for each province. 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups. 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.2. Implementation processes 64 13.3. Implementation timeframe		
11. Initiatives of the VET strategy	Strategic Objective 3: Institutionalised workplace-based learning	47
Strategic Objective 1: Effective governance of the VET system serving AFF	Strategic Objective 4: Financing the VET system	47
Strategic Objective 2: Relevant VET programmes 53 Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partners 63 13.2. Implementation processes 64 13.3. Implementation timeframe 65		
Strategic Objective 3: Institutionalised workplace-based learning 56 Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure - a unique structure for each province61 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups	Strategic Objective 1: Effective governance of the VET system serving AFF	48
Strategic Objective 4: Financing the VET system 58 12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 63 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partners 63 13.2. Implementation processes 64 13.3. Implementation timeframe 65	Strategic Objective 2: Relevant VET programmes	53
12. Roles and responsibilities for the VET strategy 59 12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partners 63 13.2. Implementation processes 64 13.3. Implementation timeframe 65	Strategic Objective 3: Institutionalised workplace-based learning	56
12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 63 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.2. Implementing partners 63 13.3. Implementing nonitoring and evaluating the VET strategy 63 13.4. Implementing partners 63 13.5. Implementing partners 63 13.1. Implementing partners 63 13.2. Implementation timeframe 65	Strategic Objective 4: Financing the VET system	58
12.1. Implementation Structures 59 12.2. Expanding the coordinating and support function of the NETSAFF structures 59 12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups 62 12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 63 13.1. Implementing, monitoring and evaluating the VET strategy 63 13.2. Implementing partners 63 13.3. Implementing nonitoring and evaluating the VET strategy 63 13.4. Implementing partners 63 13.5. Implementing partners 63 13.1. Implementing partners 63 13.2. Implementation timeframe 65	12. Roles and responsibilities for the VET strategy	59
12.2. Expanding the coordinating and support function of the NETSAFF structures	12.1. Implementation Structures	59
12.2.1. Existing national-level NETSAFF structures 59 12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province		
12.2.2. Existing provincial-level NETSAFF structures 60 12.3. Augmenting NETSAFF structures to accommodate the VET strategy 61 12.3.1. The augmented national structure 61 12.3.2. The augmented provincial structure - a unique structure for each province61 61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups		
 12.3. Augmenting NETSAFF structures to accommodate the VET strategy		
12.3.1. The augmented national structure		
 12.3.2. The augmented provincial structure - a unique structure for each province61 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups		
 12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups	0	
12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partners 63 13.2. Implementation processes 64 13.3. Implementation timeframe 65	• • •	
12.3.4. Provincial Permanent VET Working Groups 62 12.3.5. Operational arrangements 62 13. Implementing, monitoring and evaluating the VET strategy 63 13.1. Implementing partners 63 13.2. Implementation processes 64 13.3. Implementation timeframe 65	Working Groups	62
12.3.5. Operational arrangements6213. Implementing, monitoring and evaluating the VET strategy6313.1. Implementing partners6313.2. Implementation processes6413.3. Implementation timeframe65		
13.1. Implementing partners		
13.1. Implementing partners	13. Implementing, monitoring and evaluating the VET strategy	63
13.2. Implementation processes		
13.3. Implementation timeframe		
Glossary of Terms	Glossary of Terms	

Acronyms

AET	Agricultural Education and Training
AET Strategy	National Education and Training Strategy of 2005
AFF	Agriculture, Forestry and Fisheries
AgriSETA	Agriculture Sector Education and Training Authority
APAP	Agricultural Policy Action Plan
ASSAF	Academy of Science in South Africa
ATI	Agricultural Training Institutes
CHE	Council for Higher Education
DAFF	Department of Agriculture, Forestry and Fisheries
DOB	Department of Basic Education
DHET	Department of Higher Education and Training
FAO	Food and Agriculture Organisation of the United Nations
FET	Further Education and Training
FoodBevSETA	Food and Beverage Sector Education and Training Authority
FP&M SETA	Fibre Processing and Manufacturing Sector Education and Training Authority
GFETQSF	General and Further Education and Training Qualifications Sub-Framework
HEQSF	Higher Education and Training Qualifications Sub-Framework
HSRC	Human Sciences Research Council
ICT	Information Communication Technology
IGDP	Integrated Growth and Development Plan
M&E	Monitoring and Evaluation
MOU	Memorandum of Understanding
NCV	National Certificate: Vocational
NDP	National Development Plan
NETSAFF	National Education and Training Strategy for Agriculture, Fisheries and Forestry
NETFAFF	National Education and Training Forum for Agriculture, Forestry and Fisheries
NGO	Non-Governmental Organisation
NQF	National Qualifications Framework
OQSF	Occupational Qualifications Sub-Framework
PETFAFF	Provincial Education and Training Forum for Agriculture, Forestry and Fisheries
PSET	Post-School Education and Training
QCTO	Quality Council for Trades and Occupations
SAQA	South African Qualifications Authority
SDP	Skills Development Provider
SETA	Sector Education and Training Authority
Stats SA	Statistics South Africa
TETA	Transport Education Training Authority
T&O	Trades and Occupations
TVET	Technical and Vocational Education and Training
Umalusi	Quality Council for General and Further Education and Training
VET	Vocational Education and Training
WIL	Work-Integrated Learning

List of Figures

Figure 1: The Agriculture, forestry and fisheries occupational landscape	14
Figure 2: ICT applications in agriculture, forestry and fisheries	15

EXECUTIVE SUMMARY

The single most important investment any country can make is in its people. Education has intrinsic and instrumental value in creating societies that are better able to respond to the challenges of the 21st century. Lifelong learning, continuous professional development and knowledge production alongside innovation are central to building the capabilities of individuals and society as a whole (NDP, 2011, p. 296).

In many countries around the world, vocational education and training (VET) is considered an essential and irreplaceable element of both the economy and society. Many industrialised countries with vibrant food and agriculture sectors draw heavily on the human capital generated by their vocational education systems. Many decision-makers in both the private and public sectors of these countries, recognised that VET feeds the current demand for skilled labour across many sectors, and ensures the future of much of their economies.

South Africa has a well-established and legislated sector known as Technical and Vocational Education and Training (TVET) which has grown out of what was formerly the Further Education and Training (FET) Sector. The TVET system generally refers to the 50 public sector TVET colleges that provide technical and vocational education and training across a wide range of vocations and occupations. This official TVET system is governed directly by the Department of Higher Education and Training (DHET) and it is in a state of transition aimed at increasing the effectiveness and efficiency of the system in terms of access, throughput, funding and financial management.

However, there is a wider space in which VET (as a mode of education, training and learning) is also offered in a variety of forms by private, public and Non-Governmental Organisation (NGO) sector companies and institutions – all of which are generally subject to the same principles and regulations under which the official TVET system operates. All training and education institutions and all educational programmes seeking accreditation are subject to the same standards and must comply with the same rules governing the whole of the South African education system. There is no formal or rigorously constituted VET system governing the overall offering of VET generally or for the agriculture, forestry and fisheries (AFF) sectors. Yet, there does exist some of the elements of a system to which this strategy refers as the 'VET system'. The aim of this strategy is to further enhance the overall VET system.

Further, it is within this wider VET space that the Department of Agriculture, Forestry and Fisheries (DAFF) has developed this VET strategy to provide guidance and direction to the provision of VET to AFF sectors and their respective labour markets. This VET Strategy is, thus, designed to work with and support the various strategies and initiatives aimed at augmenting, strengthening and bringing greater coherence and coordination to the overall South African VET system and its offering of VET – paying particular attention to the needs and interests of the AFF sectors that DAFF serves. The strategy is embedded in, and will be implemented in the context of, and in collaboration with, all the relevant stakeholders and role-players in the public and private sectors. It is further embedded in, and will be implemented in keeping with prevailing legislation governing education with particular reference to VET.

The strategy is conscious of the need to address South Africa's persistent high unemployment, and that VET is needed in skills areas that are of greater relevance for the labour market and to address the under-supply of relevant skills to the economy in most sectors (including the AFF sectors), at all levels. The strategy takes into account that skills are needed to facilitate employment with established employers, as well as to foster entrepreneurial self-employment.

With wide fluctuations occurring over the last decade, currently more than 1.1 million people in South Africa work (formally or informally) in the AFF sectors. All three sectors rely on primary production, including fishing, activities which are most often carried out by farmers, fishers and timber producers as well as farm and other elementary level workers who comprise nearly 73% of the AFF labour force. The people engaged in primary activities often have substantial experience, but also often little formal education or training relevant to their occupations.

The overriding value of the AFF value chain is generated through post-production activities such as value-adding processing. Those engaged in these aspects of the AFF sectors account for almost 27% of the AFF labour force (17% employed in the Food and Beverage value-adding subsectors, and 10 % in the Fibre Processing and Manufacturing subsectors). They range from unskilled, semi-skilled, skilled to professional workers, also with varying degrees of theoretical and practical training and education and experience.

The AFF sectors have a long history of fragmented education and training – particularly vocational education and training. The training and education for all these personnel includes informal, non-formal, and formal training and runs along the full spectrum of the National Qualifications Framework (NQF). While training is common in the AFF sectors, it has not translated into a substantial change in the profile of employees – with the majority still being employed in elementary and semi-skilled occupations. Career options, including entrepreneurial opportunities, are constrained to a large extent by the nature of vocational education and training.

The key issues plaguing VET for the AFF sectors fall into the following themes:

- The relevance of VET programmes to the labour markets;
- Financing of the VET system;
- Performance of the VET system;
- Workplace-based learning and authentic work experience.

Collectively, these themes represent the critical areas of change and where substantial strengthening of the current system is needed. In terms of relevance, the key issue is the mismatch between what is learned through VET programmes and what is needed particularly in the private sector. This is partly due to the predominance of the public sector in all aspects of the VET offerings. The general absence of the private sector, other than through the Skills Levy Fund, is one of the greatest weaknesses of the current VET system serving the AFF sectors.

The key issue regarding financing VET is the single funding mechanism (via the Skills Levy Fund) and the general inflexibility of the financing arrangements. Of particular concern are the decision-making processes that determine expenditure.

The overall VET system and its offering for AFF is not well coordinated. Critical information about workplace needs and trends in labour markets is not used effectively in planning VET or delivering programmes. Many stakeholders, including the learners, are often excluded or otherwise overlooked in the process of designing and evaluating VET programmes. In practice, the private sector is seen more as the client rather than as a partner and driving force in the system, sharing the load and determining direction.

Good quality VET ensures that learners get practical skills learned in an authentic work place. Most AFF VET programmes do not offer workplace-based learning. This significantly reduces the efficacy of the programmes and limits the knowledge and skill set that completing learners take with them to the workplace. However, workplace-based training would allow the enterprise to get to know the trainee and her/his performance. There is hence a better chance of being employed after having been trained in an enterprise.

Based on this assessment, the overarching aim of this strategy is to provide structure and otherwise augment and strengthen the still disparate overall VET system to ensure that it provides the technical and vocational skills needed to support the vision for the AFF sectors as depicted in national policy. Within this context, the strategy operates on the premise that VET programmes are not only, nor even primarily, about qualifications. VET programmes are about people – people in occupations. In addition to contributing to the advancement of the AFF sectors, the people coming through VET should be able to create meaningful and fulfilling livelihoods that contribute to meeting their own livelihood outcomes and realising their long-term ambitions.

To achieve this, the VET strategy for the AFF sectors sets out four strategic objectives:

- Strategic Objective 1: Effective governance of the anticipated VET system serving AFF: The VET system serving the AFF sectors is governed effectively in a collaborative manner to design, implement and evaluate relevant, accountable technical and vocational education and training;
- Strategic Objective 2: Relevant VET programmes: VET programmes are relevant to the needs of the labour markets in the AFF sectors;
- Strategic Objective 3: Institutionalised workplace-based learning: Workplace-based learning is a formal part of all VET programmes; and
- Strategic Objective 4: Financing the VET system: The VET system and its offering is financed from diverse sources, using multiple financing mechanisms with accountability for impact.

Specific outcomes are set for each of these objectives. And for each of these outcomes, the strategy proposes strategic initiatives to begin the process of realising the strategic objectives. In addition to being aligned to the policy objectives for the AFF sectors as outlined in the National Development Plan (NDP), the Integrated Growth and Development Plan (IGDP) and the Agricultural Policy Action Plan (APAP), the strategic objectives and their corresponding initiatives specifically address the opportunities, weaknesses and related issues identified by the national and provincial stakeholders who were engaged in the consultative processes carried out in preparation of this strategy. These initiatives stretch across the next 10 years.

DAFF will take the lead in implementing the strategy. However, the intention is that the strategy be jointly implemented with a range of stakeholders – particularly the DHET. Other key partners include the private sector, relevant Sector Education and Training Authorities (SETAs), and the authorities regulating the education sectors (Umalusi, CHE, QCTO).

The primary vehicle for implementation will be through the national and provincial structures put in place by the National Education and Training Strategy for Agriculture, Forestry and Fisheries (NETSAFF), but with the specific inclusion of structures and processes dedicated to the VET system serving the AFF sectors. The primary focus of the proposed implementing structures and processes is to create partnerships, build capacity and facilitate collaboration that will help strengthen the coherence and quality of VET programmes and institutions serving the AFF sectors. Further, the VET system serving the AFF sectors should operate across the full NQF spectrum. Thus the structures proposed in this strategy will coordinate with the full spectrum of stakeholders. This will include all the relevant regulatory agencies, the full range of AFF enterprises offering workplace-based training as well as training and education institutions offering programmes related to AFF in both the school and post-school phase, including public TVET colleges and private VET institutions and Skills Development Providers (SDPs), the agricultural training institutes, public and private universities, and high schools.

It is intended that at the end of the 10-year programme, the VET system supporting the AFF sectors will be substantially transformed to ensure that:

- The vocational education offered by the VET programmes:
 - Prepare the learner for work either as an employee or as an entrepreneur in a profession, occupation or trade;
 - Produce personnel with flexible capacity and competence, making them mobile and capable of working effectively in their chosen fields;
 - Combine theory and applied theory learning at an educational institution with practical authentic work experience in a farm or business through which occupational competences that are relevant to the labour market are developed; and which competences can be applied with minimal adaptation to the same or similar occupation in another farm or business.
- The AFF sectors will have skilled workers, technicians, artisans and professionals with authentic workplace-based training and simultaneously facilitate the learners' transition into the labour market or career advancement. In this way, vocational education is not only an education *for* a profession, occupation or trade, but also *through* a profession, occupation or trade. This will be one of the key targets as this strategy is implemented.
- Learning acquired through VET programmes prepares unemployed learners for employment or to start their own businesses in an AFF industry, and helps those formally employed in the AFF industries gain additional capacity to improve his or her performance and productivity, and open the way to promotion or entrepreneurial possibilities.

1 Introduction

In many countries around the world, technical and vocational education and training is considered an essential and irreplaceable element of the both the economy and society in which education plays a key role. Many industrialised countries with vibrant food and agriculture sectors draw heavily on the human capital generated by their vocational education systems. Many decision-makers in both the private and public sectors of these countries recognised that technical and vocational education and training feeds the current demand for skilled labour across many sectors, and ensures the future of much of their economies.

This VET Strategy is designed to work with and support the various strategies and initiatives aimed at augmenting, strengthening and bringing greater coherence and coordination to the wider South African VET system and its offering of VET – paying particular attention to the needs and interests of the AFF sectors it serves. It is embedded in, and will be implemented in the context of collaboration with all the relevant stakeholders and role-players in the public and private sectors.

2 Background

South Africa has had vocational training and education since the 1920s. It grew out of the industrialisation of the economy, particularly mining and railways. Initially, state-funded programmes were exclusively for white males and focused on establishing a reliable pool of qualified artisans. Training was done through state-run technical colleges and apprenticeships. Vocational training was effectively a tool of economic growth in which humans were the key component.

As the economy grew and the demand for artisans grew, vocational training was expanded to train black males. However, because of the prevailing racial policies, training was limited to the lowest level of artisanship. One result of this was the creation of the sentiment that vocational training was inferior to general education at school and tertiary academic training. Learning a trade carried a negative connotation.

A second outcome was the significantly lower quality of training afforded to black South Africans in comparison to white South Africans. This increased the general negative sentiment about vocational training and education.

The White Paper for post-school education and training highlighted the historically strong role apprenticeships in the artisan trades have traditionally played as "the pathway to qualifications". However, it notes that "the apprenticeship system has been allowed to deteriorate since the mid-1980s, resulting in a shortage of mid-level skills in the engineering and construction fields" (DHET, 2013)¹.

As will be discussed in more detail later, since 1994, the Government has made many efforts to address both of these issues. The quality of training has been addressed essentially through five processes: creating governing structures (e.g. SETAs and policies (e.g. the NQF;

¹ **DHET**. 2013. *Building an Expanded, Effective and Integrated Post-School System.* White Paper for Post-School Education and Training. [online]. Pretoria, South Africa.

http://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20postschool%20education%20and%20training.pdf

accreditation requirements); consolidating disparate public training colleges into megacolleges to harmonise offerings, encourage efficiency and promote quality control; and establishing a new funding model covering, in particular, capital investment in colleges and college fees and affordability. Among these is the plan to re-establish "a good artisan training system" (i.e. VET system) as "an urgent priority" with a goal of producing 30 000 artisans a year by 2030 (DHET, 2013).

That "good artisan training system" is impelled by two key drivers. The first driver is providing VET that is relevant to the labour market. This will help address South Africa's legacy of high unemployment that has proved difficult to address through policy solutions alone. Currently, there is an under-supply of skills to the economy across the board, at the high, intermediate and low skills levels. Further, the low rate of absorbing labour into the formal economy has resulted in sustained high unemployment and forced participation in the informal economy – sometimes on a purely survivalist basis. Thus, the challenge for VET is more education and training in skills areas that are of greater relevance for the labour market. Additionally, the skills developed must fulfil the dual purpose of facilitating employment with established employers, and fostering entrepreneurial self-employment.

The second driver is globalisation which brings with it increasing pressure for local producers to be globally competitive, and to remain abreast of new technologies, production systems and methods. This shifts the demand from unskilled to skilled labour – including an increasing demand for people who can adapt easily to new technologies and new responsibilities and managerial demands in the workplace. This suggests that traditional training approaches that focus narrowly on one form of production are now of limited value. The challenge for VET is to produce graduates with a solid base of knowledge and, in particular, specialised skills, whilst giving them the capacity to respond to new production, processing modes and methods. This suggests the need to facilitate skills and learning spaces related to innovation.

However, given that South Africa is a transitional economy, balance between the demands of globalisation and the still very real current demand for 'standard' production practices in the AFF sectors will be needed. This balance must apply not only to the formal economy, but also to the informal economy, which continues to offer important opportunities for short-term employment and income creation as part of the formalisation process.

3 Policy framework

This strategy is informed by, embedded in, and intended to build on exiting South African policy. The strategy applies various elements of three key policies to the context, challenges and opportunities characterising VET for the AFF sectors.

3.1. The present education and training policy framework

Education and training in South Africa is clearly and carefully structured. All current policy emanates from the White Paper on Education and Training formally published in 1995 and which emanated from the Reconstruction and Development Programme. The central argument of the White Paper was that "Education and training are central activities of our society. They are of vital interest to every family and to the health and prosperity of our national economy. The government's policy for education and training is therefore a matter

of national importance second to none", and that "South Africa has never had a truly national system of education and training, and it does not have one yet. This policy document describes the process of transformation in education and training which will bring into being a system serving all our people, our new democracy, and our Reconstruction and Development Programme" (DHET, 2013, p.8)¹.

Structurally, the South African education system is administered by the Department of Basic Education (DBE) and DHET. DBE administers primary and secondary school education from Grade R to Grade 12, while, DHET administers Post-School Education and Training (PSET). This includes: Public Universities and Private Higher Education Institutions, TVET Colleges and Private Colleges, newly established Community Education and Training Colleges, Sector Education and Training Authorities, regulatory bodies such as the South African Qualifications Authority and Quality Councils. Within this framework, TVET colleges.

All PSET learning programmes are organised around the NQF formally put in place in 2008 and revised in 2013. The NQF is a comprehensive system for the classification, registration and publication of articulated and quality-assured qualifications.

The NQF is a single integrated system comprising 10 levels and three sub-frameworks:

- General and Further Education and Training Sub-Framework (GFETQSF);
- The Higher Education Qualifications Sub-Framework (HEQSF);
- The Occupational Qualifications Sub-Framework (OQSF).

Each sub-framework is governed and coordinated by a dedicated Quality Council. Umalusi is the Council for Quality Assurance in General and Further Education and Training (NQF Levels 1-4). The Council on Higher Education (CHE) governs the HEQSF (NQF Levels 5-10). Quality Council for Trades and Occupations (QCTO) is responsible for the OQSF which effectively applies to all NQF levels. "The three Quality Councils manage the sub-frameworks, develop qualifications, accredit providers and examination bodies, and ensure the quality of examinations and certificates" (Modisane, 2014, p.1)².

The objective of the NQF is to create a single, integrated national framework for learning achievements; facilitate access to, and mobility and progression within, education, training and career paths; enhance the quality of education and training; and accelerate the redress of past unfair discrimination in education, training and employment opportunities. Within this framework of objectives, education and training should contribute to the full personal development of each learner and the social and economic development of the nation at large.

The 10-level framework supports the laddering and advancement of learning as one moves up the levels. This laddering is facilitated by level descriptors that are meant to be applied consistently across any and all learning activities to ensure parity and comparable quality and levels of learning – for example, all 3-year diplomas are at NQF level 6 and are, thus,

² **Modisane, T.** 2014. SA's National Qualifications Framework promotes genuine qualifications. http://www.saqa.org.za/show.php?id=6712

expected to address learning at the level described in the level descriptors for that level. According to legislation, TVET officially fits into NQF levels 1-4, and that is where the majority of the VET qualifications lay. However, vocational education, as an approach to learning and developing qualifications features, to greater and lesser degrees and with varying applications, throughout the NQF.

Education and training being attended before the NQF levels form part of basic education (primary and secondary school) which is governed by national legislation and policy, but is managed through provincial Departments of Education which are responsible for ensuring that schools follow the national curriculum, register independent education and training providers operating in their provinces, and coordinate the matriculation exams.

3.2. The location of VET in the broader education system

As noted previously, vocational education is, legislatively, a facet of PSET. And the VET strategy for the AFF sectors will operate within this legislative framework. The following Acts and policy documents have framed the operations and focus of South Africa's VET system.

- Higher Education Act 101 of 1997;
- Skills Development Act 97 of 1998;
- Skills Development Levy Act of 1999;
- Continuing Education Training Act 16 of 2006;
- Skills Development Act 97 of 1998 as amended by Act 9 of 1999, Act 31 of 2003, and Act 37 of 2008;
- National Skills Development Strategy (2000-2005, 2005-2010 and 2011-2016); and
- White Paper for Post-School Education and Training (2013).

As indicated in the White Paper for Post-School Education and Training: "One of the main purposes of the post-school system is to prepare workers for the labour market, or to enable individuals to earn sustainable livelihoods through self-employment or establishing a company or cooperative" (DHET, 2013, p.8)¹. A key ethos behind this is that everyone should be able to make a living for themselves and contribute skills to a developing and fast changing economy.

Within the space of PSET, TVET is mandated to "train young school leavers, providing them with the skills, knowledge and attitudes necessary for employment in the labour market" (DHET, 2013, p. 11)¹. The original intent was to provide training primarily for the mid-level skills required to develop the South African economy. With the adoption of the Skills Development Act, TVET was broadened to incorporate people who may already be employed, but who want or require additional training and skills development to improve their employability.

The VET system serving the agriculture, forestry and fisheries sectors embraces the ambit of the whole formal TVET system as well as the wider Agricultural Education and Training system (AET) – which runs the full range of the NQF (i.e. the GFETQFS, the HEQSF and the OQSF), and engages all the respective regulatory and governance institutions and processes.

3.3. National Development Plan: 2030 (NDP)

As indicated earlier, this VET strategy is aligned to the NDP and has taken many of its cues from there. The strategy will orientate itself toward facilitating the provision of relevant and quality learning opportunities for young people, for adults who want to change careers or upgrade skills, for people who have left school before completing their secondary education, and for unemployed people who wish to start an occupation and career. The strategy will also support access to lifelong learning that improves employability for all in the workforce in the AFF sectors.

A key aspect of implementing this VET Strategy will be to facilitate dialogue and technical planning among VET providers to make it possible for learners to take different pathways that enable them to continue with formal learning. It will support creating practical linkages between schools, private enterprises with workplace-based training, VET providers, universities of technology, universities and other providers of education and training to create the necessary pathways.

The NDP notes specifically that one of the areas needing progress in South Africa in order enable it citizenry to have a decent standard of living is education and skills linked to the opportunity to work. This is a key theme of this VET Strategy, and will be one of the main areas of coordination.

3.4. Integrated Development Plan for Agriculture, Forestry and Fisheries (IGDP) and the Agricultural Policy Action Plan (APAP)

This VET Strategy reflects the vision and priorities of the Integrated Development Plan (IGDP) for Agriculture, Forestry and Fisheries. The vision for South African agriculture is:

"Equitable, productive, competitive, profitable and sustainable agriculture, forestry and fisheries sectors, growing to the benefit of all South Africans" (DAFF, 2012, p. 59).³

Through this, the IGDP indicates that the three industries will make a meaningful contribution to:

- Decent employment;
- Vibrant, equitable, sustainable rural communities contributing towards food security for all; and
- Protecting and enhancing South Africa's environmental assets and natural resources

The IGDP challenged the three industries to contribute to developing and sustaining job creation, rural development, sustainable use of natural resources, maintenance of biodiversity and ecosystems, sustainable livelihoods and food security.

The APAP was developed essentially as the implementation plan of the IGDP into action. Some of the strategic actions detailed in the APAP include:

- Ensuring a more producer- and consumer-friendly market structure;
- Accelerating implementation of the small-scale fisheries policy;

³ **DAFF.** 2012. *Integrated Growth and Development Plan 2012*. [online]. Pretoria, South Africa. http://www.daff.gov.za/docs/Policy/IGDP121.pdf

- Promoting local food economies;
- Investment in agro-logistics;
- Reducing dependence on industrial and imported inputs;
- Increasing productive use of fallow land;
- Promoting climate smart agriculture;
- Strengthening knowledge and information management; and
- Promoting import substitution and export expansion through concerted value chain and commodity strategies.

With respect to the strategic action around value chains, the APAP will begin to address the imbalance of concentration and ownership within the market which impacts job creation. Strategic actions have been established to address this by localising food networks, developing infrastructure, providing incentives for small-, medium- and micro-enterprises and small-scale producers across the AFF value chains, and by supporting first entry into the market. Specifically, APAP has targeted the following commodities for transformation: Red Meat; Poultry; Fruit and Vegetables; Wine; and Wheat. Additionally, Forestry, Fisheries (with a focus on aquaculture and small-scale fisheries schemes), and Biofuels have been identified as strategic focus areas.

The APAP specifically highlights the pivotal role skills development will play in making it possible to achieve the intended outcomes of these strategic actions. Given the practical nature of many of these action plans, technical and vocational knowledge and skills will be required across the many occupations outlined in Figure 1 illustrating the AFF occupational landscape, which is discussed in Section 4.

This VET Strategy is designed to facilitate the achievement of these objectives through providing and strengthening appropriately trained and skilled human resources.

3.5. National policies for Vocational Education and Training

As stated at the beginning of this document, this VET Strategy is designed to work with and support the various strategies and initiatives aimed at augmenting and strengthening the currently disparate system providing VET – paying particular attention to the needs and interests of the AFF industries it serves.

While being led by DAFF, in general, this strategy will be governed by, and will operate within, the legislation and policy mandates and frameworks for VET as outlined in Section 4, which are largely implemented by the DHET. Therefore, while operating within the framework of the IGDP/APAP, the strategy is also aligned with the strategic plan of DHET. In particular, this VET strategy is specifically aligned with the aim of providing relevant, quality and accessible education, training and development in both primary and secondary AFF industries. The strategy will contribute to establishing credible institutional mechanisms for skills planning and identifying critical and scarce skills and occupation that are difficult to fill. It will seek to increase and coordinate access to occupationally-directed programmes, and to support cooperatives, small enterprises, and worker-initiated NGOs and community training.

3.6. National Skills Development Strategy III (NSDS)

This strategy is designed to align with the National Skills Development Strategy III (2015) which specifically calls for the following:

- Establishing a credible institutional mechanism for skills planning;
- Increasing access to occupationally directed programmes;
- Promoting the growth of a public VET system that is responsive to sector, local, regional and national skills needs and priorities;
- Addressing the low level of youth and adult language and numeracy skills to enable further training;
- Encouraging better use of workplace-based skills development;
- Encouraging and supporting cooperatives, small enterprises, worker-initiated programmes, NGOs, and community training initiatives;
- Increasing public sector capacity for improved service delivery and supporting the building of a developmental state; and
- Building career and vocational guidance.

The strategy does not in all cases directly address these objectives and processes. However, the essence of each is captured in the strategic objectives and strategic initiatives outlined in Sections 10 and 11 respectively.

3.7. Operation Phakisa

Operation Phakisa was designed to fast track the implementation of solutions on critical development issues enumerated in the NDP. Operation Phakisa is a results-driven approach, involving setting clear plans and targets, on-going monitoring of progress and making these results public. In keeping with the expectations of Operation Phakisa, the implementation of this strategy will follow the steps of Operation Phakisa, as well as the process described in the policy.

4 Rationale for a VET strategy for Agriculture, Forestry and Fisheries

The NDP which is the mainspring policy to carry South Africa forward through 2030, emphasises the importance of training and education:

The single most important investment any country can make is in its people. Education has intrinsic and instrumental value in creating societies that are better able to respond to the challenges of the 21st century. Lifelong learning, continuous professional development and knowledge production alongside innovation are central to building the capabilities of individuals and society as a whole (NDP, 2011: 296)⁴.

⁴ **National Planning Commission**. 2015. *National Development Plan 2030; Our Future-make it work*. [online]. Pretoria, South Africa. <u>http://www.nationalplanningcommission.org.za/Pages/NDP.aspx</u>

The government is aware that the Education and Training system that provides human resources for South Africa's AFF sectors is in dire need of substantial governance reform. Despite the efforts of previous initiatives, there remains a need to be directed towards greater integration, cooperation, and accountability. This reform must be driven by a clear, coherent vision of the future of the system that produces and processes food, fibre and fuel for domestic and international markets (ASSAF, 2017:21)⁵.

In 2005, prior to the publication of the NDP, the then Department of Agriculture and Land Affairs published the first National Agricultural Education and Training (AET) Strategy. It was aimed primarily at increasing the coherence and quality of education and training in agriculture at all levels. It did this in the context of addressing the needs of the South African economy and of improving agricultural production through quality agricultural education and training.

In response to the reorganisation of the responsibilities of the Department in 2009 to include forestry and fisheries, the AET Strategy was revised to incorporate these two additional sectors. Thus, in 2015, the NETSAFF was finalised. Ultimately, eight strategic objectives were adopted:

- Harmonising and coordinating education and training policy;
- Harmonising and coordinating education and training curricula;
- Coordinating delivery of education and training programmes;
- Making learning mobile and transferable;
- Aligning curricula with urgent and longer-term challenges faced by agriculture, fisheries and forestry;
- Addressing barriers to access;
- Improving the image of agriculture, fisheries and forestry as a career choice; and
- Encouraging the study of agriculture, fisheries and forestry in higher education and at postgraduate level.

This overarching education and training strategy dealt with broad issues faced across the whole of the education and training field for the AFF sectors. While much progress has been made on the NETSAFF objectives, there was a general bias toward higher education qualifications – particularly those with high levels of theoretical learning. This set the stage for developing a strategy that specifically addresses VET – both as a band of learning the South African qualifications framework and as concept relevant to all levels of qualifications.

As is the case with all new policy development, the overall policy framework for the AFF VET Strategy is the NDP which places the AFF sectors firmly on the agenda for the next 15 years. Specifically, and in relation to AET, the NDP calls for (ASSAF, 2017:19):

• The creation of an additional one million jobs in the agriculture, agro-processing, and related sectors by 2030.

⁵ **ASSAF**. 2017. *Revitalising Agricultural Education and Training in South Africa*: Consensus Study. [online]. Pretoria, South Africa. <u>http://research.assaf.org.za/handle/20.500.11911/85</u>

- Increased investment in agricultural technologies, research, and the development of adaptation strategies.
- Expanding the college system with a focus on improving quality.
- Improved skills development and training in the agricultural sector, including entrepreneurship training. This should include the training of a new cadre of extension officers.
- Investigation into whether extension and agricultural services are appropriately located at provincial level.
- Innovative means for agricultural extension and training by the state in partnership with industries.

VET is meant to respond to demands of the labour market in order to enhance the economy. It is all about preparing people for the workplace – for work. For the AFF sectors, technical and vocational education and training comprises the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations throughout the AFF sectors (UNESCO, 2017)⁶. A critical aspect of this learning is that it must take place in the workplace, such as a farm or value-adding business, where the learner learns practical knowledge and skills under the pressure of real working conditions while simultaneously contributing to the output of the farm or business.

Figure 1 depicts the landscape of occupations in the AFF sectors. It shows the range of occupations in the main value chain from input producers to exporters. It also captures occupations in the support and organisational services that supplement and complement the activities in the value chain. It further demonstrates the reach of the AFF labour markets, including employment and self-employment. It will be immediately evident that the scope of work in the AFF sectors – and thereby the scope of the need for VET in the sectors – is very wide. Currently, most of the VET programmes taken up are those related to occupations in the value chain, and within that, the majority are those related to primary production (i.e. farming, fishing and growing trees) with some focus on processing of food, fibre and related products. This association of the AFF sectors with primary production gives a false understanding of the size of the labour markets and of the extent of provision and coordination of VET required. More significantly, it gives a false impression of the value and importance of vocational education and training to the economy of South Africa and of the extent to which it can contribute to creating sustainable livelihoods.

Within the value chain, there are numerous occupations in activities in both the pre- and post-production stages of the value chain. They can represent employed or self-employed occupations. For example, in the pre-production stages, occupations include those associated with developing genetic material (both plant and animal). For plant genetic material, occupations include as plant breeders, breeding technicians, soil scientists and technicians, greenhouse workers, seed marketing specialists, etc. Similarly, for animal genetic material, occupations included animal breeders, animal care and breeding

⁶ UNESCO. 2017. What is TVET? [online]. <u>http://www.unevoc.unesco.org/go.php?q=What+is+TVET</u>

technicians, and laboratory technicians. In each of these contexts, there are a host of other occupations at elementary, supervisory, technical and managerial levels.

It is very possible that a particular occupation may be found in any or all of the three occupational areas (support, value chain and organisational). For example, a soil testing technician may be employed in various stages along the value chain, or may be employed in the support service or in one of the commodity organisations. An agricultural engineer or technician, for example, may work in the processing stage in the value chain or in a specialised service provider business in support services. Similarly, the extension advisors may be in support services or in the organisational services. Irrespective of the occupational area, the occupation itself comprises a set of theoretical and vocational knowledge and skills the acquisition of which must be consistent with needs of the workplace.

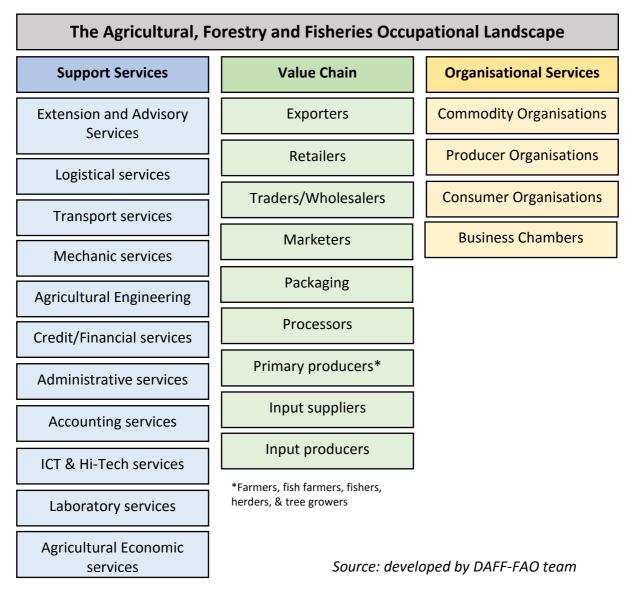


Figure 1: The Agriculture, forestry and fisheries occupational landscape

Of particular note are emerging occupations within the AFF sectors. These include production of non-traditional products such as solar-energy, bio-gas and bioplastics and

similar products, but also occupations addressing environmental issues (climate change, natural disaster management, biodiversity, etc.) and future water scarcity (biotechnology, irrigation with less water, weather forecast, etc.). These also include Information Communication Technology (ICT) occupations such as information and knowledge management, mapping of landscapes, managing logistical processes (programme developer, IT steering of machinery/robots, etc.), assessing diseases or soil moisture (drones, satellite diagnostics, etc.) and others. As shown in Figure 2**Error! Reference source not found.**, ICT ccupations can be found throughout the entire AFF occupation and labour market landscape. Non-traditional products and modern ICTs will, no doubt, feature in the future of the AFF sectors in South Africa and can attract many young people. It is essential that VET provides the training and education needed to meet that future.

TELEPHONE> Interactive voice response COMPUTERS> Agriculture information AND WEBSITES and markets BROADCASTING> Expertise sharing, advisory, community SATELLITE ----> Weather, universal accessibility. remote sensing MOBILE> Advisory, sales, banking, networking INTERNET ·····> Knowledge sharing. social media, AND BROADBAND e-community, banking, market platform, trading, etc. SENSOR *****> Real time information. NETWORKS better data quantity and quality, decision making DATA STORAGE ENERS Precision AND ANALYTICS agriculture. actionable Source: FAO, ITU knowledge

Figure 2: ICT applications in agriculture, forestry and fisheries⁷

5 Strategy development process

As indicated earlier, this strategy has its origins in two previous broader strategies the AET strategy launched in 2005, and the NETSAFF, launched in 2015. The implementation of these strategies highlighted the need to strengthen the position and quality of vocational education and training for the AFF sectors.

The strategy was developed over the course of 18 months. The first year was devoted to determining the scope of the strategy and establishing a road map for its development. The Food and Agriculture Organisation of the United Nations (FAO) provided technical and financial support for the development of this VET strategy. Assistance was also provided by the German Society for International Cooperation (GIZ). A team of specialists in vocational education, in agriculture, forestry and fisheries, in agricultural education, and in public governance, was established to lead the formation of the strategy. Extensive literature –

⁷ FAO & ITU. 2016. *E-Agriculture Strategy Guide*. [online]. Bangkok, Thailand. <u>http://www.fao.org/3/a-i5564e.pdf</u>)

particularly relating to the successful provision of VET internationally – was reviewed to establish a framework for good practice.

The second year entailed a multi-stakeholder consultative process composed or workshops and consultation meetings. The workshops were held in each of the nine provinces as well as two nationally. In an effort to give a voice to all relevant stakeholders, public and private skills development providers, private sector industry, government regulators, national and departments of agriculture and education, farmers, entrepreneurs and students. Strengths and weaknesses of the system were collected and discussed and a vision of a future system reflected. Specifically, these workshops explored the range of stakeholders and their involvement with VET, consulted about good practice in VET, and identified barriers and stumbling blocks inhibiting the effective provision, uptake and impact of VET serving the AFF sectors.

Consultations were also held with the DHET, the Quality Council for Trades and Occupations (QCTO), and three of the Sector Education and Training Authorities (SETAs): AgriSETA, FoodBevSETA, and FP&MSETA.

The data from all of these consultations was analysed and the resulting insights were incorporated into the present strategy. Five main themes emerged from the analysis:

- Relevance of VET programmes to their respective labour markets in the AFF sectors;
- Financing the VET system;
- Performance of the VET system: governance, delivery and accountability;
- Work-integrated learning and assuring authentic work experience;
- The reach of the VET system: access and inclusivity.

These themes form the framework for the VET strategy. They are used when examining the status quo of the current system and identifying critical challenges. They provide the structure for the vision and strategic objectives and initiatives to effect the changes needed to ensure that the VET system serving the AFF sectors delivers the range and quality of knowledge and skills needed to meet the current labour market demands and ensure that the system is able to meet the needs of the future.

6 The AFF sectors and their labour markets – demand for VET

To develop a relevant VET strategy, it is essential to understand the overall status of employment in South Africa as well as in the AFF collective sector. Similarly, it is important to understand the availability and uptake of VET programmes within AFF.

As of September 2017, out of a potential of 37.4 million people of employable age (15-64 years) in South Africa, approximately 16.2 million (43.3%) are recorded as employed. This includes formal, informal, and self-employment. One of the challenges in determining the size and status of the AFF labour markets is that official employment statistics published by Statistics South Africa (Stats SA) are not disaggregated beyond the following groupings:

- Agriculture, hunting, forestry and fishing;
- Mining and quarrying;
- Manufacturing;
- Electricity, gas and water supply;

- Construction;
- Trade;
- Transport, storage and communication;
- Finance, real estate and business services;
- Community, social and personal services;
- Private households; and
- Other.

The AFF labour markets are located mostly in 'agriculture, hunting, forestry and fishing' (which includes farmers, fishers, timber producers and others involved in primary production) and 'manufacturing' (which includes many of the value-adding occupations). However, the AFF labour markets are also found in 'trade', 'transport, storage and communication', 'finance, real estate and business services', and 'community, social and personal services' which includes occupations in the post-production value chain, and in support and organisational services.

In the absence of other disaggregated data, in addition to using data from StatsSA, this strategy draws on statistics produced by AgriSETA, FoodBevSETA and FP&MSETA with the understanding that the data presented is indicative rather than precise.

6.1. Labour market and related VET programmes supported by AgriSETA

Approximately 810 000 people are employed in "agriculture, hunting, fishing and forestry". This represents 5% of the 16.2 million people employed in South Africa, and 2.2% of the 37.4 million South Africans who are of employable age (15-64 years). This is a decline of 25 000 in the number employed in the sector in 2008 (Stats SA, 2017). In the last decade, employment in primary production/fishing has fluctuated substantially from 835 000 in 2008 to a low of 626 000 in 2011 to a high of 919 000 in 2016 to the present 810 000.

As indicated above, these employment figures represent employment in the primary production stages of the AFF value chains. They do not include any substantial numbers employed in the support services or value-adding stages. The latter are captured under 'manufacturing'.

Of the 810 000 employed in the sector, 31% are female, 69% are male (StatsSA, 2017). An estimated 42% of the work force in this category is under the age of 35; another 50% is between the ages of 35 and 55; and 8% are over 55 years old (AgriSETA, 2016). Further, 48% of the agricultural work force is found in the primary production sub-sector, 19% in the grain and poultry industries. The balance (14%) are employed in the coffee and tea, sugar and fibre industries. AgriSETA (2016) also noted shortages are beginning to show in post-production occupations, indicating that more people are leaving post-production jobs than are entering.

The majority of employees in large agricultural organisations have 'elementary occupations' – which are the lowest level positions. Of the remaining 49%, 34% is comprised of professionals (3%), technicians and associate professionals (6%), skilled agricultural and related trade workers (12%), and plant and machine operators (13%). Another 9% comprises clerical support workers (5%) and service and sales workers (4%) (AgriSETA (2016).

Supporting this labour market, AgriSETA has 86 registered qualifications and 92 registered learnerships. Nearly 60% of these are located in the post-production stages in the value chain, approximately 25% in primary production, and 9% in pre-production. Of the 51093 employees trained in 2015/2016, the vast majority (86.1%) were in "elementary occupations" most of which fall in the primary production stage of the value chain. The rest were trained as skilled workers (3.5%), technicians (2.9%), plant and machine operators and assemblers (2.9%), and professionals (1.5%).

6.2. Labour market and related VET programmes supported by FoodBevSETA

A substantial percentage of the occupations and employment in the post-production stages of the AFF sectors is located in the food and beverage manufacturing sector. Based on 2011 data, approximately 150 000 people are formally employed in the sector. Nearly one-third are employed in the processed fish, meat, fruit and vegetables sub-sector, which has also seen the highest growth of output and sales. Some 39% of the sector's employees are younger than 35 years and 54% are between 35 and 50 years (FoodBevSETA, 2011).

While the vast majority (84.5%) are employed by large-size companies, small companies offer opportunities in niche markets and have different skills needs. Further, added to these numbers are 24 000 informally employed in the beverages sub-sector and 14 500 informally employed in the food sub-sectors.

Overall employment in the sector fell substantially between 1997 and 2009, largely due to the increasing use of capital-intensive technologies and the increasing productivity of labour. Despite this, it is anticipated that the employment will increase with a particular demand for considered 'scarce skills' including machine operators and drivers, and technicians and trade workers.

The occupational profile in the food and beverage manufacturing sector shows that elementary occupations comprise 33% of labour force. Additionally, 16.6% of the labour force work as machinery operators and drivers, 15.5% are technicians and trade workers – both categories being vocationally orientated occupations. Professionals and managers comprise 12.2% of the food and beverage sector workforce. The balance is employed as clerical and administrative workers (14.6%) or community and personal service workers (0.8%).

In terms of qualifications offered, the FoodBevSETA supports 45 qualifications, most of which are pitched between NQF 1-4. It also has 40 unit standard-based skills programmes in various aspects of baking. In addition, the SETA is working with the QCTO on new occupational qualifications – including dairyman, process machine operators, wine makers and confectionary bakers. In 2016/2017, approximately 6 400 people were trained in food and beverage occupations – about 50% through the workplace-based learnership programme.

Looking forward, the labour market anticipates the need for a wide range of specialised skills due to the increasing usage of capital-intensive high technology innovations and processes, together with the complex distribution channels involved in taking products to market. In particular, there will be a need to upskill the existing workforce as well as training new personnel. Not surprisingly, manufacturers are more recently demanding higher skills levels, especially at NQF 5 and above, but with specialised, sector-specific skills. Further, the

food and beverage labour market anticipates the need to develop skills in response of the following trends and developments in the sub-sector:

- Development of a national food control agency;
- Development of aquaculture;
- Development of the organic food sub-sector;
- Development of the small milling industry;
- Enhancement of competitiveness in fruit and vegetable canning; and
- Beneficiation of rooibos and honeybush products.

6.3. Labour market and related VET programmes supported by FP&MSETA

The fibre processing and manufacturing sector comprises 13 sub-sectors: Clothing; Dry Cleaning; Footwear; Forestry; Furniture; General Goods; Leather; Packaging; Print Media; Printing; Publishing; Pulp & Paper; Textiles and Wood Products. The bulk of the sector is made up of secondary and tertiary industry activities that turn raw materials into finished products for the market. Forestry is a noticeable exception as its primary activities are considered part of the overall FP&M sector.

Eight of these 13 industries are, at least in part, linked to the agriculture and forestry: sectors clothing, footwear, forestry (production), furniture, leather, pulp and paper, textiles, and wood products. Specifically, the forestry industry is the upstream feeder into the milling and wood products industries. It also feeds into, wood chips, timber, pulp and paper, and lumber. These have upstream linkages to the wholesale and retailing of wooden products, furniture, and footwear. Primary agriculture feeds natural fibres (e.g. cotton, wool and mohair) and animal hides and skins into the leather industry and from there, again, into furniture, clothing, and footwear. In this context, the FP&M sector opens the way to new careers for school leavers and the unemployed, and advancement for those currently employed in the sector.

In total, there are 8 245 employers in the FP&M sector employing 115 273 people. The largest employer is the clothing sub-sector which employs over 42 000 people (36.7%), followed by wood products (16.9%) and forestry (15.5%) (FP&M, 2015).

The overall occupational programme for the fibre processing and manufacturing sector shows, as with other sectors, elementary occupations are the largest component of the labour force. However, the sub-sectors are not homogenous. In the **forestry** sub-sector, 64% of the employees are in elementary occupations (64%), while 15% are employed as plant and machine operators and assemblers. In **textiles**, 37% of the employees are in elementary occupations are plant and machine operators and 33% employed as plant and machine operators and assemblers.

In **wood products**, 46% are in elementary occupations, and 22% work as plant and machine operators and assemblers. In the **furniture**, 34% are in elementary occupations, 21% are plant and machine operators and assemblers, and 20% are skilled agricultural, forestry, fishery, craft and related trades workers.

Thirty-three percent (33%) of the employees in the **leather** sub-sector are plant and machine operators and assemblers, 24% are employed in elementary occupations and 14% are skilled agricultural, forestry, fishery, craft and related trades. Similarly, in the **paper and**

pulp sub-sector, 34% of the employees are plant and machine operators and assemblers, 20% are in elementary occupations.

Trends in employment rates in the FP&M sub-sectors vary. Employment in textiles, furniture, wood and wood products and leather and leather products declined by 25-30% between 2004 and 2014. Over the same period, employment in clothing decreased by 47% and paper and paper products increased by 14%.

In response to these challenges, various policy initiatives, such as the IPAP, have been proposed and implemented to increase the demand for value-added products from this sector. This will, in turn, create new work opportunities as well as develop the capacity of those currently occupied in the sector. For example, in the beneficiation of animal hides as high-value fashion products and occupations in the wood industry including furniture making and operating small-scale saw mills.

The FP&M SETA supports 42 qualifications. In 2012-2013, 6 207 learners were registered in these qualifications. Nearly 43% (2 665 learners) were enrolled for the national certificate Clothing, Textile, Footwear and Leather Manufacturing Processes. Approximately 19% (1189 learners) were enrolled for the certificate in making wooden furniture.

6.4. The future of the AFF labour markets

From the forgoing, a number of things are evident. For many years to come, there will be a need to build the technical and vocational skills of farmers, tree growers, fishers and other primary producers and their respective workers, as they still form the backbone of the labour force. Beyond primary production, there is substantial volatility in employment (including self-employment) within the various sub-sectors associated with AFF. A substantial percentage of the workforce is comprised of elementary occupations in a labour market that is showing trends towards less-labour intensive production and value-adding systems, methods and processes.

Further, the AFF sectors are changing, modernising, and being increasingly forced to compete with international markets and to adjust to changing consumer demands. In this context, five trends are manifesting in the AFF labour markets:

- 1) A shift from production and fishing that is exclusively or primarily for home consumption to more diversified and technology-supported market-orientated primary production;
- 2) A shift from production and sale of raw AFF products as the primary occupation, toward vertically integrating household livelihoods to capture value-adding in both pre- and post-production stages of the AFF value chains;
- A growing demand for knowledge and skills needed to adapt to climate change that, among other things, entails adoption of environmentally friendly production and processing methods and technologies;

- 4) Movement toward 'greening' the AFF sectors in terms of producing 'green' products such as bio-fuels and bio-plastics and 'green' jobs (e.g. those jobs that are related to preserving or restoring environmental quality) (UNEP, 2008)⁸; and
- 5) A trend toward the adoption of ICTs in all areas of the AFF sector.

⁸ See: **UNEP.** 2008. Green Jobs: Toward descent work in a sustainable, low-carbon world. [online] <u>http://adapt.it/adapt-indice-a-z/wp-content/uploads/2013/08/unep_2008.pdf</u>

The VET system will need to review its various offerings to accommodate these anticipated changes in the labour market. This will include ensuring curricula, competences, equipping of learning spaces in educational institutions as well as workplaces offering workplace-based learning are able to prepare learners for work in the occupations that will evolve with these changes in the labour market.

7 VET actors and their roles in the VET system – governance

VET is formally part of the PSET system which comprises all education and training provision for those who have completed school, those who did not complete their schooling, and those who never attended school (DHET, 2013: xi). It consists of the following institutions, which fall under the ambit of the DHET:

- Regulatory bodies responsible for qualifications and quality assurance in the postschool system;
- Sector Education and Training Authorities (SETAs);
- National Skills Levy and the National Skills Fund (NSF);
- Public TVET colleges (formerly known as FET colleges);
- Private VET providers;
- Community colleges (formerly public adult learning centres);
- Public and private universities; and
- Private enterprises with workplace-based training.

7.1. Regulatory bodies

There are four key agencies that oversee the implementation of the NQF: The South African Qualifications Authority (SAQA); the Council of Higher Education (CHE); the Council for Quality Assurance in General and Further Education and Training (Umalusi); and the QCTO.

7.1.1 The South African Qualifications Authority (SAQA)

The South African Qualifications Authority (SAQA) was established to oversee the implement and development of the NQF. Its main functions are to set standards for the NQF and to provide quality assurance for the NQF. It prepares policy frameworks to guide the Qualification Councils, including developing qualifications, assessment, recognition of previous learning and quality assurance. It maintains a national database of learners and evaluates foreign qualifications.

The Council for Quality Assurance in General and Further Education and Training (Umalusi) was established to maintain norms and standards in the GFETQSF. It is responsible for developing and managing qualifications for general and further education and training, to provide quality assurance of all exit point assessment of GFETQSF qualifications, certify learner achievements; provide quality assurance of independent schools; and accredit private assessment bodies. Umalusi is responsible for three types of certificates: Matriculation qualifications; Adult education and training qualifications; and Vocational

qualifications (including the National Technical Certificate (N3) and the National Certificate: Vocational (NCV).

7.1.2 The Quality Council for Trades and Occupations (QCTO)

The QCTO is responsible for the OQSF which facilitates workplace-based education of post school learners; provides occupational qualifications that can be credibly benchmarked against similar international occupational qualifications; and facilitates the articulation between occupational qualifications to qualifications in the other qualifications frameworks.

7.1.3 The Council on Higher Education (CHE)

The CHE was created to establish and manage the quality assurance system for higher education. It is responsible for the HEQSF. All higher education institutions fall within the sphere of CHE. All higher education qualifications – e.g. diplomas and degrees – must first be reviewed and accredited by the CHE before they can be offered.

7.2. Sector Education and Training Authorities

As a part of its preparation of the AFF VET Strategy, DAFF engaged with SETAs to learn about the size and shape of the force connected to the AFF sectors, and the size and shape of the VET response. The SETAs most directly linked to VET for the AFF sectors are:

- Agriculture SETA (AgriSETA)
- Food and Beverage Manufacturing Industry SETA (FoodBevSETA)
- Fibre Processing and Manufacturing SETA (FP&MSETA)
- Transport Education and Training Authority (TETA)

7.2.1. The Agriculture SETA (AgriSETA)

AgriSETA supports VET programmes in primary agriculture (production), secondary agriculture (pre- and post-production), and nature conservation (fisheries observation). The primary agricultural programmes cover the production of crops and livestock. The secondary agricultural programmes range from seed production, post-production handling of both crop and animal products – including processing, packaging and machine operation.

7.2.2. The Fibre Processing and Manufacturing SETA (FP&M SETA)

The FP&M SETA is responsible for VET related to the processing of fibres and manufacturing fibre-related products. There is a strong linkage between agriculture and forestry and the FP&M sector. Agriculture and forestry are the source of its raw materials.

7.2.3. The Food and Beverage Manufacturing Industry SETA (FoodBev SETA)

FoodBev SETA is organised around five areas called chambers whose members represent employees and employers. All of them are fed directly from primary and, in some cases, secondary agriculture.

• Baking, Cereals, Confectionary and Snacks: manufactures breakfast foods, bakery products, cocoa, chocolate, sugar confectionery and nuts. It is comprised mainly of companies involved in salting, baking, drying and cooking processes.

- Beverage Manufacturing: manufactures spirits, beer, malt, soft drinks and mineral water.
- Dairy Manufacturing: produces fresh milk, cheese, butter, ice-cream, yoghurt and edible ice.
- Food Preparation Products: manufactures products that are used in making a meal or a beverage, such as noodles, spices and sauces.
- Processed and Preserved Meat, Fish, Fruit and Vegetables: produces processed and preserved meat, fish, fruit and vegetables.

FoodBev SETA supports a number of VET learnerships, apprenticeships, skills programmes and qualifications, and is working with QCTO in the development of new certificates. All of the qualifications are directly related to the five FoodBev chambers. The nature of most of these programmes are such that they lend themselves to enabling producers to acquire training to be able to vertically integrate and expand their livelihood opportunities. For example, a fisher could register for the Certificate in Fish and Seafood Processing which provides him or her with the knowledge and skills necessary to be able to manufacture, package, store and market fish and seafood products from the raw materials.

7.2.4. TETA (Transport SETA)

Because their connection to transport issues related to fishing, TETA effectively opens entirely new career options for current marine fishers, and create a new area of collaboration for DAFF. Marine fishers can move into another part of the fisheries value chain. Among these are employment or self-employment in fisheries resource compliance and in fishing operations. Many of the TETA VET programmes are also subject to accreditation of the South African Maritime Safety Authority (SAMSA).

TETA is a good example of the value of an integrated view of VET for AFF. For many of the current fishers, or their children, the TETA VET programmes offer certificated training in skills they may have already acquired through the family's livelihood strategies, including: Navigating, handling, and manoeuvring fishing ships; Handling and stowing catch; Maintaining lifesaving and safety equipment; and Assisting with shipboard operations.

7.3. Education and Training Institutions

There are four groups of institutions responsible for providing education and training in the PSET system:

- Public TVET colleges (formerly known as FET colleges)
- Colleges of Agriculture/Agricultural Training Institutes⁹;
- Private VET educational institutions;
- Community colleges (formerly public adult learning centres); and
- Public universities and private higher education institutions.

⁹ Public nursing colleges are excluded from this list

Although not formally considered training institutions, the VET system also encompasses private enterprises with workplace-based training.

Approximately one million students are registered at the 26 public universities. Approximately, 700 000 students are registered at the 50 public TVET colleges that operate from more than 260 campuses around the country. And approximately 260 000 students are registered in community colleges.

Public and private universities, public TVET colleges, private VET educational institutions and other skills development providers are subject to national legislation and formal registration and accreditation, including any workplace-based training. They are established and operate under the authority of the various education Acts. Registration and accreditation runs through DHET with formal registration and accreditation being effected through the regulatory body responsible for the particular level of programmes they offer. All learning programmes, qualifications, learnerships, apprenticeships, assessors and examiners must be accredited and registered by one of the three councils depending on the level of the qualifications they offer.

7.3.1. Public TVET Colleges

There are 50 public TVET Colleges that operate on more than 260 campuses around South Africa. They are established and operate under the authority of the Continuing Education and Training Act. They are subsidised by the state with approximately R8 billion per year. It is estimated that some 700 000 learners are registered at public TVET Colleges; the aim is to increase enrolment to 1.2 million by 2020.

7.3.2. Public Colleges of Agriculture/Agricultural Training Institutes (ATIs)

There are 11 public Colleges of Agriculture – more recently called Agricultural Training Institutes (ATI). While varying from college to college, the ATIs offer qualifications, part qualifications and short courses from NQF levels 1-7, predominantly in some aspect of primary agriculture. Most of the ATIs divide their programmes into VET and Higher Education – with the greatest attention being given to higher education. The learning framework is essentially vocational, but with wide variations with respect to work-integrated learning.

Ten of the ATIs resort under the mandates of Provincial Departments of Agriculture and one is managed through the National Department of Agriculture. Negotiations are currently being finalised to elevate the ATIs to their national competency (as with all other such institutions), but with joint governance by the DHET and DAFF. They will also be granted greater operational autonomy. This shift, and the process it followed, presents itself as a model of collaborative planning to restructure VET systems.

7.3.3. Private VET Education Providers and SDPs

There are 390 registered private educational institutions and hundreds of private sector skills development providers that provide VET programmes to varying degrees. The smaller private service providers tend to have a single focus VET offering – for example, AgriSETA lists nearly 500 training providers accredited to offer training related to its learnerships and qualifications.

7.3.4. Community Colleges

Nine (9) community colleges were forged out of more than 3 000 previous adult education

and training centres. They were designed as an alternative for South Africans who need adult or continuing education or training but are unable to enter universities and TVET colleges – particularly youth and adults who did not complete or never attended school and who wish to raise the base for further learning, improve their skills for employability and/or progression to opportunities in the TVET colleges and university education. These colleges offer programmes that contribute to improving community cohesion and social capital, and responsive to the geographic and sectoral needs and challenges and include the provision of formal literacy and numeracy as well as a variety of formal qualification, occupational qualifications and part qualifications and skills. They work through networks and partnerships with community-based organisations, non-governmental organisations, and faith-based organisations.

7.3.5. Public Universities and Private Higher Education Institutions

There are 26 public universities (11 traditional universities, 6 universities of technology and 9 comprehensive universities). Traditional universities offer general and professional academic programmes leading to undergraduate, master and doctoral degrees. Universities of technology provide career-focused undergraduate programmes. Comprehensive universities combine elements of both traditional and universities of technology. There also 22 private higher education institutions. These institutions offer both VET and Higher Education qualifications; none of them offer programmes directly related to the AFF industries, but are primarily involved in human science, business management and information technology.

Additional to the institutions and agencies discussed above, the proposed VET system must also collaborate and coordinate with the DBE This is essential because of the overlap of basic education (which includes NQF 1-4 as a part of the secondary education system) with the official TVET system. It is also essential because current discussions regarding basic education include the need for a vocational focus in schools as a part of the three stream approach embracing academic, vocational and occupational education and training.

The forgoing discussion highlights the highly complex system in which vocational education is offered. Depending on what programmes it offers, a single education and training institution may be required to work with all of regulatory bodies and all of the SETAs related to the AFF sectors. While the concept of vocational education may, by definition, apply at any level of NQF, the current system of registration, accreditation and governance is structurally divided into the three qualification sub-frameworks. Thus, one of the key aims of this strategy is to facilitate and coordinate navigation through structures, policies and processes.

8. The status of the VET system and its programmes

In many ways, particularly when reviewing the international benchmarks, South Africa is well positioned to deliver excellent technical and vocational education. Far more than most African countries, South Africa has an ample legislative framework for education, VET in general and specifically for the public TVET colleges. However, notwithstanding the many efforts to strengthen the provision of VET, there are numerous overarching challenges (AgriSETA, 2016: 33):

- Immobility of labour in the market, there are some people who are not willing to relocate to where their skills may be required;
- There are some people who enter into the agriculture sector especially at low levels without a passion for it;
- Due to the geographical spread of the farms, it is difficult to get a critical mass to be trained;
- Retaining skilled individuals interested in the sector after training;
- There are high costs involved in bringing individuals to urban centres for training which uses much of the budget that could otherwise increase the number of learners trained; and
- The young generation is not willing to start at the bottom and work their way up

Further, while all education and training resorts under national legislation, the majority of the policies framing VET focuses on the public TVET system. And yet, private providers and businesses involved in VET make a significant contribution to the provision of VET. This is significant gap in the overall VET system and is, thus, addressed in this strategy.

More specifically to the VET system and its programmes serving the AFF sectors, the stakeholders who were consulted as a part of developing this strategy, identified a range of barriers that inhibit the provision of, access to and/or the successful completion of VET programmes. The barriers are grouped around the following themes:

- The relevance of VET programmes to the labour markets;
- Financing the VET system;
- Performance of the VET system;
- Workplace-based learning and authentic work experience.

Each of these is discussed in the following sections. After this, objectives and initiatives designed to address the identified challenges are presented in Sections 10 and 11.

8.1. Relevance of VET programmes

One of the key outcomes from the consultative workshops with AFF VET stakeholders was the realisation that there are **widely varying understanding of the concept**, definition and practical application of vocational education and training. This leads to inconsistent development of vocational knowledge and skills both within programmes and across the spectrum of programme and VET SDPs. This contributes to different standards across the country which impacts on employability, as well as on the confidence levels of learners, the quality of performance and mobility. This is particularly true with respect to workplacebased learning where the inconsistency is such that two learners with the same qualification constructed around different understandings about vocational training may have substantially different levels of practical competence. This varying understanding of VET has also led to the erroneous and unfortunate position that VET is not relevant to education at conventional universities. Consultations with stakeholders revealed further that training and education for occupations related to AFF has become **increasingly theoretical and disconnected with the practical knowledge and skills requirements demanded by the workplace**. While there has been success in increasing the uptake of mathematics and science as high school subjects, performance has been poor. There is a similar trend even in vocational colleges (e.g. VET colleges) where more emphasis is placed on passing theoretical exams, than on the practical learning needed for the workplace (ATI, n.d.). A second and related factor is the lack of practical training, work experience and practical knowledge and skills of the vocational educators and other teachers and lecturers involved in vocational education.

Linked to this, as outlined in detail by the report of the Human Sciences Research Council (HSRC, 2016), and confirmed by stakeholder consultations, is the mismatch between what is being learned and what is needed in the workplace. The HSRC report identifies demand, educational supply, and qualification-job mismatches (See Box 1), which is essentially a structural mismatch – meaning that the mismatches are built into the educational systems delivering trained personnel to the labour market. This supports the need for action in VET – particularly in relation to (i) the labour market, (ii) the direction of the economy, and (iii) building careers, in this instance, in AFF.

Box 1: Demand, educational supply, and qualification-job mismatches¹⁰

Demand mismatch examines the shape and trajectory being followed by the economy, the types of jobs being created, and the skills set and expectations of the working-age population. A structural mismatch between labour, demand and supply is the most significant type in the South African context, in that the economy and labour market show a demand for high-skilled workers, but there is a surplus of low-skilled workers.

Educational supply mismatch examines the type of skills produced by different levels of education and training systems, and the degree to which they respond to skills demand in specific occupations. Our analysis of the education supply mismatch currently experienced highlights the need to enrol and graduate higher numbers of STEM [science, technology, engineering, and mathematics] graduates from both universities and VET colleges.

Qualification-job mismatch is comprised of two dimensions: firstly, the qualification gap which examines the match between the type of qualifications required by workers in medium and higher-level occupations to perform their job effectively, and the actual type of qualifications held by those in such occupations. Secondly, it traces the sectors and occupations that the educational qualifications are absorbed into. This analysis revealed that there is a qualification gap in that less than half of managers, senior officials, technicians and associate professionals had a tertiary level qualification. Regarding the educational qualification-job mismatches, the evidence showed that higher education graduates tended to be employed in high-skilled occupations as managers, professionals, and technicians, and associate professionals. In contrast, only a minority of those with VET qualifications worked as technicians and associate professionals. Significantly, the data also revealed that nearly half of the higher education graduates are employed in the community, social and personal services sector. Finally, a high proportion of the Science and Engineering graduates, from both higher and technical vocational education sectors, prefer to work in the financial services sector, as opposed to the

¹⁰ Reddy, V., Bhorat, H., Powell, M., Visser, M. & Arends, A. 2016. Skills Supply and Demand in South Africa. LMIP Publication. Human Sciences Research Council. [online] Pretoria, South Africa. <u>http://www.hsrc.ac.za/uploads/pageContent/7429/LMIP_SkillsSupplyandDemand_Sept2016.pdf</u>

manufacturing sector.

Another aspect that emerged, similar to the general negative image of vocational education discussed earlier, is the **association of technical and vocational learning with lower level jobs**. As reported in NETSAFF, not only are there problems articulating from one qualification to another, the consultative stakeholder workshops indicated there are even more profound barriers preventing workers from advancing beyond the level of worker – despite often excellent technical training. This latter point is a legacy issue that is particularly prevalent in the AFF industries.

Further, a review of qualifications offered, as well as inputs from the consultative workshops and national stakeholders determined that the **principal focus of VET for the AFF industries has been on primary production** – that is, the focus has been on training farmers, fishers, and forest rangers. There has been less emphasis on training people for the post-production/post-harvest (i.e. value-adding) sector in the value chain, where the majority of jobs, self-employment and wealth can be created. This bias is also often found in national and provincial development policies and strategies addressing AFF development, rural development, food security and poverty alleviation. As highlighted by the HSRC, graduates prefer to work in the financial service sector, and not the manufacturing (i.e. processing) sector; changing this will help address the challenge.

Related to this is the **qualification and capacity of SDPs** – including the teachers, lecturers, technicians and work-place mentors. Far too many VET educators themselves have no formal workplace-based experience. Far too many VET educators are not formally qualified as vocational educators. Similarly, work-place providers often have no knowledge or skill set related to vocational education and training, and few appear to be formally certified – particularly farmers with whom students are placed.

8.2. Financing the VET system

The primary source of finance for VET is generated by the Skills Levy Act. These funds are directly primarily to the official TVET system, with some supporting higher education learners in undergraduate and post-graduate programmes. While the financing system appears fairly straight forward, it is cumbersome to access and implement. There is debate about the amount of financing available. Some argue that the budgets are under-utilised, while others argue that financing is insufficient.

What has emerged is that money available is to pay for the provision of training courses for learnerships, apprenticeships and internships, and in some cases, Higher Education qualifications and part qualifications. It does not pay for, or contribute to, the establishment of workplace learning facilities in the AFF companies who are meant to provide work-place learning for VET learners.

Additionally, with a few notable exceptions in the red meat, fresh milk and sugar industries, there appears to be little incentive for the private sector to invest in VET beyond paying the mandatory skills levy – particularly in the small and medium enterprise level. Innovative funding mechanisms through public-private partnerships and cost sharing, tax deduction and loans should be explored to increase quality, efficiency and accountability and to

stimulate demand for VET. Particularly the private sector should have a strong self-interest to invest in qualified employees which contribute considerably to their competiveness.

A similar challenge is faced by public and private VET SDPs that lack resources to provide for update practical learning and the provision of authentic workplace-based learning. Infrastructure, equipment, technology and capacity of skills development providers were all reported to suffer from a lack of adequate investment and financing. The lack of income diversification of SDPs is one of the causes for insufficient investments in VET, particularly in establishing workplace learning spaces. The high costs of equipment and fast changing technologies suggest that the SDPs need to develop innovative partnerships with AFF private enterprises to complement the theoretical learning in school with practical learning at the work place. Another possibility would be to out-source management of the college farm to a private business, etc.

As noted earlier, there is a high attrition rate among post-production occupations in the AFF sectors, there is substantial mismatch between training and demand in the AFF sectors (e.g. the high rate of unemployed agricultural graduates). Trends in the AFF sectors are reshaping the labour AFF markets and creating new opportunities. Yet, in the midst of this, it is noted that the largest number of AgriSETA learnerships are in primary agriculture (AgriSETA, 2016).

Provision is made for funding education and training in "scarce and critical skills" as a part of the "discretionary grants". In fact, nearly 40% of the funds transferred to the SETAs are channelled to Professional, Vocational, Technical and Academic Learning (PIVOTAL) programmes reflecting priorities set for the various sectors by the relevant SETA Board.¹¹

Further, financing guidelines highlight the importance of carefully establishing scarce skills and directing resources accordingly, including creating occupational qualifications along the full range of the NQF. Thus, scope does exist within the current financing model to direct resources also to VET for the pre- and post-production occupations, to emerging climate change, 'green' and ICT occupations, and towards those soft and managerial skills needed throughout the AFF occupations.

Related to this are issues surrounding student funding. Students are not investing in the learning and are generally unwilling to contribute to the cost of acquiring a VET qualification or part-qualification although it is an investment into their future well-being and personal career development.

One of the key issues related to financing VET is that VET is inherently costly. It is one of the most expensive forms of education and training. However, when it is implemented correctly and effectively, it has high returns for the employers/self-employers and the economy. To achieve the required level of effectiveness requires investment into both private and public institutions to provide VET – particularly investment for practical and workplace learning.

¹¹ **DHET**. 2012. *Guidelines on the Implementation of the Sector Education and Training Authorities (SETAs) Grant Regulations*. [online]. Pretoria, South Africa. <u>http://www.dhet.gov.za/Public%20FET%20Colleges/Planning%20-</u> %20Additional%20Resource%20Documents/Guidelines%20on%20SETA%20Grant%20regulations%202015%20approved.pdf

Box 2: Co-financing of apprenticeship training: Germany and Denmark¹²

Both Germany and Denmark co-finance their well-established, dual system apprenticeship schemes very differently.

In **Germany**, employers contribute three-quarters of the total costs of apprenticeship training, while the rest is borne about equally by the Federal Government and the Länder (financing school-based instruction¹³) and by the Federal Employment Services. However, a sizeable part of employers' contribution (a third to a half) is offset by the value of apprentices' output.

Denmark finances its apprenticeship system largely through costs borne by public and private enterprises and through levy refunds from the Employers' Reimbursement Scheme. All employers (both public and private) contribute to the Fund on the basis of the number of full-time employees; refunds are made to employers hiring apprentices Thus, apprenticeship training is co-financed through contributions to the Fund, by government, by all employers (particularly those not taking on apprentices) and by the apprentices themselves (through lower wages).

In summary, the current financing system is cumbersome to access and implement. Funding does not cover the cost of establishing or maintaining VET facilities such as work-place learning spaces. The private sector is involved in financing VET almost exclusively through the legislated Skills Development Levy.

8.3. Performance of the current VET system

There is ample evidence from many sources that the VET system is not functioning at its full potential. The stakeholder workshops raised a range of practical issues that need to be addressed. Effective VET requires agility, flexibility and responsiveness. Within this framework, the following are the critical issues identified:

8.3.1. The role of the private sector in the governance and provision of VET

This aspect has been partly covered in the previous points. The stakeholders consulted and the evaluations analysed – particularly in the light of good practice – confirmed the negative impact created by the institutionalised separation of industry from the provision of VET. As noted earlier, it impacts on the relevance of VET programmes including the mismatch of learning and labour requirements, financing of VET, and provision and rigour of workplace-based learning. It also impacts on the governance of the VET system.

While industry is engaged in various ways in curriculum development and review and even in contributing to the learning programmes, industry appears not to be engaged in the actual governance of the VET system, and neither be a driver by pushing for a more relevant and effective VET system.

¹² Ziderman, A. 2016. Funding Mechanisms for Financing Vocational Training: An Analytical Framework. IZA [Institute for

the Study of Labor]. Policy Paper No. 110. [online]. Pretoria, South Africa. <u>http://ftp.iza.org/pp110.pdf</u>

¹³ Schools in this context are roughly the equivalent of a TVET college or other VET SDP

This issue stems from structural and regulatory issues related to financing VET, failure on the part of the private sector to embrace the fundamental importance of VET to the future of their businesses and the economy, and the over-dominance of the public sector in the VET system – particularly in the governance of VET.

Addressing this is entirely consistent with the Continuing Education Training Act which states:

Technical and vocational education and training is clearly a joint responsibility of government and the private sector. It is important that public and private funding of this activity should complement each other. Two major public areas of responsibility stand out. One is the promotion of widespread and appropriate technical and vocational education and training programmes for the historically disadvantaged, who are usually not in a position to purchase these services privately. Another is the development of skills in industries, including niche industries offering special opportunities for the country, where the private sector is not investing adequately in the necessary human resources development" (DHET, 2015, p.16).¹⁴

8.3.2. Autonomy of public TVET Colleges and Agricultural Training Institutes

Public colleges and ATIs are hemmed in in their performance; they have little autonomy. As has been learned with the DAFF investigations into the positioning of the 11 public colleges of agriculture, to be effective, these institutions need a sufficient level of autonomy. They need to be able to raise, retain and expend funds and appoint and further qualify their staff similar to the manner afforded to government schools.

8.3.3. Systems performance and management

There are numerous inefficiencies throughout the VET system serving the AFF sectors. Some of the key concerns raised by AFF VET stakeholders include:

- Slow processes related to developing and accrediting curricula and learning programmes;
- Slow processes and inconsistency in SDP accreditation processes;
- Weak feedback and communication systems;
- Little or no post-completion tracking of learners;
- Lack of monitoring and evaluating, particularly with respect to relevance, success rates, responsiveness to market demands; and
- Focus on measuring expenditure instead of successful throughput and employability in relation to the expenditures.

In keeping with international good practice, to resolve the VET system performance issues will require establishing partnerships (at provincial and national level) with private sector farmers and businesses to create formal institutions to strengthen the provision of VET to the AFF sector. These institutions will need to have a voice in VET planning, curriculum

¹⁴ **DHET.** 2015. Continuing Education Training Act 2006 (Act 16 of 2006). *Government Gazette*, 15 May 2015. No. 38796. Pretoria, South Africa.

development, implementation, monitoring and evaluation. To pursue this line of action will require engaging with DHET and the Department of Labour (DOL).

Ultimately the system needs to come together under an institutionalised framework of cooperative participatory governance characterised by a shared vision of vocational education and training which is translated into collective action towards a common purpose of providing VET programmes that strengthen the AFF sectors, bolster the livelihoods of the current AFF workforce and facilitate career opportunities for learners – both employed and unemployed.

This is also consistent with the intention expressed in the Continuing Education Training Act. states:

"Good governance of the sector is best served by a mix of bottom-up and top-down processes..... Unnecessary complexity in ... rules and frameworks should be avoided. Institutions need to feed upwards their best practices so that these can be assessed and possibly taken to scale. Good governance also involves on-going formal and informal interaction with employer and employee organisations, from the national level down to the level of institutions" (DHET, 2015, p.15).⁸

8.3.4. Reach and inclusivity

The current VET system is deficient in its reach and inclusion of significant sectors of society connected (or potentially connected) to the AFF labour markets: those employed/self-employed in the informal AFF sector; farm workers and other elementary-level workers; land reform beneficiaries; women; and youth. Each group presents unique challenges to be addressed by the VET system.

Employed and self-employed workers in the informal AFF sector

These potential VET learners are essentially hidden in the economy and are therefore absent from any strategic planning for VET programmes or occupational development.

Farm workers and other elementary-level workers

Despite often receiving formal training, these workers are trapped in low-level occupations and have few opportunities to break away. This is exacerbated by movement toward mechanised agriculture and climate change, both of which are reducing the need for farm workers. Without any marketable skills, these workers are rendered marginalised, redundant and powerless – and "unemployable in the formal economy" outside their current employment (Atkinson, 2007, p.78)¹⁵

Land reform beneficiaries

This is not a disadvantaged group. These are South Africans who have benefited from the Land Reform Programme. The effectiveness of the VET system in reaching these people varies substantially from province to province. In some provinces, the beneficiaries do not avail themselves of accredited and full-funded training that has been arranged for them. In other provinces, the beneficiaries indicate that training is not offered in good time. Training appears to be inconsistent and reliant on practicing farmers who have little formal training as mentors or educators.

¹⁵ **Atkinson, D.** 2007. *Going for Broke: The fate of farmworkers in arid South Africa*. HSRC Press. [online]. Pretoria, South Africa. <u>http://www.hsrcpress.ac.za/product.php?freedownload=1&productid=2191</u>

Whatever the status of the provision of VET to land reform beneficiaries, land reform (including land restitution) presents a special challenge and opportunity for the AFF VET system to make a real and meaningful contribution toward achieving the objective of land reform policy. Specifically, VET can help ensure that land acquired is used productively to the benefit of those receiving the land, to the AFF sectors, and to general economy.

Women

While most women in the AFF sectors will likely be part of one of the three previous categories, their situation warrants special attention. Despite advances, women are still among the least educated and skilled members of the South African labour force, and they generally attract lower incomes, particularly in the AFF subsectors. At all levels of the occupational landscape discussed earlier, women find themselves facing unique challenges. In the workplace, they face historical inequities in terms of available positions, opportunities for advancement, and working conditions and environments. Similarly, women are often bound by many factors including social pressure, discrimination, institutionalised barriers, and access to resources that prevent them from accessing VET services, sustaining participation and completing programmes and from joining the workforce.

As noted in the policy on Sustainable Agriculture, "women's fundamental contribution is continually under-appreciated and under-supported" (DOA, 2004, p.7)¹⁶, and more pertinently in the White Paper on for Post-School Education and Training: "Patriarchy, also a legacy of our past, ensures that women and girls continue to experience a subordinate position in many areas of life, including in much of the education and training system" (DHET, 2013, p.4). It is essential, both for the women and for the success of the country, that these circumstances will be reversed. This will, at the very least require developing policies designed to ensure that girls and women are not face discrimination in the VET system or in post-completion placement.

Youth

Youth represent a particular challenge for the VET system. The abundance of unemployed graduates with agricultural and related diplomas and certificates is sufficient evidence to highlight the particular deficiency of the VET system in addressing the urgent need to facilitate gainful, honest employment of youth. A significant contributor to this is the over-emphasis on training to acquire a qualification rather than training for an occupation and career. This is exacerbated by the mismatch between learning and the needs of the labour market. It is further aggravated by issues related to the quality of their general education and to various economic forces putting pressure on the labour market.

The percentage of South Africa's population the youth represent, warrants that special attention be given to this section of the population. Advancements in technologies – in particular ICTs – being applied throughout the occupational landscape of the AFF sectors, the special demands of climate-smart agriculture, and the movement toward 'green' technologies and products all offer points of departure for augmenting existing or creating new VET programmes for occupations requiring vocational knowledge and skills that are particularly attractive to the young. As, argued by a matriculating student headed for IT training from his family's smallholder farm: *"Youth may represent 25% of South Africa's*

¹⁶ **Department of Agriculture**. 2004. *Policy on Agriculture in Sustainable Development*. [online]. Pretoria, South Africa http://www.nda.agric.za/docs/Policy/SustainableDev.pdf

population, they represent 100% of its future" (R. Ramkelawaan, personal communication, November 2017).

8.4. Work-Integrated Learning: Authentic work experience through workplace-based learning

One of the key underpinnings of effective vocational education is for the learner to gain authentic work experience as an integrated part of his or her VET learning programme. As indicated earlier, occupational qualifications (under the QCTO) have three components: theory, applied theory and authentic work experience.

One of the challenges found amongst those engaged in VET is varying understandings of the concept and intention of authentic work experience. Various terms are used; each is valid in a particular context. The umbrella term, as used by SAQA, is "Work Integrated Learning (WIL)", which is defined as "A characteristic of vocational and professionally oriented qualifications" and notes that "may be incorporated into programmes at all levels of all three Sub-Frameworks." (SAQA, 2014)¹⁷

SAQA further explains that WIL may take various forms including simulated learning, workdirected theoretical learning, problem-based learning, project-based learning and workplace-based learning. In Higher Education WIL is referred to as *WIL*. In the GFETQSF it includes *simulated learning, work-directed theoretical learning, problem-based learning,* and *project-based learning*. In the OQSF, it is referred to as *learnership* and *workplace-based learning*.

This strategy recognises that the practical application of WIL in various qualifications offered by educational institutions will vary according to their accreditation requirements. However, in keeping with good practice for vocational education and training, for the purposes of this strategy, WIL is understood as *workplace-based learning*, in which the learner gains authentic work experience as a formal, assessed and accredited part of his or her VET learning.

Box 3: Authentic Workplace Experience¹⁸

Authentic workplace experience

is the heart of true vocational education and training.

The essence of vocational education

is the development of vocational skills

that enable its recipients to be gainfully employed.

An authentic work setting is immensely valuable for learning because it:

Provides learners with a sense of place and purpose;

https://hr.saqa.co.za/glossary/pdf/v49SRKBUh2hk9ybw/Glossary%20of%20terms%2013112014.pdf

¹⁷ **SAQA**. 2014. *Standard Glossary of Terms. Terms Related to the South African National Qualifications Framework*. [online]. Pretoria, South Africa.

¹⁸ **Okurumeh, E.A.** 2016. Development of Entrepreneurial Skills through Vocational Education and Information and Communication Technology (I.C.T) in Nigeria. In *International Journal of Science and Research*, Volume 5 Issue 3, March 2016, p, 1745-1748.

- Introduces learners to relevant jobs and the world of work;
- Fosters systematic observation and reflection on practice;
- Increases transfer of learning by creating opportunities for transfer; and
- Facilitates developing expertise for the job, at the job.¹⁹

Further, integration of classroom and workplace learning is most effective when structured short with intervals and moving between the two settings (the class room and the workplace) regularly and rapidly. This integration:

- Allows learners to apply theoretical knowledge immediately;
- Helps learners reflect on work experience within the classroom context; and
- Trains the mind to switch easily between theory and practice.

All of the stakeholders consulted highlighted the inadequacy of these aspects of the current provision of VET for AFF. Although the QCTO is driving the agenda to include authentic workplace-based learning as the third component of VET programmes, it is struggling to find organisations, businesses and agencies in the labour market (whether private or public sector) that are willing, able and motivated to partner with them in the provision of workplace-based learning opportunities to fulfil the education and training requirements.

In addition to learning space, the range of technologies used for work integrated learning is often outdated or not well matched to the intended occupation for which the learner is being trained. This is particularly evident with the public TVET colleges and colleges of agriculture.

Another issue is the lack of consistency of workplace learning. There is no formalised learning programme with learning outcomes that can be monitored and assessed. An example of this is the placement of third year agricultural diploma students at the public colleges of agriculture. All of the colleges require students to spend all or part of their third year on a farm, but there is little rigour around the learning that takes place. Some host farmers are true mentors, others receive the students as additional labour. Some watch over the students carefully and work to a clear programme of learning. Others simply put the students to work. This is, of course, related to the fact that few work-place providers are qualified VET educators.

A corollary issue is the provision of practical (simulated) learning as a part of the learning at the educational institutions. Many institutions do not have or even have access to the infrastructure and equipment needed to offer the practical learning to the standards required.

Collectively, these weaknesses in the current provision of VET contribute to the increasingly theoretical training of learners and of the persistent mismatch between training and needs of the labour markets.

¹⁹ Eiriksdottir, E. & Jonasson, J.T. 2014. *Vocational education and training at school and at the workplace*. The Icelandic Case. [online]. Iceland. <u>https://www.vinnumalastofnun.is/media/1293/elsaslides.pdf</u>

This background and the following international benchmarking provide the framework for the proposals made in this Strategy giving the focus and direction for the VET system and its programmes serving the AFF sectors. The premise of this strategy is that it is cognisant of the existing legislation and arrangements governing the provision and quality assurance of VET. However, the strategy is also cognisant of the reality that the provision of VET will not enable the AFF sectors to achieve their priorities. Thus, this strategy seeks to engage at various levels, to consolidate and enhance the VET system into one that can deliver vocational knowledge and skills that are relevant to the AFF sectors both now and into the future.

9. International Benchmarking

The literature reviewed shows a wide array of approaches to vocational education and training. And, not unexpectedly, good practice varies and varies based, in large measure, on two factors: the country's history in education and vocational education; and the structure and make-up of the private sector economy and its relationship with government. Thus, there is little value in attempting to import VET systems that have been developed in other countries – even from those where the VET system is vibrant and well-functioning. Rather, what can be 'imported' are key principles and standards that point in the direction of achieving excellence in the provision of VET for the AFF sectors in South Africa.

Thirteen standards of excellence emerged as potential benchmarks for the South African VET system.

Demand-oriented: the labour market sees the value of VET to its own mission and clearly articulates its requirements and is the primary force demanding services;

Combines theoretical, practical and workplace-based learning/training: learning is more than just learning how to do a job or perform a particular function, it is experiencing first-hand how that job or function fits into an actual farm or business, where the pressure of production deadlines and other realities provide real context for learning and better prepare the learner in term of what to expect in the workplace;

Outcomes-based: rather than being content driven or constructed on the knowledge base of the educator or educational institution, learning is captured in the concept of competence which encapsulates technical and performance ability in context of service.

Modularised with a flexible mode of delivery: learning is acquired in discrete, identifiable units that link together, but which can be learned separately. Delivery is designed primarily around the workplace and the learner, rather than around the convenience of the educational institution. Flexibility entails the inclusion of multiple workplace experiences to learn an occupation in different contexts. It also includes the ability to adapt quickly as the knowledge and skills requirements change in the labour market.

Relevant to the labour market: what is learned can be applied in the workplace either as an employee or as an entrepreneur. There is minimal demand mismatch or qualification-job mismatch. This is achieved by close collaboration among the educational institutions, the workplace (industry) and the government.

Active stakeholder ownership, participation and collaboration: VET is a system. And by, definition, a system must have an 'owner' that provides the impetus and momentum for the

system. The benchmark here is genuine collective ownership by the learner, private sector (farms and businesses), the state and educational institutions. Ownership is not nominal, but is manifested in serious participation and collaboration in all aspects of the VET system.

Substantial and genuine private sector participation: In countries that have a vibrant VET system there is a strong and leading presence of the private sector. Farms and businesses are not unwilling or sceptical partners, they are drivers and leaders of the VET system because they see its value to their own enterprises.

Harmonised with existing National Qualification Frameworks: The VET system operates within the wider educational framework. Articulation between and among institutions and qualification is actively promoted where bridges, not walls, are constructed for access and success of learners.

Integrates formal, non-formal and informal VET: The VET system recognises the size of and the contribution made to the economy by all those in the labour market whether they are in the formal or informal sectors, and whether their training and education has been formal, non-formal or even informal. Well-functioning VET systems develop strategies and protocols to embrace rather than exclude people and training that falls outside the 'formal' sector.

Permeable (transferrable) learning: This has two aspects. One is the ability to articulate within an occupation, acquiring more knowledge and skills that will allow employees to advance in the workplace. The other is the ability to apply the knowledge and skills learned for one occupation to the learning of a different, perhaps related, occupation. Learning for an occupation expands options; it does not limit them.

Open access/equal opportunities: The VET system is structured to accommodate people and labour markets with varying requirements. Women, youth, the disabled, those who have received little or no formal education or training, those living in remote locations, and those encumbered with responsibilities that make learning away from 'home' difficult – the VET is structured to accommodate them all.

Gender sensitivity: Owing to the unique position and challenges experienced by women, vibrant VET systems structure and otherwise position themselves to increase accessibility and successful completion of VET programmes by women and facilitate their integration into the labour market.

Anticipates and adapts to future needs: As with any viable system, a well-functioning VET system stays tuned to the needs of the future. It keeps abreast with changes in the labour market, and in the way work is done – with particular reference to changes in technologies used and quality and other standards set domestically and internationally.

10. Vision and objectives of an effective VET system

The vision of a permanent and future oriented VET system falls within the vision of the wider NETSAFF which is to ensure accessible, responsive, quality education and training for the South African AFF industries. This strategy specifically addresses the development of vocational knowledge and skills.

The vision for VET for the AFF sectors is to see all three sectors provided with human resources at all levels – from ground-level workers to senior management to entrepreneurs – who have the specialised knowledge, skills and competence required to ensure the continued advancement and strengthening of the AFF industries as well as to ensure that learners have a life-long career path.

The mandate of the structures proposed in Section 11 of this strategy is to support and otherwise contribute to planning, developing, implementing, monitoring, and evaluating policy, programmes, assessment practices and systems for vocational education and training related to the fields of AFF.

The primary focus of the proposed implementing structures and processes is to create partnerships, build capacity and facilitate collaboration that will help strengthen the coherence and quality of VET programmes and institutions serving the AFF sectors. The VET system serving the AFF sectors should operate across the full NQF spectrum and thus the structures proposed in this strategy will coordinate with all the relevant regulatory agencies, as well as the full range of training and education institutions offering programmes related to AFF in both the school and post-school phase, including public TVET colleges, private higher education institutions and SDPs, the ATIs, AFF enterprises with workplace-based training, public and private universities, and high schools.

This strategy will give special attention to building and strengthening partnerships with private-sector businesses, companies and organisations in the AFF sectors – with special emphasis on post-production operations in the various value chains – to ensure their full engagement as an integral part of the VET system, and its governance and programmes. Producer organisations and chambers of commerce and business, as employers and contractors of human resources, must carry their share of responsibility for developing, implementing and evaluating VET programmes, systems and mechanisms. An important part of this will be their direct involvement in identifying scarce and critical skills to ensure that VET programmes are aligned to labour market needs. Equally important will be their involvement with addressing the financing of the VET system (e.g. governance, coordination and monitoring in addition to the provision of VET programmes) and with the need for workplace-based learning which is so fundamental to high-quality, effective VET.

Fostering dynamic interaction and collaboration among the key institutional actors in the VET system – principally businesses, VET SDPs and regulatory and governing institutions – will contribute to engendering a shared vision about VET and translating it into unified and collective action. As called for in the DHET Strategic Plan, fostering interaction and collaboration will also contribute to strengthening the capacity of the participating institutions, increasing access to VET learning programmes, and improving success of learners in those programmes.

10.1. The Vision for Vocational Education and Training and the future VET system

Consolidating the wide breadth of national, sectoral and educational legislation and policy, this VET Strategy calls for three components of vocational education and training: technical competence; occupational competence; and professional competence. These three components comprise the knowledge and skills needed to work in a skilled occupation, particularly in the context of a dynamic and competitive world of work.

Vocational education prepares the learner for work – either as an employee or as an entrepreneur in a profession, occupation or trade. It should produce personnel with flexible capacity and competence, making them mobile and capable of working effectively in their chosen fields. It combines theory and applied theory learning at an educational institution with practical authentic work experience in a farm or business through which occupational competences that are relevant to the labour market are developed. These competences are

not focused exclusively on the requirements of the individual farm or business providing the workplace-based learning. In keeping with the standard of transferability, the competences can be applied with minimal adaptation to the same or similar occupation in another farm or business.

The vision for vocational education is that it should ensure that the AFF sectors will have skilled people with authentic workplace-based training and simultaneously facilitate the learners' transition into or advancement through the labour market. In this way, vocational education is not only an education *for* a profession, occupation or trade, but also *through* a profession, occupation or trade. This will be one of the key targets as this strategy is implemented.

This Strategy will also work to ensure that learning acquired through VET programmes prepare the unemployed learner for employment or to start his or her own business in an AFF industry, and likewise, helps the employed worker in the AFF industries gain additional capacity to improve his or her performance and productivity, and open the way to promotion or entrepreneurial possibilities.

Specifically, the aim of this strategy is to strengthen the VET system and its programmes to ensure that it provides the technical and vocational skills needed to support the vision for the AFF sectors as depicted in national policy. Within this context, the strategy operates on the premise that VET programmes are not only, nor even primarily, about qualifications. VET programmes are about people – people in occupations. In addition to contributing to the advancement of the AFF sectors, the people coming through VET should be able to create meaningful and fulfilling livelihoods that contribute to meeting their own livelihood outcomes and realising their long-term ambitions.

Thus, the overarching purpose of this Strategy is to augment, strengthen and bring greater coherence and coordination to the wider VET system and its provision of VET for AFF. Functionally, the long-term goal is to create a well governed, efficient and effective VET system that can deliver vocational knowledge and skills that are relevant to the AFF sectors both now and into the future.

The practical focus of this strategy addresses critical issues relating to structure and functioning of a VET system. However, the intention of the strategy is to serve a broader purpose. The effective planning, implementation and evaluation of this strategy, is to position the VET system to contribute to enhancing the lives of those currently and yet to be working in the AFF sectors, to strengthening the efficiency of the AFF sectors, and to advancing society and to building the future economy of South Africa.

10.2. Strategic Objectives for VET for Agriculture, Forestry and Fisheries

The objectives of this Strategy for the VET system serving the AFF sectors are aligned with the strategic objectives of NETSAFF. However, given the unique issues and challenges obtaining in the VET system serving the AFF sectors, this strategy approaches its objectives in a different way with a different focus and emphasis. The objectives of this strategy are organised around the following strategic issues as discussed in the previous section:

- ✓ Performance of the VET system;
- ✓ Relevance of VET programmes;

- ✓ Workplace-based learning: Authentic work experience; and
- ✓ Financing the VET system.

These are the critical areas of change and where substantial strengthening of the current system is needed. This section of the strategy sets out the objectives for these themes. In addition to being aligned to the policy objectives for the AFF sectors as outlined in the NDP, the IGDP and the APAP (discussed in earlier sections), the strategic objectives and their corresponding initiatives specifically address the opportunities, weaknesses and related issues identified by the provincial and national stakeholders who engaged in the consultative processes carried out in preparation for drafting this strategy. Where relevant, they also reflect international benchmarking as discussed in Section 9.

Strategic Objective 1: Effective governance of the VET system serving AFF

The VET system serving the AFF sectors is governed effectively in a collaborative manner to design, implement and evaluate relevant, accountable vocational education and training.

The strategy will engage with private sector actors in the AFF sectors to achieve the following outcomes.

Outcome 1-1: Mobilisation and participation of AFF industry in the governance of the VET system

AFF industry, including private farmers, growers, fishers and value chain and support businesses, is mobilised and actively participates in all aspects of the governance of VET, including:

- contributing to the development, implementation and evaluation of VET policy and processes,
- setting standards for vocational knowledge and skills,
- curriculum design, implementation and evaluation,
- playing a central role in the determination of scarce and critical skills and hard-to-fill occupations.

Outcome 1-2: Competence and capacity of VET educators serving the AFF sectors

All current and future educators have authentic work-place experience and formal qualifications in VET, and which experience is regularly updated.

Outcome 1-3: Accountability for impact

VET system supporting the AFF sectors prioritises measuring the impact of expenditure in terms of the cost per learner throughput and in terms of enrolment, completion, and post-completion employment (including self-employment).

Outcome 1-4: Greater reach and inclusion

The VET system is structured to accommodate the needs and requirements of women, youth, those in elementary occupations, land reform beneficiaries and those working in the

informal sector, and to create opportunities and pathways for employment and advancement.

Outcome 1-5: Advocacy programmes and mechanisms established to improve the image of VET

The image of VET is improved, career guidance to potential, enrolled and graduated VET learners operational, and transparency between occupations is established with the aim of creating new perceptions about and opportunities for career choices.

Strategic Objective 2: Relevant VET programmes

VET programmes are relevant to the needs of the labour markets in the AFF sectors

As discussed in earlier sections, the AFF sectors are changing. They are affected by: climate change; changing domestic, regional and international social, political, demographic and economic dynamics; and, of course, by the transformation agenda of the government most recently articulated in the NDP. All of these changes will alter the competences required in the AFF labour markets, particularly at farm/production and value chain level. Thus, these changes present opportunities for and place demands on the VET system serving the AFF sectors. First among these opportunities and demands is the need to ensure that VET programmes are relevant to the anticipated changes in the AFF labour markets as captured in the AFF occupational landscape in Figure 1.

Broadly, therefore, the strategy will create greater structural connection between VET learning programmes and the needs of the labour market, including the need for entrepreneurs and innovation. More specifically, the strategy will achieve the following outcomes:

Outcome 2-1: Unity of thought and collective action

All stakeholders share the same understanding about the concept, definition and practical application of vocational education and training. This understanding is translated into collaborative collective action that traverses structural and institutional boundaries.

Outcome 2-2: Match between competence supply and demand in the labour market

All VET programmes are aligned to the needs of the AFF labour markets such that supply matches demand for competence in all AFF sectors. This will include addressing the demand for high-skilled employees and entrepreneurs, addressing the need to improve maths and science skills in the GFETQSF (e.g. high schools), and establishing mechanisms to ensure that demand and supply stay synchronised. An important element of this is ensuring improvement and greater utilisation of the existing labour market information systems.

Outcome 2-3: Preparing learners to meet the future

VET programmes serving the AFF sectors prepare learners to meet the future by ensuring vocational knowledge and skills in areas such as climate change, environmental/green technologies, resource management, ICTs and high-tech farming and processing methods and technologies; these are included as critical learning outcomes in AFF VET programmes for the full range of AFF occupations.

While it is beyond the scope of this VET strategy, it is necessary to point out that VET alone will not prepare farmers, growers, fishers and value chain actors and service providers for these inevitable changes. Parallel collaborative plans to walk with stakeholders through these changes will be required from other units in DAFF, other National and Provincial Departments and private sector stakeholders.

Strategic Objective 3: Institutionalised workplace-based learning

Workplace-based learning is a formal part of all VET programmes.

The strategy will drive a range of initiatives to achieve the following outcomes:

Outcome 3-1: All AFF VET learners get authentic workplace-based experience

Workplace-based learning meets the standards set for WIL for occupations and is consistent, coherent and quality assured across common VET qualifications. This will include that workplace learning is formally designed and integrated into curricula and properly regulated, monitored and evaluated.

Outcome 3-2: A substantial increase in the number of AFF companies, businesses and farms that register as workplace training providers

Every enrolled VET learner is able to find an appropriate workplace-based training as integral part of the training programme. This results in an increase of employment of learners after completion of their VET training.

Strategic Objective 4: Financing the VET system

The VET system is financed from diverse sources, using multiple financing mechanisms with accountability for impact

The strategy will seek to diversify funding and financing resources and test new financing mechanisms to achieve the following outcome:

Outcome 4-1: Financing sources and mechanisms

The present single-channel financing mechanism will be augmented with additional financing sources and mechanisms managed, monitored and evaluated collectively by collaborative structures embedded in a multi-stakeholder governance system. Financing will be developed to provide finance for: VET governance, coordination and monitoring; tuition; establishing, developing and maintaining workplace learning spaces and related training; acquiring and deploying relevant learning and occupation-related technologies; and providing post-completion aftercare for learners.

11. Initiatives of the VET strategy

As set out in the previous section, each strategic objective has been assigned a number of outcomes. This section presents the initiatives that will be pursued to achieve the various outcomes. Some of the initiatives include pilots that will be used to kick-start the strategy and generate the initial learning to help shape the future implementation of the strategy.

One of the key aspects cutting across all of the initiatives is the essential element of collaboration and collective action. While DAFF will be the initiator and, initially, the principal driver, the long-term success of the strategy depends on establishing collaborative self-managing structures and networks comprising all relevant stakeholders including farmers, private sector businesses, public and private sector institutions offering vocational education and training (including high schools), VET learners, and pertinent national and provincial government departments and regulators.

Strategic Objective 1: Effective governance of the VET system serving AFF *The VET system serving the AFF sectors is governed effectively in a collaborative manner to design, implement and evaluate relevant, accountable vocational education and training.*

VET system	
Initiative 1	Strengthening collective governance of the VET system serving AFF
Desired	Competent and effective collective governance of AFF VET institutions
change	
Indicator(s)	 Private sector actively participates in all aspects of the governance of VET including curriculum design, implementation and evaluation, setting standards for vocational knowledge and skills, contributing to the development, implementation and evaluation of VET policy and processes, Private sector plays a central role in the determination of scarce and critical skills and hard-to-fill occupations.
Level of	National and provincial level
application	
Action(s)	Audit the capacity of the collective governance structures
	 Develop and implement capacity development programmes based on the results of the audit
Product(s)	 Agreed governance competency standards for VET governance Audit reports of status quo evaluation of governance capacity against agreed standards Capacity development programmes Action plan to implement capacity development programmes against the audit results A systematic process to plan, implement, monitor, and evaluate their governance action(s) and programmes
Pilot	Set up task team at national level to work with at least one PAFFET to initiate
Project:	implement this initiative
Timeframe	 National pilot task team on governance established and operational within six months of implementation National-level and at least one formally constituted provincial-level collective governance structure in place within one first year of implementation; two more provincial-level structures each year thereafter.

Outcome 1-1:	Mobilisation and participation of AFF industry in the governance of the
	VET system

Initiative 2	Norms and Standards for the VET system, providers	, AFF VET SDPs and workplace training
Desired	Functional mechanism for creating equity among public and private AFF VET training	
change	institutions and workplace training providers	
Indicator(s)	 Norms and standards are clear, achievable and measurable and address at least the following areas: 	
	- Governance	- Curriculum
	- Financing systems	 Accreditation of providers,
	 Infrastructure and facilities 	qualifications and workplace
	 Academic staff Administrative 	- ICT issues
	staff and capacity	 Monitoring and Evaluation system
	 The norms and standards are validated by AFF VET stakeholders Finalised norms and standards reflect the principles of vocational education Norms and Standards document includes an implementation plan 	
Level of	National	
application		
Action(s)	Conduct multi-level consultative workshops to engage a wide spectrum of	
	stakeholders and role-players to contribut	e to the development of norms and
	standards for AFF VET	
Product(s)	Results of workshops; evidence of broad	d-based inclusion of stakeholders
	Approved Norms and Standards for AFF	VET SDPs and workplace-trainings
Timeframe	Norms and standards formally adopted within two years of implementation	

Initiative 3	Promoting partnerships among VET role players
Desired	Greatly proliferated operational service delivery in partnerships between VET SDPs
change	and industry workplace providers
Indicator(s)	• Partnerships in place for at least 5 qualifications in each of the nine provinces.
Level of	Provincial and national (the latter for exchange and harmonising partnership
application	experiences and evaluating their progress)
Action(s)	Engage VET SDPs and businesses to explore opportunities to collaborate around
	offering integrated vocational education and training.
Product(s)	 Lists of potential collaborators and partners
	Plans to broker partnership
	• Formal service delivery contracts signed between VET SDPs and industry workplace
	providers based on VET standards
Timeframe	At least one partnership contract in place in each province within two years of
	implementation; then at least 5 per year thereafter

Outcome 1-2: Competence and capacity of VET educators serving the AFF sectors

Initiative 4	Increasing sector work experience of teaching staff
Desired	Improved capacity of lecturers, teachers and trainers to teach knowing AFF industry
change	realities through workplace experience
Indicator(s)	 Substantially increased number of current VET educators have real-work experience in a relevant sector Recruitment policies changed to require authentic work experience No new appointments of educators without authentic work experience Education of VET teachers incorporates workplace experience as a requirement
Level of	National level sets competence and education requirements; adopted at institutional
application	level.

Action(s)	 Current staff: Facilitate process to ensure lecturers, teachers and trainers currently working in the AFF VET system have authentic workplace experience New recruits: Facilitate process to have recruitment policies for hiring or contracting lecturers, teachers and trainers include a requirement of workplace experience in the field for which they are being recruited Review requirements for VET teachers' education
Product(s)	 Audit report of status quo report regarding workplace experience among currently contracted and employed lecturers, teachers and trainers Action plan per AFF VET training institution to ensure teaching staff without workplace experience to acquire it Audit report of status-quo of recruitment policy Action plan per AFF VET training institutions to amend policy as per outcome of the audit Workplace experience defined as a requirement for VET teachers' education
Timeframe	 At least 10% of current VET educators within two years of implementation, and 10% each year thereafter At least 10% of SDPs have changed recruitment policies within two years of implementation, and then 10% each year thereafter New appointment target achieved within 10 years of implementation Teacher education institutions establish partnership with AFF industries within two years of implementation

Initiative 5	Promoting competence of educators in VET competencies
Desired	Lecturers, teachers, trainers, workplace mentors formally trained in vocational
change	education and training
Indicator(s)	Substantial increase in the number of SDP facilitators with formal VET qualifications
	 Recruitment policies reflect requirement of formal VET qualification
	 No new appointment of VET educators without formal VET qualification
Level of	National
application	
Action(s)	Negotiate with universities and universities of technology to establish specialised
	programmes to train VET lecturers, teachers, trainers, workplace mentors in
	vocational education and training
Product(s)	 Action(s) plan to engage universities and the private sector
	 Framework (programme template) for specialised training programmes
	 Accredited specialised programmes
	 Audit of existing or planned VET teacher and lecturer training programmes (DHET,
	QCTO) for the AFF sector.
Timeframe	 At least 10% of current VET educators within two years of implementation, and
	10% each year thereafter
	 At least 10% of SDPs have changed recruitment policies within two years of
	implementation, and then 10% each year thereafter
	 New appointment target achieved within 10 years

Outcome 1-3: Accountability for desired impact

Initiative 6	Promoting rigorous monitoring and evaluation	
Desired	VET programmes are rigorously monitored and evaluated for impact	
change		
Indicator(s)	 Monitoring and evaluation system established nationally and for each province and each VET institutions (including relevant AFF industries) 	

	Monitoring and evaluation focuses on impact including:	
	 Post-completion employment/self- 	 Throughput rates
	employment tracking	 Feedback from employers
	 Quality and efficiency of teaching and 	 Feedback from students
	training for theory, applied theory and	 Internal and external cost per
	work experience	throughput
	- Quality of learning related to theory,	
	applied theory and work experience	
Level of application	National, provincial, and institutional	
Action(s)	• Establish the status quo for M&E, and desig	
	 Develop a participatory monitoring and eva 	-
	provincial and national levels; data collectio	on to start at provincial level to feed into
	the national system	
Product(s)	 Action plan to engage stakeholders 	
	 Criteria and indicators for monitoring and evaluation 	-
	 Documented system (including software an 	
	 Operationalised system with defined response 	nsibilities and tasks
Timeframe	 Measurement standards agreed within one 	year of implementation
	 National M&E system in place within two year 	ears of implementation
	 At least 2 provincial-level M&E systems in p 	lace within three years of
	implementation; two more each year there	after

Outcome 1-4: Greater reach and inclusion

Initiative 7	Promoting greater access and the geographical spread of VET opportunities
Desired	Learners who choose to pursue a vocational career have access to institutions
change	that provide quality vocational education and training
Indicator(s)	 Every potential learner has access to an AFF VET programme within his/her district municipality
	 At least 20% of SDPs have mobile VET programmes
	 At least 5 distance learning programmes applying VET principles (theory, practice and workplace-based learning) for each of the AFF sectors
Level of application	National, provincial and institutional
Action(s)	 Identify areas and programmes that need a greater geographical spread
	 Develop and implement plans for establishing programmes in priority areas
Product(s)	 Action plan for working with DHET on access to VET programmes
	 Establish the status quo of the norms and standards
	Proposals for possible new VET training institutions or extension - service areas
	for existing VET training institutions
	 Proposals to include feasibility studies
	 Proposals to account for prioritisation of needs
Timeframe	 The number of potential learners without access to AFF VET programmes in
	each district municipality reduced by 25% within 10 years of implementation
	 At least 2% of SDPs have mobile VET programmes within three years of
	implementation; 20% within 10 years.
	 At least one distance learning programme for each sector within three years of implementation; one additional programme for each sector every two years thereafter

Initiative 8	Career paths for youth, women and farmworkers
Desired	VET programmes specifically designed to create career paths for youth, women
change	and farmworkers
Indicator(s)	 50% of all qualifying female applicants are accepted into, successfully complete and find relevant employment after completing a VET programme of their choice
	 50% of all qualifying youth applicants are accepted into, successfully complete and find relevant employment after completing a VET programme of their choice
	 6% of qualifying disabled applicants are accepted into, successfully complete and find relevant employment after completing a VET programme of their choice
	 10% of all farmworkers move to new careers after completing a VET
	programme
Level of	National and provincial
application	
Action(s)	 Establish the status quo for each category and set strategic targets
	Establish dedicated Task Teams nationally and in each province to work with
	relevant stakeholders to develop programmes, processes and tracking systems
	to achieve the desired change for each category
Product(s)	Status quo report and strategic plan with targets for each category
	• Documentation of programmes and processes outlining how the targets will be
	achieved for each category
	Tracking system
Timeframe	Task teams established and operational within six months of implementation
	 Status quo report completed within one year of implementation
	 National tracking system operational within two years of implementation
	• At least one programme for each category in each province within three years
	of implementation; additional progress to be determined by the strategic plans

Outcome 1-5: Advocacy programmes and mechanisms established to improve the image of VET

Initiative 9	VET Advocacy
Desired	VET has a better image in rural areas, AFF industry and learners so that enrolment
change	rates expand
Indicator(s)	 Each province has implemented at least one advocacy programme in its rural area Good VET practices and successful cases of enrolments and career advancement, etc. are gathered and used for advocacy and campaigns for VET Majority of high schools have a system in place to provide students with positive guidance around VET in the AFF sectors as a pathway to a meaningful career and livelihood
Level of application	National, provincial and institutional (schools)
Action(s)	VET advocacy programmes at provincial levels developed and established
Product(s)	 Provinces have in cooperation with p/p providers, employers, farmers organizations, banks and donors installed a network with VET advocacy reference persons in each organization Leaflets, good practice fact sheets, etc. specific to the AFF sectors are produced and disseminated
Timeframe	 National advocacy programme launched within one year of implementation At least two provincial-level programmes launched within two years of

implementation; two additionally each year.
• Establish the status quo for VET career guidance at schools within two years of
implementation; develop and action plan from there.

Strategic Objective 2: Relevant VET programmes VET programmes are relevant to the needs of the labour markets in the AFF sectors.

Outcome 2-1: Unity of thought and collective Action(s)

Initiative 10	Promoting the concept of technical and vocational education and training
Desired change	Unity of thought among all AFF VET stakeholders (including producers, businesses, educators, learners, and public agencies) about the concept and practical
change	manifestation of vocational education and training
Indicator(s)	 VET policies of AFF VET stakeholders articulate vocational education on a framework of theory, applied theory and work experience and reflect that
	understanding in their VET plans and budgets.
Level of	National and professional
application	
Action(s)	 Engage AFF VET stakeholders in workshops, seminars and individual sessions on
	technical and vocational education and training
	Identify and implement a range of vehicles to engage stakeholders, e.g. internet-
	based chat rooms
Product(s)	 Proposals and plans for engagement vehicles
	 Reports of outcomes of Action(s), including follow-up Action(s)
	 On-going discourse and learning about effective technical and vocational education and training for AFF
Pilot	Plan and hold substantive seminars on vocational education and training. At least 1
Project:	national seminar and 1 seminar in each province
Timeframe	 Pilot project task team established and operational within six months of implementation
	 Pilot designed within one year of implementation
	 Pilot launched within two years of implementation
	20% of all relevant stakeholder policies aligned within five years of implementation

Outcome 2-2: Match between competence supply and demand in the workforce

Initiative 11	Addressing the mismatch between labour demand and supply
Desired	Labour supply matches labour demand
change	
Indicator(s)	 Curricula for all relevant qualifications at all NQF levels aligned with requirements of the labour market as informed by joint collaboration between providers and industry
	• The revision process is institutionalised with curricula revised systematically
Level of application	National, provincial, institutional
Action(s)	Establish curricula development partnerships between industry and VET SDPs
Product(s)	Revised curricula that:
	- Reflect closer match between knowledge and skills acquired by learners with
	the knowledge and skills required in the workplace
	 Are accredited with the relevant accreditation agency
	- Reflect the basic structure of vocational education (theory, applied theory and

	work experience)
Timeframe:	At least one revised curricula for each of the GFETQSF and HESQF level and each
	sub-sector within five years of implementation
	 Transformation completed within 10 years

Initiative 12	Promoting opportunities for value-adding activities and occupations
Desired change	Increased uptake of VET in value-adding occupations with clear career paths to higher level jobs
Indicator(s)	 At least 50% of registrations for VET programmes are for post-production occupations Active producer groups which engage together in processing and marketing established VET programmes for primary producers include value-adding options
Level of application	National and provincial
Action(s)	 Plan advocacy programme with relevant stakeholders Consultation with primary-producer/farmer groups Training of small- and medium holders in setting up business plans for a specific cooperative processing/marketing line for their Product(s) Promotion of entrepreneurship of interested primary producers to develop (their processing/marketing)
Product(s)	 Advocacy programme for cooperative processing and marketing developed Training materials and programmes developed VET programme documents showing inclusion of value-adding options
Timeframe	 Advocacy plan developed within 18 months of implementation Training materials and programmes ready within two years of implementation At least 2 primary producer VET programmes for each of the AFF sectors with value-adding options established within three years of implementation

Initiative 13	Promoting entrepreneurship
Desired	Entrepreneurship and self-employment permeates the AFF occupational
change	landscape
Indicator(s)	• 25% of all completing learners become entrepreneurs/self-employed at all
	levels across the AFF occupational landscape
Level of	National and provincial
application	
Action(s)	• Facilitate process to ensure entrepreneurship is a significant focus of all AFF
	VET programmes including training for start-up
	 Collaboration with existing small business development agencies
Product(s)	Audit report of the status quo of the placement of entrepreneurship in AFF VET
	programmes
	Action(s) plan to work with identified stakeholders to increase the focus of
	their respective programmes on training for entrepreneurship
	Linkages created between VET training institutions and agencies supporting
	small business development
Timeframe	5% of completing learners become entrepreneurs within three years of
	implementation; increases by 5% annually thereafter

Initiative 14	Scarce and critical skills and hard-to-fill occupations now and for the future
Desired	VET system is continuously updated with regard to scarce and critical skills and hard-

change	to-fill occupations
Indicator(s)	 Lists of scarce and critical skills and hard-to-fill occupations are updated at least every five years
Level of application	National and provincial
Action(s)	 Establish national-level partnerships with relevant SETAs to participating developing Sector Skills Plans Establish provincial-level systems to regularly review scarce and critical skills in the province Engage with and establish the regular use of the existing labour market information systems (e.g. Department of Labour)
Product(s)	 Consolidated national list of scarce and critical skills for each of the AFF industries Provincial lists of scarce and critical skills for each of the AFF industries Operationalised Memoranda of Understanding (MOUs) with at least AgriSETA, FP&M SETA, FoodBev SETA and TETA Operationalised provincial systems showing participation of industry and VET SDPs at all levels of the NQF. Scarce and critical skills consider occupations in the full value chain of each of the AFF industries, including relevant support sectors (e.g. agricultural economics)
Timeframe	 MOUs with SETAs in place within two years of implementation Provincial-level processes to review scarce skills operational within three years of implementation Systematic use of labour market information evident within three years of implementation First collaborative lists of scarce and critical skills and hard-to-fill occupations published within four years of implementation

Initiative 15	Harmonising VET qualifications
Desired	Increased coherence and harmonisation of AFF-related VET qualifications in terms of
change	knowledge and skills
Indicator(s)	Industry accords equal recognition of learning outcomes per qualification
	Alignment processes are institutionalised
Level of	National
application	
Action(s)	Establish processes for sustained collaborative review of AFF VET curricula to
	foster greater coherence among qualifications among principal stakeholders
Product(s)	Lists of qualifications to be reviewed
	Lists of collaborating VET stakeholders
	 Action(s) plan to engage with identified AFF VET institutions
	Clearly articulated national standards for each occupation and level
Timeframe	• 5% of all qualifications harmonised within three years of implementation; 5%
	annually thereafter

Initiative 16	Promoting portability of qualifications within the AFF VET system
Desired	VET learners can move more easily between VET programmes and providers, to
change	other programmes in the NQF and internationally.
Indicator(s)	• Entry requirements for qualifications accommodate qualifications earned at another institution (e.g. the NCV4 is included in the entrance requirement for a cognate first degree)
Level of	National

application	
Action(s)	 Establish a process to get VET training institutions to establish systems to: facilitate transfer of learners mid-programme (e.g. system to award exemption with credit) based on recognition of common learning and competence facilitate articulating with a qualification from one institution to a higher-level qualification at another institution (e.g. prior recognition of qualifications/institutions) facilitate articulation from GFETQSF to HEQSF
Product(s)	 Action(s) plan for engaging institutions Framework for course/module comparison Database of cooperating institutions
Pilot Project:	Establish a task team to work with a higher education institution to include NCV4 in the entrance requirements for a relevant AFF qualification; document the learning process.
Timeframe	 Pilot project task team established and operational within one year of implementation Target institution selected and initial consultations begin within 18 months of implementation 10% of SDPs accommodate qualifications within four years of implementing strategy

Outcome 2-3: Preparing learners to meet the future

Initiative 17	Promoting VET learning for the future of the AFF sectors
Desired	VET graduates are competent in vocational skills relevant to the future of the AFF
change	sectors
Indicator(s)	 Vocational knowledge and skills relevant to climate change, environmental/green technologies, resource management, ICTs and high-tech farming and processing methods and technologies are included as critical learning outcomes in AFF VET programmes for the full range of AFF occupations.
Level of application	National
Action(s)	Evaluate and update the level AFF technology skills being taught in VET programmes at all NQF levels
Product(s)	 Revised curricula and programmes for post-production occupations showing the inclusion of training for high-technology skills. The technologies used and the corresponding skills development align with AFF industry needs, particularly in the post-production operations of the value chain.
Pilot Project:	Establish a task team to identify a qualification for which current training is
	insufficiently catering for high-technology skills and work with the relevant role-
	players to determine what is required to incorporate high-technology skills in terms
	of infrastructure, equipment, staff training, etc.
Timeframe	 Pilot project task team established and operational within six months of
	implementation
	 10% of qualifications reflect relevant knowledge and skills within four years of
	implementation; 5% annually thereafter

Strategic Objective 3: Institutionalised workplace-based learning *Workplace-based learning is a formal part of all VET programmes.*

Initiative 18	Promoting vocational skills throughout the NQF
Desired	Vocational skills are considered critical learning in AFF qualifications at all levels of
change	the NQF and all operate on a similar framework of theory, applied theory and work
	experience.
Indicator(s)	 All AFF qualifications include vocational skills as part of their exit-level outcomes
	learned through curricula constructed to cover theory, applied theory and work
	experience coherently
	 Learners acquire knowledge and skills that are relevant to the occupation for
	which they are being trained
	• Practical learning is gained through assessable workplace-based training relevant
	and appropriate to the occupation and the level of the qualification
Level of	National and institutional
application	
Action(s)	Engage with VET SDPs, higher education institutions and with AFF private sectors
/(011(3)	companies and farmers to clarify the practical knowledge and skills required
	 Create mechanisms to set and implement standards for achievement
	 Facilitate revision of curricula to incorporate identified knowledge and skills
	 Review curricula for consideration and complementarity of school and workplace- based training
	based training
Product(s)	Knowledge and skills and their assessment criteria articulated for each AFF
	qualification identified
	 Learning programmes updated including curricula and appropriate assessment
	methods
Pilot Project:	Set up task team at national level to design and implement a plan to review at least
	two significant qualifications (one between NQF 1-4 and one between NQF 6-7) in
	each AFF industry and redesign to meet the intentions of this initiative.
Timeframe	National pilot project task team established and operational within six months of
	implementation
	 10% of the qualifications include vocational skills within five years of
	implementation
L	

Outcome 3-1: All AFF VET learners get authentic workplace-based experience

Outcome 3-2: A substantial increase in the number of AFF companies, businesses and farms that register as workplace training providers

Initiative 19	Expanding access to workplace learning sites
Desired	All learners in all AFF VET programmes are able to be placed in relevant accredited
change	workplaces for their workplace-based training and experience
Indicator(s)	Substantial increase in the number of AFF learners who get placed in authentic
	work places for learning and training
	 Substantially reduced throughput completion time
Level of	National and institutional
application	
Action(s)	 Implement a systematic programme in collaboration with the SETAs and the QCTO to engage AFF businesses in agreeing to and becoming registered as accredited workplace-based training places Install mechanisms to provide information on available workplaces to learners and to assess the reasons for successful/unsuccessful employment/self-employment.
Product(s)	 Audit the capacity of AFF businesses to offer work experience and workplace- based training for learners. Action(s) plan based on audit to facilitate preparation for accreditation

	Financing secured
Timeframe	 10% of AFF learners have authentic work places within five years of
	implementation; 5% additionally annually thereafter

Initiative 20	Building physical capacity for workplace experience
Desired	Improved physical capacity to provide workplace-based training and experience of
change	AFF VET programmes
Indicator(s)	 All registered Skills Levy Fund (SLF) companies have relevant facilities for workplace-based learning All AFF VET learners have access to a registered workplace learning site
Level of application	National and institutional
Action(s)	• Facilitate infrastructure development designed specifically for VET programmes (trade and qualification specific) at training institutions and in workplaces
Product(s)	 Checklists of institutions, qualifications and related infrastructure designs Operational working groups established nationally and in each province Financing mechanisms secured Workplace-based training sites established
Timeframe	 10% of SLF companies within five years of implementation; 5% annually thereafter

Strategic Objective 4: Financing the VET system

The VET system is financed from diverse sources, using multiple financing mechanisms with accountability for desired impact

Outcome 4-1: Financing sources and mechanisms

Initiative 21	Increasing financing and financing options for VET serving AFF						
Desired	Sufficient financing available for efficient and effective VET governance, coordination						
change	and monitoring, including that learners and VET training institutions and workplace-						
	based training providers have access to these funds and are generating funds needed						
	to ensure access to, provision of and completion of VET programmes						
Indicator(s)	 Alternative financing options and mechanisms operational 						
Level of	National, provincial and institutional						
application							
Action(s)	• Explore funding possibilities with VET stakeholders to develop options and pilot						
	sustainable, long-term financing programmes						
	 Identify key players and potential partners 						
Product(s)	 Action plan to engage VET stakeholders 						
	Funding option proposals						
Pilot	Establish one national-level and one provincial-level task team to initiate an						
Project:	exploratory process to consult all relevant stakeholders with the view to identify						
	financing sources and mechanisms to make VET more relevant, efficient, effective						
	and sustainable						
Timeframe	 National pilot task team for new financing mechanisms and investment into VET 						
	established and operational within six months of implementation						
	 First provincial task team established and operational within 18 months of 						
	implementation						
	 At least one financing option pilot tested and institutionalised within two years of 						
	implementation						

12. Roles and responsibilities for the VET strategy

12.1. Implementation Structures

NETSAFF and the participants in the VET workshops identified three key strengths that are relevant to this VET Strategy:

- DAFF and PDA structures supporting the AFF industries are well positioned to leverage partnerships and support from relevant public, private and NGO-sector stakeholders to help address the particular technical and vocational knowledge and skills needs of the AFF industries;
- Existing organisational structures and systems embedded in the public and private VET training providers and organised around the functions related to:
 - Programmes and Qualifications;
 - Planning and Institutional Support;
 - Examinations and Assessments; and
 - Education and Training.
- Existing organisational structures and systems embedded in AFF-related organisations and agencies in the private and NGO-sectors generally organised around
 - Technical operational support for primary producers (i.e. farmers, grower, fishers) and actors in the pre- and post-harvest AFF value chains;
 - Research and advisory services;
 - Information gathering and dissemination;
 - Access to inputs, finance, infrastructure and other requisites; and
 - Building cooperative structures and processes.

12.2. Expanding the coordinating and support function of the NETSAFF structures

While this strategy specifically addresses VET and is guided by the background and context for governance of the VET for the AFF industries, this strategy will be implemented through the structures and processes outlined in NETSAFF. Under the leadership of the DAFF Directorate: Sector Education and Training, the governance system comprises national and provision structures.²⁰

12.2.1. Existing national-level NETSAFF structures

- A National Forum [named National Education and Training Forum for Agriculture, Forestry and Fisheries (NETFAFF)]
- A National Executive Committee (funded by the Directorate: Sector Education and Training)
- A National Secretariat

²⁰ See NETSAFF documentation for descriptions of the constitution and functions of these structures.

The role of the national structure is to support and oversee the implementation of NETSAFF of which this Strategy forms a part.

Box 4: The National NETSAFF Forum

The National Forum is appointed by the Minister and will be drawn from a diversity of people representing educational institutions operating nationally in all three subsectors and from all learning levels and representing key national role-players in each of the subsectors. It will further comprise representatives from the Provincial Forums on a rotational basis as well as one permanent member from DAFF. The National Executive is elected from the membership of the National Forum.

12.2.2. Existing provincial-level NETSAFF structures

- Nine provincial forums [named *Provincial Education and Training Forum for Agriculture, Forestry and Fisheries (PETFAFF)*]
- A Provincial Executive Committee
- A Provincial Secretariat (funded by the Directorate: Sector Education and Training)
- Ad Hoc Working Groups

The role of the Provincial Forum is to implement the strategy through fostering and coordinating constructive dialogue among forum members and other education and training stakeholders with a view to meeting the objectives of NETSAFF by:

- Facilitating the implementation of relevant programmes and projects in each province;
- Monitoring, reviewing and reflecting on programmes and projects in each province; and
- Providing feedback and making recommendations to the National Forum on adjustments to the NETSAFF and about potential new initiatives.

Box 5: Provincial NETSAFF Forums (PETFAFF)

Each Provincial Forum (PETFAFF) is self-appointed under the guidance of DAFF and with operational support from the relevant provincial Department of Agriculture. Membership is drawn from a diversity of people representing educational institutions operating provincially in all three subsectors and from all learning levels and representing key provincial role-players in each of the subsectors.

12.3. Augmenting NETSAFF structures to accommodate the VET strategy

This VET Strategy will expand and enhance the existing NETSAFF structures to enable specific focus on fostering the concept and principles of technical and vocational education and on the coordination of the planning and provision of VET with the AFF industries in a public-private partnership.

Previously, VET had been addressed as one of the ad hoc working groups operating at Provincial level. This strategy amends this by establishing dedicated working groups for VET.

12.3.1. The augmented national structure

- A National Forum [National Education and Training Forum for Agriculture, Forestry and Fisheries (NETFAFF)
 - $\circ~$ A National Sub-Forum for VET in the AFF sectors [constituted similarly as outlined in Box 4.
 - A Permanent National AFF VET Working Group [appointed by the sub-Forum]
 - Ad hoc Thematic Working Groups addressing challenges as they arise [appointed by the sub-Forum]
- A National Executive Committee
- A National Secretariat

12.3.2. The augmented provincial structure - a unique structure for each province

- A Provincial Forum [constituted as outlined in Box 5]
 - $\circ~$ A Provincial Sub-Forum for VET in the AFF sectors [constituted similarly as outlined in Box 5.
 - A Permanent Provincial AFF VET Working Group [appointed by the sub-Forum]
 - Ad hoc Thematic Working Groups addressing challenges as they arise [appointed by the sub-Forum]
- A Provincial Executive Committee
- A Provincial Secretariat [funded by the Directorate: Sector Education and Training]
- A Permanent VET Working Group [appointed by the sub-Forum]
 - One Working Group for each Strategic Objective
 - Task Teams for initiatives (as required)

• Ad Hoc Working Groups to address new issues that arise through implementing this strategy

12.3.3. National sub-Forum for VET and Permanent National and Provincial AFF VET Working Groups

To ensure coherence, integration and coordination of this strategy and all ensuing work related to VET for the AFF sectors, this strategy will resort under the overarching National VET Forum. However, to ensure that VET receives the focused attention, it requires that dedicated VET governance and coordination structures will be put in place nationally and provincially.

The National VET Forum will oversee the implementation of this VET strategy. National VET initiatives outlined in this strategy, as well as new strategies that will emerge over time, will be implemented through the permanent National VET Working group. It will be the agency through which the national-level Memoranda of Understanding will be implemented on behalf of DAFF.

In addition to implementing the national VET initiatives in this strategy, the National VET Working Group will liaise and directly coordinate with, advise, encourage and otherwise support the Provincial VET structures under NETSAFF. The Working Group will keep the National VET forum appraised of any and all progress. It will also propose additional initiatives based on gaps identified, difficulties faced and on a careful review of the outcomes from the current initiatives.

12.3.4. Provincial Permanent VET Working Groups

Each Provincial PETFAFF VET sub-Forum will establish a permanent Working Group for VET. While the overall implementation, monitoring and evaluation of this Strategy remain the responsibility of the NETFAFF and nine PETFAFFs, the VET strategy will be implemented through the Provincial VET Working Groups, with the support of the Provincial Secretariat. The VET Working Groups will be responsible for planning, facilitating and accounting for the initiatives, activities and tasks for each of the objectives as set out in Sections 10 and 11.

Membership of the VET Working Groups will be voluntary, but the Provincial Forum and Executive Committee will need to ensure that the range of VET stakeholders in the province are represented. Special effort should be made to ensure that the AFF private sector industries and VET learner are represented on the VET Working Group. Participation in the VET Working Group should not be conditioned on financial resources of the representatives. The most suitable candidates should be appointed to the VET working group with the widest possible representation of the AFF sectors.

One of the key functions of the VET Working Group will be mobilising stakeholders (private sector, farmer organisations, learners, educators, etc.), for joint action.

12.3.5. Operational arrangements

In terms of practical implementation, the principles and policies set out in Section of 4.3 of NETSAFF in terms of running costs, staff remuneration, honoraria and travelling costs, and programme costs will apply to all of the structures, processes and initiatives outlined in this VET Strategy. The introduction of this strategy constitutes a new line item for the NETSAFF budget.

13. Implementing, monitoring and evaluating the VET strategy

13.1. Implementing partners

This strategy will be implanted nationally and provincially. While DAFF will be the lead agency responsible for implementing this strategy, successful implementation rests with substantial collaboration and coordination among many stakeholders. Principal among these is the DHET, which is the trustee of VET. To ensure the efficacy of collaboration DAFF will enter into an MOU with DHET – the signing of which will signify the commencement of this strategy. While the details of the MOU will be worked out in consultation with DHET, the intention is to ensure that DAFF and DHET work together on every aspect and on every level as required to ensure the successful implementation of this strategy. Similarly, as noted earlier, DHET will also partner with the DBE to ensure that relevant VET initiatives and projects relative to the schooling system are aligned and coordinated accordingly.

Other key partners in the implementation of this strategy will be drawn from:

- Student organisations as they are currently constituted in civil society;
- Farmer, grower and fisher organisations including producer groups and cooperatives;
- Commodity organisations;
- Organised agriculture including (e.g. National African Farmers' Union (NAFU) and Agriculture-South Africa (AgriSA));
- Organised forestry (e.g. SA Forestry);
- Organised fisheries (e.g. Fish South Africa (FishSA), as and when structures emerge);
- Educational institutions and representative agencies (at all NQF levels), including private enterprises with workplace-based training;
- SETAs (specifically, AgriSETA, FoodBevSETA, FP&MSETA); and
- Education regulatory authorities (e.g. Umalusi, CHE, QCTO).

As anticipated in Strategic Objective 1, these partners are meant to play a leadership role and actively participate in all aspects of the governance of VET, including:

- Contributing to the development, implementation and evaluation of VET policy and processes,
- Setting standards for vocational knowledge and skills,
- Curriculum design, implementation and evaluation,
- Playing a central role in the determination of scarce and critical skills and hard-to-fill occupations.

The strategy is a means to an end, and it is essential to ensure that the various stakeholders contribute to implementing the strategy in relation to their function within the VET system. To this end, stakeholders will be invited to participate (and even lead) processes at national and provincial levels as members of the forums, work groups, executive committees and task teams that will drive the strategic objectives and the initiatives outlined in this strategy, as well as new initiatives that will, no doubt, be developed as progress is made.

Far more critical is the second aspect of roles and responsibilities – practical and meaningful participation in leading and governing the VET system serving the AFF sectors. This will translate into taking a lead in researching, designing the VET programmes, and in monitoring implementation and in evaluating impact.

13.2. Implementation processes

As noted earlier, the vehicle for implementation is the collective NETSAFF structure (as amended) that is already in place. The general process to be followed is as follows:

- 1) Establish the MOU between DAFF and DHET
- Appoint the National and Provincial Permanent VET Working Groups and establish operating budgets (including draw-down and accounting procedures), communication systems and reporting requirements for the Working Groups – resulting in nine provincial and a national timetable for reporting.
- 3) VET Working Groups meet to:
 - Establish an executive team for the Working Group;
 - Determine assigned priorities (as outlined in the implementation plan and starting with the pilot projects);
 - Accordingly establish, allocate initiatives to, and manage Initiative Task Teams; and
 - Provide budgets, (including draw-down and accounting procedures) communication systems, and reporting requirements for each initiative.
- 4) Multi-stakeholder Initiative Task Teams develop and implement action plans in accordance with the outline of the initiatives outlined in the VET strategy – including timelines, budgets and provision for monitoring. For each initiative, the organisations that need to be involved need to be defined. Out of these organisations, the Initiative Task Teams can be formed to oversee the progress of implementation of each initiative.
- 5) VET Working Groups manage the allocated work according to the approved reporting timetable providing funds, information and guidance as required.
- 6) Progress reports are submitted as outlined in the agreed timelines and reporting requirement for each initiative and for the overall VET strategy.
- 7) Minimally, Provincial VET Working Group should meet quarterly. Working Group executive teams should, in collaboration with the Provincial NETSAFF Secretariat, manage processes between Working Group meetings.
- 8) Minimally, the National VET Working Group should meet at least three times annually. Working Group executive teams, in collaboration with the National NETSAFF Secretariat should manage processes between Working Group meetings.

13.3. Implementation timeframe

The following tables were derived from the timeframes in the individual initiatives.

	Operational	Operational To be completed within									
Milestone		3 months	6 months	12 months	24 months	3 years	4 years	5 years	10 years		
1	MOU between DAFF and DHET for the joint implementation of the strategy										

Memorandum of Understanding (MOU)

Strategic Objective 1: Effective governance of the VET system serving AFF

			To be completed within						
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years
1	Strengthening collective governance of the VET system serving AFF	Set up task team at national level to work with at least one PAFFET to initiate implement this initiative	Pilot project task team established and operational	National-level and at least one formally constituted provincial-level collective structure in place	A least 3 formally constituted provincial-level collective structures in place	A least 5 formally constituted provincial-level collective structures in place	A least 7 formally constituted provincial-level collective structures in place	A least 9 formally constituted provincial-level collective structures in place	A least 15 formally constituted provincial-level collective structures in place
2	Norms and Standards for AFF VET SDPs and workplace providers			Working group established and operational	Norms and standards formally adopted				
3	Promoting partnerships among VET role- players			Working group established and operational	At least one partnership contract in place in each province	At least 6 partnership contracts in place in each province	At least 11 partnership contracts in place in each province	At least 16 partnership contracts in place in each province	At least 36 partnership contracts in place in each province

			To be completed within							
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years	
4	Increasing sector work experience of teaching staff			Working group established and operational	At least 10% of current VET educators have real-work experience At least 10% of SDPs have changed recruitment policies	At least 20% of current VET educators have real-work experience At least 20% of SDPs have changed recruitment policies	At least 30% of current VET educators have real-work experience At least 30% of SDPs have changed recruitment policies	At least 40% of current VET educators have real-work experience At least 40% of SDPs have changed recruitment policies	At least 90% of current VET educators have real-work experience At least 90% of SDPs have changed recruitment policies All new appointments have real-work experience	
5	Promoting competence of educators in VET competencies			Working group established and operational	At least 10% of current VET educators have formal VET qualifications At least 10% of SDPs have changed recruitment policies	At least 20% of current VET educators have formal VET qualifications At least 20% of SDPs have changed recruitment policies	At least 30% of current VET educators have formal VET qualifications At least 30% of SDPs have changed recruitment policies	At least 40% of current VET educators have formal VET qualifications At least 40% of SDPs have changed recruitment policies	At least 90% of current VET educators have formal VET qualifications At least 90% of SDPs have changed recruitment policies All new appointments have real-work experience	
6	Promoting rigorous monitoring and evaluation		Working group established and operational	Measurement standards agreed within the first year of implementation	National M&E system in place	At least 2 provincial-level M&E systems in place in each province	At least 4 provincial-level M&E systems in place in each province	At least 6 provincial-level M&E systems in place in each province	At least 16 provincial-level M&E systems in place in each province	

			To be completed within							
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years	
7	Promoting the geographical spread of VET opportunities			Working group established and operational		At least one distance learning programme for each sector At least 2% of SDPs have mobile VET programmes	At least two distance learning programmes for each sector	At least three distance learning programmes for each sector	The number of potential learners without access to AFF VET programmes in his/her district municipality reduced by 25% At least eight distance learning programmes for each sector At least 20% of SDPs have mobile VET programmes	
8	Career paths for youth, women and farmworkers		Working group established and operational	Status quo report completed Task teams established	National tracking system operational	At least one programme for each category in each province				
9	VET Advocacy		Working group established and operational	National advocacy programme launched within first year of implementation	At least two provincial-level programmes launched within second year of implementation; two additionally each year	At least four provincial-level programmes launched	At least six provincial-level programmes launched	At least eight provincial-level programmes launched	At least 18 provincial-level programmes launched	

Strategic Objective 2: Relevant VET programmes

			To be completed	within					
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years
10	Promoting the concept of technical and vocational education and training	Plan and hold substantive seminars on vocational education and training. At least 1 national seminar and 1 seminar in each province	Pilot project task team established and operational	Pilot designed	Pilot launched At least 1 national seminar	At least 1 additional national seminar and 1 seminar in each province	At least 1 additional national seminar and 1 additional seminar in each province	20% of all relevant stakeholder policies aligned	
11	Addressing the mismatch between labour demand and supply			Working group established and operational				At least one revised curricula for each of the GFETQSF and HESQF level and each sub-sector	Transformation completed
12	Promoting opportunities for value-adding activities and occupations			Advocacy plan developed	Training materials and programme ready	At least 2 primary producer VET programmes for each of the AFF sectors with value-adding options established		15% of completing learners become entrepreneurs	
13	Promoting entrepreneurship			Working group established and operational		5% of completing learners become entrepreneurs	10% of completing learners become entrepreneurs	15% of completing learners become entrepreneurs	40% of completing learners become entrepreneurs
14	Scarce and critical skills and hard-to-fill occupations now and for the future			Working group established and operational	MOUs with SETAs in place	Provincial-level processes to review scarce skills operational Systematic use of labour market information evident	First collaborative lists of scarce and critical skills and hard-to-fill occupations published		

			To be completed within							
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years	
15	Harmonising VET qualifications			Working group established and operational		5% of all qualifications harmonised	10% of all qualifications harmonised	15% of all qualifications harmonised	40% of all qualifications harmonised	
16	Promoting portability of qualifications with in the AFF VET system	Establish a task team to work with a higher education institution to include NCV4 in the entrance requirements for a relevant AFF qualification; document the learning process.	Pilot project task team established and operational		Pilot designed and launched		10% of SDPs accommodate qualifications			
17	Promoting VET learning for the future of the AFF sectors	Establish a task team to identify a qualification for which current training is insufficiently catering for high- technology skills and work with the relevant role- players to determine what is required to incorporate high- technology skills in terms of infrastructure, equipment, staff training, etc.	Pilot project task team established and operational				10% of qualifications reflect relevant knowledge	15% of qualifications reflect relevant knowledge	40% of qualifications reflect relevant knowledge	

			To be completed	within					
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years
18	Promoting vocational skills throughout the NQF	Set up task team at national level to design and implement a plan to review at least two significant qualifications (one between NQF 1-4 and one between NQF 6-7) in each AFF industry and redesign to meet the intentions of	Pilot project task team established and operational					10% of the qualifications include vocational skills	
19		this initiative.		Working group established and operational				10% of AFF learners have authentic work places	35% of AFF learners have authentic work places
20	Building physical capacity for workplace experience			Working group established and operational				10% of Skills Levy Fund companies have physical capacity for workplace experience	35% of Skills Levy Fund companies have physical capacity for workplace experience

Strategic Objective 3: Institutionalised workplace-based learning

Strategic Objective 4: Financing the VET system

			To be completed	within					
	Initiative	Pilot	6 months	12 months	24 months	3 years	4 years	5 years	10 years
21	Increasing financing	Establish one	National task	First provincial	At least one				
	and financing	national-level and	team	task team	financing option				
	options for VET	one provincial-	established and	established and	pilot tested and				
	serving AFF	level task team to	operational	operational	institutionalised				
		initiate an							
		exploratory							
		process to consult							
		all relevant							
		stakeholders with							
		the view to							
		identify financing							
		sources and							
		mechanisms to							
		make VET more							
		relevant, efficient,							
		effective and							
		sustainable							

Glossary of Terms

The following terms are adapted from SAQA. After each definition, an indication of how the term is applied in higher education (HE), GFET, and Trades and Occupations (T&O) is given, where relevant.

where relevant.	
Term	Definition
Accredited	A learning programme, leading to one of the qualification types of the
learning	HEQSF, that has gone through the process of approval by the CHE
programme	Based on the HEQSF (CHE, 2013)
HE	accredited learning programme
GFET	not applicable
T&O	not applicable
Accredited	A legally established institution (public or private) that has been
provider	recognised, usually for a particular period of time, by a QC or its
	appointed agent, as having the capacity or provisional capacity to offer
	a qualification or part-qualification registered on the NQF at the
	required standard
HE	institutional accreditation
GFET	accredited provider, capacity of an independent school, private FET
	college or private adult learning centre to offer qualifications on the
	GFETQSF at the required standard, capacity of a private assessment
	body to assess a qualification on the GFETQSF at the required
	standard
T&O	accredited skills development provider, accredited assessment centre
Adult Education	Learning and training undertaken by adults, including formal, non-
and Training	formal and informal learning, for improving knowledge and skills, for
(AET)	personal development, further learning and/or employment
	Based on the Adult Basic Education and Training Act (Act 52 of 2000)
HE	university education, continuing education, continuing professional
	development
GFET	school education, college education, adult basic education and
	training, alternative education for adults
T&O	learning programmes, apprenticeships, workplace-based training,
	occupational-specific training
Apprenticeship	A learning programme in respect of an officially listed trade, which
	includes a trade-test in respect of that trade
	Based on the Skills Development Act (Act 97 of 1998)
HE	not applicable
GFET	not applicable
T&O	apprenticeship
Articulation	The process of forming possibilities of connection between
	qualifications and/or part-qualifications to allow for the vertical, lateral
	and diagonal movement of learners through the formal education and
	training system and its linkages with the world of work
HE	progression from the GFETQSF, within the HEQSF, and to the OQSF
GFET	progression within the GFETQSF, to the HEQSF and OQSF
T&O	progression within the OQSF, to the HEQSF and GFETQSF

Term	Definition
Artisan	A person certified as competent to undertake a listed trade in
	accordance with the relevant legislation
	Based on the Skills Development Act (Act 97 of 1998)
HE	not applicable
GFET	not applicable
T&O	artisan, tradesman, certified artisan
Access	Opportunity to pursue education and training, including relevant
	qualifications and part-qualifications, for all prospective learners
HE	entry to higher education, advanced standing
GFET	promotion/advancement to a higher grade, entry to an FET college
T&O	entry to an occupational qualification, part-qualification or trade, entry
	to a final external summative assessment
Assessment	A body delegated by the QCTO to manage and co-ordinate the
Quality Partner	external integrated summative assessments of specified NQF-
(AQP)	registered occupational qualifications and part-qualifications
	Based on the OQSF (QCTO, 2013)
HE	not applicable
GFET	not applicable
T&O	AQP
Career	Services and activities intended to assist people throughout their lives
development	to make informed education, training and occupation choices
services	Based on the Framework for Co-operation in the Provision of Career
	Development Services (DHET, 2013)
HE	career counselling, career guidance
GFET	career guidance, Life Orientation, learner support
T&O	career development, career pathing
Certification	Formal recognition of a qualification or part-qualification awarded to a
	successful learner
	Based on the GFETQSF
HE	degree, diploma, certificate
GFET	General Certificate e.g. General Education and Training Certificate for
	Adults (GETC), Elementary Certificate e.g. National Certificate
	Vocational Level 2 (NC(V) 2), Intermediate Certificate e.g. National
	Certificate Vocational Level 3 (NC(V) 3), National Certificate e.g.
	National Senior Certificate (NSC), National Certificate Vocational Level
	4 (NC(V) 4), National Senior Certificate for Adults (NASCA); subject
	certificates, subject statements, learning area certificates/statements
T&O	occupational certificate, occupational trade certificate, trade
	certificate

Term	Definition
Competence	Competence has three elements:
	 Practical competence – the ability to perform a set of tasks.
	 Foundational competence – the ability to understand what we
	ourselves or others are doing and why.
	 Reflexive competence – the ability to integrate or connect our
	performance with an understanding of the performance of others,
	so that we can learn from our actions and are able to adapt to
	changes and unforeseen circumstances.
	Competence is technical ability in context of service
ЦЕ	[See Skill below]
HE GFET	Competence Competence
	Competence
Curriculum	A statement of the training structure and expected methods of
curriculum	learning and teaching that underpin a qualification or part-qualification
	to facilitate a more general understanding of its implementation in an
	education system
	, Based on the GFETQSF (Umalusi, 2013)
HE	curriculum
GFET	the curriculum encompasses three components: intended curriculum,
	enacted curriculum and assessed curriculum; curriculum framework,
	CAPs; curriculum means the same as programme
Т&О	curriculum
Development	A body delegated by the QCTO to manage the
Quality Partner	process of developing specific occupational qualifications, part-
(DQP)	qualifications, curricula and assessment specifications
	Based on the OQSF (QCTO, 2013)
HE	not applicable
GFET	QRG
T&O	DQP
Educator	An inclusive term referring to teachers at schools; lecturers at colleges,
	traditional universities, comprehensive universities, and universities of
	technology; trainers in workplaces; facilitators, assessors, moderators,
	and people teaching, educating, training, facilitating or assessing
	learners across the board
HE	lecturer
GFET	teacher
T&O	trainer
Exit point	A point at which a learner is required to demonstrate competence
	through an assessment that leads to documentary proof (certification)
	through an assessment that leads to documentary proof (certification) of proficiency
HE	
HE GFET	of proficiency

Term	Definition
Formal learning	Learning that occurs in an organised and structured education and training environment and that is explicitly designated as such Based on the National Policy for the Implementation of RPL (SAQA, 2013)
HE	learning programmes that lead to qualifications and part-qualifications registered on the NQF
GFET T&O	qualifications and part-qualifications registered on the NQF qualifications and part-qualifications registered on the NQF
Informal learning	Learning that results from daily activities related to paid or unpaid work, family or community life, or leisure Based on the National Policy for the Implementation of RPL (SAQA, 2013)
HE GFET T&O	informal learning informal learning informal learning
Learner	An inclusive term referring to anyone learning, including pupils at school; students at colleges, traditional universities, comprehensives, and universities of technology; apprentices, learners in learnerships, interns; people undergoing training, and people learning non-formally and informally as well as people enrolled for particular qualifications or part-qualifications
HE GFET T&O	student enrolled for a learning programme pupil, student (including an adult learner), person who attends an ECD centre, school or A(B)ET centre apprentice, trainee, worker
Learnership	A learning programme registered with the DHET which consists of a structured learning component, a practical work experience component of a specified nature and duration, and which leads to a qualification registered on the NQF which is related to an occupation; a learnership is based on an agreement entered into between the learner, the institution and the employer Based on the Skills Development Act (Act 97 OF 1998)
HE GFET T&O	learnership learnership learnership
Learning programme	A structured and purposeful set of learning experiences that leads to a qualification or part-qualification Based on the National Policy for the Implementation of RPL (SAQA, 2013)
HE GFET	learning programme not applicable
	learnership, apprenticeship, skills programme, based on a curriculum

Term	Definition
Non-formal learning	Planned learning activities, not explicitly designated as learning, towards the achievement of a qualification or part-qualification; often associated with learning that results in improved workplace practice Based on the National Policy for the Implementation of RPL (SAQA, 2013)
HE GFET T&O	continuing education, short courses, adult education, CPD, non-credit bearing courses, popular education not applicable CPD, non-aligned courses, popular education
Occupation	A set of jobs or occupational specialisations where the main tasks and duties are characterised by a high degree of similarity (skill specialisation) and are grouped together on the OFO as an occupation; occupations include trades and professions Based on the Policy and Criteria for the Registration of Qualifications and Part-Qualifications on the NQF (SAQA, 2013) profession
GFET T&O	vocation, occupation occupation
Occupational specialisation	A skills set related to an occupation and which may be more or less complex than that of the occupations to which it relates Based on the OQSF (QCTO, 2013)
HE GFET T&O	not applicable not applicable occupational specialisation based on the OFO
Post-school education and training	Education and training opportunities for people who have left school as well as for those adults who may never have been to school but require education opportunities (the term Youth and Adult Learning and Education [YALE] is also used in some sectors) Based on the White Paper for Post-School Education and Training (DHET, 2013)
HE GFET T&O	post-school education and training, specifically higher education post-school education and training, specifically in FET colleges and adult learning centres/community learning centres/community colleges/CETCs post-school education and training, specifically occupationally-directed
	learning
Public provider	A state or partially state-funded body that offers any education or training programme that leads to a qualification or part-qualification registered on the NQF
HE GFET T&O	universities PALCs, FET colleges, public schools public workplace providers

Term	Definition
Qualification	A registered national qualification consisting of a planned combination of learning outcomes which has a defined purpose or purposes, intended to provide qualifying learners with applied competence and a basis for further learning and which has been assessed in terms of exit level outcomes, registered on the NQF and certified and awarded by a recognised body Based on the Policy and Criteria for the Registration of Qualifications and Part-Qualifications on the NQF (SAQA, 2013)
HE	learning programmes are accredited based on the qualification types in the HEQSF
GFET T&O	qualification types and variants as defined on the GFETQSF qualification types as defined on the OQSF
Registration of a learnership	The inclusion of a learnership by the DHET, against a specific qualification, on a list of learnerships on the recommendation of a SETA Based on the Learning Programme Regulations (DHET, 2012)
HE GFET T&O	not applicable not applicable registration of learnership
Skill	Skill is the necessary competencies that can be expertly applied in a particular context for a defined purpose. See Competence (above)
HE	Skill
GFET	Skill
T&O	Skill
Skills programme	A QCTO-accredited learning programme that is occupationally based and which, when completed, may constitute credits towards a qualification registered on the NQF Based on the Skills Development Act (Act 97 of 1998)
HE GFET T&O	not applicable not applicable skills programme, occupational qualification
Short course	A short learning programme through which a learner may or may not be awarded credits towards a qualification or a part-qualification, depending on the purpose of the programme
HE	short course, continuing education, adult education, non-formal course, CPD
GFET T&O	not applicable workplace training, CPD

Term	Definition
Technical and Vocational Education and Training (TVET) College	A public or private institution that is established or declared as: (i) a technical and vocational education and training college; or (ii) a private college that is registered Based on the White Paper for Post-School Education and Training (DHET, 2013)
HE GFET T&O	not applicable FET college, Community Education and Training Centre, private college not applicable
Trade	An occupation for which an artisan qualification and relevant trade test is required in terms of the Skills Development Act (Act 97 of 1998). SETAs are required to apply to NAMB to have an occupation listed as a trade Based on the Skills Development Act (Act 97 of 1998)
HE GFET <u>T&O</u>	profession not applicable trade, artisan
Vocational Education and Training (VET)	A continuum of socially and economically necessary and desirable technical knowledge, skills and competencies required to orient and prepare people for work from low skill to high skill, involving an appropriately varied mix of humane, scientific and technological learning Based on the TVET discussion document (DHET, 2013)
HE GFET T&O	not applicable VET, FET VET
Vocational orientation HE GFET T&O	To provide the knowledge and skills to enter the economy through a general, broad orientation in vocational areas, as well as general learning in essential areas such as Language and Mathematics Based on the TVET discussion document (DHET, 2013) not applicable vocational orientation occupational orientation
Work experience	Knowledge, skills and practice gained through exposure, interactions and productive (employed) work in an occupationally-relevant workplace
HE GFET T&O	internship, candidacy, learnership work-shadowing, work simulation, practical internship, candidacy, learnership, apprenticeship
Work Integrated Learning (WIL)	A characteristic of vocational and professionally oriented qualifications that may be incorporated into programmes at all levels of all three Sub- Frameworks. WIL may take various forms including simulated learning, work-directed theoretical learning, problem-based learning, project- based learning and workplace-based learning. In this strategy, WIL refers to workplace-based learning.

Term	Definition
HE	WIL
GFET	simulated learning, work-directed theoretical learning, problem-based
	learning, project-based learning
Т&С) learnership, workplace-based learning