# UNITED REPUBLIC OF TANZANIA MINISTRY OF EDUCATION AND VOCATIONAL TRAINING



# TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING DEVELOPMENT PROGRAMME (TVETDP)

2013/2014 - 2017/2018

Incorporated inputs by Stakeholders and TVET-TWG

Dar es Salaam

16<sup>th</sup> February 2013

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#### **FOREWORD**

The Government of Tanzania recognizes that the overall goal of improving the quality of life of Tanzanians is hinged on the Education sector. In lieu of that, the Government launched the Education Sector Development Programme (ESDP) in 1997 in order to improve education and training provision to achieve poverty alleviation. Since then there have been a number of initiatives by the Government towards improving the provision of education and training. The major initiatives among others include the launching of Primary Education Development Programme (PEDP), the Secondary Education Development Programme (SEDP), the Folk Education Development Programme (FEDP), Teacher Development and Management Strategy (TDMS), the Higher Education Development Programme (HEDP), and the Adult and Non Formal Development Programme (ANFDP).

The Government is aware of the role played by TVET in the provision of skills which is vital for an economy to grow and compete, particularly in an era of economic integration and rapid technological changes. Despite its importance, for quite some time, TVET in Tanzania has been expanding slowly thus unable to match with the ever-growing demands of technical personnel in appropriate levels for all sectors of the economy. In this regard, the Government is committed to implementing the Technical and Vocational Education Development Programme (TVETDP) that will revitalize the Technical and Vocational Education and Training sub-sector in order to: support economic growth; alleviate poverty through wealth creation; and, facilitate the achievement of the Vision 2025 through supply of quality technical experts in both the public and private sectors.

Technical and vocational education and training is delivered through 1037 TVET institutions owned by over fifteen MDAs, private, community and faith based organizations of which the MOEVT owns only 32. This administrative arrangement has always resulted into challenges towards development of the national strategy as well as effective monitoring of the subsector. It is from this point of view that the education sector opted to hire the services of a consultant to lead the process of developing the TVET Development Programme. This programme has been prepared by the Government in collaboration with Development Partners and Non-State Actors through stakeholders' workshops; joint working sessions and ESDC consultative meetings.

The TVET development programme is guided by the Tanzania Development Vision 2025; the Five Year Development Plan; the National Strategy for Growth and Reduction of Poverty (NSGRP); and the Education Sector Development Programme (ESDP). The programme has four priority areas. These are: (1) Improving Access and Equity; (2) Improving the quality of outputs; (3) Improving the Capacity to provide Quality TVET; and (4) Improving Monitoring and Evaluation of TVET Subsector.

The Government is aware that participation of various stakeholders in the planning and implementation stages is key to the success of any programme. The success of TVETDP will therefore depend significantly on the full participation of all stakeholders. Every MDA and TVET stakeholders including the private sector, Civil Society Organisations (CSOs) and Development Partners are expected to contribute towards programme realization

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Dar es Salaam February 2013

#### **EXECUTIVE SUMMARY**

# **Background and Rationale**

Economic and social development efforts of Tanzania, as guided by the Tanzania Development Vision 2025, recognize the need to have, among other things, quality education at all levels. This critical requirement is being operationalised by the Education Sector Development Programme (ESDP) which aims at improving the micro and macro-environment towards improving the delivery of educational outputs and outcomes. For more effective implementation of ESDP, several sub-programmes have been launched to guide Primary, Secondary, Folk, Higher, Non Formal and Adult Education but there is no programme as yet to cater for Technical and Vocational Education and Training (TVET). This document constitutes the proposed TVET Development Programme (TVETDP), which is aimed at providing an efficient and effective TVET sub-sector strategies and implementation mechanisms for achieving the desired impact.

# Methodology used in TVETDP formulation

TVETDP has been developed based on an extensive Situation Analysis (SITAN) which involved review of documents and consultation with stakeholders. The analysis of the TVET sub-sector involved the scanning of the environment surrounding TVET with a view to clarifying the major external issues that affect or could affect TVET. The capacity of the TVET sub-sector was subsequently assessed, to gauge its coping ability and identify gaps with a view to addressing the major issues in TVETDP. Major issues were prioritized and key results, goals, strategies and required activities for realization of aspirations under each priority area were subsequently clarified. This led to the formulation of institutional arrangements, estimation of financial implication and sources, and clarification of sustainability issues and risks. The whole exercise was participatory involving all key stakeholders, and involved several rounds of consultations through visits and participatory retreats as well as structured meetings involving the targeted stakeholders as well as the Education Sector dialogue structure.

# Major Issues from SITAN for Consideration in TVETDP

- On average, 600,273 STD VII, Form IV and Form VI leavers are not able to join respective further education annually, and there are about 2.8 million people under such situation over the last five years only. While that was the case, the total enrolment of learners in 2011/12 was only 112,447 in TET and 121,348 in VET.
- There is also severe gender imbalance in science and technology related programmes, whereby female learners in such programmes constituted 11-19% only in 2011/12.
- Concentration of TVET in urban settings (about 75%), leaving marginal training opportunities in the rural areas, where 80% of the population resides and without proper skills for even supporting livelihoods.
- Enrolment in ordinary diploma programmes is relatively low to allow progression to higher levels of education for those wishing, while availing the required number of technicians and associate professionals in the labour market, hence promote the desired human capital balance.

- According to data provided in the first Tanzania Five Year Development Plan, there is significant skills gap that need to be filled over the next 13 years. High skills occupations (managers, professionals, associate professionals and technicians) need to be increased by about five folds while medium skills occupations by 3 folds, on average. Medium skills occupations include clerks, service workers, crafts and trade workers, and skilled agricultural workers.
- Few TVET institutions are attaining Full Registration status within three years after indicating interest (less than 25%), and full accreditation within three years after their registration (less than 10%) due to deficiencies in governance, operational management systems and the lack of capacity in terms of human, physical and financial resources.
- TVET training programmes currently on offer are not addressing some of the occupations that have been identified to be critical for realization of the Five Years Development Plan and eventually Tanzania Development Vision 2025. The observed skill gaps are attributable to the lack of pertinent Labour Market Information and corresponding occupational and/or training standards, as well as inadequacy or lack of the required human, physical and financial resources for teaching and learning facilitation in the subject areas.
- In filling the gaps, TVETDP needs also to consider major opinions by employers, who have observed the urgent need to enhance quality of graduates from TVET, especially in practical skills to allow their faster integration in the work. Employers have also showed concern on the lack of enough flexibility in the TVET programmes being offered to suit learners who are already in service, and the need to embed entrepreneurship training in programmes. More or less similar observations are apparent with the informal sector, whereby the lack of entrepreneurship, skills and knowhow are considered among the major challenges.
- Quality and relevance of TVET programmes to a great extent depend on how they addressing the real needs of the labour markets. SITAN has revealed that current LMI systems in Tanzania are not well established and/or effectively implemented, as they are not integrated, coordinated (are fragmented), with repetition of collection of data by multiple agencies, and there is no sharing of information between institutions. Further, the information collected is sometimes unreliable since not all necessary data/information is collected, and there is no timely feeding of LMI to decision making. TVETDP needs to consider these issues in order to guarantee quality and relevance of TVET programmes and hence graduates.
- Monitoring and evaluation of TVET also need to be strengthened at all levels to ensure that the desired impact is realised.

#### **Enrolment Projections and associated Resources Implications**

# Learners' enrolment for addressing the skills gap

For the five years period of the first phase of TVETDP (2013/14-2017/18), TVET institutions must increase the overall enrolment of learners from 233,795 in 2011/12 to at least 1,413,916 in 2017/18, respectively towards addressing the major issues identified by SITAN. Such huge

expansion of enrolment should go hand in hand with promotion of gender parity in TVET as well as improvements in access opportunities to people with disabilities and those in rural areas. In order to guarantee quality of graduates in line with the NACTE and VETA norms, the observed major expansion of learners' enrolment is liable to also impose significant implication in terms of resources requirement.

# Resources Implications

With the traditional residential teaching and learning methods under prevailing standard learners to facilitator ratios, the number of facilitators (teaching staff) will need to be increased from 7,600 in 2011/12, to 129,545 in 2017/18. In the same vein, the supporting staff will also need to be increased, technical staff from 7,518 to 30,481 and administrative staff from 1,879 to 7,620 over the first five years of the Programme. This is a major investment in terms of recruitment, staff development and retention. Corresponding significant expansion is also anticipated in terms of physical resources. Space for academic and welfare of students and staff will need to be expanded from about 1.7 million square metres in 2012/13 to 8.072 million square metres cumulatively in 2017/18. Applying the average unit cost of USD 900 per square metre it is apparent that about USD 5.73 million (approximately Tshs. 9.17 trillion) will be required over the first five years of TVETDP, for construction of building and infrastructure, and USD 3.78 million for furnishing and equipment, which may not be realistic.

# **Strategic Interventions**

Some strategic decisions have been adopted to reduce the implications on resources for attaining the projected expansion of learners' enrolment to manageable levels without compromising on quality of outputs. These include widening of the catchment for recruitment of facilitators, improving the capacity of TVET teacher training institutions to be able to train an increased number of new recruits without pedagogical skills, enhancing cooperation with the private sector (industry/major employers) towards enhancing the practical skills of those recruited with deficiencies, and availing conducive working environment and incentive mechanisms to ensure retention of staff. ICT mediated teaching and learning will also be key ingredient in reducing the magnitude of staff requirements, where applicable. It is also strategized to identify few strategic investments which are realistic over the five years period, while putting more emphasis on strategic partnerships with industry to introduce complimenting apprenticeship and other non-residential/part-time modes of training and their combinations.

Specifically, it is strategized that 30% of the projected enrolment be realized through ICT mediated teaching and learning, 10% through flexible training programmes (i.e. part-time/evening courses and the likes), 25% through short courses and RPL, 30% through conventional full-time residential training programmes, 5% through tailored skills enhancement programmes for employees in industry, and 1% through piloting apprenticeship/work based training. The contribution of the apprenticeship programmes is strategized to increase after piloting and with the expansion of the industrial base. With such arrangement, 56 new DVTCs, 10 new specialized TET institutions and 4 new institutions for training of TVET facilitators will be constructed to collectively absorb 42,000 full time equivalent learners (at least 500 in each) in addition to 350,000 to be enrolled under other non-residential/part-time modes of training. A further 300 existing institutions will be upgraded, to collectively enroll at least 300,000 full time equivalent learners. All these institutions and others will also have provisions for offering other modes of teaching and learning so as to allow enrolment of at least additional 438,272 learners

under flexible training programmes, short courses for continuing education and towards RPL. It will be conditional for institutions covered under the above arrangements to focus in the training of learners towards critical occupations for realization of FYDP and eventually Tanzania Development Vision 2025.

# **Project Description and Implementation**

# Priority Areas

Based on the highlighted strategic context, TVETDP focuses to improve four priority areas namely: (i) Access and equity in TVET; (ii) Quality of outputs; (iii) Capacity to provide quality TVET; and (iv) Monitoring and Evaluation of TVET. These are characterized with 8 Key Results Areas, 20 Goals, 61 strategies and 150 major activities.

#### **Expected Outcomes**

Access and Equity:

- (i) STD VII, Form 4 and Form 6 leavers provided with more parallel opportunities for respective further education and/or effective integration into the labour market;
- (ii) Access to TVET for students from disadvantaged groups significantly improved in line with the catchment;

# Quality of outputs:

(iii) Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025;

# Capacity to provide quality TVET:

- (iv) Availability of adequate and appropriate human resources in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond;
- (v) Availability of adequate and appropriate physical resources in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond;
- (vi) Availability of adequate and timely financial resources available to support the planned improvements in access, equity and quality in TVET within the core priority areas and beyond;
- (vii) Existence of effective and efficient governance and management of TVET at all levels of the subsector and realisation of the desired impact assured;

#### Monitoring and evaluation

(viii) TVET sub-sector is monitored and evaluated regularly and feedback provided for timely and effective improvements.

# **Programme Implementation**

Institutional arrangements have been proposed in order to ensure efficiency and effectiveness in TVETDP implementation, while maintaining transparency and accountability. Monitoring and evaluation of TVET are essential components for realisation of TVETDP. Monitoring will involve systematic and continuous collection and analysis of information about the progress of training activities according to the Programme performance indicators and operational targets.

Evaluation on the other hand, will involve objective assessment of inputs, processes, outputs and outcomes for gauging relevance, effectiveness and impact of TVET in the light of corresponding key result areas. Essentially, Monitoring and Evaluation will be a consultative, shared responsibility of implementing institutions, TVETDP coordination team and other stakeholders.

# **Budget Summary**

Implementation of the Programme for the first 5 years shall require availability of about Tshs. 2,195,744 million. This amount is quite significant and requires huge collective mobilization. Significant proportion (61%) of the total financial implication is intended to improve capacity of the TVET subsector to provide quality TVET. The main elements of costs under this expenditure centre are covering improvements in buildings and infrastructure (52%), equipment and facilities (32%) and human resources (14%).

Based on the assumptions made, Tshs. 2.728 trillion will be available for the first 5 years of TVETDP towards implementing the Programme as well as the financing the current activities of the TVET subsector. The amount will be raised from three sources, namely the Government, SDL and Development Partners. The Government's contribution (which also includes the support by Development Partners through GBS) amounts to Tshs. 1.49 trillion (about 55%), SDL collection (41%) and direct support of Development Partners to institutions and projects Tshs. 115.8 billion (4%). While Tshs. 2.728 trillion will be available, the total budget required in order to implement TVETDP and finance the regular and current activities of the TVET subsector is Tshs. 4.367 trillion, making a deficit of Tshs. 1.639 trillion (*Basic Scenario*) which will need to be solicited or acquired outside the Government, current SDL provisions and DPs' contributions. Potential sources for filling in the financing gap include investments by the Private Sector directly or through PPP arrangements, internal generation of revenues by institutions and cost reduction measures, as well as grants and loans from other Development Partners. The general public will also have a significant role to play in supporting TVETDP implementation.

Various scenarios are possible to further reduce the financing gap with minimum implications on TVETDP outcomes. For example, reduction of the number of new DVTCs to be constructed from 56 to 31 (only districts with no VET opportunities at the moment), postponing the upgrade of 6 existing institutions to become Centres of TVET Excellence, and not including additional student loans, scholarships and grants together will reduce the financing gap to Tshs. 839 billion. This scenario assumes that in addition to 31 DVTCs proposed to be constructed with Government sources, the Private Sector will also construct new institutions or expand existing ones to absorb the 12,500 learners, originally intended to be accommodated by the planned DVTCs. It is also assumed that additional student loans and grants will be covered under the existing arrangements.

# Sustainability and risks

The sustainability of TVETDP to a great extent depends on the huge mobilisation of resources from various sources, dialogue and involvement of all stakeholders, careful planning and monitoring and evaluation. There are major issues that may however affect the efforts. These include the review of the Constitution, competing priorities for resources with other sectors, the sensitivity of SDL to the employment market, adverse effect of natural conditions to the economy, incentives for enhanced contribution by the Private sector, and the effects of the world economy.

#### **GLOSSARY**

Certain terminologies have been repeatedly used in this document. In order to have common understanding and hence avoid possible different interpretations of the same their definitions in the context of this document are provided hereunder:

**Vocational Education and Training (VET):** A system which aims at providing learners with the necessary knowledge and skills to exercise a profession in order to be integrated in the labour market.

**Technical Education and Training (TET):** The education designed at post secondary level to prepare middle-level personnel (associate professionals and technicians) and at tertiary level, to prepare professionals for higher management positions.

**Technical and Vocational Education and Training (TVET):** Aspects of educational process involving - in addition to general education - the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic life.

**Accreditation:** The act of granting credit or recognition of a TVET institution or training programme that such institution/programme complies with the prescribed quality standards and institutional quality assurance system exists to guarantee sustainability of the same.

**Accreditation by NACTE:** An approval granted to a TET institution on account of having a sound quality assurance system that ensures quality provision of NTA qualifications as per educational standards established by the Council.

**Accreditation by VETA:** An approval granted to a programme on account of a VET offering institution having capacity, resources and systems to ensure its quality provision and resulting output in line with the standards approved by the VET Board.

**Candidacy Accreditation by NACTE:** Status granted to an institution once has attained full registration status and upon fulfillment of some NACTE Academic Quality Standards.

**Provisional Accreditation by NACTE:** Status granted to a fully registered institution which has not fulfilled all the stipulated requirements for accreditation but which can be fulfilled within a specified timeframe.

**Full Accreditation by NACTE:** Status granted to a fully registered institution which has adequately met the stipulated accreditation requirements.

**Registration:** Entails that the institution has followed the legal procedures for establishing a training institution and has met the minimum requirements for admitting students in terms of having adequate infrastructure, capacity and resources to offer training.

**Preparatory Registration by NACTE:** Status granted to a TET institution that is in the process of being established or has no adequate resources to provide training sustainably. It is not allowed to admit students.

**Provisional Registration by NACTE:** Status granted to a TET institution that either has deficiencies that it can redress in a short duration before it is considered for full registration or has just started to admit students and has enough resources for all or considerable part of the programme.

**Full Registration by NACTE:** Status granted to a TET institution that is fully operational and has acquired enough experience, human, physical and financial resources to ensure sustainability for running its programmes.

**Preliminary Registration by VETA:** Status granted to a VET institution that is in the process of being established or has no adequate resources to provide training sustainably.

**Provisional Registration by VETA:** Status granted to a VET institution that either has deficiencies that it can redress in a short duration before it is considered for full registration

**Full Registration by VETA:** Status granted to a VET institution that is fully operational and has adequate capacity in terms of human, physical and financial resources to ensure sustainability for running its programmes.

**Transition rate:** The proportion of a particular cohort of trainees/learners/students that successfully complete a phase of education and transfer to enroll in the next phase of education.

**Informal economy:** The economy of household enterprises or unincorporated enterprises owned by households, not separate legal entities independent of the households or household members who own them. They do not have a complete set of accounts which permit a clear distinction of production activities of the enterprises from the other activities of their owners and the identification of flows of income and capital between enterprises and owners.

**Recognition of Prior Learning (RPL):** Involves the assessment of previously unrecognised skills and knowledge that an individual has achieved outside the formal education and training system. RPL assesses this unrecognised learning against the requirements of the qualification, in respect of both entry requirements and the outcomes to be achieved.

Lecturer, academic staff, instructor, teacher and facilitator: Are used interchangeably depending on the level of engagement in TVET delivery, all to mean a person employed or engaged by a VET or TET institution to deliver a TVET programme or its component within the respective institution.

**Competence:** Is the proven or demonstrated individual capacity to use know-how skills, qualifications or knowledge in order to meet the usual and changing occupational situations and requirements.

Competence Based Education and Training: Is a system by which the trainee/student is trained/educated on the basis of demonstrated ability and related knowledge rather than on the elapse of time.

# ABBREVIATIONS AND ACRONYMS

ANFEDP - Adult and Non Formal Education Development Programme

AIDS - Acquired Immuno Deficiency Syndrome
CBET - Competence Based Education and Training

CBO - Community Based Organisation
CSO - Civil Societies Organisation

DVTC - District Vocational Training Centre

EMC - Engineering, Manufacturing and Construction
EMIS - Education Management Information System

EPZ - Export Processing Zones

ESDP - Education Sector Development Programme

ESMIS - Education Sector Management Information System

ETP - Education and Training Policy
FBO - Faith Based Organisation

FDC - Folk Development College

FEDP - Folk Education Development Programme

FYDP - Tanzania Five Year Development Plan 2011/12-2015/16

GDP - Gross Domestic Product
HAW - Health and Welfare

HEDP - Higher Education Development Programme

HIV - Human Immunodeficiency Virus

ICT - Information and Communication Technology

IGC - International Growth Centre of the London School of Economics

ILFS - Integrated Labour Force Survey
 ILO - International Labour Organisation
 IPPE - Integrated Post Primary Education

IPR - Intellectual Property Rights

ISCED - International Standard Classification of Education
 ISCO - International Standard Classification of Occupation

KPI - Key Performance IndicatorLMI - Labour Market Information

MDAs - Ministries Departments and Agencies

MIC - Middle Income Country

MIS - Management Information System

MKUKUTA - Mkakati wa Kukuza Uchumi na Kupunguza Umaskini, Tanzania

MMIC - Model Middle Income Country

MoCDGC - Ministry of Community Development, Gender and Children

MoCST - Ministry of Communications, Science and Technology

MoEVT - Ministry of Education and Vocational Training

MoF - Ministry of Finance

MoIT - Ministry of Industry and Trade

MoLE - Ministry of Labour and Employment

M&E - Monitoring and Evaluation

NACTE - National Council for Technical Education

NGO - Non Governmental Organisation

NSGRP - National Strategy for Growth and Reduction of Poverty

NQF - National Qualifications Framework

NTA - National Technical Award
NVA - National Vocational Award
ODL - Open and Distance Learning

PEDP - Primary Education Development Programme
POPC - President's Office, Planning Commission

PO-PSM - President's Office, Public Service Management

PPP - Public-Private Partnership

PPVT - Post Primary Vocational Education

QA - Quality Assurance

RPL - Recognition of Prior Learning

SADC - Southern African Development Community

SBL - Social Sciences, Business and Law
SDL - Skills and Development Levy

SEDP - Secondary Education Development Programme

STI - Science, Technology and Innovation

SWOC - Strengths, Weaknesses, Opportunities and Challenges

TET - Technical Education and Training

TVET - Technical and Vocational Education and Training

TVETDP - TVET Development Programme

UNESCO - United Nations Education Scientific Cultural and Organisation

URT - United Republic of Tanzania

VET - Vocational Education and Training

VETA - Vocational Education and Training Authority

VTC - Vocational Training Centre

#### 1.0 INTRODUCTION

# 1.1 Background on the Education Sector and TVET Sub-sector in Tanzania

#### 1.1.1 Formal Education and Training

In Tanzania, Education in overall is broadly divided into formal and non formal components. The formal education component has a 2-7-4-2-3+ structure. This entails starting with 2 years of Preprimary education, for children aged 5-6 years with no examinations for promotion purpose, followed by 7 years of primary education (STD I-VII), which is universal and compulsory to all children aged 7-13 years. There is STD VII examination which marks the completion of Primary Education and results are used to guide selection into the subsequent level of formal education - secondary education. The formal secondary education consists of two subsequent cycles. The first is a 4 year programme of Ordinary Level (O-Level) secondary education (Form I-IV) covering the official school attending age range of 14-17 years, and the subsequent 2 years of Advanced Level (A-Level) secondary education (Form V-VI) mainly for youths of 18-19 years of age. Form IV and Form VI examinations mark completion of secondary education cycles and the results are used for selection of students for further formal education as well as non formal education and training. The selection and enrolment into A-Level secondary education is based on prescribed performance in relevant A-Level subject combinations after attainment of appropriate credits in the Certificate of Secondary Education Examination.

University education is part of higher education and is provided after completion of A-Level secondary and attainment of appropriate principals in the Advanced Certificate of Secondary Education Examination. Candidates with equivalent qualifications are also eligible for admission into university education. The official attending age for undergraduate degree programmes in universities is 20-24 years.

# 1.1.2 Non Formal Education and Training

Non formal education is any organized and sustained educational activities outside the school system. It may take place both within and outside educational institutions and cater for persons of all ages depending on the country's contexts. It may cover educational programmes to impart adult literacy, basic education for out of school children, life skills, work skills and general culture.

In the Tanzanian context Non formal education refers to adult education as well as provision of education to out of school children aged 11-18 years outside the formal education system. The main programme offered to the latter group is complementary Basic Education whose cycle ranges from 2 to 3 years. Adult Education caters for people aged 19+ covering integrated community based adult education in the form of basic and post literacy with components of extension services, income generation, vocational training and non formal secondary education offered through open and distance learning modes.

#### 1.1.3 Folk Education

Folk Education is essentially non-formal education offered in community based colleges that are specifically intended to provide knowledge and skills to communities so as to enable them employ themselves hence effectively arrest poverty. Folk Education is intended to solve community immediate problems related to social, economic and cultural development. It develops personalities of individuals, their ability to think, feel and appreciate people's problems so that they could help others participate more fully in the social and economic activities of their community as well as advances the knowledge of adults so that they could make better decisions in personal and public matters including cooperative endeavors. It promotes knowledge and advance skills of the communities in agriculture, handcraft, domestic science and health science and involves learners in cultural activities.

# 1.1.4 Technical and Vocational Education and Training

Technical Education and Training (TET) provides alternative educational opportunities after O-Level and A-Level secondary education. TET graduates are equipped to play roles requiring higher levels of skill, knowledge and understanding, in which they take responsibility for respective areas of specialization as technicians, associate professionals and professionals, as appropriate. Essentially, TET is part of higher education obtained in a non-university institution. Upon successful completion, TET graduates are awarded Certificate, Diploma, Bachelors Degree, Masters Degree and Doctorate degree as appropriate. To join the lower level in TET requires graduates from ordinary and advanced secondary schools, depending on the programme to be pursued, as well as a lower TET qualification for progression within the TET qualification framework. Although they have distinct frameworks so far, TET together with Vocational Education and Training (VET) provide what is referred to as Technical and Vocational Education and Training (TVET).

According to the enabling legal instrument, VET in Tanzania is defined to mean training leading to a skilled occupation. Learners in VET centres are hence pursuing competence based training to become skilled workers for meeting the specific requirements of occupations and upon successful completion they are awarded competency certificates - National Vocational Awards (NVA) Levels I – III for the relevant trades. Entry qualifications to the long VET courses vary from primary to secondary school education, depending on the course, and also through progression within the VET qualifications. VET graduates with NVA III may also be eligible for progression into TET.

#### 1.2 Rationale of TVETDP

Economic and social development efforts of Tanzania from the year 2000 up to 2025 are guided by the Tanzania Development Vision 2025. Consistent with the Vision, the economy should be transformed from a predominantly agricultural one with low productivity to a diversified and semi-industrialized economy buttressed by science and technology. In realizing the same, the Vision recognizes the need

for Tanzania to be, among other things, a nation with high level of education; a nation which produces the quantity and quality of educated people sufficiently equipped with the requisite knowledge and skills to solve the problems of the society and meet the challenges of development and attain competitiveness at regional and global levels (URT, 1999:19). This critical requirement for realizing the Tanzania Vision 2025 is being operationalised by the Education Sector Development Programme (ESDP) which was first launched in 1997 and reviewed twice in 2001 and 2008.

ESDP aims at enhancing the micro- and macro-management of educational institutions so as to improve the delivery of outputs and outcomes. For more effective implementation of ESDP, several sub-programmes have been launched to cater for the major education sub-sectors. Specifically, the Primary Education Development Programme (PEDP) was first launched in 2002, the Secondary Education Development Programme (SEDP) in 2004, Folk Education Development Programme (FEDP) in 2010, and the Adult and Non Formal Education Development Programmes (ANFEDP) in March 2012. While that is so for the other major education sub-sectors, there is no programme as yet for guiding Technical and Vocational Education and Training (TVET), notwithstanding its central position for achieving national economic growth and poverty reduction.

This fact makes it critical to also have in place a Technical and Vocational Education and Training Development Programme, and moreover, the success of TVET depends on the successes of other education subsystems, which do already have clear provisions to support their developments. Further, TVET needs to adjust itself to meet the expectations from the rapid technological changes and the ever dynamic socio-economic environment. In that vein, more deliberate emphasis may need to be put to introduce TVET programmes in line with labour market demands and promote flexibility in their delivery towards improving access, equity, relevance and effectiveness. All these cannot be realized in an *adhoc* manner. There is therefore an obvious need to have in place a TVET Development Programme (TVETDP) with a view to providing clear and coordinated TVET sub-sector strategies and implementation mechanisms. The ultimate goal is to avail the nation with the human capital that is adequate and appropriate for solving the problems of the society and meeting the challenges of transforming Tanzania into a middle income country by 2025. This document constitutes the proposed TVETDP.

# 1.3 Methodology used in Programme Development

TVETDP has been prepared according to the following schedule of interrelated undertakings:

(i) Situation analysis which involved a critical analysis of the TVET system based on desk review of various existing reports and extensive consultations with 375 stakeholders (institutions and individuals having stake with TVET) from 11 regions in Tanzania Mainland, covering both the public and private sectors. The stakeholders included Government Ministries, Departments and Agencies (MDAs); TVET Providers;

Industry/Employers; Private Sector umbrella organizations; Quality assurance and professional bodies; Development Partners; and other stakeholders, including lecturers/teachers, graduates, trainees, parents/sponsors of students, and promoters of TVET;

- (ii) SWOC Analysis and clarification of TVET opportunities, key drivers and challenges, as well as preparedness of the TVET system in aligning to the same;
- (iii) Identification of the major issues for consideration in TVETDP, including skills gap for the various broad fields of study and major groups of occupations according to ISCED and ISCO, respectively;
- (iv) Projection of the corresponding learners' enrolment targets and associated implications on resources, and formulated strategic direction for realizing the same in line with NACTE/VETA norms;
- (v) Prioritisation of issues and clarification of the Key Results, goals and strategies for their realization under each Priority Area;
- (vi) Pegging of activities to the formulated strategies and identification of inputs for costing;
- (vii) Formulation of the framework for monitoring and evaluation of the TVETDP and the subsector in general;
- (viii) Clarification of institutional arrangements, financial implication and Programme financing for the first 5 years, and issues on sustainability and risks.

#### 1.4 Overview of the TVETDP Document

TVETDP document comprises of four chapters, namely: Introduction; Strategic Context; Programme Description; and Programme Implementation. The Introduction part (Chapter 1) provides background information, rationale of TVETDP and methodology used to prepare the programme. The Strategic Context part (Chapter 2) presents a summary of the Situation Analysis Report, the major issues identified for consideration in TVETDP and strategic direction in realizing the same. On the other hand, the Programme Description part (Chapter 3) presents the Vision, Mission and Priorities of TVETDP, which are supported with a description of Key Result Areas, Targets and corresponding Strategies for realization, while the Programme Implementation part (Chapter 4) covers the Institutional arrangements, Monitoring and Evaluation Framework, Programme financing for the first 5 years, and issues on Sustainability and risks.

#### 2.0 STRATEGIC CONTEXT

# 2.1 Highlights of the TVET Situation Analysis (SITAN)

# 2.1.1 Scope and approach

The analysis of the TVET sub-sector involved the scanning of the external environment surrounding TVET and preparedness of the TVET system in aligning to the same. The external environment scan included clarification of the place of TVET in the national macro-level development frameworks as well as sectoral policies/strategies and major international perspectives. Effectiveness of the national QA system for TVET was also assessed including M&E framework at national level. Assessment of the supply to and demand of TVET was critical undertaking in the scanning of the external environment scan. The supply side was gauged by touching base with the achievements recorded with the various development programmes within the Education sector, including PEDP, SEDP, ANFEDP, FEDP and HEDP. This clarified the catchment of potential candidates for TVET. On the other hand, critical skills (type and levels) required for realization of FYDP and hence Tanzania Development Vision 2025 and employers' opinion on TVET graduates were used to clarify the demand side. Major issues influencing the supply to and demand of TVET were also evaluated. These included the extent and effectiveness of involvement of employers and other external stakeholders in the affairs of TVET, perceptions on TVET, and the level and trends of TVET financing.

Having clarified the major external issues that affect or could affect TVET, the capacity of the TVET sub-sector was assessed to gauge its coping ability and identify gaps. The internal analysis of the sub-sector clarified the extent and effectiveness of TVET regulation and coordination, the quality and relevance of education and training programmes provided. The trends in the enrolment of learners were also assessed to compare with the developments in PEDP, SEDP and HEDP. The extent on how enrolments are aligned towards achieving the required human capital balance for optimum productivity in the labour market, and towards addressing the needs of vulnerable and under-represented groups of the community were also clarified. Research and innovation as well as consultancy and services are also major functions of TVET institutions. The ability of the TVET sub-sector to take full advantage of the opportunities and address the challenges observed from the analysis of the external environment is dictated by its capacity in terms of human, physical and financial resources, as well as quality management systems. These were critically analysed. The details of the analysis of the TVET sub-sector, findings and strategic recommendations are included in the TVETDP Situation Analysis Report, which form part of this Programme Document. Major findings are however summarized in the subsequent Sections to complement the strategic context.

# 2.1.2 Major findings

Major issues have been apparent from SITAN, which need to be considered in TVETDP with a view to ensuring a more effective TVET subsector and desired impact in the socio-economic development of

the country. These are clustered into access and equity issues, quality and capacity issues and a summary of key opportunities, drivers and challenges, as well as strengths and weaknesses of the TVET subsector in aligning to the same.

# 2.1.2.1 Access and equity

It has been apparent from SITAN that access and equity in TVET has improved in recent years. The student enrolments for example, have increased by about 350% in TET and 25% in VET over the last five years (2007/08-2011/12), with overall gender parity reaching 49% in VET and 46% in TET in 2011/12. Notwithstanding the observed improvements, the enrolments are still by far not adequately aligning with SEDP, PEDP and HEDP achievements. On average, 402,305 STD VII leavers are not able to join Secondary Education annually, and there are 2,011,525 such people over the last five years only. The same trend is apparent with the transition from Form IV to Form V and from Form VI to higher education. Over the five years (since 2006), 781,546 Form IV leavers could not proceed to Form V, providing an average of 156,309 candidates per annum. Further, 41,659 Form VI leavers (8,332 on average annually) either obtained Division IV or failed over the same period, hence not eligible to join higher education. While that was the case, the total enrolment of learners in 2010/11 was only 85,040 in TET and 102,217 in VET.

There is also still severe gender imbalance in science and technology related programmes, whereby female learners in such programmes constituted 11-19% only in 2010/11. The ability of TVET institutions to accommodate learners from other disadvantageous groups including those from rural locations or with disabilities is also still very low. For example, Dar es Salaam, Kilimanjaro, Mwanza, Kagera and Arusha regions, which are all in relative urban settings, enrolled 67% of all trainees in VET in 2010/11, while the total population of youths (15-24 years old) in these regions is only 32%. With respect to learners with disabilities, VET had capacity to accommodate only 20% and TET up to 3% of the eligible candidates. Further, enrolment in ordinary diploma programmes is relatively low. In 2011/12 for example, there were 27,574 students only at NTA Level 6, while opportunities were available to more than 35,000 such candidates to proceed for degree studies in universities and TET institutions in 2012/13. This is liable to create severe human capital imbalance in the labour market due to lack of technicians and associate professionals.

# 2.1.2.2 Quality of TVET and capacities

Quality assurance structures are generally established at VET and TET levels, registration and accreditation processes are functioning, and monitoring and review of quality assurance processes are implemented regularly and identified improvements implemented at the level of respective QA agencies and institutions. It is however observed that less than 25% of VET and TET institutions are attaining the Full Registration status within three years after obtaining provisional registration, only about 10% of TET institutions are able to qualify for full accreditation within three years after their full registration, and the accreditation process within VET is yet to be effected. The major constraints have been in terms of deficiencies in governance, operational management systems and the lack of capacity in terms of human, physical and financial resources for facilitation. With the observed need to enhance access and equity, the pressure to improve capacity of the TVET subsector becomes more immense.

Further, TVET training programmes currently on offer are not addressing some of the occupations that are critical for realization of key interventions in NSGRP II, FYDP, and hence the Tanzania Development Vision 2025. Major gaps for technicians and associate professionals have been observed due to the absence of TET programmes for preparing metallurgical technicians, metal production process controllers, chemical engineering technicians, chemical process plant controllers, ICT user support technicians, interior design and decorator associate professionals, among others. The same is apparent with the craft and related trade workers/plant and machine operators, etc. In the same vein, VET programmes are missing for preparing trainees to become skilled mineral processing plant operators or chemical/glass ceramics//rubber/plastic/textile fur/leather products plant/machine operators, or glass makers, cutters, grinders and finishers, or insulation workers, glaziers, riggers and cable splicers, or wood treaters, among others. This gap is attributable to the lack of pertinent LMI and corresponding occupational and/or training standards, as well as inadequacy or lack of the required human, physical and financial resources for teaching and learning facilitation in the subject areas. These issues need to be addressed to ensure the anticipated impact from TVET is realized.

Employers have observed the urgent need to enhance quality of graduates from TVET, especially in practical skills to allow their faster integration in the work. Employers have also showed concern on the lack of enough flexibility in the TVET programmes being offered to suit learners who are already in service, and the need to embed entrepreneurship training in programmes. More or less similar observations are apparent with the informal sector, whereby the lack of entrepreneurship, skills and knowhow are considered among the major challenges.

Quality and relevance of TVET programmes to a great extent depend on how they addressing the real needs of the labour markets. SITAN has revealed that current LMI systems in Tanzania are not well established and/or effectively implemented, as they are not integrated, coordinated (are fragmented), with repetition of collection of data by multiple agencies, and there is no sharing of information between institutions. Further, the information collected is sometimes unreliable since not all necessary data/information is collected, and there is no timely feeding of LMI to decision making. TVETDP needs to consider these issues in order to guarantee quality and relevance of TVET programmes and hence graduates.

Monitoring and evaluation of TVET are essential components for realization of the Tanzania Development Vision 2025. To some reasonable extent monitoring and evaluation are taking place at the levels of NACTE and VETA but ineffective at national level. Further, there is lack of effective mechanism for monitoring and evaluation of TVET under the ownerships of other ministries. As a result of the current governance arrangement, there is no clear and integrated national strategy for TVET, and the system is fragmented with inherent learner progression restrictions and in some cases overlapping responsibilities between VETA and NACTE, and also between VETA and NACTE on one hand and numerous ministries on the other hand. There is also no systematic assessment of how TVET funding through VETA and NACTE ensure links to national development priorities. At the moment neither MoEVT nor VETA or NACTE are benchmarking TVET institutions because framework for monitoring and evaluation is missing, and the low capacity to effectively perform the same. Monitoring and evaluation of TVET therefore need to be strengthened at all levels to ensure that the desired impact is realised.

# 2.1.3 TVET opportunities and key drivers

The analysis of the external environment surrounding TVET has clearly indicated the following major opportunities/potential key drivers for more effective contribution of TVET to the socio-economic development of the country:

- (i) TVET has been given prominent role in the macro-level policies and strategies including the Tanzania Development Vision 2025, National Strategy for Growth and Reduction of Poverty (NSGRP) II: 2010/11-2014/15, Tanzania Five Year Development Plan (FYDP): 2011/12-2015/16 and various sector specific policies, plans and strategies;
- (ii) Existence of clear international perspectives and global agenda on TVET development including the ILO and UNESCO Recommendations 2001, Africa Union TVET Strategy 2007, and Strategy for Revitalisation of TVET in SADC Countries, among others;
- (iii) Existence of Skills Development Levy (SDL) for supporting skills development;
- (iv) Increased willingness of employers/industry to be involved in TVET affairs which can significantly assist quality and relevance of TVET provision;
- (v) Existence of arrangements such as Export Processing Zones (EPZ)/Economic Promotion Zones for attracting foreign direct investments and hence new employment opportunities;
- (vi) Enactment of Public Private Partnership (PPP) legislation which can enhance the participation of the private sector in TVET provision or involvement in the expansion of TVET infrastructure and hence improve access;
- (vii) Government intention to establish the Tanzania Qualifications Framework which will promote articulation and hence improve perception on TVET;
- (viii) Increased production and/or emergency of new economic ventures in some sectors, which will increase employment opportunities and the need for skills development;
- (ix) Willingness and readiness of development partners to continue supporting TVET;
- (x) Security and political stability in the country, which is critical for enhancing domestic revenue collection and support from development partners, hence availability of sufficient resources for executing TVETDP interventions.

# 2.1.4 Major challenges

Taking advantage of the highlighted opportunities may however require consideration of the following major challenges that have been apparent from the external environment scan:

- (i) Quality TVET is an expensive undertaking. Competing priorities (with the other sectors of the economy and other Education sub-sectors) result in low and/or irregular inflow of financial resources to TVET which is liable to threaten its contribution;
- (ii) Poor/wrong perception on TVET and particularly on VET that is the preserve of those who are poor performing, may negatively affect learner enrolment expansion;

- (iii) Lack of clear differentiation of roles and benefits of TVET graduates in workplaces compared to others may be a disincentive;
- (iv) Potential change of policies by development partners and/or donor fatigue may threaten support to TVET;
- (v) The proposed sectoral approach in SDL management in FYDP may affect skills development for the informal sector and the least developed sectors, if not cautiously operationalised.

The detailed description of the external environment surrounding TVET which formed the basis of the above highlights is provided in the Situation Analysis Report (URT, 2012).

#### 2.1.5 Strengths of the TVET system

Taking advantage of the highlighted opportunities and minimization of the potential effects of the observed challenges require the TVET system to be well prepared for the same. Based on the detailed Situation Analysis (URT, 2012), the following are the main strengths of the TVET system:

- (i) Existence of a TVET department in MoEVT for coordination at national level;
- (ii) Existence of specific policies and legislation on VET and TET;
- (iii) Existence of well established regulatory and coordinating organs NACTE and VETA for TET and VET, respectively;
- (iv) Existence of some sort of monitoring and evaluation at VETA and NACTE levels;
- (v) Existence of EMIS for TVET linked to ESMIS which may allow proper planning, monitoring and evaluation;
- (vi) Existence of reasonable good relations with employers, which contribute to enhance quality and relevance of training programmes;
- (vii) Some ability to conduct labour market surveys and analysis;
- (viii) Existence of programmes covering some of the FYDP priority areas and occupations;
- (ix) Existence of an agreed TVET progression framework;
- (x) Increased student enrolments by 350% in TET and 25% in VET over the last 5 years;
- (xi) Achieved general gender parity at 49% in VET and 46% in TET;
- (xii) Adequate teaching staff for current enrolment levels up to NVA Level II in VET and NTA Level 6 in TET;
- (xiii) Reasonable physical facilities for current enrolments up to NVA Level II in VET and NTA Level 6 in TET;
- (xiv) Ability of TVET institutions to generate some income from own sources.

The highlighted strengths of the TVET sub-sector are good assets for realization of the desired impact of TVET and need to be consolidated and improved.

# 2.1.6 Weaknesses of the TVET system

The following weaknesses however, need to be addressed to maximize the preparedness of the TVET subsector in taking advantage of the market opportunities:

- (i) Fragmentation of TVET with distinct VET and TET;
- (ii) Lack of effective coordination, planning, M&E framework of the TVET sub-sector;
- (iii) Lack of operational articulation mechanism;
- (iv) Training programmes not addressing some of the FYDP critical occupations;
- (v) Low adoption of CBET in TVET;
- (vi) Low capacity to generate and analyse labour market information;
- (vii) Relatively weak EMIS. While comparative data on TVET exist, projection data for TVET is not yet available to allow forecasting. TVET data in is also not linked to LMI making the use of the same in assessing the efficacy and impact of TVET provision difficult;
- (viii) Enrolment rates not adequately aligning with SEDP, PEDP and HEDP;
- (ix) Enrolment trends not favourable for achieving human capital balance;
- (x) Students' gender imbalance in most science and technology related programmes;
- (xi) Very low ability to accommodate students with disabilities;
- (xii) Lack of operational mechanism for recognition of prior learning;
- (xiii) Low adoption of ICT and ODL methods of course delivery;
- (xiv) Inadequate capacity to conduct research and innovation;
- (xv) Inadequate capacity to offer consultancy and other services to the community;
- (xvi) Inadequate teaching staff for meeting all current and desired expanded enrolments;
- (xvii) Inadequate qualifications among teaching staff;
- (xviii) Inadequate and in some cases dilapidated building and related infrastructure;
- (xix) Inadequate and in some cases obsolete training equipment and machinery;
- (xx) Poor maintenance and rehabilitation of buildings and equipment;
- (xxi) Inadequate quality assurance mechanisms at institutional levels;
- (xxii) Low ability to generate income internally;
- (xxiii) Inadequate ability to plan and manage resources;
- (xxiv) Inadequate promotion and marketability of TVET programmes;
- (xxv) Weak leadership at institutional level in some cases.

# 2.2 Strategic Direction

# 2.2.1 Clarification of the skills gap

The main aspiration in Tanzania Development Vision is to transform towards a middle income country by 2025. Based on the results of the Integrated Labour Force Survey (ILFS), 2007, FYDP has indicated significant skills gap that need to be filled by Tanzania in order to attain the middle income status. The gaps have been identified by the President's Office, Planning Commission (POPC) through a detailed study jointly executed with the International Growth Centre (IGC) of the London School of Economics in 2011. The study benchmarked 14 selected middle income countries (*China, India, Indonesia, Sri Lanka, Egypt, Malaysia, South Korea, Thailand, Philippines, Morocco, Jordan, Syria, Tunisia, and Cote d'Ivoire*) as well as Vietnam because it shares important characteristics with Tanzania. To allow comparison, the average data from the benchmarked countries was used to represent what is referred to as the Model Medium Income Country (MMIC) as shown in Table 1.

Table 1: Benchmarking of the skill profiles in Tanzania and MMIC

Level of skills of workers	Major group of occupations	Proportion working po [%	opulation	Skill Gap (Required increase in % of th working population by 2025)	
	Tanzania MMIC				
	Managers and Administrators	0.2	2.72	14 times	
High	Professionals	0.7	4.66	7 times	
8	Associate Professionals and Technicians	1.8	4.73	3 times	5 times
	Clerks and related workers	0.4	4.55	11 times	
	Service, shop and market sales workers	9.1	11.77	1.3 times	
Medium	Craft and related trade workers	4.1	17.35	4 times	2 13
	Skilled agricultural workers	n.a	0.42	Significant	3 times
	Plant and machine operators/assemblers	1.3	5.66	4 times	
Low	Others including elementary workers	82.4	48.14	0.6 times	0.6 times
Indicative overall balance of skilled workers		1:2:17	1:0.6:5		

Source: POPC-IGC, ILFS, 2007 with further analysis by the Author

**Legend:** n.a. – not available

While Table 1 indicates the skill gaps that need to be gradually filled within 13 years, the realisation cannot be achieved linearly. As it has already been observed, the desired development in Tanzania during the period is envisaged to come from growth in manufacturing, mining, tourism and agriculture sectors, which have to be well supported with improvements in the physical infrastructure for energy, transport, water, as well as science, technology and innovation. Like with any other major undertaking, the realisation in all these sectors follows a particular sequence of four broad stages once the idea has been adopted, namely:

- (i) **Planning and development stage** involving idea clarification, i.e. initial surveys and appraisals, feasibility studies, concept design, development and application testing.
- (ii) **Production/service preparation stage** involving mobilisation of resources, acquisition/physical construction/installation of related infrastructure and other take-off activities.

- (iii) Stage of actual realisation from the sector including actual production, distribution and sales.
- (iv) **End of life activities** for environmental sustainability (which may include rehabilitation, recycling, safe disposal, etc)

At every stage, all major groups of occupations, i.e. managers, professionals, associate professionals, skilled workers and elementary workers are required, though to a different levels, The indicative extent of requirements of key skills for the various priority areas of FYDP as per the author's opinion are shown in Table 2, where "1" implies high, "2" intermediate, and "3" low requirement, in relative terms.

Table 2: Indicative extent of requirements in key skills at different stages of realisation

FYDP 2011/12-2015/16 PRIORITY AREAS		BROAD PHASE/STAGE OF UNDERTAKING											
			Planning and development		Pre	Preparation for take-off		Actual realisation		_	_	End of life activities	
		P	AP	SW	P	AP	SW	P	AP	SW	P	AP	SW
	Manufacturing	1	2	3	3	1	2	3	2	1	1	3	2
Industry	Mining	1	2	3	3	1	2	3	2	1	1	3	2
Agriculture	Agriculture	1	2	3	3	1	2	3	2	1	1	3	2
	Tourism	1	2	3	1	2	3	3	1	2	1	2	3
Tourism, trade	Trade	1	2	3	1	2	3	1	2	3	1	2	3
and services	Finance services	1	2	3	1	2	3	1	2	3	1	2	3
	Energy	1	2	3	1	2	3	1	2	3	1	3	2
	Marine transport	1	2	3	2	1	3	3	2	1	1	3	2
	Railways	1	2	3	3	1	2	3	2	1	1	3	2
Infrastructure	Road transport	1	2	3	3	1	2	3	2	1	1	3	2
imrastructure	Air transport	1	2	3	2	1	3	3	2	1	1	3	2
	Water/sanitation	1	2	3	3	1	2	3	2	1	1	3	2
	STI	1	2	3	1	2	3	1	2	3	1	2	3
Human capital	Education	1	2	3	1	2	3	1	2	3	1	2	3
development	Health/welfare	1	2	3	1	2	3	1	2	3	1	2	3

**Legend:** P-Professional;

*AP – Associate Professionals*;

 $SW-Skilled\ worker$ 

From the above, it is apparent that generally, the requirements for professionals dominate during planning and development stage, as well as for guiding the end of life activities. Associate professionals or technicians on the other hand are most critical during preparation stage and to a significant extent in actual realisation of the sector undertakings, while skilled workers have greatest roles during actual realisation and to significant extents during construction phase and in end of life activities which are often labour intensive.

The distribution of the skills gap over the next 13 years and strategies for redressing will therefore touch base with this fact. For example, although the shortfall in Associate Professionals and Technicians is three folds compared to the need by 2025, the realistic gap is much higher during the

first five or so years in which most major undertakings will be in planning and preparation stages. The gap in the requirement of technicians will also be much higher taking into consideration the significant imbalance observed in students enrolment trends over the last few years, inclining to programmes for professionals than for associate professionals. This fact is liable to further distort the human capital balance during the first 5 or so years, if deliberate efforts to compensate are not taken.

The intermediate targets for 2015/16 set in FYDP for high skilled workers are shown in Table 3.

Table 3: Targets for high skilled workers according to FYDP, 2015/16

<b>Broad Study Group</b>	Occupation	FYDP	Target	TDV Target		
		2015/16		2024/25		
	Physical scientists and related technicians	26,000		87,700		
Science	Life scientists and related technicians	22,000	52,000	73,100	174,200	
	Statisticians, mathematicians, system analysts and related technicians	4,000		13,400		
Engineering, Manufacturing and Construction (EMC)	Architects, engineers and related technicians	88,000	88,000	290,800	290,800	
Health and Welfare	Medical professionals and related workers	64,000	144,000	212,200	476,000	
	Health assistants	80,000		263,800		
	Economics and related professionals	30,000		100,000		
Social Science, Business and Law (SBL)	Accountancy/finance professionals	63,000	328,000	208,900		
	Jurists and legal professionals	16,000		54,400		
	Authors, journalists, writers	5,000		17,500	1,089,400	
	Administrators and managers	130,000		430,600		
	Government executive officials	84,000		278,000		
Education	Teachers	320,000	320,000	1,061,000	1,061,000	
	Total		932,000		2,030,400	

*Source: POPC-IGC*, with further analysis by the Author

Based on the intermediate targets shown in Table 3 and earlier observations regarding the extent of requirements in key skills at different stages of realisation of major development projects (Table 2), the distribution of skill requirements over the period up to 2025 has been derived for all the 8 broad fields of study as per ISCED 2011. These are shown in Annex 1 and the summary is presented in Table 4.

Table 4: Skills gaps during the short, medium and long terms in summary

Broad field of study	Major Group of Occupation	Present status (2012/13)	Short term target (2015/16)	Medium term target (2017/18)	Long term target (2024/25)
	Professionals	14,196	17,600	24,800	144,300
Engineering,	Technicians	26,504	70,400	124,000	146,600
Manufacturing	Medium skilled workers	374,500	440,000	755,000	3,607,500
& Construction	Low skilled workers	136,881	291,700	447,200	858,300
	Professionals	16,049	20,920	26,400	87,100
~ .	Technicians	11,234	31,080	52,800	87,100
Science	Medium skilled workers	541	1,040	2,640	8,710
	Low skilled workers	1,073	1,360	1,690	2,560
	Professionals	3,717	4,175	5,175	15,130
	Associate Professionals	8,549	19,650	27,300	45,050
Agriculture	Medium skilled workers	33,200	48,500	61,000	121,044
	Low skilled workers	16,312,000	16,000,000	15,500,000	12,448,800
	Professionals	48,215	64,000	97,000	212,200
	Associate Professionals	63,785	82,000	121,000	263,200
Health and	Medium skilled workers	n.a	2,000	8,000	43,000
Welfare	Low skilled workers	135	3,100	7,600	38,100
	Professionals	291,270	329,000	379,000	1,089,400
Social Science,	Associate Professionals	421,040	656,000	946,000	2,178,800
Business and	Medium skilled workers	738,200	1,028,600	1,341,360	2,681,840
Law (SBL)	Low skilled workers	18,050	22,200	25,680	43,080
	Professionals	8,738	9,870	11,370	32,680
	Associate Professionals	12,631	19,680	28,380	65,360
Humanities and	Medium skilled workers	22,146	30,860	40,240	80,460
Arts	Low skilled workers	542	670	770	1,300
	Professionals	4,135	4,223	8,102	70,585
	TET	4,036	4,122	7,908	68,890
	VET	99	101	194	1,695
Education	Associate Professionals	1,215	20,863	35,190	117,027
(TVET	TET	719	12,351	20,832	69,280
facilitation)	VET	496	8,512	14,358	47,747
	Medium skilled workers	5,027	25,086	43,292	103,822
	TET	294	1,455	2,511	6,022
	VET	4,733	23,631	40,781	97,800
	Professionals	105,433	119,200	146,600	400,600
C	Associate Professionals	211,058	228,800	252,800	403,500
Services	Medium skilled workers	997,800	1,241,400	1,442,040	2,035,260
	Low skilled workers	67,784	106,200	135,000	316,480
Lagand: na not	Total	19,965,648	20,940,177	22,097,429	27,748,888

Legend: n.a. – not available

In filling the gaps in terms of coverage, TVETDP needs also to consider major observations by stakeholders. Employers are generally satisfied with TVET graduates but observing the need to enhance their quality, especially in practical skills as well as soft skills to allow their faster integration in the work. Employers have also showed concern on the lack of enough flexibility in the programmes being offered to suit learners who are already in service, and the need to embed entrepreneurship training in programmes. Monitoring and evaluation of TVET also need to be strengthened at all levels to ensure that the desired impact is realised.

# 2.2.2 Projection of learners' enrolment for addressing the skills gap

The learners' enrolment for 2012/13 is derived from existing data for 2011/12 with an annual growth rate at 10% for all cases in TET. In VET, the assumed growth rates are 10% for EMC, Science and HAW, 33% for Agriculture, and 50% for Services, SBL, TVET Methodology, and Humanities and Arts, which are in line with the average rates over the period 2007/08-2011/12. Subsequent enrolment data for the Programme Period (2013/14 to 2017/18) are derived from a 10% increase of the annual graduate deficits (skills gaps per annum) shown in Annex 1 (summarized in Table 4) to take care of potential drop-outs. The current average drop-out rate in TVET is about 5-7%. It is important to note however, that Professionals are trained in TET as well as the higher education system in universities. Hence, the skills gaps at that level are distributed between the two systems, aiming to reach the ratio of 60:40 between TET and Universities graduates in EMC by 2017/18; 50:50 in Agriculture; 30:70 in Science, HAW, and SBL; 50:50 in Services; and 75:25 in TVET methodology training. The prediction of learners' enrolment in the various levels of study for the 8 broad fields is shown in Annex 2 and summarized in Table 5.

Table 5: Projections of learners' enrolment at different study levels

MAJOR STUDY LEVELS	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Postgraduate students	3,250	3,605	4,040	4,625	5,640	6,995
Undergraduate students	15,715	29,813	32,662	38,430	51,072	73,725
Ordinary Diploma	40,717	45,737	67,758	81,862	114,160	138,081
TET certificates	53,711	53,376	88,855	107,987	150,593	182,148
Total students in TET	113,393	132,531	192,915	232,904	321,465	400,949
VET formal certificates	154,103	365,229	419,532	506,203	574,485	661,193
Short courses	32,646	77,232	121,826	179,474	238,205	351,774
Total students in VET	186,749	442,461	541,358	685,677	812,690	1,012,967
Grand Total students in TVET	290,142	574,992	734,273	918,581	1,134,155	1,413,916

Note: Total learners in 2011/12 were 233,795 including 112,447 in TET and 121,348 in VET (BEST, 2012)

It is observed that for the five years period of the first phase of TVETDP (2013/14-2017/18), TVET institutions must increase the overall enrolment of learners from 233,795 in 2011/12 to at least 1,413,916 in 2017/18, respectively. Such huge expansion of enrolment should go hand in hand with promotion of gender parity in TVET as well as improvements in access opportunities to people with disabilities and those in rural areas. The observed 500 percent expansion of learners' enrolment over a relatively short period of time is very significant, which is liable to also impose significant implication in terms of resources requirements.

# 2.2.3 Projection of staff requirements for realizing the enrolment targets

In order to maintain quality of TVET provision and hence output graduates, the TVET system needs to have adequate and appropriate staff for facilitation and support. Current academic quality standards by NACTE specify students to staff (learner to facilitator) ratio of 8:1 for TET institutions, and by VETA a ratio of 16:1 for VET institutions. Norms for other supporting staff are missing but for planning purposes it is recommended to at least have one technical staff (e.g. laboratory and workshop technicians and artisans, studio attendants, and other associate professionals and skilled workers directly supporting the teaching staff) for every 4 teaching staff and one administrative staff for every 12 teaching staff. The detailed cumulative requirements of TVET teaching staff (facilitators) computed based on the above norms and recommendations are shown in Annex 3 and summarised in Table 6.

Table 6: Summary of cumulative requirements of TVET staff with conventional training methods

STAFF CATEGORY	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET Facilitators (teaching staff)	12,924	16,566	24,114	29,113	40,183	50,119
VET Facilitators (teaching staff)	9,631	22,827	26,221	31,638	35,905	41,325
Total facilitators in TVET	22,555	39,393	50,335	60,751	76,088	91,444
Total technical staff in TVET	7,518	13,131	16,778	20,250	25,362	30,481
Total administrative staff in TVET	1,879	3,283	4,195	5,063	6,341	7,620
<b>Grand Total staff</b>	31,952	55,807	71,308	86,064	107,791	129,545

Note: In 2011/12 TVET system had 7,600 facilitators including 4,590 in TET and 3,010 in VET (BEST, 2012)

As it is apparent in Table 6, the number of facilitators in 2011/12 stood at 7,600 in total. Compared to the requirements of 91,444 facilitators within the first five years period of the Programme (2013/14-2017/18), there is need to avail additional 83,844 such staff. This is a major investment in terms of recruitment, staff development and retention.

#### 2.2.4 Projection of physical resources requirements

Quality of TVET provision is also highly influenced by the status of physical infrastructure including space (buildings and related infrastructure) for academic and welfare of staff and learners. The planning norm for TVET institutions offering variety of courses specifies 7.5 to 10 square metres per each full time equivalent learner. In addition to employing the traditional modes of classroom training, the envisaged expansion of enrolment is however to be achieved with various other modes of training including formal and informal apprenticeship with/by industry, evening classes, ODL and RPL, as well as combinations thereof. This leads to the assumption to use the reduced limit of 5.0-7.5 square metres per learner in TET and VET, respectively. The projected space requirements are obtained by applying these to the learners' enrolment figures as presented in Annex 4 and the total highlighted in Table 7.

Table 7: Cumulative space requirements (Square metres)

SPACE CATEGORY	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Space requirements in TET	775,448	993,983	1,446,863	1,746,780	2,410,988	3,007,118
Space requirements in VET	933,745	2,212,305	2,706,790	3,428,385	4,063,450	5,064,835

It is observed in Table 7 that even with the modified unit space norms, a cumulative total buildings area of 8,071,953 square metres by 2017/18 is extremely high. This implies a requirement of additional 6,362,760 square metres over the first five years of the Programme. Applying the average unit cost of USD 900 per square metre prevailing in 2012 for construction of educational institutions it is apparent that about USD 5.73 million (approximately Tshs. 9.17 trillion) will be required over the first five years of TVETDP, which may not be realistic. Moreover, with such investment on buildings and infrastructure, USD 3.78 million will be required for equipment, furnishing and other facilities.

A decision should therefore be made to identify a few manageable strategic investments in new and/or upgrading civil works while putting more emphasis on strategic partnerships with industry to introduce complimenting apprenticeship and other non-residential/part-time modes of training and their combinations. Construction of new TVET institutions in rural areas with no such establishments is one of such strategic intervention for improving equity and inclusiveness. The same is also valid with construction of new institutions for training of TVET facilitators with a view to complimenting the only few dedicated ones currently in existence with very limited capacity to train the numbers of facilitators required to meet the enrolment targets.

# 2.2.5 Strategic interventions

Considering the extent of investments in terms of human and physical resources required for meeting the enrolment targets, it is crucial to consider some interventions that will reduce the pressure on resources to manageable levels without compromising on quality of outputs. Based on the existing quality standards, it is difficult to realise the planned increase in enrolment of learners with conventional training programmes and methods. It is therefore of strategic importance to aggressively employ a combination of teaching and learning arrangements. Specifically, it is planned to distribute the load as shown in Table 8:

Table 8: Distribution of additional learners in various teaching and learning modes

TEACHING AND LEARNING MODE/STRATEGY	DISTRIBUTION OF LEARNERS		
	Number	Percent	
All training modes/strategies	1,123,774	100	
Conventional centre based training (includes the below components in italics)	674,264	60	
Full time residential training programmes	337,132	30	
Flexible training (e.g. part-time courses, multiple entries/exits, etc)	112,377	10	
Short courses	224,755	20	
Recognition of prior learning	56,189	5	
Various modes of Apprenticeship/work based training programmes	11,238	1	
Tailored skills enhancement progammes for employees in industry	44,950	4	
ICT mediated teaching and learning/ODL	337,132	30	

For absorbing learners under the full-time residential training programmes, 70 new TVET institutions will be constructed to collectively absorb 42,000 full time equivalent learners (at least 500 in each VET

and 1,000 in TET institutions). The new institutions will include 56 DVTCs, 10 specialised TET institutions and 4 colleges/institutes for training of TVET facilitators. With the adopted unit space norms, a total of 235,000 square metres of new constructions will be required. Applying the average unit cost of USD 900 per square metre the cost implication for new constructions over the first five years of TVETDP at an exchange rate of 1 USD to Tshs. 1,600 becomes Tshs. 338.4 billion. This includes Tshs. 201.6 billion for 56 DVTCs, 28.8 billion for 4 dedicated TTCs and 108 billion for 10 specialized TET institutions.

A further 300 existing institutions will be upgraded, to collectively enroll at least 300,000 full time equivalent learners (each to enroll at least 1,000). All these institutions and others will also have provisions for offering other modes of teaching and learning so as to allow enrolment of at least additional 438,272 learners under flexible training programmes, short courses for continuing education and towards RPL.

ICT mediated teaching and learning including ODL will have a great role to play in minimizing investments in physical infrastructure and human resources, at least for training in certain trades and occupations. In this endeavour, 40 existing institutions will also be upgraded to improve respective capacities to employ ICT mediated teaching and learning, both in terms of preparation of contents, teaching selection of strategies and hardware. Integrating ICT in learning can mean anything from complete online training, with specific learning platforms using virtual microworlds and laboratories, to online access to/and control of/ distant physical set-ups such as cyber-kiosks, or telecenters, or physics laboratory. Critical in this undertaking will therefore be the development of facilitator awareness of pedagogical principals in the design and development of ICT mediated learning materials teaching, including conversion of existing resources, and their assessment and application in the media, which may vary from intranet, Internet, multimedia, email, interactive TV, teleconferencing, videoconferencing or other computer mediated learning methods. Adequate funding also need be set aside for content preparation, as well as specification and procurement of the appropriate software packages and hardware for ICT mediated teaching and learning, including realization of the last file connectivity in the selected institutions and LAN, as well as procurement of computers and subscriptions for bandwidth. The Programme aspiration is to have at least 337,132 learners acquiring TVET qualifications through ICT mediated teaching and learning by 2017/18.

Apprenticeship programme expected also to contribute in this strategic endeavour, is a type of training, whereby learner's competencies are acquired either in real work environment, or in combination with training institutions. Apprenticeship training allows graduates to readily integrate in workplaces and perform all work tasks properly. It is an important way of acquiring transferable and job specific skills. Various modes of apprenticeship training are being practiced. The dual education system combines apprenticeship in a company and vocational education at a VET training institution. This arrangement in its different versions is practiced in Germany, Austria, Denmark, Switzerland, France, the Netherlands, all countries that constituted the former Yugoslavia, Republic of South Africa, Botswana, Zimbabwe, Namibia, Malaysia, Philippines, among others. Kenya, Congo and Togo and VETA in Tanzania are developing dual apprenticeship programmes, Tanzania is in fact re-introducing the system as it was practiced in the 1990s but could not be sustained due to the then prevailing environment.

In West Africa, traditional apprenticeship offers the largest opportunity for the acquisition of employable skills in the informal sector. In Ghana, the informal sector accounts for more than 90 percent of all skills training in the country.

The main challenge with apprenticeship training programmes however, is obtaining and sustaining willingness of companies to take apprentices on voluntary basis, and consider the arrangement a long term investment in human resources development. This fact is more significant in countries with weak industrial base, and hence will require adequate preparation to re-introduce the dual training system fully in Tanzania. VETA is finalising arrangements to pilot the re-introduction of formal apprenticeship training based on the German mode, starting with 10 companies in Dar es Salaam, 5 in Moshi and one in Arusha. The pilot training phase is expected to start in March 2013 and will take three years to complete. The pilot project will cover about 90 trainees in 3 trades, namely: automotive (21 trainees); electrical (23 trainees); and hospitality (about 45 trainees). TVETDP will support these efforts and upscaling of the pilot phase so that by the end of the first 5 years of TVETDP, this mode of training is able to absorb the planned numbers, with potential for further major contribution in the subsequent phases.

It will be conditional for institutions covered under the above arrangements to focus in the training of learners towards critical occupations for realization of FYDP and eventually Tanzania Development Vision 2025. SITAN observed that some of such critical areas are being covered but will need consolidation and/or improvements in terms of capacity for quality provision. Major gaps were observed particularly for technicians and associate professionals due to the absence of TET programmes for preparing metallurgical technicians, metal production process controllers, chemical engineering technicians, chemical process plant controllers, ICT user support technicians, interior design and decorator associate professionals, among others. The same is apparent with the craft and related trade workers/plant and machine operators, etc. In the same vein, VET programmes are missing to prepare learners to become skilled mineral processing plant operators or chemical/glass ceramics//rubber/plastic/textile fur/leather products plant/machine operators, or glass makers, cutters, grinders and finishers, or insulation workers, glaziers, riggers and cable splicers, or wood treaters, among others to be specified.

If the proposed distribution of additional learners (Table 8) will be realized, the physical and human resources requirements will be reduced significantly, compared to the provisions in Tables 5 and 6. Essentially, the critical requirement will be to avail the teaching and learning space for accommodating learners in conventional full-time residential programmes, which the assumption that the same will also be used by other learners with appropriate timetabling. Under such scenario, the cumulative building space requirement will be reduced from 8,071,953 square metres to about 3,181,312 square metres by 2017/18. The modified distribution of space requirements when combinations of different teaching and learning strategies are employed is shown in Table 9.

Table 9: Cumulative space requirements (Square metres) with combinations of training strategies

REQUIREMENT CATEGORY	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Space requirements in TET	232,634	298,195	434,034	524,034	723,296	902,135
Space requirements in VET	420,185	995,537	1,218,056	1,542,773	1,828,553	2,279,176

Total requirement in TVET	646,820	1,293,732	1,652,114	2,066,807	2,551,849	3,181,312
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On the other hand, cumulative human resources requirement will be reduced for teaching staff from the original 91,444 to 36,578, while supporting technical staff will reduce from the original 30,481 to 9,145 members. The modified distribution of staff requirements is shown in Table 10.

Table 10: Cumulative requirements of TVET staff with a combination of training modes

STAFF CATEGORY	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET Facilitators (teaching staff)	5,170	6,626	9,646	11,645	16,073	20,048
VET Facilitators (teaching staff)	3,852	9,131	10,488	12,655	14,362	16,530
Total facilitators in TVET	9,022	15,757	20,134	24,300	30,435	36,578
Total technical staff in TVET	2,256	3,939	5,034	6,075	7,609	9,145
Total administrative staff in TVET	1,879	3,283	4,195	5,063	6,341	7,620
Grand Total staff	13,157	22,979	29,363	35,438	44,385	53,343

Note: In 2011/12 TVET system had 7,600 facilitators including 4,590 in TET and 3,010 in VET (BEST, 2012)

In order to realize the projected number of staff however, there is still obvious need to widen the catchment for recruitment of facilitators, improving the capacity of TVET teacher training institutions to be able to train an increased number of new recruits without pedagogical skills, enhancing cooperation with the private sector (industry/major employers) towards enhancing the practical skills of those recruited with deficiencies, and availing conducive working environment and incentive mechanisms to ensure retention of staff. Efforts will have to be made to recruit staff with the requisite qualifications and experiences and which may only require some short courses for skills or knowledge updates. Considering the extent of recruitments however, there will always be staff member who will require formal qualifications and/or major skills upgrades and it is these who will pose major cost implication under human resources. For planning purposes it assumed that about 10% of the projected facilitators will fall under such category and will have to be upgraded. The unit cost for upgrading the knowledge and skills of one TVET facilitator with basic qualification is typically estimated at Tshs. 10 million.

# 3.0 PROGRAMME DESCRIPTION

#### 3.1 Vision and Mission

The *Vision* of TVETDP is to realise a TVET system that will serve as the driving force for the productive and competitive workforce capable of contributing to socio-economic development of Tanzania

The *Mission* of TVETDP is to institute a sustainable quality TVET system capable of providing, facilitating and promoting an integrated competitive workforce; preparing individuals for employment and entrepreneurship; as well as enhancing the individual capacity for lifelong learning

# 3.2 Priority Areas

Based on the strategic context highlighted above in Sect. 2.3, the major achievements and strengths of the TVET system will be enhanced, and most if not all its observed weaknesses eliminated, touching base with the market opportunities and challenges. Essentially, this entails improving access and equity in TVET without compromising on the quality of outputs. In that vein, TVETDP intends to avail the subsector with adequate and appropriate resources as well as systems for quality provision of TVET and its monitoring and evaluation. The ultimate goal is to ensure the positive impact of the subsector in realising the aspirations of FYDP 2015/16 and eventually of the Tanzania Development Vision 2025. Hence, TVETDP focuses on four priority areas in realisation of its vision and mission, namely: (i) Access and equity in TVET; (ii) Quality of outputs; (iii) Capacity to provide quality TVET; and (iv) Monitoring and Evaluation of TVET.

#### 3.3 Improving Access and Equity

#### 3.3.1 Key Result Area 1

STD VII, Form 4 and Form 6 leavers provided with more parallel opportunities for respective further education and/or effective integration into the labour market.

Goal 1: To increase the overall enrolment of learners from 112,447 in TET and 121,348 in VET in 2011/12 to 400,946 and 1,012,967 in 2017/18, respectively.

Number of learners		2013/14	2014/15	2015/16	2016/17	2017/18
TET		132,531	192,915	232,904	321,465	400,949
VET	Long courses	365,229	419,532	506,203	574,485	661,193
	Short courses	77,232	121,826	179,474	238,205	351,774
Total		574,992	734,273	918,581	1,134,155	1,413,916

Strategies for realization of Goal 1:

- (a) Achieve the planned increase in enrolment using a combination of teaching and learning arrangements, e.g., ICT mediated teaching and learning/ODL, apprenticeship and other training in collaboration with industry, conventional full-time residential programmes, flexible training programmes, short courses, etc.;
- (b) Invest more in interventions that have significant potentials for increasing TVET opportunities;

- (c) Sustain/safeguard the realized increase in TVET opportunities.
- (d) Introduce measures to mainstream TVET in the national education system in line with the policy framework;
- (e) Support strategic sensitization of the public towards improving the perception on TVET;

#### 3.3.2 Key Result Area 2

Access to TVET for students from disadvantaged groups significantly improved in line with the catchment.

Goal 2: To increase the overall enrolment of female learners from 46.8% in VET and 47.9% in TET in 2011/12 to at least 50% in 2017/18 for both cases.

Percentage of females	2013/14	2014/15	2015/16	2016/17	2017/18
TET overall	48	49	50	50	50
VET overall	47	48	49	50	50

Strategies for realization of Goals 2:

- (a) Engage in interventions that have significant potentials for increasing the opportunities for females to enroll in TVET programmes;
- (b) Enhance guidance, counseling and employment services for female learners;
- (c) Sustain/safeguard the realized increase in the enrolment of female learners.

Goal 3: To increase the enrolment of female learners in Science and Technology programmes in both VET and TET from about 11-19 % in 2011/12 to at least 35% for all such programmes by 2017/18.

Percentage of females	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	15	20	25	30	35
Science	20	22	25	30	35

Strategies for realization of Goals 3:

- (a) Provide special incentives to promote increased enrolment of science and technology programmes in TVET, focusing on areas where female participation is particularly low;
- (b) Introduce special measures to enhance the completion rates of female learners in TVET programmes, focusing on areas where female participation is particularly low;
- (c) Enhance guidance, counseling and employment services for female learners;
- (d) Sustain/safeguard the realized increase in the enrolment of female learners.

Goal 4: To increase the opportunities for access of learners with disabilities from about 20% in VET and 3% in TET in 2011/12 to at least 50% of all such potential candidates in VET and 35% in TET by 2017/18.

Percentage of females	2013/14	2014/15	2015/16	2016/17	2017/18
TET	5	10	15	25	35
VET	20	25	30	40	50

Strategies for realization of Goal 4:

- (a) Support interventions that have significant potentials for increasing opportunities for learners with disabilities to join TVET programmes;
- (b) Introduce special measures to enhance the completion rates of learners with disabilities in TVET programmes;
- (c) Demonstrate impact of the realized increase in the opportunities for access of learners with disabilities;
- (d) Sustain/safeguard the increase in capacity to enroll learners with disabilities in line with the catchments.

## 3.4 Improving the Quality of Outputs

## 3.4.1 Key Result Area 3

Impact of the increased access and equity assured and evident in the realization of FYDP and hence, Tanzania Development Vision, 2025

Goal 5: To enroll learners in TVET that will contribute towards attaining the recommended human capital balance of professionals, associate professionals and skilled workers.

Study Levels	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
NTA 9-10	3,250	3,605	4,040	4,625	5,640	6,995
NTA 7-8	15,715	29,813	32,662	38,430	51,072	73,725
NTA 4-6	84,428	99,113	156,213	189,849	264,753	320,229
NVA I-III	154,103	365,229	419,532	506,203	574,485	661,193
Short courses	32,646	77,232	121,826	179,474	238,205	351,774
Total	290,142	574,992	734,273	918,581	1,134,155	1,413,916

Strategies for realization of Goal 5:

- (a) Enhance the coordination of TVET at national level;
- (b) Align the enrolment of learners at different levels of TVET towards maintaining the recommended human capital balance;
- (c) Ensure TVET is more responsive to the dynamic needs of the labour market and society;
- (d) Sustain/safeguard the implemented measures for achieving human capital balance.

Goal 6: To enroll learners in the occupation fields supporting the FYDP core priority areas.

Field of Study	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	111,066	145,210	178,530	214,350	244,760
Science	8,565	10,070	12,580	15,060	18,750
Agriculture	81,655	125,318	183,604	242,538	358,633
Health and Welfare	7,875	11,495	15,770	26,570	47,850
Services	150,895	167,046	193,811	209,736	227,140
SBL	171,270	217,385	262,310	332,920	401,370
Humanities and Arts	1,420	3,265	6,100	9,815	15,235
TVET Facilitation	42,246	54,484	65,876	83,166	100,578
Total	574,992	734,273	918,581	1,134,155	1,413,916

Strategies for realization of Goal 6:

- (a) Enhance the coordination of TVET at national level;
- (b) Improve the coverage of TVET programmes in line with the labour market demands;
- (c) Improve relevance of TVET programmes in line with the core priority areas;
- (d) Align the enrolment of learners at different levels of TVET to cover the core priority areas;
- (e) Ensure that TVET is more responsive to the dynamic needs of the labour market;
- (f) Sustain/safeguard the implemented measures for addressing the core priority areas.
- Goal 7: To increase the competence of graduates so that are able to integrate in the work places and carry out all the required work tasks properly within 3 months and one year after graduation for at least 50% of fresh graduates from VET and TET respectively by 2015/16 and increased to at least 75% by 2017/18.

Strategies for realization of Goal 7:

- (a) Enhance the relevance of all curricula that are implemented in TVET;
- (b) Enhance the involvement of employers in the affairs of TVET;
- (c) Enhance the quality of teaching and learning to ensure quicker integration of TVET graduates in work places;
- (d) Ensure that TVET is more responsive to the dynamic needs of the market and society;
- (e) Sustain/safeguard the realized measures for improving competency of graduates.

## 3.5 Improving the Capacity to provide Quality TVET

## 3.5.1 Key Result Area 4

Adequate and appropriate human resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service, within the core priority areas and beyond

Goal 8: To attain the ratio of learners to teaching staff in conventional full time residential programmes at 8:1 in TET and 16:1 in VET by 2015/16 and the same maintained afterwards. This entails increasing the number of teaching staff from 4,590 in TET and about 3,010 in VET in 2011/12 to 20,048 in TET and 16,530 in VET by 2017/18.

Staff Category	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET teaching staff	5,170	6,626	9,646	11,645	16,073	20,048
VET teaching staff	3,852	9,131	10,488	12,655	14,362	16,530
Teaching staff in TVET	9,022	15,757	20,134	24,300	30,435	36,578

*Strategies for realization of Goal 8:* 

- (a) Operationalise effective human resources management policies and plans in TVET covering all staff;
- (b) Implement effective modalities for teaching staff recruitment;
- (c) Diversify recruitment target groups to assure realization of additional teaching staff;
- (d) Sustain/safeguard the realized achievement in enhancing the recruitment of teaching staff.

Goal 9: To ensure that at least 75% of all teaching staff in TET and VET have the requisite qualifications and experiences in line with the identified fields and levels of study by 2015/16 and 100% by 2017/18 and the same maintained afterwards. In this context, requisite qualification implies possession of qualification that is at least one level higher than what is sought by learners being facilitated

#### Strategies for realization of Goal 9:

- (a) Implement effective modalities for teaching staff recruitment;
- (b) Increase the opportunities for staff training in VET and TET facilitation in line with the requirements;
- (c) Systematically develop capacity of teaching staff in line with respective work requirement;
- (d) Operationalise effective retention schemes for teaching staff;
- (e) Implement effective mechanism for appraisal of performance of teaching staff to ensure quality, efficiency and effectiveness.
- Goal 10: To increase the percentage of female teaching staff from 26% in TET and 29% in VET in 2011/12 to at least 40% in both cases by 2017/18

#### Strategies for realization of Goal 10:

- (a) Provide special incentives to promote increased recruitment of females in TVET facilitation, focusing on areas where female teaching staff are few;
- (b) Implement measures for compensation of gender based inequities and inequalities in TVET facilitation:
- (c) Introduce special measures to enhance the retention of female teaching staff, focusing on areas where female participation is particularly low;
- (d) Enhance guidance and counseling services for female staff;
- (e) Sustain/safeguard the realized increase in the recruitment of female teaching staff.

Goal 11: To attain the ratio of administrative staff to teaching staff at 12:1 and of technical staff to teaching staff at 4:1 by 2017/18. This entails attaining the following staff profile.

Staff category	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Technical staff	2,256	3,939	5,034	6,075	7,609	9,145
Administrative staff	1,879	3,283	4,195	5,063	6,341	7,620
Total supporting staff	4,135	7,222	9,229	11,138	13,950	16,765

#### Strategies for realization of Goal 11:

- (a) Operationalise effective human resources management policies and plans in TVET covering all staff;
- (b) Implement effective modalities for recruitment of supporting staff;
- (c) Systematically develop capacity of supporting staff in line with respective work requirement;
- (f) Operationalise effective retention schemes for supporting staff;
- (g) Implement effective mechanism for appraisal of performance of supporting staff to ensure quality, efficiency and effectiveness.

#### 3.5.2 Key Result Area 5

Adequate and appropriate physical resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service, within the core priority areas and beyond

Goal 12: To ensure adequacy of buildings and related physical infrastructure for meeting the enrolment targets and adopted training strategies. This entails availing the following square metres of building constructions by 2017/18.

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET	232,634	298,195	434,034	524,034	723,296	902,135
VET	420,185	995,537	1,218,056	1,542,773	1,828,553	2,279,176
TVET	646,820	1,293,732	1,652,114	2,066,807	2,551,849	3,181,312

*Strategies for realization of Goal 12:* 

- (a) Achieve the planned increase in enrolment using a combination of teaching and learning arrangements, e.g., conventional residential training, ICT mediated teaching and learning/ODL, apprenticeship and other training in collaboration with industry, flexible programmes, short courses, etc.;
- (b) Operationalise strategic mechanisms for improving the adequacy of buildings and related infrastructure towards assuring quality of TVET provision and other major undertakings;
- (c) Improve the culture of continuous maintenance and rehabilitation of buildings and related infrastructure in institutions, to ensure their appropriateness for quality TVET provision and other major undertakings;
- (d) Sustain/safeguard the realized achievement in improving TVET physical infrastructure.
- Goal 13: To ensure adequacy and appropriateness of equipment and teaching and learning facilities for meeting the enrolment targets and programmes in line with NACTE/VETA norms by 2017/18.

Strategies for realization of Goal 13:

- (a) Operationalise strategic mechanisms for improving the adequacy of equipment and facilities towards assuring quality of TVET provision and other major undertakings
- (b) Improve the culture of continuous maintenance and repair of equipment and other facilities in institutions, to ensure their appropriateness for quality TVET provision and other major undertakings;
- (c) Promote more effective use of equipment and other facilities including devising a mechanism for sharing of resources amongst TVET institutions as appropriate;
- (d) Sustain/safeguard the realized achievement in improving TVET equipment and other facilities.

#### 3.5.3 Key Result Area 6

Adequate financial resources timely available to support the planned improvements in access, equity and quality in TVET, within the core priority areas and beyond

Goal 14: To devise and implement a strategic and sustainable TVET funding mechanism for meeting the implication of expanded enrolment and other core undertakings in line with the NACTE/VETA norms by 2014/15.

Strategies for realization of Goal 14:

- (a) Introduce a systematic assessment of how TVET funding ensures links to national development priorities and provide feedback;
- (b) Identify and implement strategies for increased financial contribution from all possible sources, including from internal sources within institutions, direct Government/owners subventions, the Private sector, and support from development partners;
- (c) Advocate and operationalise more effective planning and prioritization of undertakings.
- Goal 15: To increase the contribution of local non-governmental sources of funding TVET from about 11% in 2011/12 to at least 33% of requirements by 2015/16.

Strategies for realization of Goal 15:

- (a) Identify and implement strategies for attracting the private sector to invest more in TVET;
- (b) Identify and implement strategies for attracting the local community to contribute towards TVET;
- (c) Devise and implement innovative ways of generating internal revenue in institutions without affecting execution of respective core functions;
- (d) Identify and implement cost reduction and unnecessary cost avoidance measures.

## 3.5.4 Key Result Area 7

Effective and efficient governance and management of TVET exist at all levels of the subsector and realisation of the desired impact assured

Goal 16: To increase the number of TVET institutions attaining full registration, within three years after getting provisional registration, from 25% in 2011/12 to at least 75% in 2017/18.

Strategies for realization of Goal 16:

- (a) Enhance the capacities of key players to govern and manage the academic function more effectively;
- (b) Enhance the capacities of key players to govern and manage the administration function more effectively;
- (c) Enhance the capacities of institutions in terms of human, physical and financial resources;
- (d) Strengthen the regulatory, coordination and promotion roles of NACTE and VETA for their more efficiency and effectiveness.
- Goal 17: To increase the number of TVET institutions/programmes attaining full accreditation, within three years after getting full registration, from about 10% in 2011/12 to at least 75% in 2017/18.

Strategies for realization of Goal 17:

- (a) Enhance the capacities of key players to govern and manage the academic function more effectively;
- (b) Enhance the capacities of key players to govern and manage the administration function more effectively;

- (c) Enhance the capacities of institutions in terms of human, physical and financial resources;
- (d) Strengthen the regulatory, coordination and promotion roles of NACTE and VETA for their more efficiency and effectiveness.
- Goal 18: To ensure that at least 50% of TVET providing and regulating institutions are meeting respective minimum performance targets by 2014/15 and 75% institutions by 2017/18.

Strategies for realization of Goal 18:

- (a) Promote effective and efficient institutional arrangements for the TVET sub-sector;
- (b) Enhance the capacities of key players to govern and manage the academic function more effectively;
- (c) Enhance the capacities of key players to govern and manage the administration function more effectively.

#### 3.6 Improving Monitoring and Evaluation of TVET Subsector

#### 3.6.1 Key Result Area 8

TVET sub-sector is monitored and evaluated regularly and feedback provided for timely and effective improvements

Goal 19: To ensure that progress in TVET implementation is formally monitored and evaluated at all levels in line with the TVET Sub-sector M&E Framework from June 2014 onwards

Strategies for realization of Goal 19:

- (a) Enhance the ability to generate and use TVET information more effectively;
- (b) Formulate monitoring and evaluation framework for the sub-sector;
- (c) Promote monitoring and evaluation of undertakings at institutional levels;
- (d) Perform monitoring and evaluation of the TVET sub-sector for improvements, in line with the framework:
- (e) Improve reporting and feedback mechanism at all levels.
- Goal 20: To ensure that TVET is taken on board in the overarching national monitoring framework for growth and poverty reduction and impact gauged by 2014/15 and maintained

Strategies for realization of Goal 20:

- (a) Enhance the involvement of the Planning Commission in the review of TVET affairs;
- (b) Adopt effective performance indicators in the TVET sub-sector M&E Framework;
- (c) Proactively facilitate the recognition of the role and impact of TVET in the socio-economic development of the country.

## 3.7 Major Activities and Key Inputs

The major activities that need to be undertaken towards realising the Key Result Areas of TVETDP, Goals and strategies are appended in Annex 5. In order to allow costing of the Programme, the major activities are further broken down to identify the minor undertakings and required inputs as shown in Annex 6.

#### 4.0 PROGRAMME IMPLEMENTATION

## 4.1 Overall Management Structure of the Programme

In order to ensure efficiency and effectiveness in TVETDP implementation while maintaining transparency and accountability, the organisation and overall management of TVETDP implementation will follow the logic as presented in Fig. 1.

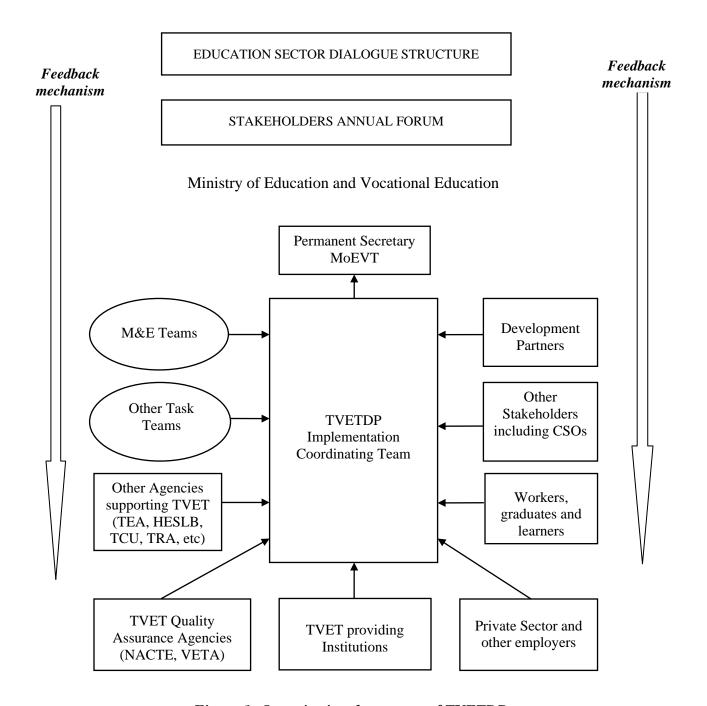


Figure 1: Organisational structure of TVETDP

## 4.2 Institutional Arrangements

TVET is provided by various public and non-public institutions, including private, faith-based. Public VET institutions are being administered through VETA, MCDGC, and a number of LGAs. Public TET institutions on the other hand are spread across over 15 ministries, and further dispersion is anticipated. This will pose great challenge in TVETDP implementation if adequate institutional arrangements are not in place. TVETDP will be implemented under the following institutional arrangements in line with the structure shown in Fig. 1. While, the coordination and guidance of TVETDP implementation in line with the approved Programme undertakings will be provided by a dedicated Coordinating Team with inputs from key stakeholders, the oversight of TVETDP implementation will be realised through the existing Education Sector dialogue structure. Specific roles and responsibility of the various actors are provided in the subsequent sections of the document.

## 4.2.1 Education Sector Dialogue Structure

The Education Sector Dialogue Structure, which will have the overall mandate to oversee TVETDP implementation, will be as provided by ESDP, 2008. The dialogue structure is essentially made of the Sub- Sector Technical Working Groups, feeding the Sector Development Committees through respective Task Forces. Subsequently, TVETDP matters are transacted by the Government Education Sector Thematic Area Working Group, Joint Education Sector and Thematic Area Working Group and finally the Inter-Ministerial Steering Committee. The compositions and functions of the mentioned committee are provided in ESDP (URT, 2008:61-65). However, flexibility needs to be exercised in the course of implementation to accommodate unforeseen demands.

#### 4.2.2 Stakeholders Annual Forum

There shall be an annual forum involving all stakeholders of TVET, including representatives of all relevant MDAs, the private sector, civil societies, TVET providers, TVET regulatory agencies, Professional Associations, Government agencies supporting TVET and development partners. The Forum will be responsible for the following undertakings:

- (i) Consistent reporting by stakeholders at different levels and sharing of experiences on programme implementation;
- (ii) Gauging stakeholders' satisfaction on the progress of TVETDP implementation;
- (iii) Provision of feedback for improvements, when necessary.

#### 4.2.3 Ministerial level

#### 4.2.3.1 Ministry of Education and Vocational Training (MoEVT)

MoEVT will be responsible for the following undertakings:

- (i) Sub-sector policy development;
- (ii) Overall vision of the sub-sector;
- (iii) Overall coordination of the sub-sector towards realisation of TVETDP;
- (iv) Custodian of TVET-MIS and linking to ESMIS;
- (v) Linking and harmonise TVET supply data and LMI;
- (vi) Overall supervision of TVET institutions directly owned by MoEVT;
- (vii) Funding of quality assurance agencies for TVET;

- (viii) Formulation and operationalisation of incentives for promotion of PPP;
- (ix) Appointing M&E and special tasks teams and ToRs recommended by TWG;
- (x) Appointing governing boards/councils of TVET institutions it directly owns;
- (xi) Appointing governing boards/councils of quality assurance agencies;
- (xii) Linking TVET to overarching national monitoring frameworks;
- (xiii) Linking TVET to the other sectors and other Education sub-sectors;
- (xiv) Soliciting/availing funds for the construction of the identified DVTCs;
- (xv) Oversight of harmonisation of curricula of the bias secondary schools and VET;
- (xvi) Oversight of harmonisation of curricula of post primary/secondary education and VET and implementation.

## 4.2.3.2 Other MDAs and LGAs:

Other MDAs and LGAs owning TVET institutions will do the following:

- (i) Supervision of TVET institutions they directly own;
- (ii) Funding of respective TVET institutions;
- (iii) Appointing governing boards/councils and management of TVET institutions they directly own;
- (iv) Providing strategic support to MoEVT on matters directly under respective portfolios, as indicated at different places in Annex 5;

## 4.2.4 TVET Implementation Coordinating Team

There will be a Implementation Coordinating Team under the Chairmanship of the Director of TVET, MoEVT. Other members include the Commissioner for Labour, MoLE; Director of Policy and Planning, MCDGC; Commissioner for Local Government PMO-RALG; Director of Policy and Planning, MoEVT; Director of Science and Technology, MCT; Director of Policy and Planning, PO-PC; Executive Secretary of NACTE; Director General of VETA; representatives of the Development Partners. The Coordinating Team will be responsible for the following undertakings:

- (i) Strengthening partnerships, consultation and information sharing within the subsector and enhancing mutual accountability;
- (ii) Recommending special task teams and ToR to PS-MoEVT for appointment;
- (iii) Recommending M&E teams and ToR to PS-MoEVT for appointment;
- (iv) Oversight of M&E of TVETDP implementation;
- (v) Adherence of TVETDP implementation to the agreed roadmap;
- (vi) Regular reports to the Education Sector Development Committee;
- (vii) Recommending improvements in capacity building strategies;
- (viii) Recommending priority interventions and institutions for the agreed priority interventions.

#### 4.2.5 TVET Quality Assurance agencies

## 4.2.5.1 NACTE Council/VET Board

NACTE Council and VET Board will be responsible for the following:

- (i) Guidelines for registration of TVET institutions as appropriate;
- (ii) Guidelines for accreditation of TVET institutions/programmes as appropriate;

- (iii) Framework for standards setting for quality TVET, as appropriate;
- (iv) Framework for curricula development;
- (v) Framework for admission of learners;
- (vi) Framework for learners' assessment;
- (vii) Framework for coordination of TVET at national level, as appropriate;
- (viii) Framework for employers involvement in TVET policy making and plan formulation at NACTE/VETA levels;
- (ix) Framework for employers involvement in curricula development/review;
- (x) Framework for employers involvement in curricula implementation;
- (xi) Framework for employers involvement in assessment;
- (xii) Framework for promotion of TVET as appropriate;
- (xiii) Framework for monitoring and evaluation of TVET, as appropriate;
- (xiv) Overseeing the performance of NACTE/VETA management as appropriate;
- (xv) Appointment/causing the appointment of NACTE/VETA senior staff;
- (xvi) Ensuring comparability of awards;
- (xvii)Advising MoEVT on TVET matters as appropriate.

#### 4.2.5.2 NACTE/VETA Management

The Management of NACTE/VETA will be responsible for the following:

- (i) Registration of TVET institutions as appropriate;
- (ii) Accreditation of TVET institutions/programmes as appropriate;
- (iii) Setting standards for quality TVET as appropriate;
- (iv) Following-up the compliance of institutions to NACTE/VETA norms;
- (v) Coordination of TVET at national level as appropriate;
- (vi) Involvement of employers in TVET affairs, as appropriate;
- (vii) Promotion of TVET at national level as appropriate;
- (viii) Provision of assistance to TVET institutions to provide quality TVET;
- (ix) Appointment/causing the appointment of NACTE/VETA staff;
- (x) Monitoring and evaluation of TVET implementation, as appropriate;
- (xi) Assisting the 25 FDCs upgraded to serve as DVTC take off smoothly.

#### 4.2.6 Private sector and other employers

The Private sector and other employers will be responsible for the following undertakings:

- (i) Providing regular information and feedback on the required skills and gaps;
- (ii) Participating in TVET policy and plan formulation;
- (iii) Participating in occupational and training standards setting for quality TVET;
- (iv) Participating in curricula formulation and review;
- (v) Provision of industrial practical training opportunities to TVET staff and learners;
- (vi) Offering apprenticeship courses jointly with TVET institutions or individually;
- (vii) Enhancing the skills of respective employees with TVET institutions;
- (viii) Participating in the assessment of competencies of learners;
- (ix) Financing TVET through payment of SDL;
- (x) Financing the construction of infrastructure assets through PPP arrangements;
- (xi) Provision of other assistance to institutions towards provision of quality TVET.

## 4.2.7 TVET providing institutions

#### 4.2.7.1 Governing Boards/Councils

The Governing boards/councils of TVET institutions will be responsible for the following:

- (i) Formulation of institutional policies and procedures for quality management;
- (ii) Formulation institutional plans and strategies for realisation of TVETDP;
- (iii) Overall governance and supervision of the management of institution;
- (iv) Quality and relevance of training programmes of the institution;
- (v) Framework for involvement of employers at institutional level, as appropriate;
- (vi) Modalities for admission of learners in line with NACTE/VETA norms;
- (vii) Modalities for assessment of learners in line with NACTE/VETA norms;
- (viii) Appointment, development, retention, appraisal and discipline of senior staff;
- (ix) Oversight of physical resources of the institution;
- (x) Oversight of financial resources of the institution including mobilisation;
- (xi) Framework for monitoring and evaluation of TVET at institutional level.

## 4.2.7.2 Management of Institutions

On the other hand, the management of TVET institutions will be responsible for the following:

- (i) Day to day running of the institutions;
- (ii) Implementing institutional policies and procedures for quality management;
- (iii) Implementing institutional plans and strategies for realisation of TVETDP;
- (iv) Involvement of employers in TVET affairs at institutional level, as appropriate;
- (v) Admission of learners in line with NACTE/VETA norms, as appropriate;
- (vi) Providing quality TVET in line with NACTE/VETA norms, as appropriate;
- (vii) Assessment of learners in line with NACTE/VETA norms, as appropriate;
- (viii) Appointment, development, retention, appraisal and rewarding, discipline of staff;
- (ix) Conducive working/study environment in institutions;
- (x) Welfare of staff and learners in institutions:
- (xi) Carrier guidance and counselling of learners;
- (xii) Management of physical resources of the institution including construction, acquisition, rehabilitation and maintenance;
- (xiii) Management of financial resources of the institution including mobilisation;
- (xiv) Monitoring and evaluation at institutional level.

## 4.2.8 Other agencies supporting TVET

- 4.2.8.1 TRA will be responsible for the following undertakings
  - (i) Collecting SDL and timely disburse the relevant shares to beneficiaries.
  - (ii) Providing regular information of SDL collection trends to TVET stakeholders.
- 4.2.8.2 HESLB is expected to perform the following:
  - (i) Providing information on loans including eligibility and conditions of access;
  - (ii) Providing information on application modalities;
  - (iii) Providing loans to TVET learners in line with the approved framework;
  - (iv) Loans recovery to ensure sustainability of the arrangement.

## 4.2.8.3 TCU is expected to perform the following:

- (i) In liaison with NACTE, coordination the central admission of learners in TET;
- (ii) Providing information on trends of admission of learners in TET;
- (iii) Providing information on trends of admission of TET graduates in universities.

#### 4.2.8.4 TEA is expected to perform the following:

- (i) Provision of assistance to institutions towards improving access to TVET;
- (ii) Provision of assistance to institutions towards improving equity and equality;
- (iii) Provision of assistance to institutions towards improving quality of TVET.

## 4.2.9 Development Partners in TVET

The government recognizes the need for collaboration and consultative approaches in the implementation of the plan. In this context the responsibilities of development partners shall be to mainstream their support into government plans, contribute funds, along agreed criteria and modalities for disbursement of funds for TVETDP, and participate as stakeholders in TVETDP review process.

## 4.2.10 Workers, graduates and learners

Workers, graduates and learners are expected to perform the following undertakings:

- (i) Providing regular information and feedback on the required skills and gaps;
- (ii) Participating in TVET institutional policy and plans formulation;
- (iii) Participating in occupational and training standards setting;
- (iv) Participating in curricula formulation and review.

#### 4.2.11 Other stakeholders

CSOs including NGOs, CBOs and FBOs are expected to continue to support the Government in improving access, equity and quality in respective TVET institutions in line with TVETDP targets.

## 4.3 Monitoring and Evaluation Framework

Monitoring and evaluation of TVET are essential components for realisation of TVETDP. Monitoring will involve systematic and continuous collection and analysis of information about the progress of training activities according to the Programme performance indicators and operational targets. Evaluation on the other hand, will involve objective assessment of inputs, processes, outputs and outcomes for gauging relevance, effectiveness and impact of TVET in the light of corresponding key result areas. Essentially, Monitoring and Evaluation will be a consultative, shared responsibility of implementing institutions, TVETDP coordination team and other stakeholders as shown in *Fig. 1*, guided by the Programme Logframe Matrix given in *Annex 7*.

All beneficiaries will be required to develop respective more detailed log-frameworks as instruments for monitoring and evaluation of progress at respective level. Key to this undertaking will be to ensure consistency with Programme goals and implementation schedules, provision of feedback for improvements when necessary. Frequency of submitting reports will normally be quarterly, but the Programme Implementation Coordinating Team might issue specific requirements on reporting. In

order to ensure consistence in reporting and share experiences on programme implementation, there shall be annual review workshops which will harmonize the individual institutional reports.

## 4.4 TVETDP Budget

## 4.4.1 Financial implications

Major financial implications for implementing TVETDP have been computed based on the assumptions and unit costs highlighted in Section 2.2 of this document. Implementation of the Programme for the first 5 years shall require availability of about Tshs. 2.195 trillion distributed as detailed in Annex 8 and summarized in Table 11.

Priority Area		Cost	implication	(in Million	Tshs.)		
	2013/14	2014/15	2015/16	2016/17	2017/18	Total	[%]
Improving Access and Equity	55,550	72,580	102,370	132,320	185,815	548,635	25
Improving Quality of Outputs	25,045	30,980	36,630	42,740	48,925	184,320	8
Improving Capacity	290,375	367,055	307,825	186,440	195,595	1,347,290	61
Improving M&E	1,642	2,173	2,124	2,325	2,676	10,940	1
Subtotal	372,612	472,788	448,949	363,825	433,011	2,091,185	95
Contingencies at 5%	18,631	23,639	22,447	18,191	21,651	104,559	5
Grand Total	391,243	496,427	471,396	382,016	454,662	2,195,744	100

Table 11: Overall TVETDP budget for the period 2013/14-2017/18

It is observed from Table 11 that significant proportion of the total financial implication is intended to improve capacity of the TVET subsector to provide quality TVET. The elements of costs under this expenditure centre are clustered into four groups covering improvements in human resources; physical resources; the capacity to attract more financial resources; and the governance and management of the subsector more efficiently and effectively. The allocations to such groups (with physical resources further split into buildings and equipment) are shown in absolute values in Annex 8 and summarized in Fig. 2 in terms of percentage of the total amount budgeted for improvement of capacities.

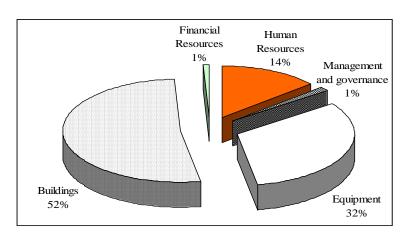


Figure 2: Distribution of cost implications for improving capacity

In terms of specific activities, the largest cost implication is for civil works in constructing the 70 new TVET institutions and upgrading 300 existing institutions. Out of the total cost implication for implementing TVETDP, about 31% will be spent for such disbursements, as it is shown in Fig. 3. Other major expenditures will be in the provision of loans, grants and scholarships to learners in programmes that are critical for supporting the realization of FYDP and/or from under-represented and disadvantaged groups. (25%), procurement of equipment, other facilities and furniture (17.6%), rehabilitation and maintenance and rehabilitation/repair of buildings and equipment (9.0%), staff development (7.2%) and strategic interventions towards institutional reforms.

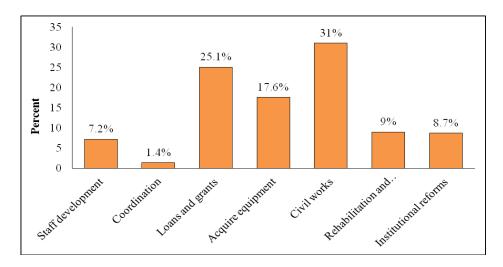


Figure 3: Distribution of the overall cost implications among the major activities of TVETDP

TVETDP will provide funds to potential institutions and other beneficiaries with a view to achieving its goals and indicators in all the specified key result areas of the Programme. As such, in order to access TVETDP funds, institutions and other beneficiaries will have to review/prepare respective strategic plans to match with TVETDP aspirations. Budgeting and management of funds under TVETDP will follow normal Government budgeting and resource flow mechanisms. The flow of funds to institutions will follow the normal Government disbursement procedures and accounted for as normal Government funds. TVET institutions through their Governing Councils and Boards will have to ensure that they account for the funds and follow Public Procurement procedures in procuring goods and services.

## 4.4.2 Programme financing

## 4.4.2.1 Major sources

The cost implications for TVETDP implementation is expected to be financed from various sources as follows:

- (a) In addition to meeting the recurrent expenditures in its institutions, the Government through its normal annual budget will provide loans, grants and scholarships to learners as appropriate, which is 25% of the total budget. The Government will also meet the rehabilitation and maintenance expenses which is 9% of the total budget.
- (b) Owners of other TVET institutions will meet the recurrent, rehabilitation and maintenance expenses in respective institutions.

- (c) Contribution from SDL: Apart from its planned increase to 3-4 %, the anticipated growth of the economy will stimulate more employment opportunities hence more SDL collections to assist in meeting the recurrent expenses. However, the planned significant expansion of TVET enrolment, especially in VET will also attract significant increase in operational expenses. Institutions will therefore have to ensure efficient and effective utilization of resources, in addition to enhancing internally generation of revenue.
- (d) With more efficient and effective utilization of resources, the significant expansion of enrolments will assist institutions to generate more revenues through tuition fees. In order for this to realise the expected impact, efforts to clarify student unit costs for the various TVET programmes and levels of study need to be concluded and operationalised.
- (e) PPP arrangements will be employed in the development of expensive physical infrastructure and equipment for teaching and learning in institutions. In order to promote the success of such undertaking, the Government will consider introducing strategic incentives to the private sector for the purpose.
- (f) Development partners are expected to support TVETDP through direct projects or institutional support in addition to General Budget Support (GBS).

### 4.4.2.2 Basic Assumptions

In order to ensure effective participation by all stakeholders in financing TVETDP, emphasis will be put on the creation of prerequisite conditions, which include promoting macroeconomic stability, ensuring environmental sustainability, a conducive business environment, good political and economic governance, aggressive investment promotion for more jobs creation, proper land use planning and property rights management, among others. In order to project the contribution of the specific financing sources and gaps, the following basic assumptions were made:

- (i) Tax revenue will increase as percentage of GDP from around 15% in 2011/12 to at least 19% by 2015 and maintained up to the end of the plan period
- (ii) During the plan period, the gross domestic saving as share of GDP will be increased from the current 10.6% to 14% by 2015/16 and maintained up to the end of the plan period
- (iii) The Government shall allocate at least 35% of the projected annual domestic revenue to development
- (iv) Single digit annual inflation rate will be maintained over the plan period and the magnitude will not change significantly over the period
- (v) The GDP will grow from 6.4% in 2011/12 up to about 10 per cent by 2015/16 onwards, as projected in FYDP
- (vi) The share of MoEVT budget to GDP will increase from about 2.2% in 2011/12 to at least 3.5% in 2017/18
- (vii) Government will meet its commitment to allocate up to 20-25% of its overall national recurrent expenditure to education (19.1% in 2012/13)

- (viii) The Government will increase TVET budget by 25% annually based on 2012/13 baseline in the first 3 years of the Programme, and by 20% in 2016/17, reducing to 15% in 2017/18
- (ix) SDL base will be expanded to include all employers, which will lead to an increase in collections by at least 50%. Currently, only private employers with more than 4 employees are paying the levy
- (x) SDL share to TVET increased to two third of the levy collected instead of the one third proportion available to VET at present
- (xi) In addition to the contribution through General Budget Support (GBS), Development Partners will increase their direct supports to projects and/or institutions by 10 percent during the plan period

## 4.4.2.3 Realisation of costs and gaps

Based on these assumptions and fixing the existing 2012/13 data on TVET financing as baseline, the potential contributions by various sources to TVET have been projected. These are shown in Annex 9 and summarized in Table 12.

Table 12: TVETDP financing sources and gaps (in million Tanzanian shillings)

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
	(Baseline)						
Government:	118,893	148,616	185,770	232,213	278,655	320,454	1,165,708
(Recurrent)							
Government: (Capital)	33,385	41,731	52,164	65,205	78,246	89,983	327,329
SDL	45,600	136,800	171,000	213,750	267,188	333,984	1,122,722
Development Partners	17,241	18,965	20,862	22,948	25,243	27,767	115,785
Total funds available	Total funds available 215,119		429,796	534,116	649,332	772,188	2,728,544
TVETDP Cost		391,243	496,427	471,396	382,016	454,662	2,195,744
Total budget required		606,352	839,539	901,192	916,132	1,103,994	4,367,209
Financing Gap							
В	asic Scenario	263,240	409,743	367,076	266,800	331,806	1,638,665
Alternativ	ve Scenario 1	282,205	430,605	390,024	292,043	359,573	1,754,450
Alternativ	ve Scenario 2	220,040	341,343	285,258	266,800	331,806	1,466,847
Alternativ	257,220	397,723	349,056	245,780	307,786	1,557,565	
Alternativ	210,740	342,243	269,576	139,300	151,806	1,113,665	
Alternativ	ve Scenario 5	161,520	261,823	169,738	118,280	127,786	839,147

LEGEND: Basic Scenario: All costs implications in Annex 8 considered

Scenario 1: As Basic Scenario but DPs contribute to GBS only

Scenario 2: Only 31 DVTCs considered under the direct TVETDP financing, instead of 56 Scenario 3: Establishment of the proposed 6 Centres of TVET Excellence not included

Scenario 4: Loans and grants to learners not included Scenario 5: It is a combination of Scenarios 2, 3 and 4 It is apparent from Table 12 that at total of Tshs. 2.195 trillion will be required to implement the activities of the first five years of TVETDP fully. This amount is quite significant and requires huge collective mobilization. Based on the assumptions made, Tshs. 2.728 trillion will be available for the first 5 years of TVETDP towards implementing the Programme as well as the financing the current activities of the TVET sub-sector. The amount will be raised from three sources, namely the Government, SDL and Development Partners. The Government's contribution (which also includes the support by Development Partners through GBS) amounts to Tshs. 1.49 trillion (about 55%), SDL collection (41%) and direct support of Development Partners to institutions and projects Tshs. 115.8 billion (4%). While Tshs. 2.728 trillion will be available, the total budget required in order to implement TVETDP and finance the regular and current activities of the TVET subsector is Tshs. 4.367 trillion, making a deficit of about Tshs. 1.639 trillion (Basic Scenario) which will need to be solicited or acquired outside the Government, current SDL provisions and DPs' contributions. Potential sources for filling in the financing gap include revenues to be generated internally by institutions from tuition fees, consultancy, contracted services, etc., and investments by the Private Sector directly or through PPP arrangements, as well as grants and loans from other Development Partners. According to the projected enrolment of learners during the first 5 years of the Programme, TET is planned to have 400,949 and VET will enrol 1,012,967 learners including 661,193 in long and 351,774 in short courses by 2017/18. Assuming a highly subsidised tuition fee is charge at Tshs. 1.0 million per learner in TET, and Tshs. 100,000 per learner in VET long courses, a total of Tshs. 467.1 million will be available to reduce the financing gap from Tshs. 1.639 trillion to Tshs. 1.171 trillion under the Basic Scenario and to 352 million under Scenario 5.

There is also no doubt that the private sector will have fundamental role to play in the realisation of TVETDP. For that, the Government will, therefore, devise clear mechanism to encourage increased private sector participation in development financing, construction, and management of infrastructural assets, as well as direct human capital development interventions. The general public will also have a significant role to play in supporting TVETDP implementation. In this regard, it will be important to build a culture and attitude of self reliance as much as possible, as was practiced in PEDP/SEDP implementation. The Government will therefore engage to impress and sensitise the community to contribute towards the realization of TVETDP. In that endevour, TVETDP interventions will be widely popularised from national to village and individual levels, enhancing entrepreneurship, and targeting support for disadvantaged and most vulnerable groups in the society.

While the mentioned complementing sources of revenue are likely to be available for filling in the financing gap, the situation on ground may dictate otherwise. Various scenarios are possible to reduce the financing gap, including the sampled five indicated in Table 12.

Alternative Scenario 1 assumes that Development partners will only support TVETDP through General Budget Support (GBS), implying no additional direct projects or institutional support.

Under *Alternative Scenario* 2 the number of new DVTCs to be constructed is reduced from 56 to 31, targeting districts already identified to have no VET opportunities, neither public nor private and not covered under the ongoing arrangement to upgrade 25 FDCs to also serve as DVTCs. The learners that could have been absorbed by the reduced 25 new DVTCs will be accommodated by other institutions and through the diversified TVET implementation strategies (apprenticeships, ODL, part-time/evening courses, RPL, etc). With this Scenario, the financing gap will be reduced by Tshs. 193.4 billion.

Alternative Scenario 3 does not include the upgrading of 6 selected existing institutions to become Centres of TVET Excellence (which will be given preferential treatments to produce exemplary products at their respective levels with a view to piloting TVET excellence). This idea is novel but has long term obvious impact in terms of addressing the observed severe skills gap. With shortage of funds for TVETDP financing, this idea can be implemented with funds obtained from other sources. With this Scenario, the financing gap will be reduced by Tshs. 81.1 billion.

Alternative Scenario 4 does not include additional student loans, scholarships and grants, assuming that the same will be covered under the existing arrangements. This cost implication is already been met by the Government whereby in 2011/12 for example, 14.3% of students in TET received Government Grants and 8.6% accessed loans through HESLB. However, the number of beneficiaries (25,838 out of total 112,447 learners) in 2011/12 is much lower compared to TVETDP projections of total 400,946 learners in TET by 2017/18. Hence, the Government will promote strategic partnerships with other stakeholders in meeting this cost implication. With this Scenario, the financing gap will be reduced by Tshs. 525 billion. Alternative Scenario 5 combines the other three scenarios, together reducing the gap by Tshs. 799.5 billion.

It is apparent that if the earlier assumed highly subsidized tuition fees are at least doubled, the financial gap will cease to exist with the Alternative Scenario 5, and if economic fees that are based on real unit costs are charged, there will be no deficit even under the Basic Scenario.

In the case the prevailing situation affects the realization of the basic assumptions made in Section 4.4.2.2, such that the Government and DPs are not able to contribute as planned, it is still critical to ensure that some minimum expansion in the enrolment of learners in TVET is realized to allow catching up when the situation improves. For that, it is recommended to avail at least contribute Tshs. 550 billion in five years (Tshs. 110 billion annually) covering the following priority cost centres.

Table 13: Minimum funding proposal under resources constraints in million Tshs.

SN	Priority cost centre	Total contribution
1	Rehabilitation and new buildings and infrastructure	75,000
2	Repair and procurement of equipment	35,000
3	ICT connectivity	25,000
4	Generation and applying LMI	3,000
5	Staff development	50,000
6	Monitoring and evaluation	2,000
	Total	190,000

## 4.5 Sustainability and Risks

Although the present TVETDP is for five years from 2013/14 to 2017/18, the Programme vision and objectives have been conceived with long perspective and as a national undertaking. All targets have been set with a view to their harmonious up-scaling for achieving the middle income status by 2025 and hence realization of Tanzania development vision. The sustainability of the Programme to a great extent depends on the huge mobilisation of resources from various sources, dialogue and involvement of all stakeholders. There are major issues that may however positively or negatively affect the efforts, which worth mentioning for consideration:

## (i) Review of the Constitution

The ongoing exercise to review the Constitution of the United Republic of Tanzania may result in radical changes in policies and legislations, hence invalidating some of the basic assumptions used in conceiving the Programme. Dynamic strategic planning, monitoring and evaluation of TVETDP implementation will therefore be the key interventions for the sustainability of TVETDP.

#### (ii) Prioritisation

The Government is highly committed to the development of human capital for economic growth, quality livelihood and social well-being. This is evident from the perspectives in the various policy frameworks as well as trends and pledges of future budgetary allocations to education. Such aspirations however may not be realised due to competing priorities with other economic and social sectors. Wider recognition of the multiplier effects of education and awareness creation on the same will therefore be critical. Further, it is important to recognise the potential social challenges that can be attributable to increasing population of unemployed youths. The same need to be complimented with clarification on what should start or be given more weight between creation of more employment opportunities for youths, on one hand and their skills development. Definitely, emphasis need to be given on the later, but with enhanced coordination to ensure skills development is linked to employment opportunities with a view to ensuring maintenance of harmony, peace and stability.

#### (iii) SDL contribution

SDL is planned to contribute about 41% of the projected funds that will be available to implement the activities of the first five years of TVETDP. This anticipates the expansion of base to include contributions from all employers, and increased disbursement to TVET instead of the one third proportion of the levy collected available to VET at present. While both positions towards revamping of SDL are already provided in FYDP 2011/12-2015/16, the operationalisation of the same requires amendment of the VET Fund legislation, which needs timely realisation for implementation of TVETDP, as planned. Further, since SDL is based on the number of people in formal employment, the contribution significantly depends on the status in employment market. Implementation of the strategic interventions planned for accelerating economic growth, creation of employment, and spurring industrialization efforts will therefore be critical in ensuring the planned contribution of SDL to TVETDP.

## (iv) Adverse natural conditions

Drought and floods may affect the economy particularly in agriculture, transport, energy and therefore industry. Under such situation, tax revenue and GDP growth rate may not increase as projected, hence potential for inability of the Government to contribute to TVETDP, as planned. More efforts will need to be put to ensure environmental sustainability, in order to minimise the potentials of such adverse effects. Climate change is likely to compound the already existing problems of land degradation, deforestation, loss of biodiversity, as well as increased air and water pollution due to increasing scales of productive activities and unplanned urban settlements. It is therefore important to address the impacts of climate change, and facilitate adaptation and mitigation, in line with the existing policies and legislations. Enhancing the up-take of mainstreaming of environment and climate change issues at various levels, as well as increasing public awareness on the proper methods of exploitation of natural resources, and addressing the lapses *in* enforcement of existing laws, are critical in that endeavour.

## (v) Participation of the Private sector

The gap in financing TVETDP and TVET in general is expected to be filled by contributions from the Private sector. PPP arrangements are expected to provide a better means of sharing benefits and risks associated with infrastructure projects between the public and private sectors. For that, the Government will have to devise clear legal, regulatory, and pricing frameworks, to encourage increased private sector participation in development financing, construction, and management of infrastructural assets for TVET. This will be stimulated with provision of guarantees to private sector investors and other incentives through various instruments, subject to applicable laws.

## (vi) Developments in the global economy

The government recognizes the need for collaboration with DPs and other external institutions in the implementation of TVETDP. Adverse developments in the world economy may however also affect realisation of the planned TVETDP interventions. The slower growth of the world economy may translate into low domestic revenue collection and hence insufficient resources to support TVETDP. The ongoing Euro crisis may also have negative impact on DP's contribution in GBS and/or their envisaged direct supports to projects and/or institutions. It is therefore important that, with continuing cooperation with DPs, more emphasis be put on local sources, in addition to enhancing internally generation of revenue in institutions, enhanced participation of the Private sector, and enforcing effective monetary and fiscal policies for guaranteeing sustainability.

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## ANNEX 1

## SKILL GAPS FOR ATTAINING MIC STATUS AND CORRESPONDING ENROLMENT OF LEARNERS

## A1.1 ENGINEERING, MANUFACTURING AND CONSTRUCTION (EMC)

## A1.1.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	14,196	15,000	16,000	17,600	20,400	24,800	30,200	51,200	75,600	92,400	111,600	132,400	148,800
Technician/Associate Professionals	26,504	45,000	56,700	70,400	91,800	124,000	126,800	130,000	133,720	136,440	142,160	146,880	151,200
Crafts and EMC related trades	227,136	270,000	336,000	424,000	520,000	620,000	700,000	740,000	760,000	780,000	790,000	800,000	810,000
Plant and machine operator/assembler	119,000	165,000	214,000	269,000	339,000	419,000	494,000	564,000	624,000	674,000	723,000	771,000	815,600
EMC elementary occupations	17,881	19,200	20,700	22,700	25,200	28,200	30,700	32,700	34,700	36,700	38,700	40,700	42,700

# A1.1.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Level 7-8	2,204	2,470	2,990	3,760	5,060	7,310
2. NTA Levels 4-6	5,460	9,346	12,870	15,070	23,540	35,420
3. NVA Levels I-III	71,229	97,750	127,600	157,300	182,600	198,000
Crafts and EMC related trades		47,150	72,600	96,800	105,600	110,000
Plant and machine operator/assembler	71,229	50,600	55,000	60,500	77,000	88,000
4. VET short courses targeting EMC related elementary occupation	1,110	1,450	1,650	2,200	2,750	3,300

Note: 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rate at 10%. Subsequent enrolment data are derived from graduate deficits and equal drop-out rates at 10% at all levels.

# A1.2 AGRICULTURE

## A1.2.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1. Professionals	3,717	3,800	3,950	4,175	4,575	5,175	6,175	7,675	9,175	10,675	12,175	13,175	15,130
2. Technicians/ Associate Professionals	8,549	12,200	15,900	19,650	23,450	27,300	31,200	35,150	38,550	41,550	43,550	44,550	45,050
3. Skilled agricultural workers	33,200	38,000	43,000	48,500	54,500	61,000	68,000	75,500	83,500	92,000	101,000	110,500	121,044
4. Elementary occupations (x 1,000)	16,312	16,250	16,150	16,000	15,800	15,500	15,100	14,700	14,300	13,900	13,500	13,000	12,448.8

# A1.2.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7-8	35	155	288	504	853	1,348
2. NTA Levels 4-6	7,410	8,000	9,500	12,000	15,000	20,000
3. NVA Levels I-III	3,603	5,280	5,500	6,050	6,600	7,150
4. VET short courses targeting Agriculture elementary occupation	27,500	68,200	110,000	165,000	220,000	330,000

Note: 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rate at 10% for TET and 33% for VET.

## A1.3 SCIENCE

## A1.3.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	16,049	17,520	19,120	20,920	23,300	26,400	30,200	34,900	40,800	47,800	57,600	70,800	87,100
Technicians/ Associate Professionals	11,234	16,400	22,800	31,080	41,000	52,800	65,000	73,400	78,000	80,800	83,400	85,800	87,100
Science artisans and other related workers	541	660	820	1,040	1,580	2,640	3,820	4,840	5,740	6,590	7,390	8,090	8,710
Elementary occupations	1,073	1,150	1,240	1,360	1,510	1,690	1,840	1,960	2,080	2,200	2,320	2,440	2,560

# A1.3.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7- 8	2,300	2,430	2,500	2,700	3,200	4,000
2. NTA Levels 4-6	5,643	5,680	7,040	9,240	10,780	12,980
3. NVA Levels I-III	97	130	180	240	590	1,170
4. VET short courses for Science related elementary occupation	57	85	100	130	170	200

**Note:** 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rate at 10%. Subsequent enrolment data are derived from graduate deficits, assuming equal number of students each year at all levels and equal drop-out rates at 10%.

## A1.4 HEALTH AND WELFARE

## A1.4.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	48,215	52,000	57,000	64,000	78,000	97,000	117,000	136,000	154,000	171,000	187,000	202,000	212,200
HAW Associate Professionals	63,785	68,500	74,500	82,000	95,000	121,000	150,000	176,000	198,000	216,000	233,000	249,000	263,200
HAW skilled workers	n.a	250	1,000	2,000	4,000	8,000	13,000	18,000	23,000	28,000	33,000	38,000	43,000
Elementary occupations	135	600	1,600	3,100	5,100	7,600	9,600	13,100	17,100	21,600	26,600	32,100	38,100

# A1.4.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7- 8	1,243	1,800	2,700	4,340	7,150	11,000
2. NTA Levels 4-6	12,771	13,000	14,400	15,900	20,300	28,600
3. NVA Levels I-III	n.a	275	825	1,100	2,200	4,400
4. VET short courses for HAW related elementary occupation	152	510	1,100	1,650	2,200	2,750

**Note:** 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rate at 10%. Subsequent enrolment data are derived from graduate deficits, assuming equal number of students each year at all levels and equal drop-out rates at 10%.

## A1.5 SERVICES

## A1.5.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	105,433	107,900	112,400	119,200	131,800	146,600	163,400	183,200	208,800	248,600	294,400	343,200	400,600
Associate Professionals	211,058	215,200	221,400	228,800	239,600	252,800	268,200	285,800	305,600	326,800	350,200	375,800	403,500
Skilled services workers (x1000)	998	1,071	1,150	1,241	1,339	1,442	1,546	1,650	1,756	1,825	1,895	1,965	2,035
Machine operators	37,700	47,200	57,700	69,200	81,700	92,200	109,700	125,200	141,700	159,200	177,700	197,200	244,680
Elementary occupations	30,084	32,200	34,400	37,000	39,800	42,800	46,000	49,400	53,100	57,100	61,600	66,600	71,800

# A1.5.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7- 8	69	124	346	881	2,186	4,380
2. NTA Levels 4-6	2,331	4,556	6,820	9,240	11,880	14,520
3. NVA Levels I-III	33,476	143,770	156,970	180,510	192,170	204,270
Skilled workers	23,316	79,990	87,250	100,720	107,050	113,650
Machine operators	10,160	10,450	11,550	12,650	13,750	14,850
4. VET short courses for Services related elementary occupation	2,191	2,420	2,860	3,080	3,300	3,520

Note: 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rates of 10% for TET and 50% for VET. Subsequent enrolment data are derived from graduate deficits and equal drop-out rate of 10% at all levels.

# A1.6 SOCIAL SCIENCES, BUSINESS AND LAW (SBL)

# A1.6.1 Workforce demands to attain MIC status (x 1000)

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	291.27	303	315	329	349	379	424	483	563	663	783	923	1,089.4
Associate Professionals	421.04	470	555	656	796	946	1,106	1,276	1,456	1,636	1,816	1,996	2,178.8
Skilled SBL workers	738.2	823.68	914.56	1,028.6	1,163.5	1,341.3	1,530.6	1,730.3	1,935.4	2,121.9	2,308.4	2,494.8	2,681.8
• Shop/market/ sales workers	665.2	713.68	766.56	827.6	892.48	961.36	1,030.6	1,100.3	1,170.4	1,216.9	1,263.4	1,309.8	1,356.8
Clerks and other SBL workers	73	100	135	188	271	380	500	630	765	905	1,045	1,185	1,325
Elementary occupations	18.05	19.32	20.64	22.2	23.88	25.68	27.6	29.64	31.86	34.26	36.96	39.94	43.08

## A1.6.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7- 8	7,814	18,880	19,265	20,750	25,300	35,200
2. NTA Levels 4-6	48,157	53,860	93,500	111,100	154,000	165,000
3. NVA Levels I-III	35,573	94,030	99,970	125,440	148,370	195,670
Shop/sales workers	18,740	59,180	64,210	67,140	71,370	75,770
Clerks and others	13,833	34,850	35,760	58,300	77,000	119,900
4. VET short courses for elementary occupation	843	1,400	1,450	1,720	1,850	1,980

**Note:** 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rates of 10% for TET and 50% for VET.

## A1.7 HUMANITIES AND ARTS

## A1.7.1 Workforce demands to attain MIC status

Occupation	06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	8,738	9,090	9,450	9,870	10,470	11,370	12,720	14,490	16,890	19,890	23,490	27,690	32,680
Associate Professionals	12,631	14,100	16,650	19,680	23,880	28,380	33,180	38,280	43,680	49,080	54,480	59,880	65,360
Skilled workers	22,146	24,710	27,440	30,860	34,900	40,240	45,920	51,910	58,060	63,660	69,250	74,850	80,460
Elementary occupations	542	580	620	670	720	770	830	890	960	1,030	1,110	1,200	1,300

# A1.7.2 Students enrolment projection for attaining MIC status

Study Level	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
1. NTA Levels 7- 8	150	350	625	850	1,150	1,575
2. NTA Levels 4-6	251	500	1,000	2,000	3,250	5,000
3. NVA Levels I-III	212	500	1,500	3,000	5,000	8,000
4. VET short courses for elementary occupation	25	50	100	175	300	500

Note: 2012/13 enrolment derived from 2011/12 data in BEST, 2012 with annual growth rates of 10% for NTA 4-6 and 50% for VET. Subsequent enrolment data are derived to obtain about 3% of SBL enrolments in 2017/18.

# A1.8 EDUCATION FOR TVET FACILITATION

# A1.8.1 Workforce demands to attain MIC status

Occupation		06-2012	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Professionals	TET	4,036	3,197	3,503	4,122	5,477	7,908	11.920	19,270	23.095	34,335	45,610	56,822	68,890
11010551014415	VET	99	79	86	101	135	194	293	474	568	844	1,122	1,397	1,695
Associate	TET	719	6,448	10,162	12,351	17,224	20,832	24,600	29,354	33,652	39,103	46,867	57,729	69,280
Professionals	VET	496	4,444	7,004	8,512	11,870	14,358	16,954	20,230	23,193	26,949	32,300	39,786	47,747
Skilled	TET	294	822	1,204	1,455	2,013	2,511	2,978	3,463	3,945	4,494	5,029	5,511	6,022
workers	VET	4,733	13,346	19,551	23,631	32,693	40,781	48,366	56,252	64,080	72,989	81,677	89,503	97,800

# A1.8.2 Students enrolment projection for attaining MIC status

Study Level		06-2012	2013/14	2014/15	2015/16	2016/17	2017/18
Professionals	TET	286	3,517	3,853	4,534	6,025	8,699
1101000000000	VET	7	87	95	111	149	213
Associate Professionals	TET	1,136	7,093	11,178	13,586	18,946	22,915
11010011110	VET	1,648	4,888	7,704	9,363	13,057	15,794
Skilled workers	TET	267	904	1,324	1,601	2,214	2,762
Same warners	VET	4,336	14,681	21,506	25,994	35,962	44,859
Short courses (10%)	TVET	768	3,117	4,566	5,519	7,635	9,524

# ANNEX 2 PROJECTION OF TVET LEARNERS ACCORDING TO STUDY LEVELS

## A2.1 POSTGRADUATE DEGREE/DIPLOMA

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	0	50	100	200	400	730
Science	230	240	250	270	320	400
Agriculture	0	20	30	50	85	135
HAW	18	100	270	430	720	1,100
Services	0	25	50	100	200	450
SBL	3,002	3,100	3,200	3,300	3,400	3,520
Humanities	0	20	40	75	115	160
TVET Facilitation	0	50	100	200	400	900
Total students	3,250	3,605	4,040	4,625	5,640	6,995

## A2.2 BACHELOR DEGREE AND ADVANCED/HIGHER DIPLOMA

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	2,204	2,470	2,990	3,760	5,060	7,310
Science	2,300	2,430	2,500	2,700	3,200	4,000
Agriculture	35	155	288	504	853	1,348
HAW	1,243	1,800	2,700	4,340	7,150	11,000
Services	69	124	346	881	2,186	4,380
SBL	7,814	18,880	19,265	20,750	25,300	35,200
Humanities	150	350	625	850	1,150	1,575
TVET Facilitation	1,900	3,604	3,948	4,645	6,173	8,912
Total students	15,715	29,813	32,662	38,430	51,072	73,725

## A2.3 ORDINARY DIPLOMA AND OTHER FORMAL TET CERTIFCATES

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	5,460	9,346	12,870	15,070	23,540	35,420
Science	5,643	5,680	7,040	9,240	10,780	12,980
Agriculture	7,410	8,000	9,500	12,000	15,000	20,000
HAW	4,970	5,190	6,600	8,250	14,300	28,600
Services	2,331	4,556	6,820	9,240	11,880	14,520
SBL	48,157	53,860	93,500	111,100	154,000	165,000
Humanities	251	500	1,000	2,000	3,250	5,000
TVET Facilitation	10,206	11,981	18,883	22,949	32,003	38,709
Total students	84,428	99,113	156,213	189,849	264,753	320,229

## A2.4 PROJECTION OF TOTAL NUMBER OF LEARNERS IN TET

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	7,664	11,866	15,960	19,030	29,000	43,460
Science	8,173	8,350	9,790	12,210	14,300	17,380
Agriculture	7,445	8,175	9,818	12,554	15,938	21,483
HAW	6,231	7,090	9,570	13,020	22,170	40,700
Services	2,400	4,705	7,216	10,221	14,266	19,350
SBL	58,973	75,840	115,965	135,150	182,700	203,720
Humanities	401	870	1,665	2,925	4,515	6,735
TVET Facilitation	12,106	15,635	22,931	27,794	38,576	48,121
Total students in TET	113,393	132,531	192,915	232,904	321,465	400,949

## A2.5 VET FORMAL CERTIFICATES

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	71,229	97,750	127,600	157,300	182,600	198,000
Science	97	130	180	240	590	1,170
Agriculture	3,603	5,280	5,500	6,050	6,600	7,150
HAW	0	275	825	1,100	2,200	4,400
Services	33,476	143,770	156,970	180,510	192,170	204,270
SBL	35,573	94,030	99,970	125,440	148,370	195,670
Humanities	212	500	1,500	3,000	5,000	8,000
VET Facilitation	9,913	23,494	26,987	32,563	36,955	42,533
Total students	154,103	365,229	419,532	506,203	574,485	661,193

## A2.6 SHORT COURSES

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	1,110	1,450	1,650	2,200	2,750	3,300
Science	57	85	100	130	170	200
Agriculture	27,500	68,200	110,000	165,000	220,000	330,000
HAW	152	510	1,100	1,650	2,200	2,750
Services	2,191	2,420	2,860	3,080	3,300	3,520
SBL	843	1,400	1,450	1,720	1,850	1,980
Humanities and Arts	25	50	100	175	300	500
VET Facilitation	768	3,117	4,566	5,519	7,635	9,524
Total students	32,646	77,232	121,826	179,474	238,205	351,774

## A2.7 PROJECTION OF TOTAL NUMBER OF LEARNERS IN VET

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	72,339	99,200	129,250	159,500	185,350	201,300
Science	154	215	280	370	760	1,370
Agriculture	31,103	73,480	115,500	171,050	226,600	337,150
HAW	152	785	1,925	2,750	4,400	7,150
Services	35,667	146,190	159,650	183,590	195,470	207,790
SBL	36,416	95,430	101,420	127,160	150,220	197,650
Humanities and Arts	237	550	1,600	3,175	5,300	8,500
VET Facilitation	10,681	26,611	31,553	38,082	44,590	52,057
Total students in VET	186,749	442,461	541,358	685,677	812,690	1,012,967

## A2.8 OVERAL PROJECTION OF LEARNERS' ENROLMENT IN TVET

Major Study Levels	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Postgraduate students	3,250	3,605	4,040	4,625	5,640	6,995
Undergraduate students	15,715	29,813	32,662	38,430	51,072	73,725
Ordinary Diploma/TET certificates	84,428	99,113	156,213	189,849	264,753	320,229
Total students in TET	113,393	132,531	192,915	232,904	321,465	400,949
VET formal certificates	154,103	365,229	419,532	506,203	574,485	661,193
Short courses	32,646	77,232	121,826	179,474	238,205	351,774
Total students in VET	186,749	442,461	541,358	685,677	812,690	1,012,967
Grand Total students in TVET	290,142	574,992	734,273	918,581	1,134,155	1,413,916

Note: Total enrolment in TVET in 2011/12 was 233,795 students, including 112,447 in TET and 121,348 in VET

ANNEX 3

PROJECTION OF REQUIRED NUMBER OF STAFF FOR MEETING ENROLMENT TARGETS

## A3.1 CUMULATIVE NUMBER OF TET FACILITATORS

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	958	1,483	1,995	2,379	3,625	5,433
Science	1,022	1,044	1,224	1,526	1,788	2,173
Agriculture	931	1,022	1,227	1,569	1,992	2,685
HAW	779	886	1,196	1,628	2,771	5,088
Services	300	588	902	1,278	1,783	2,419
SBL	7,371	9,480	14,496	16,893	22,838	25,464
Humanities	50	109	208	366	564	842
TET Methodology	1,513	1,954	2,866	3,474	4,822	6,015
Total TET Facilitators	12,924	16,566	24,114	29,113	40,183	50,119

## A3.2 CUMULATIVE NUMBER OF VET FACILITATORS

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	4,452	6,109	7,975	9,831	11,412	12,375
Science	6	9	11	15	37	73
Agriculture	225	330	344	379	413	447
HAW	0	17	52	69	138	275
Services	2,092	8,986	9,810	11,282	12,010	12,768
SBL	2,223	5,877	6,248	7,840	9,273	12,229
Humanities	13	31	94	188	313	500
VET Methodology	620	1,468	1,687	2,034	2,309	2,658
Total VET Facilitators	9,631	22,827	26,221	31,638	35,905	41,325

# A3.3 SUMMARY OF CUMULATIVE REQUIREMENTS OF TVET STAFF WITH CONVENTIONAL TRAINING MODE

Staff category	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET Facilitators (teaching staff)	12,924	16,566	24,114	29,113	40,183	50,119
VET Facilitators (teaching staff)	9,631	22,827	26,221	31,638	35,905	41,325
Total teaching staff in TVET	22,555	39,393	50,335	60,751	76,088	91,444
Total technical staff in TVET	7,518	13,131	16,778	20,250	25,362	30,481
Total administrative staff in TVET	1,879	3,283	4,195	5,063	6,341	7,620
Grand Total	31,952	55,807	71,308	86,064	107,791	129,545

# A3.4 SUMMARY OF CUMULATIVE REQUIREMENTS OF *TVET* STAFF WITH A COMBINATION OF TRAINING MODES

Staff category	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TET Facilitators (teaching staff)	5,170	6,626	9,646	11,645	16,073	20,048
VET Facilitators (teaching staff)	3,852	9,131	10,488	12,655	14,362	16,530
Total teaching staff in TVET	9,022	15,757	20,134	24,300	30,435	36,578
Total technical staff in TVET	2,256	3,939	5,034	6,075	7,609	9,145
Total administrative staff in TVET	1,879	3,283	4,195	5,063	6,341	7,620
Grand Total	13,157	22,979	29,363	35,438	44,385	53,343

ANNEX 4
PROJECTION OF SPACE REQUIREMENTS FOR MEETING ENROLMENT TARGETS

# A4.1 CUMULATIVE REQUIREMENTS OF SPACE INTET (Square metres)

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	57,480.0	88,995.0	119,700.0	142,725.0	217,500.0	325,950.0
Science	61,297.5	62,625.0	73,425.0	91,575.0	107,250.0	130,350.0
Agriculture	55,837.5	61,312.5	73,635.0	94,155.0	119,535.0	161,122.5
HAW	46,732.5	53,175.0	71,775.0	97,650.0	166,275.0	305,250.0
Services	18,000.0	35,287.5	54,120.0	76,657.5	106,995.0	145,125.0
SBL	442,297.5	568,800.0	869,737.5	1,013,625.0	1,370,250.0	1,527,900.0
Humanities	3,007.5	6,525.0	12,487.5	21,937.5	33,862.5	50,512.5
TET Methodology	90,795.0	117,262.5	171,982.5	208,455.0	289,320.0	360,907.5
<b>Total requirements in TET</b>	775,447.5	993,982.5	1,446,862.5	1,746,780	2,410,987.5	3,007,117.5

# A4.2 CUMULATIVE REQUIREMENTS OF SPACE IN VET (Square metres)

Major Study Fields	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
EMC	361,695	496,000	646,250	797,500	926,750	1,006,500
Science	770	1,075	1,400	1,850	3,800	6,850
Agriculture	155,515	367,400	577,500	855,250	1,133,000	1,685,750
HAW	760	3,925	9,625	13,750	22,000	35,750
Services	178,335	730,950	798,250	917,950	977,350	1,038,950
SBL	182,080	477,150	507,100	635,800	751,100	988,250
Humanities	1,185	2,750	8,000	15,875	26,500	42,500
VET Methodology	53,405	133,055	157,765	190,410	222,950	260,285
Total requirements in VET	933,745	2,212,305	2,706,790	3,428,385	4,063,450	5,064,835

## A4.3 CUMULATIVE SPACE REQUIREMENTS IN TVET (Square metres)

Requirement category	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Space requirements in TET	775,447.5	993,982.5	1,446,862.5	1,746,780.0	2,410,987.5	3,007,117.5
Space requirements in VET	933,745.0	2,212,305.0	2,706,790.0	3,428,385.0	4,063,450.0	5,064,835.0
Total requirement in TVET	1,709,192.5	3,206,287.5	4,153,652.5	5,175,165.0	6,474,437.5	8,071,952.5

ANNEX 5
MAJOR ACTIVITIES OF THE PROGRAMME

Priority Area	Key Result Areas	Goals/Indicators	Strategies		Major Activities of the Programme							
1.0 Improving Access and	1.1 STD VII, Form IV and Form VI	1.1.1 To increase the overall	(a) Achieve the planned increase	(i)	With the support of MoEVT, VETA and NACTE, TVET institutions will introduce formal apprenticeship programmes.							
Equity in TVET	leavers provided with more parallel	enrolment of learners from 112,447 in TET	in enrolment using a combination of teaching and	(ii)	TVET institutions will provide opportunities for tailored skills enhancement of employees in industry.							
	opportunities for respective	and 121,348 in VET in	learning and learning arrangements.	(iii)	MoEVT, NACTE, VETA and TVET institutions will operationalise ICT mediated teaching and learning including ODL for improving access.							
	further education and/or effective integration into	2011/12 to 400,946 and 1,413,916 in		(iv)	TVET institutions will introduce flexible training programmes , i.e. evening/weekend courses, and/or with multiple entries and exits, etc.							
	the labour market.	2017/18, respectively.		(v)	TVET institutions will offer regular and tailored short courses for upgrading skills for elementary occupations and the informal sector.							
				(vi)	With the support of NACTE and VETA, TVET institutions will introduce RPL to include assessment, recognition and certification of skills gained through work, society or other forms of training.							
					TVET institutions will cooperate with other local and international institutions to run joint programmes.							
			(b) Invest more in interventions that	(i)	MoEVT will construct 56 DVTCs, 10 specialised TET institutions and 4 TTCs with collective capacity to enroll at least 42,000 learners.							
			have significant potentials for increasing TVET	potentials for	potentials for	potentials for	potentials for	potentials for	potentials for	potentials for	(ii)	MoEVT will upgrade 300 existing institutions to collectively enroll at least 300,000 learners.
			opportunities.	(iii)	MoEVT will assist NACTE, VETA and selected 40 TVET institutions to design and develop ICT mediated teaching and learning materials							
				(iv)	MoEVT will assist NACTE, VETA and selected 40 TVET institutions to improve ICT connectivity.							
				(v)	MoEVT in collaboration with other stakeholders will provide loans, grants and scholarships to learners in priority fields of study.							
				(vi)	MoEVT and other stakeholders will expand TVET opportunities in rural areas and/or where there are no or limited such opportunities.							

Priority Area	<b>Key Result Areas</b>	Goals/Indicators		Strategies		Major Activities of the Programme	
1.0 Improving Access and	1.1 STD VII, Form IV and Form VI	1.1.1 To increase the overall	(c)	Sustain/safeguard the realized	(i)	MoEVT in collaboration with other stakeholders will provide loans, grants and scholarships in fields of study targeting priority occupations.	
Equity in TVET	leavers provided with more parallel opportunities for	enrolment of learners from 112,447 in TET and 121,348 in		increase in TVET opportunities.	(ii)	TVET institutions will promote the welfare of learners and staff at institutions (provision of student and staff accommodation, facilities for sports and other extramural affairs, health services, etc).	
	respective VET in further education 2011/12 to			(iii)	TVET institutions will provide VCT, care and support services for learners/staff affected with HIV/AIDS and non-communicable diseases.		
	and/or effective integration into the labour	400,946 and 1,413,916 in 2017/18, respectively.			(iv)	MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.	
	market.				(v)	With the support of NACTE and VETA, TVET institutions will cooperate with other local and international institutions/organizations.	
			(d)	Introduce measures to	(i)	MoEVT, VETA and NACTE in collaboration with other stakeholders will operationalise an articulation mechanism for TVET learners.	
			i i	mainstream TVET in the national education system in line with the policy framework.	TVET in the (ii)	(ii)	MoEVT will harmonise curricula of Bias Secondary Schools and VET as well as oversight/regulation.
					(iii)	MoEVT will harmonise curricula of post primary/post secondary education and VET, as well as oversight/regulation.	
					(iv)	VETA and NACTE will assist FDCs in VET needs assessment, curricula development and training of staff.	
			(e)	Support strategic sensitization of the public	(i)	MoEVT, NACTE, VETA and TVET institutions will regularly conduct focused sensitisation of the various groups of the community towards improving perception on TVET.	
				towards improving the perception on	(ii)	MoEVT, NACTE, VETA and TVET institutions will enhance sensitisation of the public towards promoting interests in TVET.	
				TVET.	(iii)	MoEVT, NACTE, VETA and TVET institutions will enhance career guidance and counseling of learners to promote interests success rates.	
					(iv)	MoEVT, MoLE and PO-PSM will operationalise the difference of roles and benefits between TVET graduates and others.	
					(v)	MoEVT will identify, designate and support few VET and TET institutions to produce exemplary products to demonstrate excellence and the impact of TVET towards changing the perception of TVET.	

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
1.0 Improving Access and Equity in TVET	1.2 Access to TVET for learners from under-represented and disadvantaged groups significantly improved in line with the catchment.	1.2.1 To increase the overall enrolment of female learners from 46.8% in VET and 47.9% in TET in 2011/12 to at least 50% in 2017/18 for both cases.	(a) Engage in interventions that have significant potentials for increasing the opportunities for females to enroll in TVET.  (b) Enhance guidance, counseling and employment services for female learners.	<ul> <li>(i) MoEVT will evaluate regular reports from TVET institutions on their implementation of gender related policies and guide improvements.</li> <li>(ii) With the support of NACTE and VETA, TVET institutions will operationalise open and distance learning and other patterns of individual learning, for females with domestic commitments, focusing on fields of studies that are particularly attractive for females</li> <li>(iii) With the support of NACTE and VETA, TVET institutions will enhance flexibility in training programmes in order to accommodate domestic responsibilities and facilitate periods of flexible self-study</li> <li>(iv) With the support of NACTE and VETA, TVET institutions will introduce arrangements for recognition of prior learning in areas of work that are typically dominated by females, e.g. domestic activities, voluntary social work, etc.</li> <li>(v) MoEVT, NACTE and VETA in collaboration with MoCDGC will guide education and training institutions to identify and to remove gender stereotypes from programmes</li> <li>(vi) With the support of NACTE and VETA, TVET institutions will integrate entrepreneurship training into all relevant TVET programmes to enhance attraction to female learners</li> <li>(ii) NACTE, VETA, and TVET institutions will link with TAESA to obtain regular updates of trends in employment opportunities and provide feedback, as appropriate.</li> <li>(iii) NACTE, VETA and TVET institutions will enhance direct contacts with employers towards promotion of graduate employment opportunities.</li> <li>(iii) TVET institutions will establish dedicated offices to provide guidance and counseling services to learners, including on family planning.</li> <li>(iv) TVET institutions will regularly invite female role models to talk with female learners.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
1.0 Improving Access and Equity in TVET	1.2 Access to TVET for learners from under-represented and disadvantaged groups significantly improved in line with the catchment.	1.2.1 To increase the overall enrolment of female learners from 46.8% in VET and 47.9% in TET in 2011/12 to at least 50% in 2017/18 for both cases.	(c) Sustain/safeguard the realized increase in the enrolment of female learners.	<ul> <li>(i) MoEVT, NACTE and VETA will regularly monitor and evaluate trends in female enrolments, and accordingly adjust interventions.</li> <li>(ii) TVET institutions will promote the welfare of female learners, including giving priority in the provision of student accommodation.</li> <li>(iii) TVET institutions will provide VCT, care and support services for female learners affected with HIV/AIDS and non-communicable diseases.</li> <li>(iv) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.</li> <li>(v) With the support of NACTE and VETA, TVET institutions will cooperate with other local and international institutions/organizations.</li> </ul>
		1.2.2 To increase the enrolment of female learners in Science and Technology programmes in both VET and TET from about 11-19 % in 2011/12 to at least 35% by 2017/18	(a) Provide special incentives to promote increased enrolment of S&T programs in TVET, focusing on areas where female participation is particularly low.	<ul> <li>(i) MoEVT in collaboration with MoCDGC and other stakeholders will provide preferential loans, grants and scholarships to applicants for TVET to compensate for gender based inequalities and inequalities in S&amp;T programmes.</li> <li>(ii) VETA will ensure that the Manual for Life Skills is available to VET facilitators in all fields and is used in initial training as well as for inservice training of VET facilitators.</li> <li>(iii) TVET institutions will enhance guidance, counseling and employment services for female learners.</li> </ul>
		2017/10	(b) Introduce other special measures to enhance the completion rates of female learners in S&T programs, focusing on areas where female participation is particularly low.	<ul> <li>(i) TVET institutions will closely follow up performances of female learners and provide additional support in areas (course modules/subjects) of major deficiencies.</li> <li>(ii) MoEVT, TEA and TVET institutions will facilitate provision of hostel accommodation to female learners in S&amp;T programmes.</li> <li>(iii) TVET institutions will provide family planning services as well as VCT, care and support services for female learners affected with HIV/AIDS and non-communicable diseases.</li> </ul>

Priority Area	<b>Key Result Areas</b>	Goals/Indicators	Strategies	Major Activities of the Programme	
1.0 Improving Access and Equity in	1.2 Access to TVET for learners from under-	1.2.2 To increase the enrolment of female learners	(c) Enhance guidance, counseling and	(i) NACTE, VETA, and TVET institutions will link with TAESA to obtain regular updates of trends in S&T related employment opportunities and provide feedback, as appropriate.	
TVET	represented and disadvantaged groups	in Science and Technology programmes in	employment services for female learners.	(ii) NACTE, VETA and TVET institutions will enhance direct contacts with employers towards promotion of graduate employment opportunities.	
	significantly improved in line	both VET and TET from about		(iii) TVET institutions will establish dedicated offices to provide guidance and counseling services to learners, including on family planning.	
	with the catchment.	11-19 % in 2011/12 to at least 35% by		(iv) TVET institutions will assign all female learners with proper individual academic advisers.	
		2017/18.		(v) TVET institutions will regularly invite female role models to talk with female learners.	
			(d) Sustain/safeguard the realized increase in the	(i) MoEVT, NACTE and VETA will regularly monitor and evaluate trends in female enrolments in S&T programmes, and accordingly adjust interventions.	
			enrolment of female learners.		<ul><li>(ii) TVET institutions will provide VCT, care and support services for female learners affected with HIV/AIDS and non-communicable diseases.</li></ul>
				(iii) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.	
				(iv) With the support of NACTE and VETA, TVET institutions will cooperate with other local and international institutions/organizations.	
		1.2.3 To increase the opportunities for access of learners	(a) Support interventions that have significant	MoEVT in collaboration with MoHSW and other stakeholders will provide preferential loans, grants and scholarships to learners with disabilities.	
		with disabilities from about 20% in VET and 3% in TET in	potentials for increasing opportunities for learners with	(ii) MoEVT, NACTE and VETA will guide and support TVET institutions to give more consideration of the interests of people with disabilities in TVET.	
		2011/12 to at least 50% in VET	disabilities to join TVET.	(iii) TVET institutions will improve the training environment to enhance accessibility by learners with disabilities.	
		and 35% in TET by 2017/18.		(iv) TVET institutions will as much as possible integrate the non disabled learners in skills training for people with disabilities.	

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
1.0 Improving Access and Equity in TVET	1.2 Access to TVET for learners from under-represented and disadvantaged groups significantly improved in line with the catchment.	1.2.3 To increase the opportunities for access of learners with disabilities from about 20% in VET and 3% in TET in 2011/12 to at least 50% in VET and 35% in TET by 2017/18.	(b) Introduce special measures to enhance the completion rates of learners with disabilities in TVET programmes.  (c) Demonstrate impact of the realized increase access for learners with disabilities.  (d) Sustain the realized increase in capacity to enroll learners with disabilities in line with	<ol> <li>(i) TVET institutions will closely follow up performances of learners with disabilities and provide additional support in areas (course modules/subjects) of major deficiencies.</li> <li>(ii) MoEVT, TEA and TVET institutions will facilitate provision of hostel accommodation to learners with disabilities.</li> <li>(iii) MoEVT, NACTE, VETA and TVET institutions will put in place special programmes that will identify and develop talented people with disabilities.</li> <li>(i) MoEVT in collaboration with MoHSW and other stakeholders will devise mechanism to ensure TVET graduates with disabilities are availed with work tools and seed money, as appropriate, to enable them establish or improve income generating projects.</li> <li>(ii) MoEVT in collaboration with MoHSW will periodically trace the supported graduates with disabilities, evaluate performances, gauge impact of the support and provide feedback to stakeholders.</li> <li>(i) TVET institutions will promote the welfare of learners with disabilities, including giving priority in the provision of accommodation.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.</li> <li>(iii) With the support of NACTE and VETA, TVET institutions will</li> </ol>
2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025.	2.1.1 To enroll learners in TVET that will contribute towards attaining human capital balance that is proper for realization of FYDP 2011/12-2015/16 and eventually Vision 2025.	catchment.  (a) Enhance the coordination of TVET at national level.	<ul> <li>cooperate with other local and international institutions/organizations.</li> <li>(i) MoEVT in collaboration with MoLE and POPC will operationalise a clear mechanism for generating and updating labour market information and linking the same to training programmes.</li> <li>(ii) MoEVT will ensure TVET supply data in ESMIS is linked with labour market information to allow analysis of progress and impact of training activities according to approved plans across TVET levels.</li> <li>(iii) MoEVT will improve the capacity of the TVET Department to plan coordinate and harmonise VET and TET, as one TVET sub-sector with common/complimenting skills development strategies.</li> <li>(iv) MoEVT will harmonise enrolments in TET and Higher Education offered by universities with a view to assuring human capital balance.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025.	2.1.1 To enroll learners in TVET that will contribute towards attaining human capital balance that is proper for realization of FYDP and eventually Vision 2025.	(b) Align the enrolment of learners at different levels of TVET towards maintaining the recommended human capital balance.	<ul> <li>(i) MoEVT in collaboration with MoLE and POPC will generate and update information on human capital requirements in the key sectors of the economy.</li> <li>(ii) TVET institutions will initially target enrolment of more learners in programmes for technicians/associate professionals and skilled workers to compensate for the observed deficits.</li> <li>(iii) TVET institutions will periodically review enrolment targets for different training levels to maintain the recommended human capital balance of professionals, associate professionals and skilled workers.</li> </ul>
		2023.	(c) Ensure that TVET is more responsive to the dynamic needs of the labour market and society.	<ul> <li>(i) MoEVT, NACTE, VETA and TVET institutions will ensure that TVET is addressing the new and emerging technologies and processes.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will ensure that TVET is maintaining the desired human capital balance in addressing the new and emerging technologies and processes.</li> </ul>
			(d) Sustain/safeguard the implemented measures for achieving human capital balance.	<ul> <li>(i) MoEVT, NACTE, VETA and TVET institutions will closely follow up trends in TVET enrolments for assuring human capital balance.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.</li> <li>(iii) MoEVT in collaboration with employers and other stakeholders will provide grants and scholarships to learners in programmes for associate professionals and skilled workers that have significant shortfalls.</li> <li>(iv) With the support of NACTE and VETA, TVET institutions will cooperate with other local and international institutions/organizations.</li> </ul>
		2.1.2 To focus the enrolment of learners in the occupation fields supporting the core priority areas for realization of Vision 2025	(a) Enhance the coordination of TVET at national level	<ul> <li>(i) MoEVT in collaboration with MoLE and POPC will operationalise a clear mechanism for generating and updating labour market information and linking the same to training programmes.</li> <li>(ii) MoEVT will improve the capacity of the TVET Department to plan coordinate and harmonise VET and TET, as one TVET sub-sector with common/complimenting skills development strategies.</li> <li>(iii) MoEVT will harmonise enrolments in TET and Higher Education offered by universities with a view to assuring human capital balance.</li> </ul>

<b>Priority Area</b>	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025.	2.1.2 To focus the enrolment of learners in the occupation fields supporting the core priority areas for realization of FYDP and eventually the Tanzania Development Vision 2025.	(c) Improve relevance of TVET programmes in line with the labour market demands.  (c) Improve relevance of TVET programmes in line with the core priority areas.	<ul> <li>(i) MoEVT in collaboration with MoLE and POPC will operationalise a clear mechanism for generating and updating labour market information and linking the same to training programmes and implementation strategies.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will ensure introduction of training programmes covering all core priority areas for realization of FYDP and ultimately Tanzania Development Vision 2025, as well as for meeting the major regional and global skills needs.</li> <li>(iii) NACTE, VETA and TVET institutions will ensure that TVET is addressing the new and emerging technologies and processes for more impact.</li> <li>(iv) NACTE, VETA and TVET institutions will also introduce training programmes for meeting the other major regional and global skills needs.</li> <li>(v) MoEVT, VETA, NACTE and TVET institutions will provide career guidance and counseling of learners to promote interests and success rates in the study fields supporting the core priority areas.</li> <li>(vi) MoEVT, VETA, NACTE and TVET institutions will provide incentives to learners in the study fields supporting the core priority areas.</li> <li>(i) MoEVT in collaboration with MoLE and POPC will operationalise a clear mechanism for generating and updating labour market information and linking the same to training programmes and implementation strategies.</li> <li>(ii) TVET institutions will periodically and regularly review curricula for taking on board the major requirements of the labour market towards supporting the core priority areas for realization of FYDP 2011/12-2015/16.</li> <li>(iii) TVET institutions will enhance involvement of employers in TVET affairs.</li> <li>(iv) NACTE, VETA and TVET institutions will promote research, creativity and innovations in respective undertakings for supporting the realization FYDP 2011/12-2015/26 and the Tanzania Development Vision 2025.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025.	2.1.2 To focus the enrolment of learners in the occupation fields supporting the core priority areas for realization of FYDP and eventually the Tanzania Development Vision 2025.	(d) Align the enrolment of learners at different levels of TVET to cover the core priority areas.	<ul> <li>(i) MoEVT in collaboration with MoLE and POPC will regularly generate and update information on core priority areas for supporting the key sectors of the economy.</li> <li>(ii) MoEVT, NACTE and VETA will guide the proper mix in enrolments of learners, covering the critical initial requirements (preparatory and construction stages) as well as actual realisation of major interventions identified in the priority sectors.</li> <li>(iii) TVET institutions will periodically review enrolment targets for different training levels to ensure attainment of the recommended mix.</li> </ul>
		VISIOII 2023.	(e) Ensure that TVET is more responsive to the dynamic needs of the labour market and society.	<ul> <li>(i) MoEVT in collaboration with MoLE will regularly generate and update information on the specific needs of major occupations and trades.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will ensure that TVET is addressing the new and emerging technologies and processes.</li> </ul>
			(f) Sustain/safeguard the implemented measures for achieving human capital balance.	<ul> <li>(i) MoEVT, NACTE, VETA and TVET institutions will closely follow up trends in TVET programmes and enrolments for ensuring adequacy of coverage and relevance.</li> <li>(ii) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations.</li> <li>(iii) MoEVT in collaboration with employers and other stakeholders will provide grants and scholarships to learners in programmes in the core priority areas that have significant shortfalls.</li> </ul>
		2.1.3 To increase the competence of graduates to integrate in the work places within 3 months and one year after graduation for at least 75% of fresh graduates by 2017/18.	(a) Enhance the relevance of all curricula that are implemented in TVET.	<ul> <li>(i) MoEVT will operationalise a mechanism for generating and updating labour market information and linking the same to training programmes.</li> <li>(ii) MoEVT in collaboration with MoLE will regularly generate and update information on the specific needs of major occupations and trades.</li> <li>(iii) TVET institutions will periodically and regularly review curricula for taking on board the major requirements of the labour market.</li> <li>(iv) NACTE, VETA and TVET institutions in collaboration with employers will introduce more work based training programmes.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators		Strategies		Major Activities of the Programme			
2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity	2.1.3 To increase the competence of graduates to	(b)	Enhance the involvement of employers in	(i)	MoEVT will enhance the involvement of employers and other stakeholders in the formulation of TVET sub-sector policies and legislations.			
	assured and evident in the realization of	integrate in the work places within 3 months		the affairs of TVET.	(ii)	NACTE and VETA will enhance the involvement of employers in Standards setting and assessments.			
	FYDP and hence Tanzania Development	and one year after graduation for at least 75% of fresh graduates by 2017/18.			(iii)	NACTE, VETA and TVET institutions will enhance the involvement of employers in institutional planning and policy formulation.			
	Vision 2025.				(iv)	NACTE, VETA and TVET institutions will enhance the involvement of employers in curricula development and review.			
					(v)	TVET institutions will enhance the involvement of employers in curricula implementation at institutions, as appropriate.			
					(vi)	TVET institutions will enhance collaboration with industry in the provision of practical training of learners at workplaces.			
					(vii)	TVET institutions will enhance collaboration with industry in the provision of practical training of staff of TVET institutions at work places for upgrading of skills in line with technological advancements.			
			(c)	Enhance the quality of teaching and	(i)	VETA, NACTE and TVET institutions will increase the adoption rate of the CBET methodology in TVET and ensure that all providing institutions in both TET and VET grant related qualifications only.			
				learning to ensure quicker integration of TVET graduates in work places.	Kei prostical skills of TVET facilitators	MoEVT, NACTE, VETA and TVET institutions will improve the practical skills of TVET facilitators.			
					graduates in	graduates in	graduates in	graduates in	graduates in
					(iv)	VETA and VET institutions will devise and implement flexible curricula that allow learners to choose from studying towards formal employment, self employment or further technical education and training.			
					(v)	MoEVT, NACTE and VETA will assist TVET institutions to address the observed major shortfalls in institutional quality management systems.			

Priority Area	Koy Rosult Aroos	Goals/Indicators	Stratogies	Major Activities of the Programme
Priority Area  2.0 Improving the Quality of Outputs	2.1 Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025.	2.1.3 To increase the competence of graduates so that are able to carry out all the basic work tasks properly within 3 months and one year after graduation for at least 75% of fresh graduates by 2017/18.	(d) Ensure that TVET is more responsive to the dynamic needs of the market and society.  (e) Sustain/safeguard	<ul> <li>(i) TVET institutions will embed entrepreneurship training in all programmes to promote self employment and realise the special requirements of the formal and informal sectors.</li> <li>(ii) MoEVT in collaboration with MoLE and MoIT will support measures towards establishing centres for career counseling and guidance on self-employment opportunities for the informal sector.</li> <li>(iii) MoEVT will provide incentives to TVET learners with unique talents with a view to encouraging and stimulating the same.</li> <li>(iv) MoEVT in collaboration with pertinent stakeholders will designate a few VET and TET institutions and direct support to produce exemplary products at their respective levels with a view to demonstrating excellence and the potential/impact of TVET for supporting Vision 2025, for eventual possible up-scaling to other institutions.</li> <li>(i) MoEVT, NACTE, VETA and TVET institutions will periodically conduct</li> </ul>
			the realized measures for improving competencies of graduates.	tracer studies/graduate and employer surveys to obtain feedback from employers and graduates on the quality of TVET outputs.  (ii) TVET institutions will review respective training programmes taking on board inputs from tracer studies/graduate and employer surveys.  (iii) TVET institutions will enhance collaboration with industry in the provision of practical training of staff of TVET institutions at work places for upgrading of skills in line with technological advancements.  (iv) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with employers and other organizations.

3.0 Improving the Capacity to provide quality TVET	Adequate and appropriate human resources available in line with the needs for improving access, equity and quality in teaching, research and	3.1.1 To attain the ratio of learners to teaching staff in conventional full time residential programmes at 8:1 in TET and 16:1 in VET by 2015/16 and the same maintained	(a)	Operationalise effective human resources management policies and plans in TVET	(i) (ii)	MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective recruitment and deployment policies and plan for teaching staff at respective levels.  MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective policies and plans for teaching staff development
		afterwards. <i>This</i>		covering all staff.		at respective levels.  MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective policies and plans for teaching staff retention at respective levels.
	innovation as well as public	entails increasing the number of			(iv)	MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective performance appraisal mechanism for staff.
	service within the core priority areas and	teaching staff from 4,590 in TET and about	(b)	Implement effective modalities for	(i)	PO-PSM will enhance flexibility in the recruitment process of TVET teaching staff in public institutions without negatively affecting the principles of equal opportunity in employment.
	beyond.	3,010 in VET in 2011/12 to 20,048 in TET and 16,530 in VET by 2017/18.		teaching staff recruitment.	(ii)	MoEVT and MoF will devise effective mechanism for allocation of adequate funding for recruitment of TVET teaching staff in public institutions in line with requirements.
					(iii)	MoEVT and MoF will devise effective mechanism for timely availability of adequate funding for recruitment of TVET teaching staff in public institutions in line with requirements.
				(c) Diversify recruitment target groups to assure realization of additional teaching staff.	(i)	VET institutions will recruit fresh TET graduates and provide them with appropriate pedagogical skills and practical training in industry.
					(ii)	VET institutions will continue to recruit qualified VET graduates, provide them with pedagogical skills, and deploy them as appropriate.
					(iii)	TET institutions will recruit TET graduates, provide them with pedagogical skills and deploy them as appropriate.
					(iv)	TET institutions will recruit graduates with relevant academic qualifications from outside TET and provide them with pedagogical skills and appropriate practical training in industry.
					(v)	TVET institutions will target to recruit experienced qualified staff from industry and provide them with pedagogical skills.

Priority Area	Key Result Areas	Goals/Indicators	Strategies		Major Activities of the Programme
3.0 Improving the Capacity	3.1 Adequate and appropriate	3.1.1 To attain the ratio of learners to	(d) Sustain and safeguard the	(i)	MoEVT and NACTE will regularly monitor and evaluate trends in teaching staff recruitments and accordingly adjust interventions.
to provide quality TVET	human resources available in line with the needs	teaching staff in conventional full time residential programmes at	realized achievement in enhancing the recruitment of	(ii)	TVET institutions will ensure existence of conducive working environment to attract significant new recruitments and retention of those already in TVET facilitation
	for improving access, equity	8:1 in TET and 16:1 in VET by	teaching staff.	(iii)	TVET institutions will introduce and support various interventions towards promotion of the welfare of staff at institutions
	and quality in teaching, research and innovation as	2015/16 and the same maintained afterwards.		(iv)	TVET institutions in collaboration with other stakeholders will provide care and support services for staff affected with HIV/AIDS and non-communicable diseases.
	well as public service within the core priority areas and	have the requisite qualifications and experiences, and delivers to expectations by 2015/16 and	(a) Implement effective modalities for	(i)	PO-PSM will enhance flexibility in the recruitment process of TVET teaching staff in public institutions without negatively affecting the principles of equal opportunity in employment.
	beyond.		staff recruitment.	(ii)	MoEVT and MoF will devise effective mechanism for allocation of adequate funding for recruitment of TVET teaching staff in public institutions in line with requirements.
			expectations by		(iii)
		and the same maintained afterwards.	(b) Increase the opportunities for staff training	(i)	MoEVT will construct 4 new TTCs (2 for VET and 2 for TET), with collective capacity to enroll 2,000 full time equivalent trainees to complement the outputs from existing TTCs.
			in VET and TET facilitation in line with the	(ii)	MoEVT will upgrade the existing TTCs each to enroll at least 1,000 trainees in TVET facilitation.
			requirements.		MoEVT will recruit adequate number of tutors for the new and existing TTCs.
				(iv)	MoEVT, NACTE, VETA will assist TTCs to design and develop ICT mediated teachers training materials.
				(v)	MoEVT will assist TTCs to improve ICT connectivity (within the selected 40 TVET institutions).
				(vi)	MoEVT in collaboration with other stakeholders will provide grants and scholarships to trainee-facilitators in priority fields of study.

Priority Area	<b>Key Result Areas</b>	Goals/Indicators		Strategies		Major Activities of the Programme	
3.0 Improving the Capacity to provide quality	3.1 Adequate and appropriate human resources	3.1.2 To ensure that at least 75% of all teaching staff in TET and VET	(b)	Increase the opportunities for staff training in VET	(vii)	MoEVT will support other existing TVET institutions to introduce training programmes for TVET facilitation and assist in the recruitment of adequate number of tutors for the institutions.	
TVET	available in line with the needs for improving access, equity	have the requisite qualifications and experiences, and delivers to		and TET facilitation in line with the requirements.	(VIII)	MoEVT, NACTE, VETA and TVET institutions in collaboration with other stakeholders will devise and introduce remuneration and performance based incentives scheme for attracting significant new recruitments in TVET facilitation.	
	and quality in teaching, research and	expectations by 2015/16 and 100% by 2017/18			(ix)	MoEVT and NACTE will regulate training of TVET facilitators and devise mechanism for their registration to ensure recognition.	
	innovation as well as public service within	and the same maintained afterwards.	(c)	c) Systematically develop capacity of staff in line with respective work requirements.	(i)	TVET institutions shall implement staff development plans for continuously developing the qualifications of staff in line with the requirements for meeting planned undertakings.	
	the core priority areas and beyond.				(ii)	TVET institutions will enhance the attachment of existing teaching staff in industry to acquire or upgrade relevant practical skills.	
					(iii)	TVET institutions will target to recruit experienced qualified staff from industry and provide them with pedagogical skills.	
					(iv)	TVET institutions will enhance collaboration with industry in the provision of in-house training of employees at work places.	
					(v)	TVET institutions will promote expertise/experience of staff in ICT mediated classroom learning and open and distant learning.	
					(vi)	TVET institutions will recruit and train staff to facilitate learners with special learning needs.	
			(d)	Operationalise effective	(i)	MoEVT, NACTE, VETA and TVET institutions will devise and introduce attractive remuneration and performance based incentives.	
					retention schemes for teaching staff.	(ii)	TVET institutions will ensure existence of conducive working environment to ensure retention of staff in TVET facilitation.
					(iii)	TVET institutions will introduce and support various interventions towards promotion of the welfare of staff at institutions.	
					(iv)	TVET institutions in collaboration with other stakeholders will provide care and support services for staff affected with HIV/AIDS and non-communicable diseases.	

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.1 Adequate and appropriate human resources available in line with the needs for improving access, equity and quality.	3.1.2 To ensure that at least 75% of all teaching staff in TVET have the requisite qualifications and experiences by 2015/16 and 100% by 2017/18.	(e) Implement effective mechanism for appraisal of performance of teaching staff to ensure quality, efficiency and effectiveness.	<ul> <li>(i) MoEVT, NACTE, VETA and TVET institutions will devise a structured staff performance appraisal and rewarding system.</li> <li>(ii) TVET institutions will create adequate awareness of staff on the new structured staff performance appraisal and rewarding system before implementation.</li> <li>(iii) TVET institutions will implement the appraisal mechanism at all levels, and provide feedback as appropriate.</li> <li>(iv) MoEVT will allocate adequate funds to TVET institutions to implement the structured performance appraisal system and rewarding mechanism.</li> </ul>
		3.1.3 To increase the percentage of female teaching staff from 26% in TET and 29% in VET in 2011/12 to at least 40% in both cases by 2017/18.	(a) Provide special incentives to promote increased recruitment of female teaching staff focusing on areas where female teaching staff are few  (b) Implement measures for compensation of gender based inequities and inequalities in TVET facilitation.	<ol> <li>TVET institutions will give preference to female staff in staff development plans with a view to compensating for gender based inequities and inequalities.</li> <li>MoEVT in collaboration with MoCDGC and other stakeholders will provide preferential grants and scholarships to all female staff pursuing further training in S&amp;T programmes.</li> <li>TVET institutions will promote the welfare of female staff, including giving priority in the provision of staff accommodation for those in areas where female teaching staff are few.</li> <li>MoEVT will request and evaluate regular reports from TVET institutions on their implementation of gender related policies and guide improvements.</li> <li>MoEVT, NACTE and VETA in collaboration with MoCDGC will guide education and training institutions to remove gender stereotypes and improve working environment.</li> <li>MoEVT, NACTE, VETA and TVET institutions will enhance sensitisation of the females learners towards promoting interests in TVET facilitation.</li> <li>MoEVT, NACTE, VETA and TVET institutions will regularly conduct focused sensitisation of the various groups of the community towards improving perception on TVET.</li> </ol>

Priority Area	<b>Key Result Areas</b>	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.1 Adequate and appropriate human resources available in line with the needs for improving access, equity and quality.	3.1.3 To increase the percentage of female teaching staff from 26% in TET and 29% in VET in 2011/12 to at least 40% in both cases by 2017/18.	(c) Introduce special measures to enhance the retention of female teaching staff, focusing on areas where female staff members are particularly few.	<ul> <li>(i) TVET institutions will provide family planning services as well as VCT, care and support services for female staff affected with HIV/AIDS and non-communicable diseases.</li> <li>(ii) TVET institutions will devise mechanism for gauging the work satisfaction of female staff and provide support in areas of major deficiencies.</li> <li>(iii) MoEVT, NACTE, VETA and TVET institutions will promote/enhance networking and collaboration with other organizations for interventions towards improving retention of female.</li> </ul>
			(d) Enhance guidance and counseling services for female staff	<ul> <li>(i) TVET institutions will assign all new female staff with individual senior staff to serve as adviser.</li> <li>(ii) TVET institutions will establish dedicated offices to provide guidance and counseling services to female staff, including on family planning.</li> <li>(iii) TVET institutions will regularly invite female role models to talk with and encourage female staff members.</li> <li>(i) MoEVT will regularly update quota and benchmarks for female to</li> </ul>
			(e) Sustain/safeguard the realized increase in the recruitment of female teaching staff.	<ul> <li>(i) MoEVT will regularly update quota and benchmarks for female to male ratios in fields of education and training where gender equity and equality has not yet been attained.</li> <li>(ii) MoEVT will request regular reports from TVET institutions on their implementation of gender related policies.</li> <li>(iii) MoEVT in collaboration with MoCDGC strengthen the role of the Gender task in Desk in coordination of gender issues within the TVET sub-sector and across the portfolios of other the relevant MDAs.</li> <li>(iv) TVET institutions will ensure existence of conducive working environment to attract significant new recruitments of female teaching staff and retention of those already in TVET facilitation.</li> <li>(v) TVET institutions in collaboration with other stakeholders will provide care and support services for staff affected with HIV/AIDS and non-communicable diseases.</li> </ul>

Priority Area	<b>Key Result Areas</b>	Goals/Indicators		Strategies		Major Activities of the Programme	
3.0 Improving the Capacity to provide quality TVET available within the core priority areas and beyond.  3.1 Adequate and appropriate norm of the ratio of technical and administration staff to teaching and maintain.	(a)	Operationalise effective human resources management policies and plans in TVET covering all staff.	(i) (ii)	MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective recruitment, deployment and retention policies and plan for technical and administrative staff.  MoEVT, NACTE, VETA and TVET institutions will formulate and implement effective policies and plans for development of technical and administrative staff, as appropriate  MoEVT, NACTE, VETA and TVET institutions will formulate and			
	34,314.		(b)	Introduce and	(iv)	implement effective performance appraisal mechanism for staff.  PO-PSM will enhance flexibility in the recruitment process of staff in	
				implement effective modalities for	(v)	TVET without negatively affecting the principles of equal opportunity.  MoEVT and MoF will devise effective mechanism for allocation of adequate funding for recruitment of TVET staff as per requirements.	
				recruitment of supporting staff.	(vi)	MoEVT and MoF will devise effective mechanism for timely availability of adequate funding for recruitment of staff in public institutions in line with requirements.	
				(c) Systematically develop capacity of supporting staff in line with respective work requirement.	(i)	TVET institutions will implement staff development plans for continuously developing the qualifications of staff in line with the requirements for meeting planned undertakings.	
					respective work	(ii)	TVET institutions will promote expertise/experience of technical staff in ICT mediated classroom learning and open and distant learning.
					(iii)	TVET institutions will recruit and train supporting staff to facilitate learners with special learning needs.	
				Operationalise effective	(i)	MoEVT, NACTE, VETA and TVET institutions will devise and introduce attractive remuneration and performance based incentives.	
			retention schemes for supporting staff.	(ii)	TVET institutions will ensure existence of conducive working environment to ensure retention of supporting staff.		
				(iii)	TVET institutions will introduce and support various interventions towards promotion of the welfare of staff at institutions.		
					(iv)	TVET institutions in collaboration with other stakeholders will provide care and support services for staff affected with HIV/AIDS and non-communicable diseases.	

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.1 Adequate and appropriate human resources available within the core priority areas and beyond.	3.1.4 To attain the NACTE/VETA norm of the ratio of technical and administration staff to teaching staff by 2017/18 and maintain.	(e) Implement effective mechanism for appraisal of performance of supporting staff to ensure quality, efficiency and effectiveness.	<ol> <li>MoEVT, NACTE, VETA and TVET institutions will devise a structured staff performance appraisal and rewarding system.</li> <li>TVET institutions will create adequate awareness of staff on the new structured staff performance appraisal and rewarding system before implementation.</li> <li>TVET institutions will implement the appraisal mechanism at all levels, and provide feedback as appropriate.</li> <li>MoEVT will allocate adequate funds to TVET institutions to implement the structured performance appraisal system and rewarding mechanism.</li> </ol>
	3.2 Adequate and appropriate physical resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond.	3.2.1 To ensure adequacy and appropriateness of buildings and related physical infrastructure for meeting the enrolment targets and training strategies by 2017/18 and maintain in line with the norms of NACTE/VETA.	(a) Achieve the planned increase in enrolment using a combination of teaching and learning arrangements.	<ul> <li>(i) TVET institutions will improve capacities of buildings and related infrastructure to be able to offer apprenticeship programmes with industry, without affecting regular courses.</li> <li>(ii) TVET institutions will improve capacities of buildings and related infrastructure to provide opportunities for tailored skills enhancement of employees.</li> <li>(iii) TVET institutions will improve capacities of buildings and related infrastructure, as appropriate to be able to offer ICT-mediated teaching and learning/ODL.</li> <li>(iv) MoEVT will assist selected 40 TVET institutions to improve ICT connectivity towards enhancing ICT-mediated teaching and learning/ODL.</li> <li>(v) TVET institutions will improve capacities of buildings and related infrastructure to increase flexibility of training programmes, i.e. be able to allow multiple entries/exits, evening/weekend courses, etc.</li> <li>(vi) TVET institutions will improve capacities of buildings and related infrastructure to offer short courses for upgrading of skills and supporting elementary occupations.</li> <li>(vii) With the support of NACTE and VETA, TVET institutions will improve capacities of buildings and related infrastructure to enhance assessment, recognition and certification of skills gained through work, society or other forms of training (RPL).</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.2 Adequate and appropriate physical resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond.	3.2.1 To ensure adequacy and appropriateness of buildings and related physical infrastructure for meeting the enrolment targets and training strategies by 2017/18 and maintain in line with the norms of NACTE/VETA.	(b) Operationalise strategic mechanisms for improving the adequacy of buildings and related infrastructure towards assuring quality of TVET provision and other major undertakings.	<ul> <li>(i) MoEVT and VETA in collaboration with LGAs will construct 56 DVTCs by 2017/18, with collective capacity of at least 28,000 learners.</li> <li>(ii) MoEVT in collaboration with other relevant MDAs will construct 10 new specialized TET institutions, with collective capacity to enroll at least 10,000 learners.</li> <li>(iii) MoEVT will upgrade 300 existing TVET institutions to collectively enroll at least 300,000 learners.</li> <li>(iv) MoEVT will construct four new dedicated TTCs for TVET facilitation with collective capacity to enroll at least 4,000 learners.</li> <li>(v) MoEVT will upgrade the physical infrastructure of existing dedicated TTCs for TVET facilitation to allow expansion of respective intakes by at least 1,000 learners each.</li> <li>(vi) MoEVT will support other existing TVET institutions to introduce training programmes for TVET facilitation and assist in the upgrade of physical infrastructure to achieve the same.</li> <li>(vii) MoEVT in collaboration with other stakeholders will ensure that all physical infrastructures facilitate easy access to learners with special learning needs.</li> <li>(viii) MoEVT and other stakeholders will direct all new investments in physical infrastructure to locations with no or limited opportunities.</li> <li>(ix) MoEVT will introduce strategic incentive mechanisms for promotion of PPP arrangements in the construction of buildings and related physical infrastructure for enhanced access and equity in TVET provision.</li> <li>(x) TVET institutions will take advantage of PPP arrangements in the expansion of building infrastructure towards meeting the academic needs of staff and learners, in line with the institutional enrolment targets.</li> <li>(xi) TVET institutions will take advantage of PPP arrangements in the expansion of building infrastructure towards meeting the welfare needs of staff and learners.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme	
3.0 Improving the Capacity to provide quality TVET	3.2 Adequate and appropriate physical resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond.	3.2.1 To ensure adequacy of buildings and related physical infrastructure for meeting the enrolment targets and adopted training strategies by 2017/18 and maintain in line with the norms of NACTE/VETA.	(c) Improve maintenance and rehabilitation of buildings and infrastructure in institutions, to ensure their appropriateness for quality TVET.  (d) Sustain/safeguard the realized achievement in improving TVET physical infrastructure.	<ol> <li>MoEVT, MDAs, LGAs and other owners of TVET institutions w to respective institutions adequate funds to maintain and rehability respective buildings and infrastructure according to norm, with a ensuring occupational safety and appropriateness for quality TVE undertakings.</li> <li>TVET institutions will regularly maintain respective buildings and infrastructure according to schedule and other norms.</li> <li>TVET institutions will rehabilitate buildings and infrastructure to their appropriateness for quality TVET undertakings.</li> <li>MDAs, LGAs, NACTE, VETA and TVET institutions will subscitude culture of continuous maintenance and rehabilitation of building and related infrastructure in institutions.</li> <li>MDAs, LGAs, NACTE, VETA and TVET institutions, as approping will enhance involvement and partnership with the Private sector TVET affairs.</li> <li>MDAs, LGAs, NACTE, VETA and TVET institutions will promonetworking and collaboration with other organizations.</li> </ol>	ate view to T  d ensure ribe to ngs riate, in
		3.2.1 To ensure adequacy and appropriateness of equipment and facilities for meeting the enrolment targets and programmes by 2017/18.	(a) Operationalise strategic mechanisms for improving the adequacy of equipment and facilities towards assuring quality of TVET.	<ul> <li>(i) MoEVT, NACTE and VETA in collaboration with MoCDGC will the 25 FDCs selected to serve as DVTCs to identify the required equipment and facilities and support their operationalisation.</li> <li>(ii) MoEVT in collaboration with other stakeholders will procure appropriate equipment and facilities for the new 70 TVET institut</li> <li>(iii) MoEVT in collaboration with other stakeholders will procure the required equipment in the upgraded existing 300 TVET institution</li> <li>(iv) MoEVT in collaboration with other stakeholders will procure equipment and facilities in TVET institutions to cater for learners with special learning needs.</li> <li>(v) MoEVT and other stakeholders will replace equipment and other facilities which are obsolete or outdated in 50 institutions.</li> <li>(vi) MoEVT and other stakeholders will acquire adequate ICT equipment operationalise ICT mediated learning/ODL in 40 institutions.</li> </ul>	tions. ns. ipment

<b>Priority Area</b>	Key Result Areas	Goals/Indicators		Strategies		Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	Improving the Capacity to provide quality  3.2 Adequate and appropriate adequacy and appropriateness of equipment and	(a)	Operationalise strategic mechanisms for improving the adequacy of equipment and facilities towards assuring quality of TVET.	(viii) (ix) (x)	MoEVT will procure additional equipment and facilities for the existing dedicated TTCs for TVET facilitation to expand intakes.  MoEVT will support other existing TVET institutions which have introduced training programmes for TVET facilitation to procure critical equipment and facilities for training of TVET facilitators.  MoEVT and other stakeholders will replace equipment and other facilities which are obsolete or outdated in 50 institutions.  MoEVT will devise and operationalise an incentive mechanism for promotion of PPP arrangements for attracting equipment support towards meeting the planned academic needs of staff and learners.  TVET institutions will take advantage of PPP arrangements in the expansion of teaching and learning facilities towards meeting the academic needs of staff and learners in line with respective enrolment targets.	
	beyond.			Improve maintenance and repair of equipment and facilities in institutions, to ensure their appropriateness for quality TVET.  Promote more effective use of equipment and other facilities.	(i) (ii) (iii)	MoEVT, MDAs, LGAs and other owners of TVET institutions will avail to respective institutions adequate funds to maintain and repair respective equipment and other facilities according to norm, with a view to ensuring occupational safety and appropriateness for quality TVET.  TVET institutions will regularly maintain respective equipment and facilities according to schedule and other norms.  TVET institutions will repair equipment and facilities to ensure their appropriateness for quality TVET undertakings.  MoEVT, NACTE and VETA will create and regularly update an inventory of expensive equipment and major facilities in institutions and communicate the same to stakeholders.  MoEVT will devise a mechanism and incentives for sharing expensive equipment and major facilities amongst TVET institutions.  TVET institutions will take advantage of the resources sharing arrangements and avoid unnecessary duplications.  MoEVT, NACTE and VETA will promote use of simulation technologies to reduce dependency of physical equipment/facilities.

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.2 Adequate and appropriate physical resources available in line with the needs for improving access, equity and quality within the core priority areas and beyond.	3.2.2 To ensure adequacy and appropriateness of equipment and facilities for meeting the enrolment targets and programmes by 2017/18.	(d) Sustain/safeguard the realized achievement in improving TVET physical infrastructure.	<ul> <li>(i) MDAs, LGAs, NACTE, VETA and TVET institutions will subscribe to the culture of continuous maintenance and repair of equipment and facilities in institutions.</li> <li>(ii) MDAs, LGAs, NACTE, VETA and TVET institutions, as appropriate, will enhance involvement and partnership with the Private sector in TVET affairs.</li> <li>(iii) MoEVT will introduce strategic incentive mechanisms for promotion of PPP arrangements in the construction of buildings and related physical infrastructure for enhanced access and equity in TVET provision.</li> <li>(iv) MDAs, LGAs, NACTE, VETA and TVET institutions will promote networking and collaboration with other local and international organizations.</li> </ul>
	3.3 Adequate financial resources timely available to support the planned improvements in access, equity and quality in TVET within the core priority areas and beyond.	3.3.1 To devise and implement a strategic and sustainable TVET funding mechanism for meeting the implication of expanded enrolment and other major undertakings in line with the norms of NACTE/VETA by 2014/15.	(a) Introduce a systematic assessment of how TVET funding ensures links to national development priorities and provide feedback.  (b) Implement strategies for increased financial contribution from all possible sources.	<ul> <li>(i) MoEVT, NACTE, VETA in collaboration with other stakeholders will formulate modalities for systematic assessment of how TVET funding ensures links to national development priorities.</li> <li>(ii) MoEVT will formulate and operationalise a mechanism to ensure the beneficiaries of SDL are providing adequate feedback to employers on the use of SDL and corresponding impact.</li> <li>(iii) MoEVT and VETA will clarify to POPC on the potential challenges in implementing the sectoral approach in SDL disbursements.</li> <li>(i) MoEVT will devise and operationalise an incentive mechanism for increased participation of the Private Sector in the financing of TVET.</li> <li>(ii) TVET institutions will charge economic tuition fees and hence offset increased operational costs.</li> <li>(iii) TVET institutions will enhance their strategic ability to ensure that they access/continue to access adequate competitive funding from SDL for meeting operations.</li> <li>(iv) Without affecting teaching (and research), TVET institutions will enhance the provision of consultancy and expert services to the public for complimenting the disbursements by owners of the institutions.</li> <li>(v) TVET institutions will devise and implement other innovative ways of generating internal revenue.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.3 Adequate financial resources timely available to support the planned improvements in access, equity and quality in TVET within the core priority areas and beyond.	3.3.1 To devise and implement a strategic and sustainable TVET funding mechanism for meeting the implication of expanded enrolment and other major undertakings in line with the norms of NACTE/VETA	(b) Implement strategies for increased financial contribution from all possible sources.	<ul> <li>(vi) TVET institutions will introduce training programmes in the priority areas for realization of MKUKUTA II and FYDP to be able to access more funding from Government and Development Partners.</li> <li>(vii) TVET institutions will enhance research, and especially contracted applied research and innovations.</li> <li>(viii) TVET institutions with possible support by NACTE and VETA will devise and operationalise formal frameworks for guiding IPR to facilitate commercialization of research results and innovations.</li> <li>(ix) TVET institutions will audit their usage of resources and identify uses that can be minimized without compromising quality.</li> <li>(x) TVET institutions will implement cost reduction and unnecessary cost avoidance measures.</li> </ul>
		by 2014/15.	(c) Advocate and operationalise more effective planning and prioritization of undertakings.	<ul> <li>(i) MoEVT, NACTE and VETA will build capacities of TVET institutions in strategic planning and prioritisation of undertakings.</li> <li>(ii) MoEVT, NACTE and VETA will build capacities of TVET institutions in budgeting according to plans.</li> <li>(iii) MoEVT, NACTE and VETA will build capacities of TVET institutions in operationalisation of internal control mechanisms.</li> <li>(iv) MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.</li> </ul>
		3.3.2 To increase the contribution of local nongovernmental sources of funding TVET from about 11% in 2011/12 to at least 33% of requirements by 2015/16.	(a) Identify and implement strategies for attracting the private sector to invest more in TVET.	<ol> <li>MoEVT, NACTE and VETA will ensure that TVET is more responsive to the dynamic needs of the labour market.</li> <li>MoEVT in collaboration with MoLE and employers will regularly generate and update information on the specific needs of major occupations and trades.</li> <li>TVET institutions will periodically and regularly review curricula for taking on board the major requirements of the labour market.</li> <li>MoEVT, NACTE, VETA and TVET institutions will ensure that TVET is addressing the new and emerging technologies and processes.</li> </ol>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.3 Adequate financial resources timely available to support the planned improvements in access, equity and quality in	3.3.1 To increase the contribution of local non-governmental sources of funding TVET from about 11% in 2011/12 to at least 33% of	(a) Identify and implement strategies for attracting the private sector to invest more in TVET.	<ul> <li>(v) NACTE, VETA and TVET institutions in collaboration with employers will introduce more work-based training programmes, such as apprenticeship programmes, and tailored courses for enhancement of the required specific skills of employees in industry.</li> <li>(vi) MoEVT will devise and operationalise an incentive mechanism for increased participation of the Private Sector in the direct financing of TVET and/or PPP arrangements.</li> </ul>
	TVET within the core priority areas and beyond. requirements by 2015/16.	(b) Identify and implement strategies for attracting the	(i) MoEVT, NACTE, VETA and TVET institutions will regularly conduct focused sensitisation of the various groups of the community towards improving perception on TVET.	
			local community to contribute towards TVET.	(ii) TVET institutions will cooperate with other local and international institutions engaged in community based undertakings.
				(iii) TVET institutions will introduce special programmes/tailored short courses targeting to support the various major community based interventions in localities.
				(iv) TVET institutions will offer regular and tailored short courses for upgrading skills for elementary occupations and the informal sector.
				(v) With the support of NACTE and VETA, TVET institutions will enhance RPL to include assessment, recognition and certification of skills gained through work, society or other forms of training.
				(vi) With the support of NACTE and VETA, TVET institutions will enhance flexibility in training programmes in order to accommodate domestic responsibilities and facilitate periods of flexible self-study.
				(vii) VETA and NACTE will assist FDCs in VET needs assessment, curricula development and training of staff to enhance their contribution.

<b>Priority Area</b>	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.3 Adequate financial resources timely available to support the planned improvements in access, equity and quality in TVET within the core priority areas and beyond.	3.3.1 To increase the contribution of local non-governmental sources of funding TVET from about 11% in 2011/12 to at least 33% of requirements by 2015/16.	(c) Devise and implement innovative ways of generating internal revenue in institutions without affecting execution of respective core functions.  (d) Identify and implement cost reduction and unnecessary cost avoidance measures.	<ul> <li>(i) TVET institutions will charge economic tuition fees and hence offset increased operational costs.</li> <li>(ii) Without affecting teaching (and research), TVET institutions will enhance the provision of consultancy and expert services to the public for complimenting the disbursements by owners of the institutions.</li> <li>(iii) TVET institutions will enhance research, and especially contracted applied research and innovations.</li> <li>(iv) TVET institutions with possible support by NACTE and VETA will devise and operationalise formal frameworks for guiding IPR to facilitate commercialization of research results and innovations.</li> <li>(v) TVET institutions will devise and implement other innovative ways of generating internal revenue.</li> <li>(i) TVET institutions will audit their usage of <i>energy</i> resources and identify uses that can be minimized without compromising quality and intervene.</li> <li>(ii) TVET institutions will audit their usage of <i>paper</i> and identify uses that can be minimized without compromising quality and intervene.</li> <li>(iii) TVET institutions will audit their usage of <i>paper</i> and identify uses that can be minimized without compromising quality and intervene.</li> <li>(iv) TVET institutions will audit their usage of <i>other materials</i> and identify uses that can be minimized without compromising quality and intervene.</li> </ul>
3.0 Improving the Capacity to provide quality TVET	3.4 Effective and efficient governance and management of TVET exist at all levels of the sub-sector and realisation of the desired impact assured.	3.4.1 To increase the number of TVET institutions attaining full registration, within three years after getting provisional registration, from 25% in 2011/12 to at least 75% in 2017/18.	(a) Enhance the capacities of key players to govern and manage the academic function more effectively.	<ul> <li>(i) MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness in academic matters.</li> <li>(ii) MoEVT will guide institutional arrangements for the academic function towards a more effective and efficient TVET sub-sector.</li> <li>(iii) MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the academic function across the TVET sub-sector.</li> <li>(iv) Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET for more effectiveness.</li> </ul>

Priority Area	<b>Key Result Areas</b>	Goals/Indicators		Strategies		Major Activities of the Programme					
Priority Area  3.0 Improving the Capacity to provide quality TVET	Key Result Areas  3.4 Effective and efficient governance and management of TVET exist at all levels of the sub-sector and realisation of the desired impact assured.	Goals/Indicators  3.4.1 To increase the number of TVET institutions attaining full registration, within three years after getting provisional registration, from 25% in 2011/12 to at least 75% in 2017/18.	(a)	Enhance the capacities to govern and manage the academic function more effectively.  Enhance the capacities of key players to govern and manage the administration function more effectively.	(vi) (i) (ii)	Major Activities of the Programme  MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.  MoEVT will enhance the leadership and management capacities of NACTE and VETA for more effective and efficient implementation of respective roles.  MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness.  MoEVT will guide institutional arrangements for the administration function towards a more effective and efficient TVET sub-sector.  MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the administration function of the TVET sub-sector.					
				criccuvery.						established for coordination, monitoring more effectiveness.  (v) MoEVT will enhance the oversight capacitation.	Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET for more effectiveness.  MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good
					(vi)	MoEVT will enhance the leadership and management capacities of NACTE and VETA for more effectiveness and efficiency.					
			(c)	Enhance the capacities of institutions in	(i)	NACTE, VETA and other owners of TVET institutions will implement effective human resources management policies and plans in TVET covering all staff.					
				terms of human, physical and financial resources.	(ii)	NACTE, VETA and other owners of TVET institutions will implement strategic mechanisms for improving the adequacy of buildings and infrastructure towards assuring quality of TVET provision.					
				resources.	(iii)	NACTE, VETA and other owners of TVET institutions will implement strategic mechanisms for improving the adequacy of equipment and facilities towards assuring quality of TVET.					
					(iv)	NACTE, VETA and other owners of TVET institutions will implement the identified strategies for increased financial contribution from all possible sources.					

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.4 Effective and efficient governance and management of TVET exist at all levels of the sub-sector and realisation of the desired impact assured.	3.4.1 To increase the number of TVET institutions attaining full registration, within three years after getting provisional registration, from 25% in 2011/12 to at least 75% in 2017/18.	(d) Strengthen the quality assurance roles of NACTE and VETA for their more efficiency and effectiveness.	<ul> <li>(i) MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>regulatory</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.</li> <li>(ii) MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>coordination</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.</li> <li>(iii) MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>promotion</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.</li> <li>(iv) MoEVT will establish the major gaps/constraints within VETA in performing its role <i>to manage the VET Fund</i> and provide the required support for their more efficiency and effectiveness.</li> </ul>
		3.4.2 To increase the number of TVET institutions/ programmes attaining full accreditation, within three years after getting full registration, from about 10% in 2011/12 to at least 75% in 2017/18.	(a) Enhance the capacities of key players to govern and manage the academic function more effectively.	<ul> <li>(i) MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness in academic matters.</li> <li>(ii) MoEVT will guide institutional arrangements for the academic function towards a more effective and efficient TVET sub-sector.</li> <li>(iii) MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the academic function across the TVET sub-sector.</li> <li>(iv) Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET for more effectiveness.</li> <li>(v) MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.</li> <li>(vi) MoEVT will enhance the leadership and management capacities of NACTE and VETA for more effective and efficient implementation of respective roles.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators		Strategies		Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	Improving the Capacity to provide quality TVET  3.4 Effective and efficient governance and management of TVET  TVET exist at all levels of the sub-sector and realisation of the desired impact assured.  (c) Enh cap institutions/  TVET  3.4.1 To increase the number of TVET institutions/ programmes attaining full accreditation, within three years after getting full registration, from about 10% in 2011/12 to at least 75% in 2017/18.	Enhance the capacities of key players to govern and manage the administration function more effectively.	(iii) (iv) (v)	MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness.  MoEVT will guide institutional arrangements for the administration function towards a more effective and efficient TVET sub-sector.  MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the administration function of the TVET sub-sector.  Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET.  MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.  MoEVT will enhance the leadership and management capacities of		
		capacities of institutions in terms of human, physical and financial resources. (iii)	(i) (ii) (iii)	NACTE and VETA for more effectiveness and efficiency.  NACTE, VETA and other owners of TVET institutions will implement effective human resources management policies and plans in TVET.  NACTE, VETA and other owners of TVET institutions will implement strategic mechanisms for improving the adequacy of buildings and infrastructure towards assuring quality of TVET provision.  NACTE, VETA and other owners of TVET institutions will implement strategic mechanisms for improving the adequacy of equipment and facilities towards assuring quality of TVET.  NACTE, VETA and other owners of TVET institutions will implement the identified strategies for increased financial contribution from all possible sources.		
			(d)	Strengthen the quality assurance roles of NACTE and VETA for their more efficiency and effectiveness.	(i)	MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>regulatory</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.  MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>coordination</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.

<b>Priority Area</b>	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.4 Effective and efficient governance and management of TVET exist at all levels of the sub-sector.	3.4.1 To increase the number of TVET institutions/ programmes attaining full accreditation, within three years.	(d) Strengthen the quality assurance roles of NACTE and VETA for their more efficiency and effectiveness.	<ul> <li>(iii) MoEVT will establish the major gaps/constraints within NACTE and VETA in performing respective <i>promotion</i> roles and provide the required support to the quality assurance agencies to redress the situation, for their more efficiency and effectiveness.</li> <li>(iv) MoEVT will establish the major gaps/constraints within VETA in performing its role <i>to manage the VET Fund</i> and provide the required support for their more efficiency and effectiveness.</li> </ul>
		3.4.2 To ensure that at least 50% of TVET providing and regulating institutions are meeting respective minimum performance targets by 2014/15 and 75% institutions by 2017/18.	(a) Promote effective and efficient institutional arrangements for the TVET sub-sector.  (b) Enhance the capacities of key players to govern and manage the academic function more effectively.	<ul> <li>(i) MoEVT in collaboration with NACTE and VETA will devise and operationalise institutional performance appraisal and rewarding system.</li> <li>(ii) MoEVT, will ensure that all parties to the TVETDP implementation organization structure perform the specified respective roles.</li> <li>(iii) MoEVT, NACTE and VETA will annually benchmark TVET institutions, and publish results.</li> <li>(i) MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness in academic matters.</li> <li>(ii) MoEVT will guide institutional arrangements for the academic function towards a more effective and efficient TVET sub-sector.</li> <li>(iii) MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the academic function across the TVET sub-sector.</li> <li>(iv) Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET for more effectiveness.</li> <li>(v) MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.</li> <li>(vi) MoEVT will enhance the leadership and management capacities of NACTE and VETA for more effective and efficient implementation of respective roles.</li> </ul>

Priority Area	Key Result Areas	Goals/Indicators	Strategies	Major Activities of the Programme
3.0 Improving the Capacity to provide quality TVET	3.4 Effective and efficient governance and management of TVET exist at all levels of the sub-sector.	3.4.1 To ensure that at least 50% of TVET providing and regulating institutions are meeting respective minimum performance targets by 2014/15 and 75% institutions by 2017/18.	(c) Enhance the capacities of key players to govern and manage the administration function more effectively.	<ul> <li>(i) MoEVT, NACTE and VETA will support TVET institutions to achieve good governance and institutional effectiveness.</li> <li>(ii) MoEVT will guide institutional arrangements for the administration function towards a more effective and efficient TVET sub-sector.</li> <li>(iii) MoEVT will build capacity of the Directorate of TVET to more effectively coordinate, harmonise, monitor and evaluate the administration function of the TVET sub-sector.</li> <li>(iv) Other relevant MDAs will build capacities of respective units in MDAs established for coordination, monitoring and evaluation of TVET.</li> <li>(v) MoEVT will enhance the oversight capacities of the Councils and Boards of NACTE, VETA and TVET institutions for corporate good governance of the institutions.</li> <li>(vi) MoEVT will enhance the leadership and management capacities of NACTE and VETA for more effectiveness and efficiency.</li> </ul>
4.0 Improving Monitoring and Evaluation of the TVET sub- sector	4.1 TVET subsector is monitored and evaluated regularly and feedback provided for timely and effective improvements.	4.1.1 To ensure that progress in TVET implementation is effectively monitored and evaluated at all levels from June 2014 onwards.	(a) Enhance the ability to generate and use TVET information more effectively.	<ul> <li>(i) MoEVT will enhance capacity of TVET institutions, QA agencies and TVET Directorate and its other staff in collection and analysis of LMI.</li> <li>(ii) MoEVT in collaboration with MoLE will ensure that the existing various LMI systems are effectively integrated and coordinated to eliminate duplication of efforts, and promote sharing of information.</li> <li>(iii) MoEVT will improve TVET-MIS and its linkage with ESMIS, with a view to capturing and harmonious reporting of VET and TET data in ESMIS.</li> <li>(iv) MoEVT EMIS Unit will link TVET supply data with labour market information to allow proper analysis of the progress and impact of training activities according to approved plans across the respective TVET levels.</li> <li>(v) MoEVT EMIS Unit will include projection data in TVET-MIS to allow realistic forecasting.</li> <li>(vi) MoEVT will support the piloting and improvements of the developed draft KPIs for eventual full operationalisation to support effective monitoring and evaluation of TVET at national and other levels.</li> </ul>

<b>Priority Area</b>	<b>Key Result Areas</b>	Goals/Indicators		Strategies		Major Activities of the Programme
·	4.1 TVET subsector is monitored and evaluated regularly and feedback provided for timely and effective improvements.	4.1.2 To ensure that progress in TVET implementation is effectively monitored and evaluated at all levels from June 2014 onwards.	(b)	Formulate monitoring and evaluation framework for the sub-sector.		MoEVT in collaboration with stakeholders will devise a mechanism for regularly and periodically locating and providing feedback on the impact of the TVET subsector within the national socioeconomic context and vice versa.  MoEVT in collaboration with stakeholders will devise a mechanism for regularly and periodically gauging the extent of progress of improvements in access and equity to TVET.  MoEVT in collaboration with stakeholders will devise a mechanism for regularly and periodically gauging and providing feedback on the extent of the progress of improvement in the quality of TVET.  MoEVT in collaboration with stakeholders will devise a mechanism for regularly and periodically gauging and providing feedback on the adequacy and appropriateness of resources and other inputs required for providing quality TVET.  MoEVT in collaboration with stakeholders will devise a mechanism for regularly and periodically gauging and providing feedback on the extent on how TVET sub-sector is monitored and evaluated to allow timely interventions for improvements.
			(c)	Perform M&E of the TVET sub-sector for improvements, in line with the framework.	(i) (ii)	MoEVT will systematically and continuously collect and analyse information about the progress of training activities nationally, in accordance with the performance indicators and measures specified in the M&E Framework for the sub-sector.  MoEVT will regularly conduct an objective assessment of inputs, processes, outputs and outcomes for gauging relevance, effectiveness and impact of TVET in the light of corresponding key result areas.
			(d)	Promote monitoring and evaluation of undertakings at institutional levels.		TVET institutions will prepare institutional M&E frameworks which are consistent with the Sub-sector framework.  TVET institutions will continuously monitor and evaluate progress of implementation of TVETin line with institutional framework.  MoEVT, NACTE and VETA will ensure that TVET is regularly evaluated in institutions in line with institutional framework.  MoEVT will ensure consistency of institutional frameworks with Programme goals and implementation schedules.

Priority Area	Key Result Areas	Goals/Indicators		Strategies		Major Activities of the Programme		
4.0 Improving Monitoring and Evaluation of the TVET sub- sector	4.1 TVET subsector is monitored and evaluated regularly and feedback provided for timely and effective improvements.	4.1.3 To ensure that progress in TVET implementation is effectively monitored and evaluated at all levels from June 2014 onwards.	(e)	Improve reporting and feedback mechanism at all levels.		MoEVT will regularly provide feedback to stakeholders about the progress of training activities nationally in line with the M&E Framework for the sub-sector.  NACTE and VETA will regularly provide feedback to stakeholders about the progress of implementation respective roles in line with the respective M&E Framework.  TVET institutions will regularly provide feedback to stakeholders about the progress of implementation respective roles in line with the respective M&E Framework.		
		4.1.4 To ensure that TVET is taken on board in the overarching national monitoring framework for growth and poverty reduction and impact gauged by 2014/15 and maintained.	(a)	Enhance the involvement of the Planning Commission in the review of TVET affairs.	(i) (ii) (iii)	MoEVT in collaboration with MoLE and POPC will regularly generate and update information on core priority areas for supporting the key sectors of the economy and provide inputs to TVET institutions for operationalisation in curricula.  MoEVT will proactively ensure that the outcomes of TVET monitoring and evaluation at national level is regularly shared with POPC and the Research and Analysis Working Group of MKUKUTA Monitoring System.  MoEVT will proactively ensure POPC is adequately represented in all major deliberations on TVET at ministerial level.		
				maintained.		(b)	Adopt effective performance indicators in the TVET subsector M&E Framework.	(i) (ii)
			(c)	Proactively facilitate the recognition of the role and impact of TVET.	(i) (ii)	MoEVT will benchmark performance of TVET sub-sector in Tanzania with good practices in the world.  MoEVT in collaboration with NACTE and VETA will devise a mechanism to benchmark TVET implementation by individual institutions in the country and rewarding excellence to stimulate improvements.		

#### ANNEX 6

#### **KEY INPUTS/MINOR ACTIVITIES FOR COSTING**

### A6.1 IMPROVING ACCESS AND EQUITY IN TVET

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Re-introduction of formal apprenticeship programmes	Links, incentives, MoU with industry, curricula, operational instruments
2	Assistance to NACTE, VETA and 40 TVET institutions to improve ICT connectivity	Specifications, last mile connection, LAN, bandwidth, computers
3	Operationalisation of ICT mediated teaching and learning including ODL	Curricula, computers and other equipment, facilitators
4	Introduction of flexible programmes, i.e. evening courses and multiple entries/exits etc	Curricula, facilitators, expanded infrastructure (buildings and equipment)
5	Recognition of Prior Learning (RPL)	RPL framework (scope and modalities), expertise, awareness creation
6	Expanding TVET opportunities to areas with no or very limited TVET opportunities	LMI, curricula, buildings, equipment, facilitators
7	Provision of loans, grants and scholarships to learners in core priority fields of study	Framework (scope and modalities for loans, grants, scholarships, etc.)
8	Promotion of the welfare of learners and staff at institutions	Relevant infrastructure
9	Providing supportto those affected with HIV/AIDS and non-communicable diseases	Infrastructure, finances for procurement of drugs and other requirements
10	Networking and collaboration with other organizations	Expertise and appropriate units in institutions to manage links, MoUs
11	Offering joint programmes with other local and international institutions	Links, MoUs, curricula, facilitators
12	Operationalisation of articulation mechanism for TVET learners	Articulation mechanism, awareness creation
13	Streamlining the Bias Secondary Schools into VET	Curricula, facilitators, improved infrastructure (building and equipment)
14	Streamlining all post primary and post secondary education into VET	Curricula, facilitators, improved infrastructure (building and equipment)
15	Assistance to FDCs in VET needs assessment, curricula development and staff training	Appropriate engagement mechanism, expertise to implement
16	Sensitising various groups of the community towards improving perception on TVET	Sensitisation packages for different groups, awareness creation
17	Sensitisation of potential candidates for TVET to promote interests in TVET	Sensitisation package, awareness creation
18	Career guidance and counseling of learners to promote interests/success rates in TVET	Expertise to implement, support mechanism
19	Operationalisation of the roles and benefits of TVET graduates	Approved modalities, awareness creation
20	Preferential support to 6TVET institutions to become centres of TVET excellence	Adequate physical, human and financial resources, quality control systems
21	Evaluation on how TVET institutions are implementing gender related policies	Appropriate fora/meetings to receive the reports
22	Offering access/pre-entry programmes in areas where female participation is low	Appropriate programmes, logistic support to the candidates
23	Operationalisation of ODL/other patterns of individual learning targeted to females	Curricula, computers and other equipment, facilitators
24	Enhancing flexibility in training programmes to cater for females	Curricula, facilitators, expanded infrastructure (buildings and equipment)
25	RPL in areas of work that are typically dominated by females	RPL scope and framework, expertise to implement, awareness creation
26	Removing gender stereotypes from programmes	Identification of stereotypes, review of programmes, awareness creation
27	Integration of entrepreneurship training into programmes to cater for female learners	Curricula review, facilitators, strategic support to learners
28	Provision of loans, grants, and scholarships to compensate for gender based inequities	Scope and modalities, Funding mechanism for loans, grants, etc.
29	Enhancing the completion rates of female learners in S&T related programmes	Sensitisation, career guidance, Funding mechanism for loans, grants, etc.
30	Availing the Manual for Life Skills to VET facilitators in all fields	Manual for life skills, sensitisation
31	Enhancing guidance, counseling and employment services to female learners	Relevant employment information, links, expertise to implement

32	Supporting institutions to accommodate the interests of people with disabilities	Relevant information, awareness creation
33	Improving the environment to enhance accessibility by learners with disabilities	Improved infrastructure, appropriate facilitators
34	Integration of the non disabled learners in skills training for people with disabilities	Curricula strategies, expertise to implement
35	Introduction of measures for increasing completion rates of learners with disabilities	Identification of the measures, facilitators
36	Putting in place programmes for developing talented people with disabilities	Special programme, facilitators, expertise
37	Avail work tools/seed money to graduates with disabilities for establishing projects	Framework and modalities, funding mechanism

# A6.2 IMPROVING QUALITY OF OUTPUTS

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Generating Labour Market Information (LMI)	Mechanism for generating LMI, expertise, enhanced coordination
2	Periodic and regular review of curricula in line with LMI	LMI, occupational/training standards, academic plans, expertise
3	Generation and updating information on human capital requirements in the key sectors	LMI generating expertise, enhanced coordination, strategic plans
4	Enrolment of more learners in programmes for technicians and skilled workers	Coordinated academic plans, infrastructure, facilitators
5	Periodic review of enrolment targets for different levels of training	LMI, standards, coordinated academic plans, expertise
6	Linking LMI to training programmes and implementation strategies	LMI, coordinated academic plans, expertise in curricula matters
7	Periodic and regular review of curricula to support realization of FYDP	LMI, standards, coordinated academic plans, expertise in curricula matters
8	Addressing the new and emerging technologies and processes in curricula for impact	Coordinated academic plans, infrastructure, facilitators
9	Career guidance and counseling of learners to promote interests/success rates	Expertise to implement, support mechanism
10	Provision of incentives to learners in the study fields supporting the core priority areas	Framework (scope and modalities for loans, grants, scholarships, etc.)
11	Promotion of research, creativity and innovations to support realization of FYDP	Institutional frameworks, infrastructure, motivated researchers
12	Increasing the adoption rate of the CBET methodology in TVET	Curricula, facilitators, expanded infrastructure, enhanced monitoring
13	Introduction of different programmes for candidates with different entry qualifications	Academic plans, curricula, infrastructure, facilitators
14	Introduction of flexible curricula for providing learners with choices of destinations	Academic plans, curricula, infrastructure, facilitators
15	Addressing the major shortfalls in institutional quality management systems	Expertise to assist institutions, strategic support, quality control systems
16	Embedding entrepreneurship training in programmes to promote self employment	Curricula review, facilitators, strategic support to learners
17	Career counseling and guidance on self-employment opportunities	Expertise to implement, support mechanism
18	Provision of incentives to TVET learners with unique talents	Framework (scope and modalities for loans, grants, scholarships, etc.)
19	Preferential support to 6 TVET institutions to become centres of TVET excellence	Adequate physical, human and financial resources, quality control systems
20	Enhancing the involvement of employers in subsector policies/legislations formulation	Framework of involvement, links
21	Enhancing the involvement of employers in Standards setting and assessments	Framework of involvement, links
22	Enhancing the involvement of employers in institutional planning/policy formulation	Framework of involvement, links
23	Enhancing the involvement of employers in curricula development and review	Framework of involvement, links
24	Enhancing the involvement of employers in curricula implementation at institutions	Framework of involvement, links, incentive mechanism, MoUs
25	Enhancing collaboration with industry in the provision of practical training of learners	Framework of involvement, links, incentive mechanism, MoUs
26	Enhancing collaboration with industry in upgrading of skills of staff at workplaces	Framework of involvement, links, incentive mechanism, MoUs

## A6.3 IMPROVING THE CAPACITY TO PROVIDE QUALITY TVET

#### A6.3.1 Human Resources

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Implementation of effective policies and plans for managing teaching staff in TVET	Effective policies and plans, scheme of services, expertise to implement
2	Adoption of flexible but equal opportunity recruitment process of TVET teaching staff	Scope of flexibility and modalities, awareness creation
3	Recruiting graduates for VET and providing pedagogical skills and industrial training	Recruitment modalities, links, skills training arrangements, emoluments
4	Recruiting graduates for TET and providing them appropriate pedagogical skills	Recruitment modalities, skills training arrangements, emoluments
5	Providing conducive working environment to attract new recruitments and retention	Infrastructure, incentive schemes, healthy management/staff relations
6	Supporting various interventions for promotion of the welfare of staff at institutions	Effective workers councils, healthy management/staff relations
7	Provision of support to those affected with HIV/AIDS and non-communicable diseases	Infrastructure, finances for procurement of drugs and other requirements
8	Removing gender stereotypes in institutions and improving working environment	Identification of stereotypes, awareness creation, intervention mechanism
9	Enhancing guidance and counseling of female facilitators, especially the new entrants	Expertise to implement, support mechanisms
10	Evaluation of how TVET institutions are implementing gender related policies	Appropriate fora/meetings to receive the reports
11	Implementation of staff development plans	Staff development plans, scheme of services, appraisal mechanisms
12	Attachment of existing staff in industry to acquire/upgrade relevant practical skills	Attachment modalities, links with industry, skills training arrangements
13	Recruiting experienced qualified staff from industry and providing pedagogical skills	Recruitment modalities, training arrangements, infrastructure, emoluments
14	Provision of training at work places for upgrading the skills of employees	Curricula, links with industry, MoUs
15	Providing staff with expertise/experience in ICT mediated classroom learning/ODL	Expertise in ICT mediated classroom learning and ODL
16	Recruiting and training facilitators of learners with special learning needs	Expertise in special learning needs, infrastructure, emoluments
17	Recruiting additional tutors in existing TTCs for TVET facilitation	Coordinated academic plans, additional infrastructure, emoluments
18	Recruiting tutors in institutions which have embarked on training TVET facilitators	Coordinated academic plans, additional infrastructure, emoluments
19	Recruiting facilitators for 4 new dedicated TTCs for TVET facilitation	Coordinated plans, recruitment modalities, infrastructure, emoluments
20	Introduction of incentive schemes to attract significant new recruitments and retention	Sustainable incentive schemes, awareness creation
21	Regulating training of TVET facilitators and effect their registration	Standards, modalities for recognition, awareness creation
22	Operationalisation of structured performance appraisal mechanism for TVET staff	Appraisal mechanism, awareness creation
23	Implementation of effective policies and plans for managing technical/admin staff	Effective policies and plans (formulation), expertise to implement
24	Adoption of flexible but equal opportunity recruitment process of technical/admin staff	Scope of flexibility and modalities, awareness creation

## A6.3.2 Building and Infrastructure

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Construction of 31 DVTCs before 2015/16 and additional 25 by 2017/18	Concept, readiness of LGA, site, consultants, contractors, construction
2	Construction of 10 new TET institutions for preparing technicians in critical fields	Concept, site, consultants, contractors, construction
3	Alignment of major infrastructure for easy access to learners with special needs	Concept, site, consultants, contractors, construction
4	Directing all new investments to locations with no or limited TVET opportunities	Criteria for selection, sensitization, identification of locations
5	Upgrading of physical infrastructure at existing TTCs for TVET facilitation	Concept, consultants, contractors, upgrading
6	Upgrading of infrastructure at institutions embarking on training TVET facilitators	Concept, consultants, contractors, upgrading
7	Construction of 4 new dedicated TTCs for TVET facilitation	Concept, site, consultants, contractors
8	Rehabilitation of 50 TVET institutions with potential for significant impact	Criteria, sensitization of stakeholders, selected institutions, rehabilitation
9	Introducing incentives for promotion of PPP in constructing TVET infrastructure	Incentive mechanism, awareness creation
10	Employing PPP to expand buildings and infrastructure for teaching and learning	Framework for PPP arrangements, proposals
11	Employing PPP to expand buildings and infrastructure for welfare of learners and staff	Framework for PPP arrangements, proposals
12	Improving ICT connectivity in 40 TVET institutions	Specification, last mile connection, local area networks
13	Carrying out maintenance/rehabilitation of buildings infrastructure according to norm	Prioritised maintenance/rehabilitation plans, rehabilitation
14	Promoting the culture of continuous maintenance of physical infrastructure	Sensitisation, maintenance plans, monitoring framework, incentive schemes

## A6.3.3 Equipment and other Facilities

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Assisting 25 FDCs to procure and operationalise equipment and facilities	Appropriate engagement mechanism, expertise
2	Procurement of equipment and facilities for the new 10 TET and 56 VET institutions	Identification of equipment/facilities, specifications, procurement plan
3	Procurement of critical equipment for supporting learners with special learning needs	Identification of equipment/facilities, specifications, procurement plan
4	Procurement of additional equipment for the existing TTCs for TVET facilitation	Identification of equipment/facilities, specifications, procurement plan
5	Procurement of critical equipment for other institutions training TVET facilitators	Identification of equipment/facilities, specifications, procurement plan
6	Procurement of equipment for 4 new dedicated TTCs for TVET facilitation	Identification of equipment/facilities, specifications, procurement plan
7	Procurement of equipment for replacing obsolete or outdated ones in 50 institutions	Identification of equipment/facilities, specifications, procurement plan
8	Procurement of ICT equipment for 40 institutions	Identification of equipment/facilities, specifications, procurement plan
9	Introducing incentives for promoting PPP to procure expensive equipment for TVET	Incentive mechanism, awareness creation
10	Employing PPP in the procurement of expensive equipment for TVET	Framework for PPP arrangements, proposals
11	Maintenance and repair of equipment and facilities in institutions according to norm	Prioritised maintenance/rehabilitation plans
12	Promoting the culture of continuous maintenance of equipment and related facilities	Sensitisation, maintenance plans, monitoring framework, incentive schemes
13	Promoting more effective use and sharing of equipment amongst TVET institutions	Framework on effective use and sharing, sensitisation
14	Promoting simulation technologies to reduce dependency of physical equipment	Framework, sensitisation

## A6.3.4 Financial Resources

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Assessing how TVET funding ensures links to national priorities and feedback	Assessment modalities, awareness creation/sensitisation
2	Building capacities of institutions to manage financial resources more effectively	Expertise, training needs assessment, training of officials
3	Provision of adequate feedback to employers on the use of SDL and impact	Framework for evaluation of SDL use, awareness creation
4	Clarifying the challenges of implementing the sectoral approach in SDL disbursements	Detailed report on experiences, sharing the report and consultations
5	Charging economic tuition fees to offset increased operational costs	Student unit costs, sensitisation
6	Reforming VETA to competitively cope with sectoral approach in SDL disbursements	Expertise, strategic analysis of operations and risk management
7	Enhancing balanced provision of consultancy services for effective financing of TVET	Framework for achieving balanced provision of consultancy services
8	Implementing other innovative ways of generating internal revenue in institutions	Expertise, innovative ways of generating incomes
9	Enhancing the ability of institutions to conduct research and innovations	Frameworks, infrastructure, equipment, incentives, sensitisation
10	Operationalisation of framework for IPR to facilitate commercialization of outputs	IPR framework, incentives, sensitization/awareness creation
11	Auditing the usage of various resources* and identification of cost reduction measures	Expertise in auditing various resources, sensitization/awareness creation
12	Implementing cost reduction and unnecessary cost avoidance measures	Sensitisation, specific interventions, monitoring and evaluation of impact

<sup>\*</sup>including energy, water, paper and other major resources being used

# A6.3.5 Management and Governance

SN	Major Activities	Key Inputs/Minor Activities for costing			
1	Supporting institutions to achieve good governance and institutional effectiveness	Merit Board appointments, clear roles, powers and accountability			
2	Guiding/coordinating institutional arrangements for more effective/efficient TVET Framework for coordination, expertise				
3	Capacity building of Directorate of TVET to perform anticipated roles more effectively Expertise, training needs assessment, training of officials				
4	Capacity building of TVET coordinating units in MDAs to perform anticipated roles	Expertise, training needs assessment, training of officials			
5	Capacity building of Councils/Boards for enhanced corporate governance	Expertise, training needs assessment, training of officials			
6	Capacity building of managers of NACTE/VETA to perform anticipated roles	Expertise, training needs assessment, training of officials			
7	Strengthening the regulatory and coordination roles of NACTE and VETA	Expertise, training needs assessment, training of officials			
8	Capacity building of institutions for more effective management of academic function	Expertise, training needs assessment, training of officials			
9	Capacity building of institutions for more effective management of resources	Expertise, training needs assessment, training of officials			

#### A6.4 IMPROVING MONITORING AND EVALUATION

SN	Major Activities	Key Inputs/Minor Activities for costing
1	Capacity building of institutions and stakeholders in collecting and analysing LMI	Expertise, training needs assessment, training of officials
2	Coordination and integration of LMI systems	Sensitisation, stakeholders endorsement, framework for coordination
3	Improving TVET-MIS and its linkage with ESMIS	Clarification of major shortfalls, expertise in MIS, sensitisation
4	Linking TVET supply data with LMI	Adequate and appropriate supply side data, LMI, linking expertise
5	Inclusion of projection data in TVET-MIS to allow realistic forecasting	Projection data, expertise in MIS
6	Piloting and improving the developed draft KPIs for eventual full operationalisation	Awareness creation, reporting mechanism, stakeholders endorsement
7	Regular and systematic monitoring of TVET at all levels	Monitoring framework at various levels
8	Regular and systematic evaluation of TVET provision and providing feedback	Evaluation framework for TVET provision
9	Regular evaluation of the performances of NACTE and VETA and providing feedback	Evaluation framework for TVET regulation
10	Aligning the developed KPIs with the modalities used by POPC/MKUKUTA System	Adopted KPIs for TVET, formal consultations with POPC, expertise
11	Facilitating access to TVET data in ESMIS by POPC/MKUKUTA Monitoring System	Modalities for sharing information
12	Sharing the outcomes of TVET monitoring and evaluation with POPC	Modalities for sharing information
13	Benchmarking Tanzania TVET sub-sector with good practices in the world	Benchmarking framework, expertise, sensitisation
14	Benchmarking of TVET implementation in individual institutions in the country	Benchmarking and rewarding framework, expertise, sensitisation

ANNEX 7

LOGICAL FRAMEWORK MATRIX FOR MONITORING AND EVALUATION OF TVETDP

N	arrative	<b>Indicators/Operational Targets</b>	Means of Verification	Major Assumptions
Programme Overall Goal				
Contribution to the realisation of Five Year Development Plans, MKUKUTA and hence Tanzania Development Vision 2025	Availability of a critical mass of individuals that are sufficiently equipped with the requisite knowledge and skills to solve the problems of the society, meet the challenges of national development and attain competitiveness at regional and global levels	Attaining middle income status by 2025  The country's resource potentials unleashed for broad-based and pro-poor growth, with average GDP growth rate maintained at 8 percent per annum up to 2015/16, and thereafter at 10 percent per annum (at least) until 2025.	<ul> <li>National survey reports</li> <li>Poverty and Human Development Report</li> <li>Budget speeches</li> </ul>	The aspirations/focus of the Tanzania Development Vision 2025 is maintained Political and economic stability
Development Objective				
Contribution to the realisation of the Education Sector Development Programme (ESDP) for more effective attainment of educational goals	TVET Development Programme that facilitates the planning, management and monitoring of the TVET sub-sector to ensure more effective attainment of outputs	Access, equity and quality of TVET improved and instilling the necessary knowledge and skills for enhanced employability and mobility of learners	<ul> <li>Survey reports on Education</li> <li>Integrated Labour Force Survey reports</li> <li>Tracer study/graduate survey reports</li> </ul>	Existence of will and sustained commitment to invest in the TVET sub-sector

<b>Priority Area</b>	Key Result Area	Indicators/Operational Targets	Means of Verification	<b>Major Assumptions</b>
Access and Equity in TVET improved	STD VII, Form IV and Form VI leavers provided with more parallel opportunities for respective further education and/or effective integration into the labour market	Overall enrolment of learners increased from 112,447 learners in TET and 121,348 in VET in 2011/12 to 400,946 and 1,012,967 in 2017/18, respectively  At least 5% of the planned enrolment realized with apprenticeship/work based programmes  At least 30% of the planned enrolment realized through ICT-mediated programmes  At least 30% of the planned enrolment realized with fulltime residential courses  At least 10% of the planned enrolment realized with flexible programmes  At least 25% of the planned enrolment realized with short courses and RPL	<ul> <li>Sub-sector progress reports</li> <li>Institutional progress reports</li> <li>Enrolment data</li> <li>New/reviewed curricula</li> <li>MoUs with industry</li> <li>Number of active links</li> <li>Annual progress reports</li> </ul>	Continued support from Government  Continued support from development partners  Increased involvement of industry/private sector  Changed perception on TVET
	Access to TVET for learners from under-represented and disadvantaged groups significantly improved in line with the catchment	Overall enrolment of female learners increased from 46.8% in VET and 47.9% in TET in 2011/12 to at least 50% in 2017/18 for both cases  Enrolment of female learners in Science and Technology programmes increased in both VET and TET from about 11-19 % in 2011/12 to at least 35% for all such programmes by 2017/18  Access of learners with disabilities increased from about 20% in VET in 2011/12 to at least 50% of all such potential candidates by 2017/18  Access of learners with disabilities increased from about 3% in TET in 2011/12 to at least 35% of all such potential candidates in TET by 2017/18	<ul> <li>Enrolment data</li> <li>Loans, grants and scholarships</li> <li>Annual progress reports</li> </ul>	Increased catchment from lower education levels  Will and commitment to support affirmative actions  Will and commitment to support affirmative actions

<b>Priority Area</b>	Key Result Area	Indicators/Operational Targets	Means of Verification	Major Assumptions	
Quality of Outputs improved	Impact of the increased access and equity assured and evident in the realization of FYDP and hence Tanzania Development Vision 2025	Enrolment of learners in TVET contribute towards attaining human capital balance in the labour force that is proper for realization of FYDP 2011/12-2015/16 and eventually Vision 2025  Enrolment of learners directed to the occupation fields supporting the core priority areas for realization of FYDP 2011/12-2015/16 and ultimately the Tanzania Development Vision 2025	<ul> <li>Enrolment data</li> <li>Loans, grants and scholarships</li> <li>Annual progress reports</li> </ul>	Existence of will and commitment to invest in the TVET sub-sector	
		Competence of TVET graduates increased so that are able to carry out all the required work tasks properly within 3 months and one year after graduation for at least 50% of fresh graduates from VET and TET respectively by 2015/16 and increased to at least 75% by 2017/18	<ul> <li>Employer satisfaction reports</li> <li>Tracer study/graduate survey reports</li> </ul>	Increased and sustained investments to facilitate CBET	
Capacity to provide quality TVET improved	Adequate and appropriate human resources available in line with the needs for improving access, equity and quality in teaching, research and innovation as well as public service within the core priority areas and beyond	Students to staff ratio maintained in line with NACTE/VETA norms for all programmes ( <i>Number of teaching staff increased from 4,590 in TET and 3,010 in VET in 2011/12 to 43,300 in TET and 39,000 in VET by 2017/18</i> )  The proportion of female teaching staff increased from 26% in TET and 29% in VET in 2011/12 to at least 40% in both cases by 2017/18  At least 75% of all teaching staff in TET and VET have the requisite qualifications and experiences	<ul> <li>Progress reports</li> <li>Decrease in staff turnover</li> <li>Information on registration of institutions</li> <li>Information on accreditation of institutions</li> </ul>	Enhanced flexibility in recruitment procedures  Increased autonomy of institutions in managing human resources	
		and delivers to expectations by 2015/16 and 100% by 2017/18  The ratio of technical and administration staff to teaching staff maintained in line with the NACTE/VETA norm by 2017/18 and maintained	-		

Priority Area	Key Result Area	Indicators/Operational Targets		Means of Verification	<b>Major Assumptions</b>
Capacity to provide quality TVET improved	physical resources available related physical infrastructure for meeting the	•	Progress reports  Information on registration of institutions  Information on accreditation of institutions  Budget speeches  Annual reports of institutions  Report of special task teams	Sustained commitment by Government, development partners and other stakeholders to invest in the TVET subsector  Increased involvement of industry/private sector in the affairs of TVET including realisation of PPP  Maintenance and increased contribution of SDL	
Monitoring and	governance and management of TVET exist at all levels of the sub- sector and realisation of the desired impact assured TVET sub-sector is	of TVET exist at all levels of the sub-sector and realisation of the desired impact assured  Progress in TVET implementation is monitored and evaluated at all levels from June 2014 onwards and	•	Annual and bi-annual	Effective
Evaluation of the TVET sub-sector improved	regularly and feedback provided provided for timely and effective improvements  feedback provided TVET is taken on board in the overarching monitoring framework for growth and power and power and power are the control of the contro	feedback provided  TVET is taken on board in the overarching national monitoring framework for growth and poverty reduction and impact gauged by 2014/15 and	•	Poverty and Human Development Report Budget speeches	coordination of the TVET sub-sector and linkage with frameworks for monitoring of progress of national development

ANNEX 8

## INDICATIVE COST IMPLICATIONS (in million Tanzanian shillings)

## A8.1 IMPROVING ACCESS AND EQUITY IN TVET

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Re-introduction of formal apprenticeship programmes	200	400	600	800	1,000	3,000
2	Assistance to NACTE, VETA and 40 TVET institutions to improve ICT connectivity	100	300	100	-	-	500
3	Operationalisation of ICT mediated teaching and learning including ODL	100	250	300	300	300	1,250
4	Introduction of flexible programmes, i.e. evening courses and multiple entries/exits etc	30	40	50	60	70	250
5	Recognition of Prior Learning (RPL)	40	50	60	70	80	300
6	Expanding TVET opportunities to areas with no or very limited TVET opportunities	50	40	30	20	10	150
7	Provision of loans, grants and scholarships to learners in core priority fields of study	35,000	45,000	65,000	85,000	120,000	350,000
8	Promotion of the welfare of learners and staff at institutions	10	20	30	40	50	150
9	Providing supportto those affected with HIV/AIDS and non-communicable diseases	95	100	105	110	115	525
10	Networking and collaboration with other organizations	100	200	300	400	500	1,500
11	Offering joint programmes with other local and international institutions	80	90	100	110	120	500
12	Operationalisation of articulation mechanism for TVET learners	250	100	100	-	-	450
13	Harmonise post primary/post secondary education/Bias Secondary Schools into VET	50	300	150	-	-	500
14	Assistance to FDCs in VET needs assessment, curricula development and staff training	50	300	150	-	-	500
15	Sensitising various groups of the community towards improving perception on TVET	180	190	200	210	220	1,000
16	Sensitisation of potential candidates for TVET to promote interests in TVET	500	550	600	650	700	3,000
17	Career guidance and counseling of learners to promote interests/success rates in TVET	50	75	100	125	150	500
18	Operationalisation of the roles and benefits of TVET graduates	90	100	70	-	-	260
19	Preferential support to six TVET institutions to become centres of TVET excellence	20	20	20	20	20	100
20	Evaluation on how TVET institutions are implementing gender related policies	50	60	70	80	90	350
21	Offering access/pre-entry programmes in areas where female participation is low	250	300	350	400	450	1,750
22	Operationalisation of ODL/other patterns of individual learning targeted to females	ı	-	-	-	-	-
23	Enhancing flexibility in training programmes to cater for females	ı	-	-	=	-	-
24	RPL in areas of work that are typically dominated by females	ı	-	-	-	-	-
25	Removing gender stereotypes from programmes	100	450	200	-	-	750
26	Integration of entrepreneurship training into programmes to cater for female learners	50	300	150	-	-	500
27	Provision of loans, grants, and scholarships to compensate for gender based inequities	17,500	22,500	32,500	42,500	60,000	175,000
28	Enhancing the completion rates of female learners in S&T related programmes	100	200	300	600	1,000	2,200
29	Availing the Manual for Life Skills to VET facilitators in all fields	80	90	100	110	120	500
30	Enhancing guidance, counseling and employment services to female learners	50	80	110	140	170	550
31	Supporting institutions to accommodate the interests of people with disabilities	30	40	50	60	70	250

32	Improving the environment to enhance accessibility by learners with disabilities	25	50	25	-	-	100
33	Integration of the non disabled learners in skills training for people with disabilities	30	35	40	45	50	200
34	Introduction of measures for increasing completion rates of learners with disabilities	40	50	60	70	80	300
35	Putting in place programmes for developing talented people with disabilities	100	125	150	175	200	750
36	Avail work tools/seed money to graduates with disabilities for establishing projects	150	175	200	225	250	1,000
	Total	55,550	72,580	102,370	132,320	185,815	548,635

# A8.2 IMPROVING QUALITY OF OUTPUTS

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Generating Labour Market Information (LMI)	500	750	1,000	1,250	1,500	5,000
2	Periodic and regular review of curricula in line with LMI	300	325	350	375	400	1,750
3	Generation and updating information on human capital requirements in the key sectors	40	45	50	55	60	250
4	Enrolment of more learners in programmes for technicians and skilled workers	10	20	30	40	50	150
5	Periodic review of enrolment targets for different levels of training	5	7.5	10	12.5	15	50
6	Linking LMI to training programmes and implementation strategies	5	10	15	20	25	75
7	Periodic and regular review of curricula to support realization of FYDP	-	=	=	=	-	-
8	Addressing the new and emerging technologies and processes in curricula for impact	40	45	50	55	60	250
9	Career guidance and counseling of learners to promote interests/success rates	-	-	-	-	-	-
10	Provision of incentives to learners in the study fields supporting the core priority areas	-	=	=	=	-	-
11	Promotion of research, creativity and innovations to support realization of FYDP	1,000	1,500	2,000	2,500	3,000	10,000
12	Increasing the adoption rate of the CBET methodology in TVET	150	250	350	450	550	1,750
13	Introduction of different programmes for candidates with different entry qualifications	45	35	25	15	10	130
14	Introduction of flexible curricula for providing learners with choices of destinations	50	40	30	20	20	160
15	Addressing the major shortfalls in institutional quality management systems	300	400	500	600	700	2,500
16	Embedding entrepreneurship training in programmes to promote self employment	500	750	1,000	1,250	1,500	5,000
17	Career counseling and guidance on self-employment opportunities	-	-	-	1	-	-
18	Provision of incentives to TVET learners with unique talents	200	300	400	500	600	2,000
19	Preferential support to 6 TVET institutions to become centres of TVET excellence	6,000	12,000	18,000	21,000	24,000	81,000
20	Enhancing the involvement of employers in subsector policies/legislations formulation	20	15	10	5	5	55
21	Enhancing the involvement of employers in Standards setting and assessments	200	200	200	200	200	1,000
22	Enhancing the involvement of employers in institutional planning/policy formulation	10	20	30	40	50	150
23	Enhancing the involvement of employers in curricula development and review	50	60	70	80	90	350
24	Enhancing the involvement of employers in curricula implementation at institutions	100	150	200	250	300	1,000
25	Enhancing collaboration with industry in the provision of practical training of learners	50	60	70	80	90	350
26	Enhancing collaboration with industry in upgrading of skills of staff at workplaces	80	100	120	140	160	600
	Total	9,655	17,082.5	24,510	28,937.5	33,385	113,570

# A8.3 IMPROVING THE CAPACITY TO PROVIDE QUALITY TVET

### A8.3.1 Human Resources

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Implementation of effective policies and plans for managing teaching staff in TVET	200	150	50	50	50	500
2	Adoption of flexible but equal opportunity recruitment process of TVET teaching staff	30	30	-	-	=	60
3	Recruiting graduates for VET and providing pedagogical skills and industrial training	4,000	4,500	5,000	5,500	6,000	25,000
4	Recruiting graduates for TET and providing them appropriate pedagogical skills	5,000	6,000	7,000	8,000	9,000	35,000
5	Providing conducive working environment to attract new recruitments and retention	150	160	170	180	190	850
6	Supporting various interventions for promotion of the welfare of staff at institutions	70	80	90	100	110	450
7	Provision of support to those affected with HIV/AIDS and non-communicable diseases	1	1	1	-	-	-
8	Removing gender stereotypes in institutions and improving working environment	100	75	50	50	50	325
9	Enhancing guidance and counseling of female facilitators, especially the new entrants	50	75	100	125	150	500
10	Evaluation of how TVET institutions are implementing gender related policies	1	1	1	-	-	-
11	Implementation of staff development plans	10,000	13,000	16,000	19,000	22,000	80,000
12	Attachment of existing staff in industry to acquire/upgrade relevant practical skills	500	750	1,000	1,250	1,500	5,000
13	Recruiting experienced qualified staff from industry and providing pedagogical skills	150	175	200	225	250	1,000
14	Provision of training at work places for upgrading the skills of employees	375	440	500	560	625	2,500
15	Providing staff with expertise/experience in ICT mediated classroom learning/ODL	1,000	1,500	2,000	2,500	3,000	10,000
16	Recruiting and training facilitators of learners with special learning needs	500	600	700	800	900	3,500
17	Recruiting additional tutors in existing TTCs for TVET facilitation	1,000	1,250	1,500	1,750	2,000	7,500
18	Recruiting tutors in institutions which have embarked on training TVET facilitators	500	750	1,000	1,250	1,500	5,000
19	Recruiting facilitators for 4 new dedicated TTCs for TVET facilitation	300	250	100	50	50	750
20	Introduction of incentive schemes to attract significant new recruitments and retention	400	500	600	700	800	3,000
21	Regulating training of TVET facilitators and effect their registration	300	400	500	600	700	2,500
22	Operationalisation of structured performance appraisal mechanism for TVET staff	300	200	-	-	-	500
23	Implementation of effective policies and plans for managing technical/admin staff	100	75	50	50	50	325
24	Adoption of flexible but equal opportunity recruitment process of technical/admin staff	20	20	20	-	=	60
	Total	25,045	30,980	36,630	42,740	48,925	184,320

# A8.3.2 Building and Infrastructure

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Construction of 31 DVTCs before 2015/16 and additional 25 by 2017/18	43,200	68,400	30,000	30,000	30,000	201,600
2	Construction of 10 specialized TET institutions in fields of study critical for TDV 2025	43,200	43,200	21,600	-	-	108,000
3	Alignment of major infrastructure for easy access to learners with special needs	1,000	900	900	-	-	2,800
4	Directing all new investments to locations with no or limited TVET opportunities	25	25	25	25	-	100
5	Upgrading of physical infrastructure at existing TTCs for TVET facilitation	5,000	5,000	4,500	-	-	14,500
6	Upgrading of infrastructure at institutions embarking on training TVET facilitators	1,000	1,250	1,500	1,750	2,000	7,500
7	Upgrading of infrastructure at other existing TVET institutions	50,000	50,000	50,000	50,000	50,000	250,000
8	Construction of 4 new dedicated TTCs for TVET facilitation	9,600	9,600	9,600	-	-	28,800
9	Rehabilitation of 50 TVET institutions with potential for significant impact	5,000	5,000	5,000	5,000	5,000	25,000
10	Introducing incentives for promotion of PPP in constructing TVET infrastructure	20	40	40	-	-	100
11	Employing PPP to expand buildings and infrastructure for teaching and learning	100	100	50	-	-	250
12	Employing PPP to expand buildings and infrastructure for welfare of learners and staff	100	125	150	175	200	750
13	Improving ICT connectivity in 40 TVET institutions	2,500	3,500	1,500	-	-	7,500
14	Carrying out maintenance/rehabilitation of buildings infrastructure according to norm	10,000	10,000	10,000	10,000	10,000	50,000
15	Promoting the culture of continuous maintenance of physical infrastructure	2,000	1,000	1,000	1,000	1,000	6,000
	Total	172,745	198,140	135,865	97,950	98,200	702,900

# A8.3.3 Equipment and other Facilities

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Assisting 25 FDCs to procure and operationalise equipment and facilities	300	600	600	300	300	2,100
2	Procurement of equipment and facilities for the new 10 TET and 56 VET institutions	48,000	84,000	84,000	ı	-	216,000
3	Procurement of critical equipment for supporting learners with special learning needs	500	600	700	800	900	3,500
4	Procurement of additional equipment for the existing TTCs for TVET facilitation	750	750	500	-	-	2,000
5	Procurement of critical equipment for other institutions training TVET facilitators	250	300	350	400	450	1,750
6	Procurement of equipment for 4 new dedicated TTCs for TVET facilitation	1,000	2,500	2,500	-	-	6,000
7	Procurement of equipment for replacing obsolete or outdated ones in 50 institutions	24,000	24,000	24,000	24,000	24,000	120,000
8	Procurement of ICT equipment for 40 institutions	5,000	10,000	5,000	ı	-	20,000
9	Introducing incentives for promoting PPP to procure expensive equipment for TVET	ı	-	=	ı	-	
10	Employing PPP in the procurement of expensive equipment for TVET	100	100	100	100	100	500
11	Maintenance and repair of equipment and facilities in institutions according to norm	8,000	9,000	10,000	11,000	12,000	50,000
12	Promoting the culture of continuous maintenance of equipment and related facilities	1,000	1,000	1,000	1,000	1,000	5,000
13	Promoting more effective use and sharing of equipment amongst TVET institutions	100	150	200	250	300	1,000
14	Promoting simulation technologies to reduce dependency of physical equipment	500	750	1,000	1,250	1,500	5,000
	Total	89,500	133,750	129,950	39,100	40,550	432,850

### A8.3.4 Financial Resources

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Assessing how TVET funding ensures links to national priorities and feedback	30	40	50	60	70	250
2	Building capacities of institutions to manage financial resources more effectively	500	750	1,000	1,250	1,500	5,000
3	Provision of adequate feedback to employers on the use of SDL and impact	80	90	100	110	120	500
4	Clarifying the challenges of implementing the sectoral approach in SDL disbursements	75	25	-	1	-	100
5	Charging economic tuition fees to offset increased operational costs	20	-	-	-	-	20
6	Reforming VETA to competitively cope with sectoral approach in SDL disbursements	80	50	-	-	-	130
7	Enhancing balanced provision of consultancy services for effective financing of TVET	50	ı	-	1	-	50
8	Implementing other innovative ways of generating internal revenue in institutions	100	80	80	80	80	420
9	Enhancing the ability of institutions to conduct research and innovations	100	150	200	250	300	1,000
10	Operationalisation of framework for IPR to facilitate commercialization of outputs	50	75	100	125	150	500
11	Auditing the usage of various resources* and identification of cost reduction measures	100	200	300	400	500	1,500
12	Implementing cost reduction and unnecessary cost avoidance measures	150	125	100	75	50	500
	Total	1,335	1,585	1,930	2,350	2,770	9,970

<sup>\*</sup>including energy, water, paper and other major resources being used

# A8.3.5 Management and Governance

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Supporting institutions to achieve good governance and institutional effectiveness	50	75	100	125	150	500
2	Guiding/coordinating institutional arrangements for more effective/efficient TVET	200	300	400	500	600	2,000
3	Capacity building of Directorate of TVET to perform anticipated roles more effectively	50	75	100	125	150	500
4	Capacity building of TVET coordinating units in MDAs to perform anticipated roles	150	200	250	300	350	1,250
5	Capacity building of Councils/Boards for enhanced corporate governance	100	100	100	100	100	500
6	Capacity building of managers of NACTE/VETA to perform anticipated roles	100	150	200	250	300	1,000
7	Strengthening the regulatory and coordination roles of NACTE and VETA	500	1,000	1,500	2,000	2,500	7,500
8	Capacity building of institutions for more effective management of academic function	250	300	350	400	450	1,750
9	9 Capacity building of institutions for more effective management of resources		400	450	500	550	2,250
	Total	1,750	2,600	3,450	4,300	5,150	17,250

### A8.4 IMPROVING MONITORING AND EVALUATION

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total
1	Capacity building of institutions and stakeholders in collecting and analysing LMI	100	200	300	400	500	1,500
2	Coordination and integration of LMI systems	100	100	100	100	100	500
3	Improving TVET-MIS and its linkage with ESMIS	300	250	250	200	200	1,200
4	Linking TVET supply data with LMI	50	150	-	-	-	200
5	Inclusion of projection data in TVET-MIS to allow realistic forecasting	50	150	-	-	-	200
6	Piloting and improving the developed draft KPIs for eventual full operationalisation		200	100	-	-	500
7	Regular and systematic monitoring of TVET at all levels		300	400	500	600	2,000
8	Regular and systematic evaluation of TVET provision and providing feedback	100	150	200	250	300	1,000
9	Regular evaluation of the performances of NACTE and VETA and providing feedback		50	50	50	50	260
10	Aligning the developed KPIs with the modalities used by POPC/MKUKUTA System	50	-	-	-	-	50
11	Facilitating access to TVET data in ESMIS by POPC/MKUKUTA Monitoring System	30	20	20	20	20	110
12	Sharing the outcomes of TVET monitoring and evaluation with POPC	2	3	4	5	6	20
13	Benchmarking Tanzania TVET sub-sector with good practices in the world		150	200	250	300	1,000
14	Benchmarking of TVET implementation in individual institutions in the country	300	450	500	550	600	2,400
	Total	1,642	2,173	2,124	2,325	2,676	10,940

#### A8.5 SUMMARY OF COSTS IN TERMS OF PRIORITY AREAS

SN	Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total	[%]
1	Improving access and equity	55,550	72,580	102,370	132,320	185,815	548,635	25
2	Improving quality of outputs	25,045	30,980	36,630	42,740	48,925	184,320	8
3	Improving the capacity to provide quality TVET	290,375	367,055	307,825	186,440	195,595	1,347,290	61
4	Improving Monitoring and Governance	1,642	2,173	2,124	2,325	2,676	10,940	1
5	Subtotal	372,612	472,788	448,949	363,825	433,011	2,091,185	95
6	Contingency at 5%	18,631	23,639	22,447	18,191	21,651	104,559	5
7	Total	391,243	496,427	471,396	382,016	454,662	2,195,744	100

### A8.6 SUMMARY OF COSTS FOR IMPROVING CAPACITIES TO PROVIDE QUALITY TVET

Major Activities	2013/14	2014/15	2015/16	2016/17	2017/18	Total	[%]
Human resources	25,045	30,980	36,630	42,740	48,925	184,320	13.7
Building and infrastructure	172,745	198,140	135,865	97,950	98,200	702,900	52.2
Equipment and facility	89,500	133,750	129,950	39,100	40,550	432,850	32.1
Financial resources	1,335	1,585	1,930	2,350	2,770	9,970	0.7
Management and governance	1,750	2,600	3,450	4,300	5,150	17,250	1.3
Total for capacity improvements	290,375	367,055	307,825	186,440	195,595	1,347,290	100

#### A8.7 DISTRIBUTION OF OVERALL COSTS AMONG THE MAJOR ACTIVITIES

Major Activities	Cumulative Total in 2017/18	[%]
Staff development	150,000	7.2
Coordination	28,990	1.4
Loans, Grants and Scholarships	525,000	25.1
Acquiring equipment	368,000	17.6
New civil works	649,900	31.0
Rehabilitation and maintenance	187,850	9.0
Institutional reforms	181,445	8.7
Total	2,091,185	100

ANNEX 9

TVETDP FINANCING SOURCES AND GAPS (in million Tanzanian shillings)

		2012/13 (Baseline)	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Government:	VET	13,043	16,304	20,380	25,475	30,570	35,155	127,882
<ul> <li>Recurrent</li> </ul>	TET	105,850	132,313	165,391	206,738	248,086	285,299	1,037,826
Expenditure	Total	118,893	148,616	185,770	232,213	278,655	320,454	1,165,708
Government:	VET	16,153	20,191	25,239	31,549	37,859	43,537	158,375
<ul> <li>Capital</li> </ul>	TET	17,232	21,540	26,925	33,656	40,388	46,446	168,954
Expenditure	Total	33,385	41,731	52,164	65,205	78,246	89,983	327,329
SDL	·	45,600	136,800	171,000	213,750	267,188	333,984	1,122,722
Davidonment Dontners	VET	338	372	409	450	495	544	2,270
Development Partners (in addition to GBS)	TET	16,903	18,593	20,453	22,498	24,748	27,222	113,515
(in dadition to GBS)	Total	17,241	18,965	20,862	22,948	25,243	27,767	115,785
Total Funds available		215,119	343,112	429,796	534,116	649,332	772,188	2,728,544
TVETDP Cost	<u>.</u>		391,243	496,427	471,396	382,016	454,662	2,195,744
Total Budget required			606,352	839,539	901,192	916,132	1,103,994	4,367,209
Financing gap	(Basic Scenari	0)	263,240	409,743	367,076	266,800	331,806	1,638,665
Financing gap	(Alternative So	cenario 1)	282,205	430,605	390,024	292,043	359,573	1,754,450
Financing gap	(Alternative So	cenario 2)	220,040	341,343	285,258	266,800	331,806	1,466,847
Financing gap	(Alternative Se	cenario 3)	257,220	397,723	349,056	245,780	307,786	1,557,565
Financing gap	(Alternative Se	cenario 4)	210,740	342,243	269,576	139,300	151,806	1,113,665
Financing gap	(Alternative So	cenario 5)	161,520	261,823	169,738	118,280	127,786	839,147

LEGEND: Basic Scenario: All costs implications in Annex 8 considered

Scenario 1: As Basic Scenario but DPs contribute to GBS only (no additional direct funding to institutions or projects)

Scenario 2: Only 31 DVTCs to be constructed under the direct Programme financing, instead of 56 as budgeted in Annex 8

Scenario 3: Establishment of the proposed 6 Centres of TVET Excellence not included under the Programme

Scenario 4: Loans and grants to learners not included under the Programme

Scenario 5: It is a combination of Scenarios 2, 3 and 4