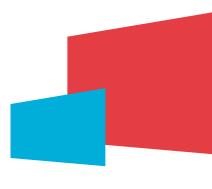


Education Sector



TVET Policy Review Malawi



UNESCO 2010

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The authors are responsible for the choice and the presentation of the facts contained in this publication and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization.

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Executive Summary

Challenges

Projected population increase and economic reforms call for coherent Technical Entrepreneurship Vocational Education and Training (TEVET)¹ Policy implementation

Malawi is a land-locked country in south-east Africa with a population estimated at 13 million. The country is among the poorest in Africa, but in recent years the government has succeeded in consolidating the macroeconomic environment. A long-term Malawi Growth and Development Strategy (MGDS) aims to transform Malawi from an import-based agrarian economy to an export-oriented country in the years to come. The combined effects of the economic development strategy and a projected population growth will call for major reforms of the education system - not least the Technical and Vocational Education and Training (TVET) system as it is currently fragmented, offers limited access, and is poorly funded.

Governance arrangements for sustainable change must be pursued

Malawi embarked on a reform of its Technical, Entrepreneurial Vocational Education and Training (TEVET) in 1997 which led to the establishment of an independent TEVET Authority (TEVETA). TEVETA was established in 1999 as a regulating and coordinating body for all providers of TEVET to facilitate and promote technical, entrepreneurial, and vocational education and training. Since then, TEVETA has taken the lead to develop a TEVET qualification framework to span the diverse TVET offer. Eleven years after its creation, TEVETA has not come to function as the overarching regulatory body. Though progress has been achieved regarding the involvement of industry, it is still not a systemic feature in the governance arrangements. Many stakeholders, particularly in industry, share a common concern that limitations in the existing TEVET governance arrangements have resulted in weak policy execution leading to delays, overregulation, and inefficiencies in expenditure.

Demand orientation far from being realized

Due to the unsolved governance challenges there are several certifications offered, which increases administration costs and causes confusion among stakeholders. The competence-based and modular approach that TEVETA has launched through the Competency-Based Education and Training (CBET) methodology is poorly understood in the market, even if it could be the means to improve linkages between informal and formal TEVET provision. Several times, the need to harmonize certifications has been brought forward in external reviews, but so far no definite steps have been taken in that direction. Apprenticeships in the informal sector comprise by far the majority of training, disconnected from the formal TEVET system. Inappropriate teacher qualifications, run-down workshops, low passing rates, and a mismatch between supply and demand are just some of the symptoms of gaps in policy execution. Central components such as TEVET qualification framework, competence-based standards, and increased industry involvement, could kick-start a process of sustainable innovation of the TEVET system in Malawi.

Nota: The terminology TEVET is used in Malawi to denote technical, entrepreneurial and vocational education and training.

Insufficient funding could hamper progress

The TEVET Act of 1999 paved the way for the development of joint funding in TEVET. During the past decade TEVETA has gradually managed to get an increasing number of enterprises to pay the compulsory one per cent TEVET levy. The government, however, is not complying with the legislative requirements concerning the TEVET levy. The current funding for TEVET is insufficient to ensure the quality in TEVET delivery. As a result students are not taught in an appropriate vocational environment either due to insufficient skills in the teacher workforce or run-down equipment. Even if increases in the funding of the TEVET sector are foreseen in policy documents, the level of funding proposed is so low that the government will be forced to prioritize public investments in the years to come if the TEVET system is to be one of the key components in the Malawi Growth and Development Strategy.

Access policies fail to meet equity requirements

Access policies, based on grades and combined with regulations that limit uptake according to the number of bed spaces available, have led to a situation where demand by far surpasses the offer in apprentice residential programmes, and access is therefore highly competitive and an option only for the best performers, who receive financial support from TEVETA. The combination of highly-regulated apprentice programmes which require boarding facilities for all students whether they need them or not, and an insufficient level of public funding, has led to technical colleges offering a range of programmes to "parallel" students who do not make use of boarding facilities, and who typically pay a much higher fee than the students in the apprentice programmes. The income stemming from parallel students is a welcome source of funding for the technical colleges; they do not have to report this income and can use it at their discretion. On the contrary the public funds are highly regulated and there are constant delays. In reality the majority of youth are left to train as apprentices in the informal sector or to get no training at all – and for the many dropouts there are no routes for a return to education. However, for the parallel students TEVET may prove to be a dead end as there are no requirements of the schools as to relevance and quality of the programmes that the technical colleges offer them.

Performance orientation in quality arrangements is yet to be developed

Current strategic approaches provide the beginnings of a quality assurance approach for TEVET, one of the gaps being a missing link between the Implementation Plan of the National Education Plan and the Strategic Plan for the National Training Authority – TEVETA. Furthermore, there is a fundamental lack of performance indicators to steer the development, implementation, and monitoring within a coherent quality assurance framework.

Better data could improve system responsiveness

System efficiency is low. One-third of students do not pass their final tests, although it is encouraging to see that dropout rates from the formal TEVET system are low. Even if there are major skills gaps in a range of occupations in the private sector, 44 per cent of TEVET graduates find employment in the public sector. Transition rates to the labour market for graduates from the vocational training system are high, irrespective of whether students come from the apprentice system or from private providers. More students from private providers find jobs or become self-employed in the informal sector. System responsiveness is hampered by a lack of robust labour market data, a problem that has been recognized for some time.

Evidence-based policy making is pending

The governmental implementation plan for the Education Sector Plan and the TEVETA Strategic Plan provide the building blocks for monitoring progress in TEVET reform. The lack of process, output and outcome-based indicators gives policymakers insufficient instruments to gear investments to areas which yield the highest benefits. Generally there is an underdeveloped piloting and evaluation culture that could provide valuable lessons for a dynamic implementation of reform measures. Highly regulated colleges also take their toll on the development of an innovative and performance-based culture.

Ways Forward

System efficiency

Utilization rates have to be increased as a means to expand access and to improve system efficiency, not least in a context of the projected population growth which is likely to increase demand. Separating residential, operations from the actual delivery of TEVET would enable TEVET actors to concentrate their resources on their core business, namely, the delivery of TEVET. Gradual deregulation of the technical colleges and greater collaboration with regional stakeholders would allow TEVET providers to develop and deliver programmes targeting the diversity of needs in the local context. Improved links with local employers are likely to have a positive impact on industry placements, and could lead to new services regarding workforce development. Experiences from several countries show that strong links between TEVET providers, employers and NGOs have a positive impact on regional innovation systems and the formation of social capital. The transformation of TEVET provision and demand orientation will call for more flexible funding schemes and higher levels of funding, especially if income generated from parallel students is to be replaced by programmes which are in demand, but where users cannot pay the same level of fees as the parallel students. TEVETA will need to give technical support to the technical colleges in the transition phase to build strategic capacity in the institutions and to give support to developing partnerships with local employers and NGOs. Since quality TEVET runs at higher costs per unit than other forms of youth programmes, it is strongly suggested that the TEVET programmes currently offered in 13 secondary schools be replaced by problem- and project-based applied science, technology, and innovation courses. There are many examples of open source courseware on the internet that could be transferred to the Malawian context and which could contribute to Malawian youth acquiring higher-order creative, communicative, and analytical skills, which are critical to success in the labour market, entrepreneurship, and to social innovation. There is international evidence that workshop-based vocational skills taught at the secondary level do not provide students with a better foundation should secondary education be the transition to the labour market.

Governance

Any further reform of the TEVET system is likely to fail unless the current governance problems are solved. Multi-stakeholder partnerships, transparency, accountability and agility should be the guiding principles for governance reform. The urgency calls for the Ministry of Education to take the lead so that the key stakeholders reach an agreement regarding a task-appropriate governance framework. This should be complemented by an action plan with targets and deadlines that can be communicated to stakeholders and external funders, demonstrating the commitment to moving forward to the benefit of the Malawian society. The TEVET Act should be revised – and this is not just a technical matter. Good governance is not just about roles and responsibilities. The governance model agreed on must support long-term capacity building at all levels. It must be open enough to grasp the opportunities to learn from promising practices in other countries. It should be sufficiently agile so to be responsive to structural changes in the labour market and to broader societal changes such as globalization, climate change, technological progress and demographic pressures. This calls for efficient, open and involving communication and decision-making processes. The government should begin a consultation process with all stakeholders with a view to medium-term development of a coherent lifelong learning policy which would integrate formal, informal and non-formal learning. The point of departure could be the Education Sector Plan.

Funding

The funding model for TEVET is not only critical to the quality of TEVET, but also to the behaviour of system actors. The government will be faced with complex policy choices as to prioritization of funding streams in the years to come. Therefore, it will be important to capture lessons learned from other countries, whilst developing a financial framework that will improve utilization of TEVET facilities. Funding models will need to address issues of access, relevance, outcomes, sustainability, and accountability in order to ensure efficiency and effectiveness in public expenditure in TEVET. Future demands to the TEVET system will likely be so great that it is imperative that all relevant stakeholders be consulted in revising the financial framework for TEVET, for only then can it be sustainable.

Access

Expansion of the TEVET system calls for increased efficiency. The first step will therefore be for TEVETA in effect to function as the regulatory body for TEVET. Second, the Ministry of Education, Science and Technology should, in consultation with the Ministry of Labour, set a date for the harmonization of the different certifications and communicate this to all relevant stakeholders. A harmonization of certifications will likely be opposed by some; therefore TEVETA must start communicating the benefits of a competence-based approach and use the expertise of the Board to design such a communication strategy. A third step would then be to implement a policy framework for recognition of prior learning. This could offer accelerated routes to qualifications as well as the return to education for drop-outs with some experience gained in the labour market. Medium-term access policies should include specific services aimed to stimulate entrepreneurship and innovation, not just for the informal sector but also in high-value areas aligned to the Malawi Growth and Development Strategy.

Quality

As a matter of urgency the Education Sector Plan and the TEVETA Strategy Plan must be aligned as the basis for a comprehensive quality assurance framework and implemented step by step with targets and deadlines to guide implementation. As part of this process and to ensure that the TEVET provision meets the needs of employers, it is now time to take stock of the lessons learned from the first CBET programmes as the basis for the development, revision, and harmonization of current certifications and curricula. Employers must be on board as a systemic feature. The rigid programming which characterizes the current apprentice programmes needs to be assessed from a labour market perspective. The competencies and the work processes for a new graduate entering the labour market should set the standards. Not all vocational occupations require the same programme duration. The competency-based method combined with recognition of prior learning could be used in workforce development to ensure that adult unskilled workers have opportunities to participate in accelerated programmes as a pathway to qualification. Quality and diversity are, and will be even more critical to a skilled Malawian workforce and the realization of Malawi's Growth and Development Strategy. The gaps between supply and demand are so immense that a coherent long-term plan is needed. This must include the development of a competent TEVET teacher workforce as a key priority. In the short term, TEVETA should explore the possibility of bridging some of the worst gaps through industry placements of TEVET teachers, combined with a flexible and modular training programme delivered at night, during vacation periods, or on week-ends, or organized as distance education to avoid the need for substitute teachers. In the medium term, TEVETA should, in collaboration with the Ministry of Education, Science and Technology, develop an institutional basis for pre-service and in-service vocational teacher training. UNESCO could be a partner in transferring promising models from other countries whilst also exploring opportunities to collaborate on TEVET teacher education and training within the whole SADC region, for cost and quality reasons.

Relevance and the knowledge base

Improved datas is a prerequisite to quality, efficiency, and accountability in public spending. Baseline work must therefore start to identify which types of input, process, output, and outcome data and indicators are needed to support the implementation of the Education Sector Plan and to begin development of a performance-based culture. This should involve the Ministry of Education, Science and Technology, the Ministry of Labour, and the Malawi Statistical Office. A systematic approach to monitoring of the labour market is another component in a value-for-money TEVET policy. Many countries have lost precious time and money by embarking on the development of overly complex labour market information systems. Gradually, Malawi should develop an innovation culture in TEVET. Experiences from other countries that have embarked upon reforms show that piloting and formative and summative evaluations are preconditions to developing systemic innovation capacity at all levels and to further evidence-based policy-making.

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Glossary

AIDS: Acquired Immune Deficiency Syndrome

ADB: African Development Bank
CBE: Complementary Basic Education

CBET: Competency-Based Education and Training

DANIDA: Danish Development Agency

DTVT: Directorate of Technical and Vocational Training

ECAM: The Employers' Consultative Association of Malawi

ESCOM: The Electricity Supply Corporation of Malawi's

ESIP: Education Sector Implementation Plan

FDI: Foreign Direct Investment

GTZ: German Agency for Technical Cooperation

GDP: Gross Domestic Product
HIV: Human Immunodeficiency Virus

ICT: Information and Communication Technology

ILO: International Labour OrganizationIMF: International Monetary FundJCE: Junior Certificate Examination

LMS: Labour Market Survey

Labour Market Information System

MANEB: Malawi National Examinations Board

MCCCI: Malawi Confederation of Chambers of Commerce and Industry

MC: Malawi Crafts Test

MCAC: Malawi Craft and Advanced Craft Certificate

MDG: Millenium Development Goals

MGDS: Malawi Growth and Development Strategy

MK: Malawian Kwacha

MOEST: Ministry of Education, Science and Technology

MOL: Ministry of Labour

MSCE: Malawi School Certificate of Examination

NTT: National Trade Testing

NESP: National Education Sector Plan
NCIC: National Construction Industry Council

NSO: National Statistical Office

OECD: Organization for Economic Cooperation and Development

PPP: Public Private Partnership

SADC: Southern African Development Community

USD: US Dollars

TEVETA: Technical, Entrepreneurial and Vocational Education and Training Authority

TEVET: Technical, Entrepreneurial and Vocational Education and Training²

TVET: Technical and Vocational Education and Training

TQF: TEVET Qualification Framework

UNESCO: United Nations Educational, Scientific and Cultural Organization

WMS: Welfare Monitoring Survey

² Throughout the report TEVET is used whether referring to technical and vocational education and training in generic terms or specific to Malawi, as TEVET is the abbreviation known and used in Malawi

Introduction and Context

During the 34th session of the General Conference of UNESCO, Member States expressed the need to scale up access to quality Technical and Vocational Education and Training (TVET). Subsequently UNESCO's Executive Board endorsed a strategy for supporting technical and vocational education and training for the period 2010-2015.

The UNESCO Strategy mirrors a growing policy awareness of the enabling role of TVET as a driver of sustainable economic growth and social equity in developing countries. A key feature of TVET is its orientation towards the world of work, whether as employed or self-employed, and the emphasis of the curriculum on the acquisition of marketable skills. TVET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that many countries will increasingly require on the path to equitable and sustainable socio-economic transformational cohesion and sustainable economic growth. Within the agreed strategic framework UNESCO will provide support to countries in three core areas:

- 1. provision of upstream policy advice and related capacity development,
- 2. conceptual clarification of skills development and improvement of monitoring, and
- 3. acting as a clearing-house and informing the global TEVET debate.

UNESCO's Section of Technical and Vocational Education and Training is committed to execute the above-mentioned programmes by undertaking different activities at national, regional and global level. The first strand of activities entails provision of upstream policy advice to countries. Malawi is the first country has participated in a series of TVET policy reviews that UNESCO has planned for the years to come. The review was undertaken by a team of UNESCO experts from 17 to 26 March 2010.

Purpose of the review

The purpose of the policy review is to identify concrete options and strategies for enhancing TVET policies and efficiency and effectiveness of TVET, aligned to broader socio-economic objectives in the country. Secondly, but no less important, it is intended to contribute to policy learning and participatory policy processes among stakeholders to stimulate dynamic and evidence-based policy making.

During the review visits the team met with policymakers and stakeholders from the field of TVET. A list of participants is given in the Annex.

The outcomes of the policy review are presented in the following structure:

- Executive Summary;
- National Socio-economic Context;
- The Education System and TVET;
- Governance of TVET;
- Funding of TVET;
- Access and Participation;
- Quality;
- Relevance and Impact;
- The Knowledge and Evidence-Base;
- · Conclusions and Recommendations.

The conclusions and recommendations set out a rationale and provide precise and clear recommendations that are intended to assist key players in Malawi to further elaborate and coordinate relevant policies, formulate targets and undertake concrete actions towards implementation of the objectives.

The team wishes to express its special thanks to the Ministry of Education, the Directorate for Vocational Education and Training, Mr Banda, and Dr Kafere. The team also wishes to express thanks to Mr Jones Chafa, UNESCO CapEFA Programme Coordinator in Malawi, as well as all the stakeholders who contributed to the realization of the country review.

The National Socio-Economic Context of TEVET

This chapter introduces the socio-economic context of TEVET in Malawi. The terminology TEVET is used in Malawi and therefore throughout the report to denote technical, entrepreneurial and vocational education and training. An overview of recent demographic developments follows, then an outline of key social indicators. The chapter concludes with an overview of economic development trends in Malawi, including the role of the informal economy and how this shapes current employment patterns.

Demographic Trends

Malawi is a land-locked country of 118,484 square kilometres located in southeast Africa. Twenty per cent of the country is covered by water. Eighty-two per cent of the population lives in rural areas where the main means of subsistence is smallholder, rain-fed agriculture. From 1987 to 2008, the population of Malawi grew at an average annual rate of 2.4 per cent. The 2008 Population and Housing Census conducted by the Malawi National Statistics Office estimated the country's population to be slightly greater than thirteen million, a 39 per cent increase from the 1987 estimate of eight million inhabitants. The population growth rate is expected to decrease slowly, but the primary school age group (6 to 13 year-olds) will increase by 20 per cent up to 2018. If universal primary completion is reached before 2018, primary school places for 4.8 million children ³ will be required by 2018, which represents a 45 per cent increase from 2008 (CSR, 2009). An increase of this magnitude is likely to put pressure on the secondary and post-secondary system – not least in the current context where access to post-secondary public vocational education is limited compared to actual demand. The Southern region of Malawi is the most densely populated, with 45 per cent of the total population. The Central region has 42 per cent, and the Northern region has the lowest share of the population with only 13 per cent of the population. The country has an average population density of 139 people per square kilometre, which is high compared to neighboring countries.

Demand for education tends to be higher in urban than in rural areas, and it is typically easier for an individual to access education in urban areas, where there is often also a wider choice. Malawi has a low urbanization rate, with only 17.7 per cent of the population living in cities. This proportion is much lower than both the African average of 37.9 per cent and the Southern African Development Community (SADC) countries average of 35.9 per cent. Malawi has seen an accelerated growth in urban informal sector employment over the past decade.

In 2008, 45.4 per cent of the population in Malawi was between 0 and 14 years old⁴ - that is, children who in most countries would be expected to attend primary and secondary school. This is the highest in the SADC region, and it indicates that demands for schooling are likely to increase in the years to come.

³ The assumption used is that repetition rate will stay constant between 2008 and 2018; 20 per cent of the students would be repeaters.

⁴ https://www.cia.gov/library/publications/the-world-factbook/geos/mi.html

Social Indicators

Poverty

According to the *United Nations Development Report* (2007/08), 63 per cent of the Malawian population is living below the US \$2 a day income poverty line, and 21 per cent below the US \$1 a day poverty line. Those percentages are lower than the SADC average. The richest 10 per cent of Malawi's population has an average per capita income that is 11 times higher than the average per capita income of the poorest 10 per cent (World Bank, 2010).

Malnutrition and the Child Mortality Rate

Malnutrition in Malawi is extensive and a major social development challenge. The prevalence of malnutrition is estimated to be 49 per cent. Dietary diversity and the average amount of calories consumed daily are low across the country. Nationwide in 2008, an overwhelming 44 per cent of pre-school children were stunted (with 18 per cent being severely stunted). These figures have remained more or less constant over the past 15 years. Malawi has the highest malnutrition rate in the SADC region (the SADC average is 33 per cent). Malawi's mortality rate for children below the age of five is 122 children per 1,000, which is slightly better than the SADC average of 131.

HIV and AIDS

The HIV and AIDS pandemic has affected all levels of social development in Malawi, including mortality, life expectancy, and infant mortality. In the education sector, HIV and AIDS has taken its toll on the teacher workforce and contributes to teachers' absenteeism. The pandemic has significantly increased the number of orphans in the country, and these children are less likely to go to school than children with families (*Malawi Poverty Assessment Report*, 2008).

Macroeconomic Performance

Malawi's macroeconomic performance has been strong and stable, with the real GDP growth rate averaging over 7 per cent since 2004 (Figure 1.1). The economic growth rate has been consistently above the Sub-Saharan average during this period. Since 2004 the inflation rate has declined to single digits, and interest rates declined to 15 per cent in 2007 down from over 40 per cent. Government revenues including grants have increased significantly from 19.4 per cent of the GDP in the 2003/2004 financial year to 32.2 per cent in 2007/2008 due to improved tax administration combined with an overall increase in donor support. This development provides an opportunity to increase investments in the education sector to stimulate sustainable medium-term economic growth.

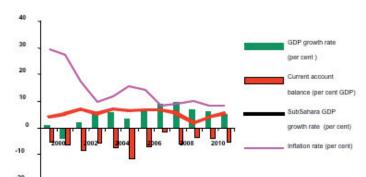


Figure 1.1: Macroeconomic Performance

Data Source: IMF (2009); NSO

Agriculture continues to anchor economic growth though with volatile swings in its contribution. The majority of the population still works in agriculture. The overall GDP growth rate mirrors this volatility, which is largely attributed to the country's dependence on single-season, rain-fed agriculture.

Developments in GDP

Malawi's private sector is characterized by the 'missing middle', with few businesses in between the large multinationals and the micro-enterprises. The manufacturing sector is small and accounts for just 14 per cent of GDP, down from a high of 32 per cent in 1992. The private sector is also inward-looking, as only 14 per cent of manufactured output is exported, in sharp contrast to the strategic intentions of developing Malawi into an export-oriented country. The changing structural composition of Malawi's GDP since 2005 demonstrates growth expanding beyond agriculture.

The Labour Market

Labour Market Characteristics

The formal sector plays a moderate role in terms of employment. The public sector dominates the formal labour market, employing close to half of formal sector employees. About three-quarters of the labour force works as smallholder farmers. Agriculture and food security is one of the priorities in the Malawi Growth and Development Strategy (MGDS). At sector level the Ministry of Agriculture and Food Security has implemented an agricultural development programme intended to stimulate agro-business development and land and water management, which could also lead to improved productivity among smallholder farmers. Informal non-agricultural employment, especially in urban areas, has traditionally been underdeveloped in Malawi. Linked to the high levels of poverty are substantial levels of child labour, both paid and unpaid (ADB, 2005).

Figure 1.2 presents employment rates by sector and shows that the agricultural sector (including forestry and fisheries) employs 77 per cent of the labour force, while manufacturing only employs 2 per cent, a reflection of the largely agrarian economy. This labour force distribution pattern should be considered for any revision of the current TEVET offer.

3%
2%

Agriculture

Manufacture

Construction

Distribution and hotels

Social & Community Services

Others

Figure 1.2: Employment Rates by Sector

Data Source: 2007 Welfare Monitoring Survey, NSO

The 2007 Welfare Monitoring Survey (WMS) reported an unemployment rate of 3.1 per cent (3.9 for males and 2.4 for females). Urban unemployment among 15-24 year olds has been rising from 1 per cent in 1998 to 9.4 per cent in 2007 owing largely to firm downsizing, public service restructuring, and rural-urban migration which was estimated at

6.3 per cent in 2008. The reported unemployment rates are likely to be an underestimate in view of the widespread underemployment that exists in subsistence and informal sectors in the Sub-Saharan economies.

An Analysis of Growth Sectors

Figure 1.3 compares average sectoral growth between periods 1995-2001 and 2002-2008. Construction, communication, financial and professional services, and mining and quarrying have been the most important sectors driving growth. The information and telecommunication sector has benefited from expansion in cellular telephone and private radio operations. Financial and professional services have benefited from growth in the insurance and banking industries. Though not identified as a growth sector, the availability of energy, including the development and use of alternative energy, will be an important framework parameter for attracting Foreign Direct Investment (FDI).

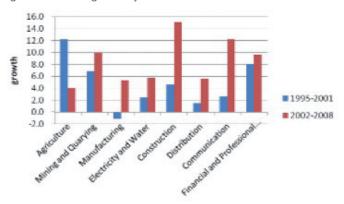


Figure 1.3: Average Yearly Sectoral Growth between 1995-2001 and 2002-2008

Data Source: NSO, NABOP

The agriculture sector's contribution to GDP of around 40 per cent is shrinking slowly. On the other hand, communication, construction, and financial services have been growing. The manufacturing sector has recovered from negative growth between 1995-2001 to more than 5 per cent average growth rate between 2002-2008, bolstered by a rise in cement production, tobacco processing, sugar production, and production of soap and detergents. The mining sector is likely to make a significant contribution to GDP with the start of uranium yellow cake mining in the third quarter of 2009. The IMF projects an annual contribution of around 10 per cent to GDP from the Kayelekera uranium mine. Evidence shows the economy is diversifying. The country therefore needs to invest in skilled labour development to sustain this progress. Studies have shown that skills are becoming increasingly important in determining how fast poor countries move up the value chain (DfID, 2008).

Government Economic Programme

The Government's Economic Programme is implemented within the framework of the *Malawi Growth and Development Strategy* (MGDS), the country's poverty reduction strategy for the period 2006-2011. The overall goal of the MGDS is to transform the country from a predominantly consuming and importing country to a producing and exporting country.

The MGDS has five themes: Sustainable Economic Growth, Social Development, Social Protection, Infrastructure Development, and Good Governance. Infrastructure Development receives the largest share of resources for the implementation period (Figure 1.4). High investment in infrastructure will require increased availability of engineers and technicians and skilled craftsmen.

The Role of TEVET in Economic Growth

The MGDS recognizes the significant shortage of skilled workers and technicians. The strategy further points out that the educational system is not producing enough graduates to meet current and future economic needs, that available training is inappropriate for business needs, and that there are insufficient facilities for vocational training opportunities

(including science and technology). However, the strategy does not explicitly define mechanisms for monitoring the availability of skills necessary to support the private sector, and supportive policies to further sustainable growth are in general hampered by a lack of robust labour market data. The table below shows the thematic prioritization in the MDGs. The question of insufficient skills is to some extent expressed in the theme of sustainable economic development – but not in any substantive manners.

5.1% 5.4%

25.1%

Social Protection

Social Development

Sustainable Economic Growth

Infrastructure Development

Good Governance

Figure 1.4: Overall Prioritization by Theme

Data Source: Malawi's Growth and Development Strategy

Constraints to Private Sector Development

In 2009, Malawi ranked 134 out of 181 countries on the World Bank's 2009 Doing Business indicators, down from 131 in 2008. The fall in rankings was largely due to marginal slips in time spent in getting permits, closing a business, and cumbersome procedures in paying taxes. However figure 1.5 shows that on average Malawi performs better than other countries in the Sub-Saharan region.

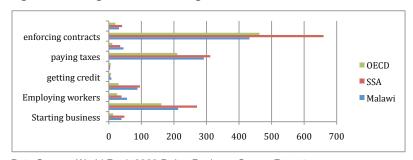


Figure 1.5: Doing Business Ranking

Data Source: World Bank 2009 Doing Business Survey Report

The continuing increase in economic growth has led to a GDP per capita of around US \$300 in 2008. Compared to the entire SADC region, Malawi still has the third lowest GDP per capita and one of the five lowest in all of Africa. However, with the government's increased emphasis on value addition on domestic products, coupled with the discovery and mining of uranium, there are real prospects of improved GDP levels. Industry stakeholders interviewed are concerned that Malawi will miss this window of opportunity, because currently the TEVET system does not deliver in numerical and qualitative terms the skills needed in the identified growth sectors, particularly since Malawi Polytechnics stopped providing technicians' programmes some years ago.

Figure 1.6 below presents Malawian firms' perceptions of the main obstacles to production and productivity. Power, crime, corruption, and infrastructure top the list. Availability of a local skilled workforce comes fifth and was perceived to be a bigger obstacle in 2008 than it was in 2007. This causes concern, given that TEVETA, the National Training Authority, has increased interactions with industry in relation to workforce development.

KEY OBSTACLES TO PRIVATE SECTOR GROWTH Exchange rate policy 7.3 The political environment Economic and regulatory policy Legal environment for settling commercial □ 2008 7.6 Availability of local skilled worksforce □ 2007 Legislation (Effectiveness of national Infrastructure (Roads) Crime theft and corruption Utilities (Electricity) 9.0 8.9 2.0 4.0 6.0 8.0 10.0 RATE

Figure 1.6: Obstacles to Production and Productivity

Source: 2008 Malawi Business Climate Survey, MCCI

Drivers and Trends Likely to Impact TEVET

Private Sector Growth Strategy

A stable macro environment and increasing Foreign Direct Investment (FDI) indicate that the Malawi environment for business investments is improving. FDIs more than doubled between 2000 and 2007, to USD 55 million in nominal terms. Malawi will need skilled labour at competitive wages in order to attract FDIs and facilitate the country's move up the value chain. A thriving private sector will also help the country achieve the export-oriented goal of the Malawi Growth and Development Strategy (MGDS). The first annual progress review of the MGDS reveals that progress has occurred, especially in terms of sustaining economic growth and consolidating macroeconomic stability, which could lay the foundation for increased investments in the TEVET sector. Furthermore, government revenue has grown remarkably thanks to improvement in tax administration and tax collection efforts. The Malawi Growth and Development Strategy has a clear goal of reforming Malawi from a primarily import-based economy depending upon the primary sector to an export-oriented country with growth sectors clearly identified, and with education as a central enabling policy.⁵

Enabling ICT Policies

In 2005 Malawi adopted a national ICT for Development policy. An ICT policy is perceived as an enabling policy to attain an information-rich and knowledge-based society. The policy has a dual focus: to develop the ICT sector, and to promote the development and use of ICT in all sectors. There are eight priorities, one of which is human capital development. The dedicated section on human capital development and education aims to facilitate the deployment of ICTs in all education sectors, to improve access, quality, and delivery, including computer-aided training materials, and to improve ICT literacy. As such ICT policies provide a strong policy framework for reform of TEVET in a number of ways. To date, this opportunity is still largely ignored.

⁵ Malawi Growth and Development Strategy 2006-2011. Ministry of Development Planning and Cooperation 2006.

Education as a Driver of Change

The President has identified the entire education sector as a key priority. This is reflected in the Education Sector Plan, which indicates that the government intends to increase investments in the education sector in the years to come, and which - with a timely and targeted approach - could contribute to the Government's development strategy in several ways⁶. The development programme for the agriculture sector is not yet complemented by targeted TEVET programmes and courses for the agricultural sector, except for those offered by the College for Natural Resources. However, the characteristics of the agricultural sector will likely call for a diversified TEVET strategy, which could have a major impact in terms of improving agricultural diversification and productivity, and also through introducing teaching methods that can contribute to sustainable, green farming (Mwenifumbo, 2008).

Maintaining a positive development in GDP and stimulating the anticipated growth in some sectors will put pressures on existing TEVET policies regarding access, diversity, relevance, and efficiency. This is unlikely to materialize without increased investments in the TEVET sector, and stronger public-private partnerships in the governance and reform of TEVET. Notably, the TEVET sector has not expanded or undergone extensive reform since the TEVET Act of 1999 and the subsequent establishment of the Technical, Entrepreneurial and Vocational Education and Training Authority (TEVETA).

The Education System and TEVET

This chapter situates the education system within a broader policy framework. It then provides an overview of the education system, including the characteristics of TEVET and the policy framework for TEVET today.

Goals and Objectives

The Constitution of the Republic of Malawi asserts that education is a fundamental human right. The national long-term development strategy for Malawi (Vision 2020) envisaged the total elimination of poverty by the year 2020 and accorded high priority to the education sector as a means to bring about social and economic transformation. The Vision 2020 analysis was incorporated into the subsequent *Policy and Investment Framework* (Revised PIF, January 2001) for Malawi. The policy and investment framework was developed in the recognition that prior policy actions were not sufficiently based on well-designed and clearly articulated policies, and that demands for expansion and quality education mean that the sector is seriously under-funded. The PIF set out a long-term development strategy and a systematic approach for investments in the education sector (up to 2012), emphasizing that: "Education is at the core of this policy." The PIF made clear that investment in education yields "broad economic and social benefits".

The Malawi Growth and Development Strategy (MGDS) From Poverty to Prosperity endorsed the pivotal role of education in socio-economic reform:

"[Education]...is a catalyst for socio-economic development, industrial growth and an instrument for empowering the poor, the weak and the voiceless. Education enhances group solidarity, national consciousness and tolerance of diversity. It facilitates the development of a culture of peace which is conducive and critical for socio-economic, political and industrial development. Hence, education is critical and necessary for economic and industrial growth and development." (MGDS, 4.3.4).

■ The Policy Framework

The National Education Sector Plan (June 2008) for the period 2008-2017 details the government's vision and mission for education in Malawi. On a sector-by-sector basis, it also assesses inefficiencies and gaps in each of the sub-sectors as a basis for planned interventions.

The Sector Plan has since been followed up by the *Malawi Country Status Report* (2008/2009), which is a detailed analytical document of the education sector that serves to highlight weaknesses and strengths in the education sector; it recommends remedial policies on a sector–by-sector basis to improve quality, access and governance in the system.

The Malawi National Education Sector Implementation Plan 2009-2013 describes a detailed implementation plan by sub-sector for the period, including planned financial expenditure.

As such Malawi can draw on an existing policy framework for further reforms within the TEVET system.

Overview of the Education System

The Education system in Malawi is based on an 8-4-4 structure. The system comprises eight years of primary education (Standard 1 to Standard 8), four years of secondary education (Form 1 to Form 4) and four years of tertiary education.

Free primary education has been offered since 1994. Whilst access to primary education is almost universal (99.9 per cent), the completion rate is low at 35 per cent, which situates Malawi far from the second millennium development goal of providing universal primary education for all. There are several factors causing this. Thirteen per cent of the students are in schools that do not provide educational continuity up to Standard 8. Crowded classrooms and open-air classrooms are other factors. Economic constraints, HIV and AIDS, pregnancy and early marriage are other reasons for dropouts, and repetitions contribute to poor internal efficiency (World Bank, 2010).

At the end of primary education pupils take the Primary School Leaving Certificate Examination, success in which determines opportunities to continue in secondary education. After two years of secondary education students take the National Junior Certificate of Secondary Education (JCE), which is followed by the Malawi School Certificate Examination (MSCE) at the end of secondary education. Completion of secondary education is a precondition to access the TEVET system, and competition is strong, because access is limited.

■ The TEVET System

The public TEVET apprentice programmes are offered by the technical colleges. To access the ordinary TEVET system, students must have completed either a JCE or an MSCE.

Pre-occupational TEVET, primarily in traditional crafts such as woodwork and metalwork, is offered by 13 secondary schools. In rural areas there are some Village Polytechnics, which did not form part of the review. In addition there are a number of both small and larger private providers as well as NGOs. Training in the informal sector is, in terms of student numbers, by far the largest provider of TEVET. Master craftsmen enter an agreement with an apprentice. The duration may vary according to when the master craftsman believes the apprentice has mastered the trade. In the cities in particular, training is at times limited to very basic training by a friend or a relative who has learned from a master craftsman. Most sources conclude that the TEVET supply in Malawi is diverse, fragmented, and uncoordinated, offered by public and private providers as well as NGOs.

The figure 2.1 below shows that the small scale of the formal public TVET offer has a negative impact on the issue of access to the public TVET system compared to other African countries.

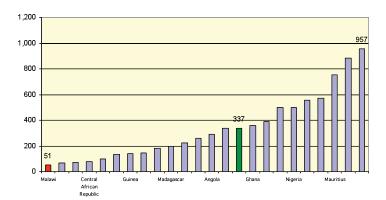


Figure 2.1: TEVET students per 100,000 inhabitants in selected SADC countries

Data Source: CSR Report 2009 - Annexes

The core of the public formal TEVET supply is governed by the Ministry of Education, Science, and Technology (MOEST), Division of Vocational and Entrepreneurial Education and Training. Access is provided by seven public technical colleges

offering training in about 22 trades such as building and construction, horticulture, engineering. Governance and access are elaborated further in Chapter 3 and Chapter 5.

Apprentice-based TEVET in the Technical Colleges

The national apprentice programme is regulated, administered and subsidized by TEVETA. Students alternate between school-based education and in-company training. The programmes start with one year of initial training in the technical college, followed by three years, each with one term in college and two periods in a company. Generally, there are few robust data available on the TEVET system. However, the existing available data show that the formal public technical education system only offers access to a fraction of those that apply. According to the regulations, technical colleges can only enrol students in the ordinary TEVET programmes based on the number of available boarding places, whether students need boarding or not. Furthermore, the TEVET system is hampered by a lack of qualified teachers, because there are no pre-service and in-service programmes that specifically target TEVET teachers. There are insufficient apprentice places available, so some students finish TEVET in a school-based form of apprenticeship. Participation patterns are also adversely affected by lack of funds to pay tuition fees, by requirements to contribute to the family household, or childcare responsibilities. The fact that most of the population is located in rural areas negatively affects the demand for further schooling, partly due to the distance, but also due to work responsibilities. Although only the regular apprenticeship programmes are publicly managed and funded, the total TEVET provision and uptake in the public technical colleges are substantially higher. In addition to the TEVETA-administered apprenticeship places, technical colleges also enroll "parallel" students, whom the technical colleges are free to select, and they can enroll in a range of programmes provided they can pay the requested fees. Some of these students attend programmes that follow the same apprenticeship structure as the TEVETA-administered students. Although the parallel student opportunity expands access, the model does not contribute to equity, since students in parallel programmes pay substantially higher fees than ordinary (TEVETA-sponsored) students. Generally the relative parallel student intake is substantially higher in urban public technical colleges (Lilongwe, Soche, Mzuzu) than in rural ones (Livingstonia, Nasawa, Namitete, Salima) because of the need to provide accommodation to students on campus in rural areas and the limited bed space available.

The enrolment of 35 students per 100,000 inhabitants includes parallel students. However, data on the share of parallel students are not robust, and some sources indicate that institutions tend to under-report the enrolment levels of parallel students, as the income generated does not have to be reported and it gives institutions a welcome opportunity to cover the actual costs of running a technical college (CSR, 2009).

Characteristics of TEVET

Training in the formal system mainly comprises traditional technical trades, though in recent years these programmes have been supplemented by programmes in administration and hairdressing. Access is biased against girls, those from rural areas, youth from low-income families, dropouts, and those with low educational attainment. In recent years affirmative actions introduced by TEVETA have improved the enrolment of girls in TEVET. In many respects the current TEVET offer is not aligned to the makeup of the economic sectors of activity – which is dominated by agriculture, nor to the Government's Growth and Development Strategy, which aims to pursue economic growth and poverty reduction through a shift from being an importing to an exporting economy. Interviewed stakeholders, particularly from industry and trade organizations, are concerned that Malawi will miss out on growth opportunities due to the lack of a qualified workforce with the right mix of skills. The lack of technicians seems, in particular, to be a universal problem, since Malawi Polytechnic stopped providing technician programmes. Workforce training is primarily offered as on-the-job training in the larger enterprises or through other institutions such as the National Construction Industry Council (NCIC), and the Malawi Confederation of Chambers of Commerce and Industry (MCCCI).

The most important categories of providers are briefly depicted in the table below:

Table 2.1: TEVET Providers in Malawi

Provider Type	Brief Description	Provision/Qualifications
Public formal TEVET: TEVET in public Technical Colleges (TCs)	Provided in seven TCs, long-term pre-employment training courses form the core of the formal public training supply. These can be further divided into "regular" programmes, which are the courses recruited for, sponsored by, and regulated by TEVETA, and mainly provided through apprenticeship. The colleges also offer "parallel" programmes. These include apprenticeship and non-apprenticeship courses as well as a range of short courses. The regular TEVET programmes are under the governance of the MOEST. The parallel programmes offered by the public colleges are under their responsibility; students typically pay higher fees in the parallel programmes than in the regular programmes. The regular programmes are limited by the bed capacity, as all regular students have to be provided boarding. TCs receive base funding from the public budget and programme funding from TEVETA and charge trainees tuition fees. Prevocational training is also offered in 13 secondary institutions - typically in traditional trades.	Technical colleges are under the Ministry of Education. The formal apprentice programmes lead to a CBET qualification at four different levels, and Malawi (Advanced) Craft and other qualifications in parallel programmes.
Private provision: TEVET provided by NGOs and private commercial schools	This is by far the largest provider type although the total number of institutions and enrolment is unknown (CSR, 2009). A preliminary provider directory from 1999 identified a total of 130 private and NGO-training providers enrolling close to 10,000 students. Training institutions cater for a range of training fields that is much wider than the occupational groups provided in the public TC's. Training duration varies, however many institutions offer formalized courses, for example in agriculture. Private commercial institutions offer mainly cheap-to-train commercial trades (e.g., accounting, management, secretarial, IT) and are concentrated in urban areas. However, the private training market also stretches into rural areas and includes more traditional technical trades. Training courses are financed by a combination of donor and private financing (fees) in the case of NGOs, and are usually fully privately financed (through fees) in the case of private commercial providers.	Many but not all programmes aim at preparing students for Trade Test, Malawi Craft and Advanced Craft certification examinations, and other international qualifications such as London City and Guild. Schools also issue school certificates.
Providers of sector-specific training	These are both public and private training institutions providing specialized training. Examples include the Malawi Institute of Hospitality (MIT), Marine Training College and Police Training Schools. The Construction association and the Association for Commerce and Trade are both examples of private providers. The institutions offer long-term, pre-employment training as well as short-term skills and upgrading, whereas the associations tend to offer internal certificates. Although often sponsored by sector ministries, some schools are self-financing and charge significant fees.	

TE) (ET. (T TD/FTA	0.15
TEVET for special target groups	The three TEVETA service centres, parastatal, or NGO training provisions cater for special target groups such as small and micro businesses, start-ups, or the disabled. Examples include the Malawi Enterprise Development Institute, Magomero Vocational Training School, and the Training Centre for the Disabled.	Self-managed or under the auspices of sector ministries, and usually issuing their own certification
Company-based training	The overall extent of employer-based training is unknown. Some large private companies maintain their own training centres. Other companies pay for staff to attend external training courses provided by training institutions. The larger part of company-based training is provided as on-the-job training. Training is financed by companies, however, companies can have part of their expenses reimbursed provided that they have paid the 1 per cent levy that all private and public companies are supposed to pay based on the payroll as stipulated in the TEVET ACT.	Provided and managed by companies. Company-owned training centres issue own or TEVETA registered certificates, external training is geared, if provided at all, for various certificates available in the training market.
Traditional apprenticeship	Traditional apprenticeship, also called <i>master craftsman training</i> , is a wide-spread system of on-the-job training provided in the informal sector. The system is self-financing with trainees receiving no or low wages during the training period. The extent and quality depends largely on the qualifications and background of the masters and the economic prospects of the individual businesses. Trades in which the system is common include baking, basket weaving, bicycle repair, boat building, construction, mechanics, welding, battery charging, tinsmithing, woodwork, radio and electrical repair, tailoring, shoe repair, net mending and others. Traditional apprenticeship is dominated by typical male trades. Trainees from the traditional apprenticeship system have the option to undergo trade testing if the Trade Testing system covers the relevant trade. Systematic information on the use of this option is not available, but according to information from the Trade Testing Directorate in the Ministry of Labour a considerable portion of the external trade-testing candidates comes from the	Self-organized by informal master craftsmen Participation in Trade Test examinations is optional.

Data Source: Further developed by the author based on the CSR 2009

TEVET Policy Framework

When TEVETA was set up as an independent authority, the intention was to reform TEVET from a supply- to a demandoriented system capable of integrating learning occurring in different contexts. To enable this transformation, a modular competence-based approach and a TEVET qualification framework were introduced. So far, this strategy has achieved only limited success. One of the main reasons is that the key stakeholders have not developed a shared view on the governance of TEVET in terms of roles, responsibilities, and lines of communication. This has been reported several times (UNESCO, 2006; World Bank, 2010) and has been a topic in a number of meetings held between key stakeholders. A symptom of this gap in the operational governance is that TEVETA has not yet become the overarching regulatory body as originally intended. This will be explored further in the next chapter.

III. Governance of TEVET

This chapter provides an overview of how the governance framework for TEVET has developed over the last decade, and who the main players are today. It discusses the characteristics of the current governance arrangements, the limitations in the existing model and provides pointers to priority actions to improve the governance of TEVET.

The Evolution of Governance

The Apprentice Act of 1996 and the Industrial Training Act of 1972 governed the apprenticeship and industrial training until the late 1990s. The Apprentice Board was responsible for the coordination of activities. The Act also provided for a levy grant scheme. The secretariat of the board was under the governance of the Ministry of Labour. Traditionally, technical vocational education (TVET) was governed by the Ministry of Education, whereas industrial training and apprenticeship was governed by the Ministry of Labour (UNESCO, 2006).

With the advent of a multi-party democracy a poverty alleviation policy was launched. The government concluded that poverty alleviation could only be realized through broad-based primary education in tandem with technical and vocational education responsive to the needs of individuals and the economy. This also led to a cabinet directive to establish an independent institution to coordinate and manage TEVET programmes, transferring the technical colleges from the Ministry of Education, Science and Technology to the Ministry of Labour (UNESCO, 2006), which became the Ministry of Labour and Vocational Training. As a result, technical education and vocational training became complementary functions under one ministry. In order to operationalize the Cabinet Directive, the Ministry of Labour set up a Task Force and Core Group in 1997 charged with the responsibility of drafting the legal framework in which TEVET activities were to be organized and for drafting a strategic plan which could guide the implementation of TEVET programmes (MOL, 1998).8 The Task Force comprised stakeholders from the private and the public sector.

The Legal Framework for TEVET

The Task Force recommendations led to a new policy on Technical, Entrepreneurial and Vocational Education and Training. This became the TEVET policy, which is still in operation today. The policy was intended to broaden the conceptual focus on TEVET comprising formal, informal and non-formal learning, and to create mechanisms for an effective coordination and integration of the different TEVET sub-systems. The intention was to develop a responsive and demand-driven TEVET system, which was previously supply-led and without focus on the role that TEVET can play in economic reform. In January 1999 the Ministry of Labour presented a bill to the parliament on TEVET policy. The Parliament passed the bill on 14 February 1999. The act created TEVETA and led to the *TEVET Act no 6 of 1999*. The decision to set up TEVETA was fostered in the Ministry of Labour to improve the quality of the operational management of TEVET, which according to the Ministry was not functioning as it should, and to enable TEVET to be developed in partnership with industry. The Act formed the legislative framework for the creation of TEVETA. It established the training payroll levy, which is levied on employers, to create a sustainable financial framework for TEVET in the medium term.

Change of Policy Holder for TEVET

From 2006 TEVET was transferred from the Ministry of Labour to the Ministry Of Education, Science and Technology (MOEST). There are no clear indications as to why this occurred, though it is widely recognized by stakeholders that the MOEST is the appropriate policy holder for TEVET. In particular, this consolidates responsibility for the education sectors, opening possibilities for an integrated approach to the governance of the education sector and to develop coherent education and lifelong learning policies. Thus, the Directorate of Technical and Vocational Training (DTVT) in the MOEST is charged with overseeing the provision of TEVET. It is worth mentioning that, although the legislative framework for TEVETA is very detailed in terms of task descriptions, there is no legislative basis that describes the specific roles of the Directorate for TEVET in the MOEST. This is one of the reasons for the current tensions regarding governance. For example, the TEVET Act stipulates that TEVETA should also *monitor and review technical education and training policy* (p. 5); this coincides with the MOEST as the policy holder, but also with the role of the TEVETA Board as stipulated in the Act: to develop policies on technical education and training and to supervise the implementation of such policies at national level (p. 8), and it is difficult to reconcile with the framing of *The National Education Sector Plan*.

Other areas of overlap concern regulation and administration for issuing certificates relating to technical education and training which are currently administered by Malawi National Examination Board (MANEB) (Craft certificate), the Ministry of Labour (National Trade Test), and TEVETA (which administers the CBET Certificate). The lack of clarity in governance was addressed by UNESCO in 2006 in an externally commissioned report, and was raised again as an issue of concern by the World Bank (World Bank, 2010). Key stakeholders attended workshop supported by UNESCO in September 2009 to find solutions to the governance issues in TEVET. Even if decisions and deadlines were set for some aspects of governance, the deadlines had not been met by the time of the review, although some stakeholders indicated that there is now more openness to move forward. These issues are further considered in Chapter 6.

TEVETA

TEVETA was established in 1999 as an independent authority intended to act as a regulating and coordinating body for all of TEVET and to facilitate and promote technical, entrepreneurial, and vocational education and training.

The TEVET Act stipulates 18 functions for TEVETA.

Functions according to the TEVET Act of 1998

- To facilitate provision of technical education and training opportunities and facilities for such training;
- To facilitate the establishment of technical education and training system that includes both basic and specialized training to meet the needs of both formal and informal sectors;
- To satisfy the demands of the labour market for employees with trade skills in order to improve production and ensure maximum efficiency and relevance of technical education and training programmes;
- To **ensure** that the system of technical education and training is based on demand, is cost effective and given a gradually decentralized planning and implementation authority to all regions of Malawi to ensure maximum utilization of resources and relevance of technical education programmes;
- To **foster and promote entrepreneurial values and skills**, as an integral part of all technical education and training programmes;
- To promote access to technical education and training for disadvantaged groups;
- To secure adequate and sustainable financing for technical education and training;
- To raise the quality of technical education and training;

- To **promote the provision** of technical education and training according to needs within the framework of overall national socio-economic development plans and policies;
- To **promote the balance of supply and demand for skilled labour** in both wage-employment and self employment in rural and urban areas;
- To **promote short tailor-made course programmes and in-service training** in order to improve the performance and productivity of the national economy;
- To **provide a competency-based technical education and training system**, combining broad basic training, gradual specialization and practical work experience;
- To promote a flexible training approach and other appropriate teaching methodologies;
- To **provide technical education and training** for the formal and informal sectors through coordination with recognized existing training providers;
- To **monitor and review** technical education and training policy;
- To **set standards and qualifications** for any occupation, skill, technology or trade in line with the needs of the labour market;
- To approve curricula of registered institutions providing technical education and training;
- To **regulate the conduct of national examinations and issue certificates** relating to technical education and training.

TEVETA results

TEVETA was originally set up with substantial support from donors; today there is a growing acceptance of the training levy (TEVETA's operations are hampered by the fact that not all public and private employers contribute the 1 per cent payroll levy that is required by legislation), and although not all interviewed stakeholders believe that TEVETA should undertake so many different functions, and express concern about overlap in governance structure, there is a universal recognition of the importance of TEVETA as a driver and implementer of the TEVET agenda. The recognition of TEVETA is also signalled by industries' growing collaboration with TEVETA on workforce development and use of the levy to co-fund training. In this sense the levy has driven a growing demand for continuing training, and led to an expansion of dialogue with industry. In recent years TEVETA has successfully introduced affirmative action to raise the participation of females in TEVET. More recently, TEVETA has started to reach out to the informal sector, which is a key development, given the size of the informal sector in terms of economic and training needs.

TEVETA governance challenges

It takes leadership, resources, stakeholder commitment and, not least, political will to change a supply-oriented system to a modern, demand-oriented and responsive TEVET system. Experiences from other countries suggest that the implementation of an independent TEVET authority can instigate and accelerate reform. TEVETA was mandated to function as a coordinating body with the intention that the TEVET Qualification Framework (TQF) would have a regulatory function spanning the different certifications offered. Yet there are still different certifications in operation that have not been aligned to the TEVET qualification framework. There is a lack of clarity as to the standards that should apply across the whole TEVET system.

Role of industry

Furthermore, CBET, which is a system of competence-based, modular qualifications developed by TEVETA, has not been widely adopted by industry, notably because industry has not been involved in a dynamic way from the outset, but rather in an ad-hoc way and to some extent through standing committees. The underlying conceptual framework and

the advantages of this approach were not communicated in an appropriate manner, according to some stakeholders. Currently there is confusion on the part of many of the main providers and users of qualifications, including employers, colleges and students as to which qualifications are appropriate in different contexts. Part of TEVET provision is still under the governance of sector ministries such as Water and Natural Resources, so the situation is inevitably complex. However, the cornerstone of a demand-oriented system is a strong partnership between the government and its agencies with industry, which is also stipulated in the TEVET Act through the establishment of industry bodies, and the role of the Board.

Even if dialogue between TEVETA and industry has increased, partnership is not a systemic feature in the governance framework, because industry trade committees are not in place. The situation is further aggravated because the Ministry of Education's formal approval of the new Board of TEVETA had been pending for almost a year at time of publication.

Public-private partnerships (PPPs) are also a key to demand-driven TEVET systems and to sustaining linkages between formal, informal, and non-formal learning as a systemic feature. For a fruitful partnership, all stakeholders need to commit to further TEVET reform, actively sharing their time, expertise, and resources. PPPs will also depend on the degree to which the government is prepared to share governance and include stakeholders in the management of TEVET in Malawi.

Funding

There has been a particular problem concerning government contributions, which in fact also might impede the perceived legitimacy of TEVETA. Thus, even if TEVETA has started to reach out to the informal sector, this remains limited, which is critical not only from the point of employment creation. So far it seems to be the larger enterprises in the formal sector that benefit from the levy through co-funding of training.

Issues to be addressed

During this review all stakeholders expressed their concern about disagreements and overlaps in the governance of TEVET, and blame this as the major cause of delays and inefficiencies in the implementation of TEVET policies. This realization is not new. Refinement of the Education Sector Plan and the Education Sector Implementation Plan could be a starting point for elaborating a task-appropriate governance framework and a subsequent revision of the legislative Act.

A revision of the Act will not just be a technical matter, as it will touch upon fundamental issues of governance. So far the current Act stipulates that the Board of TEVETA has a role in policy formulation, besides a number of other mandates central to the governance of TEVET, possibly conflicting with the interests of the Ministry of Education.

One of the visible effects is that TEVETA has not yet come to play the coordinating role in implementing TEVET policies and bridging the different provider systems, as originally intended. All stakeholders recognize that TEVETA has a central role in governance and that the MOEST is the right policy holder. However, most stakeholders share a common concern, that the governance mechanisms are not functioning optimally – though there are different views as to why. Some informants take the view that several factors could be at play such as: weak communication lines between TEVETA and the MOEST and too much focus on formalities. Others state that TEVETA is over-regulated, and decision-making procedures are too slow. In this setting, TEVETA has aimed to cover gaps and take much-needed initiatives. Others believe that TEVETA has aimed to expand and consolidate its activities "somewhat as a hyperactive child", as one stakeholder expressed it, and has expanded its mandate beyond what was intended. More importantly however, the current Act, which dates back to the late 1990s, does not stipulate the legislative basis and role of the TEVET Directorate, nor the role of the MOEST policy coordination within the broader framework of the *Malawi Growth and Development Strategy* (MGDS). In that respect it is interesting to see that no governmental stakeholders have referred to the strategic and possibly conflicting role the TEVETA Board has been given as stated in the TEVET Act.

Policy Coordination with Other Ministries

Other ministries that play or have played a central role in the field of TEVET in addition to the MOEST are:

- The Ministry of Labour
- The Ministry of Economic Planning and Development
- The Ministry of Industry and Trade

Ministry of Labour

Under the current governance arrangements the Ministry of Labour is responsible for the award of the National Trade Test Certification on programmes offered in the country's Technical and Vocational Colleges. The ministry is also mandated to monitor the performance of the labour market, ensure availability of skilled labour, address worker compensation issues, support a healthy and safe working environment, and address needs of vulnerable groups (including women) in the labour market. However, technical capacity and resource constraints have hindered performance regarding surveillance of labour market dynamics. According to the Ministry of Labour, the planning unit is heavily understaffed. The latest labour report produced in 2008 has a three-year data lag. The Quarterly Labour Statistical Bulletins used in compiling the Annual Statistical Yearbook have not been produced in the last two years.

The Ministry of Economic Planning and Development

The mission of the Ministry of Economic Planning and Development is to provide strategic guidance, advice and technical support to government and other stakeholders on economic and development planning, and monitoring and evaluation of socio-economic issues in Malawi to ensure attainment of the country's development goals.

The importance of TEVET skills development is recognized in the Malawi Growth Development Strategy. The ministry is responsible for coordinating the preparation, implementation and monitoring of the national development strategy. However, the ministry's monitoring operations have not included monitoring of skilled labour availability since the transfer of the manpower section to the Ministry of Labour in the late 1980s.

Ministry of Industry and Trade

The mission of the Ministry of Industry and Trade is to promote, support and facilitate the development of industry and trade, in both existing and potential growth sectors, thereby increasing supply to value-added goods and services for domestic and international markets while sustaining competitive advantage. It is unable to meet its mandate of monitoring the availability of skills for a competitive private sector because of irregular and incomplete data. The Ministry of Industry and Trade, however, coordinates the Forum for Public-Private Sector Dialogue: this could be used as a channel for discussing challenges of skilled labour availability for the private sector.

It is widely recognized in Malawi that vocational training can improve labour supply and opportunities for the workforce, whether employed or self-employed. However, labour market opportunities for the individual also depend on investment possibilities, macro-economic framework conditions, and business opportunities in Malawi. The MOEST has a leading role to ensure governance efficiency in planning and implementing TEVET policies through close inter- and intra-ministerial policy coordination regarding economic development and social policies. Only by occupying this role effectively can TEVET meet the objectives of contributing to equity and sustainable socio-economic development in Malawi. Other ministries that play a part in TVET, albeit a small one, are the Ministry of Youth Development and Sports, the Ministry of Gender and Community Development, and the Ministry of Disabilities.⁹

V. Funding of TEVET

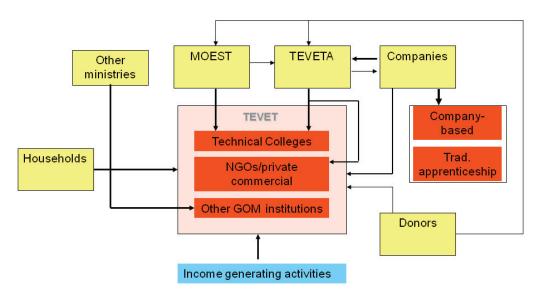
This chapter provides an overview of funding sources for TEVET and how the funding models have helped to improve sustainability. The chapter concludes with an assessment of the current funding scheme with particular emphasis on sustainability.

Overview of Financing

Education sector public expenditures fall into two categories: recurrent and development (or capital). The recurrent expenditures are financed by domestic revenues from taxes and non-tax sources and from budget support grants.

TEVET is funded by multiple sources including public expenditure, household contributions through fees, the TEVET levy of 1 per cent of the payroll, donor funds, and indirectly through industry funded workforce development and through line ministries (figure 4.1).

Figure 4.1: Flows of Funds to TEVET



Overall public expenditure for TEVET, including examination systems, amounted to MK 760 million in 2007/08, of which MK 250 million were allocated through MOEST in support of general TEVET (Table 4.1).

Table 4.1: Overview of financing regime

Type of Training Sources	Training in Public TEVET Institutions	Training by Non-Public Providers	Training by Employers (in-house, apprenticeship, and external)			
Public Budgetary Provision	Base funding of TCs; funding of sector-specific training (e.g., water, agriculture, medical) and training for specific target groups (e.g. the disabled)	Subsidies to (parastatal) providers with earmarked target group				
TEVET Levy Fund (paid by public and private employers)	Subsidy for training material of formal TEVETA-sponsored apprentices, selected grants for capital investment, bursaries to students	Funding of special programmes conducted by private institutions mainly targeting the informal sector	Part-reimbursement of cost of staff training programmes for levy-paying companies			
Private Households Tuition fees and boarding fe		Tuition fees: In the case of private commercial providers, these are cost-recovery fees	Acceptance of no or lower wages in traditional apprenticeship training			
Income- generating activities	Parallel student fees, up to MK 120,000 per year	Common in NGO TEVET institutions, occasionally as well in private commercial institutions	Lifetime income generation after completed education			
Companies	Co-financing through TEVET Levy of 1 per cent of payroll, and offering the apprentice scheme	Indirectly co-financed through TEVET levy	Direct financing of company-training centres and sponsorships of (in- house and external) staff training programmes			
Companies, informal sector		Indirectly through salaries/ allowances to apprentices and actual time devoted to training them.	Income generated from sales of products and services that the apprentice has produced for a lower cost			
Foreign donors	No significant contribution at the moment; some special programmes are funded with donor support	Some foreign NGOs and churches are involved in funding NGO training; some special programmes are funded with donor support; also programme funding of TEVETA				

Policies to Improve Funding Sustainability

At the end of the 1990s the Malawi Government commissioned a study with support from the German Agency for Technical Cooperation and the Danish Development Agency to develop a sound and sustainable system of financing for vocational education in Malawi. The study concluded that a TEVET levy could be a step towards a more sustainable funding model. The TEVET levy was introduced based on a 1 per cent contribution of the payroll from both public and private employers, as previously mentioned. The TEVET levy is used to fund programmes approved by the TEVETA Board. As TEVETA advocates demand-driven approaches to programme implementation. Programmes range from demands from private and public sector employers who pay the TEVET levy, to demands from the various groups

from the informal sector, who do not pay the levy. TEVETA has three decentralized Service Centres responsible for implementing of TEVETA Programmes in their respective regions.

However, the levy funding model is not fully operational since the levy is still not paid by all employers, notably the government. According to the director for TEVETA the result is that they have not so far been able to initiate the full range of activities articulated in their strategy. Nevertheless, the TEVET Fund administered by TEVETA has been successful in increasingly mobilizing private sector resources for TEVET. Levy income from private companies in 2007 contributed 84 per cent of the entire TEVET Fund. The contribution from the private sector is still significant. The argument that the government already pays through the funding of the TEVET colleges is not fully valid, as the private sector also contributes in addition to the 1 per cent levy by undertaking industry attachments, which requires companies to invest resources in training apprentices. TEVETA subsidies for training programmes, including training for companies and the informal sector, has grown to 36 per cent of the annual fund expenditure. Administration costs as a share of TEVETA's budget have fallen substantially in recent years; however they still represent a relatively high proportion, at 38 per cent (CSR, 2009). (Table 4.2)

Table 4.2: TEVETA Income from 2003-2007 (MK)

	2002/3	2003/4	2004/5	2005/6	2006/7
Levy from public sector	30,000	30,000	25,000	44,850	23,373
Levy from private sector	41,589	97,153	160,331	211,100	248,659
Other income*	25,039	22,230	19,771	14,234	12,421
Donor support	5,351	19,546	14,930	25,480	13,224
Total income	101,979	168,929	220,033	295,663	297,676

Data Source: Malawi CSR 2009

Public Expenditure for TEVET

Public expenditure for TEVET comprises capital funds and recurrent funds. It furthermore includes funding for supportive and regulatory functions such as the government contributions to the TEVET Authority (TEVETA), funds for testing and examination (i.e., Trade Testing in the Ministry of Labour), and allocations to the Malawi National Examination Board. In addition it includes funding activities related to Malawi (Advanced) Craft examinations (CSR, 2009).

In 2007-2008, MK 405,919,000 was budgeted as capital expenditure with most of the capital funds coming from donors; however only MK 24,843,000 was spent on modernization of trade testing (CSR, 2009; p. 170). Recurrent expenditure for TEVET comprises the seven technical colleges and amounted to MK 168,724,305 in 2008 and comprised 1108 regular students. As Table 4.3 shows, the unit cost is substantially lower in those TCs that have many parallel students, such as Lilongwe Technical College. Requirements that the regular apprentice students must match available bed space results in an underutilization of the technical college facilities, as parallel student intake will depend on the level of urbanization where the colleges are located. Some of the independent colleges have successfully introduced student transportation schemes, which could be applied in the public technical colleges. This would also increase equitable access to TEVET, given the level of public support to regular TEVET students.

The effectiveness in institutional management and delivery is hampered by a very detailed level of regulation, which for example, does not permit institutions to recruit teaching staff directly. This has to be undertaken by the Teaching Services Commission, unless the colleges recruit part-time trainers out of their own resources generated through the parallel student intake. Regulations also require that formal procurement procedures are used when materials and equipment are bought with public funding, and this often causes severe delays that impact on the quality of education. Several sources furthermore confirm that funds for equipment and materials have not increased in a decade. The current funding regime is far from being appropriate in stimulating performance orientation and institutional leadership. The leaders of the public colleges lack the incentive to take initiatives because of the requirement to refer even minor innovative variations to the central authorities. The level of regulation functions as an incentive to increase the intake of parallel students beyond capacity, because the funding derived from them is the only way the colleges have some level of autonomy in spending. The allocation of public funds is based more on standard formulas and historical budget figures rather than

^{*}Includes interest income, rental income, contributions from other partners, and miscellaneous

on actual enrolment or performance indicators of any kind. Indirectly this could negatively impact the development of a performance and demand orientation in the publicly-funded TEVET system. Deregulation involving a sensible, reasonable level of decentralization should also include greater autonomy regarding management of funds as a whole. Currently there is no flexibility regarding how different funding sources are used. This could be accomplished with a properly functioning quality scheme with input of indicators such as teachers' qualifications, minimum standards for equipment and student/teacher ratios, etc., and with deployment of outcome-based indicators that begin to position TEVET delivery and its impact on students' learning and labour market performance (Table 4.3).

Table 4.3: Summary Total and Per Trainee Public Allocations to TCs, 2007/8

Institution	Budget Allocation (in MK)	Total Enrolled Students	Unit Public Expenditure (in MK)	Regular Students Only	Unit Expenditure (Regular Trainees Only) in MK
Lilongwe	28,031,679	2,288	12,252	574	48,836
Soche	23,530,614	435	54,093	155	151,810
Mzuzu	15,652,396	486	32,207	236	66,324
Namitete	18,723,328	217	86,283	73	256,484
Livingstonia	35,346,919	348	101,572	176	200,835
Salima	23,095,926	680	33,965	492	46,943
Nasawa	24,343,443	353	68,962	104	234,072
Total	168,724,305	4,807	35,100	1,810	93,218

Data Source: World Bank CSR 2009

The Education Sector Plan shows a planned increase in recurrent expenditure for TEVET in the period up to 2017 as well as an increase in capital costs. However, the overall recurrent costs as a percentage of the total recurrent education costs still remain moderate compared to the university sector recurrent costs (Table 4.4).

Table 4.4: Recurrent Costs in Mill MK 2007 Prices - Education Sector Plan Malawi

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Recurrent costs	175.35	241.50	240.20	329.85	343.99	835.31	1,083.37	1,966.63	2,003.96	2,003.96	2,046.21
TEVET, per cent of total recurrent costs for education	0.6%	0.7%	0.8%	1%	1%	2.2%	2.6%	4.4%	4.4%	4.3%	4.2%
HE per cent of total recurrent costs	20.8%	14.7%	13.9%	13.1%	12.2%	11.9%	11.5%	10.9%	11%	10.9%	10.7%
Secondary, per cent of total recurrent costs	12%	13.1%	13.8%	13.7%	17.4%	14.7%	15.1%	19%	17%	17.4%	21.4%

Data Source: CSR 2009

Private Household Funding

Tuition fees vary substantially between public, private non-commercial and private for-profit institutions, and depend on the training programme. In the formal TEVET programmes provided in the TCs, private contributions are highly differentiated according to the status of the students - whether they are regular (TEVETA-sponsored) apprentices or parallel students recruited directly by the colleges. In private for-profit institutions, as well as in non-subsidized public and non-commercial institutions, fees are usually charged on a cost-recovery basis. This normally equals the full training cost (after the deduction of institutional income through production). Fees in this segment of the TEVET market vary substantially. Tuition fees per annum of between MK 22,500 and MK 120,000 were observed during recent visits to training institutions.

TEVET programmes provided by NGOs and church-related institutions are usually less expensive for private households. However, with few exceptions, all institutions charge at least a commitment fee. Fees in visited institutions ranged from MK 10,000 to MK 28,000 per annum. In non-governmental institutions, boarding in most of the cases is not available.

If training is geared towards formal qualification, additional examination fees are charged. These currently range between MK 750 (Trade Test 1) and MK 2,500 (Malawi Advanced Craft). TEVETA has started to update unit cost data by assessing the cost of training materials for different occupational areas, in accordance with the CBET curricula in order to form a future revision of the TEVETA per capita subsidies for regular apprenticeship students. The annual total found in the study range from MK 22,000 to MK 131,000 per student, which in most cases represents substantially more than the current lump sum subsidy of MK 12,000 per term across trades.

Assessment of the Existing Funding Model

The private sector contribution to the levy schemes increased from MK 41,589 in 2002/2003 to MK 218,659 in 2007. However, the levy paid by the public sector as a whole was lower in 2007 than in 2003. One of the arguments why the government offices do not pay the full levy is that they finance the TEVET system in other ways. However, this could also be a symptom of the unsolved tensions regarding the governance of TEVET.

It is promising that the public contributions to TEVET are planned to be increased regarding both recurrent expenditures and investments¹⁰. Nevertheless, the financing model and the level of investment planned for the next years will probably not be sustainable or adequate to Malawi's needs particularly given the projected population growth. Efficiency (output per unit cost) in the public TEVET system is generally low due to underutilization of facilities and resources.

There are several mechanisms to stimulate efficiency in (public) TEVET institutions. Increasing efficiency in the TEVET system as a whole may be achieved through performance- rather than input-based public budgeting. However, such a measure should not be implemented without giving institutions more autonomy.

In the years to come the government will be faced with complex decisions about how the Malawi Growth and Development Strategy can be implemented in the most efficient and equitable way: Will this occur through prioritization of secondary and higher education, with a more moderate increase in the TEVET sector? Or will the increase in the planned budget be insufficient given the current quality of training infrastructures, delivery, scope and content of training?

Growing demands on the TEVET system are situated in a current context, where funds allocated to higher education represented 27 per cent of the overall allocation to education in 2008, higher than the average 21 per cent for SSA countries, and considerably higher than the funds allocated to TEVET at 3 per cent (CSR, 2009). Both the higher education system and the TEVET system have comparatively high unit costs. The planned increase in public investments in the education sector is substantial, though proportionally investments in TEVET remain low. Nevertheless, the planned increase in public TEVET funding should be complemented by measures to strengthen the institutional capacity for efficient management of the TEVET system as a whole and in addition by solid arrangements to monitor outcomes and impacts of increased investments. These have to be seen as a means to implement corrective measures for the right direction of investments in TEVET and achievement of targets.

Forward-Looking Measures to Improve Sustainability of Funding

If the public TEVET system is going to be expanded it will be necessary to reform TEVET provision into an actual demand-led system - that is, taking a labour-market perspective on what type of skills are needed in different occupations and sectors of the economy. As it is today, the CBET framework has introduced a modular and competence-based approach, but it is still characterized by earlier approaches to measuring skills levels in terms of duration of programmes. All the apprentice programmes have the same duration regardless of the characteristics of the labour market demand. In other countries the competence-based and modular approach has been implemented to open up pathways for learners, such as offering shorter programmes for learners not motivated to be in school for four years or more and for skills acquisition that can be achieved on shorter time scales. The modular and competence-based approach has also been used to stimulate a return to education for the existing workforce with recognition of prior learning leading to

¹⁰ For a detailed overview of planned expenditure for education please refer to Education Sector Plan 2008-2017.

greater system efficiency. Malawi could embark on this path: the foundations are in place, provided that the qualification framework is actually adopted and used as a referencing framework as intended, whether for formal, informal or nonformal TEVET. Policymakers need to take into consideration that although different audiences might prefer one or the other of the existing certifications, a unified approach to certification could reduce administrative costs, and the savings the used to expand access and quality.

Secondly, greater institutional autonomy would contribute positively to the overall funding of the TEVET system, as colleges would then be motivated to improve capacity utilization, following the experiences from other countries. Opportunities to combine learning in the school and productive work at the enterprise reduce the net costs of TEVET per trainee. Developments in the actual supply of apprentice places, which some stakeholders regard as a problem, should therefore also be monitored and assessed particularly in light of policy interventions that could improve the availability of apprentice places, particularly in sectors with a high demand for a skilled workforce. Apprentice-based systems (for example in Australia and Denmark) have introduced targeted outreach strategies to scale up the number of available apprentice places. Financial incentives are one means, but risk creating deadweight as enterprises with high demands for a skilled workforce are likely to invest in apprentice training anyhow. In many countries, closer collaboration and targeted outreach to industry by the technical colleges has proved to be successful, especially combined with performance-based funding mechanisms. This model for instance could be relevant to the Malawi context. This would also imply that colleges with support from TEVETA get gradual responsibility for local outreach to industry not only for the purpose of industry placements, but also to build partnerships for workforce development. Institutional governance with industry involvement in the strategic orientation of the TVET colleges is a means to build commitment and stimulate dialogue in a range of matters.

V. Access and Participation

This chapter provides an overview of access to the formal TEVET system and the criteria used in enrolment procedures. It examines access opportunities for different at-risk groups, and analyses access policies in the context of government policies on poverty reduction and economic growth. The chapter discusses access policies in the context of projected population growth and how a coherent policy framework for lifelong learning could improve access opportunities and system efficiency.

Access Patterns

Figure 5.1 shows that in Malawi the 10 per cent most educated (those that study for the longest period) benefit from 73 per cent of the public resources allocated to the education sector. Malawi is the least equitable country in Africa in terms of the distribution of public resources for education.

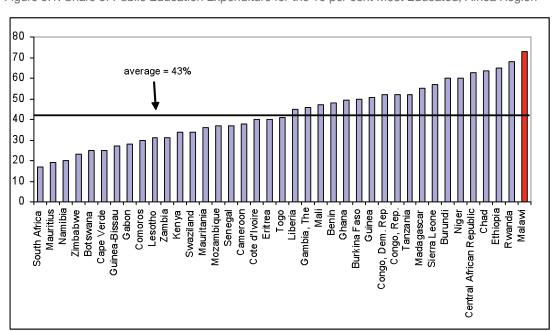


Figure 5.1: Share of Public Education Expenditure for the 10 per cent Most Educated, Africa Region

Data Source: CSR, 2009

In addition to the public technical colleges, many private providers and NGOs are in charge of knowledge provision. In a directory from 1999, 162 training institutions were identified with a total of 22,940 students enrolled, apart from the technical colleges. The findings from 1999 furthermore did not take into account the level of training that occurs through informal apprenticeship. Since then the private training market has evolved.

Malawi's gender disparities in education, skills and employment remain pronounced. While females are the majority (52 per cent) of the population, 56 per cent of women are illiterate compared to 28 per cent of men. More boys than girls attend

secondary and higher education, though the difference is not that great. Based on MICS data, statistics show that 53 per cent of boys attended secondary education as the highest level, while the figure for girls was 47 per cent. For higher education the difference is also relatively moderate, with 52 per cent of boys compared with 48 per cent of girls. Females represented less than 13 per cent of annual TEVET graduates in the period 2003-2008. 2007 data show that for every 100 males enrolled there are 38 females (World Bank, 2010).

The Policy Context of Access

The changing contexts of demand and the inefficiency of the system have been debated for some time, also regarding TEVET. The *National Education Sector Plan 2008-2017* (NESP, 2008) in fact states that "access to vocational education and training will expand during the period and the colleges will be rehabilitated".

The government estimates that approximately 600,000 youth are not in school for one reason or another (NESP, 2008). These youth include dropouts from the primary and secondary cycle, those who took either primary or junior certificate or MSCE, and who have not found employment, have started their own business, or have continued to tertiary education. For example, only 35 per cent of those who start primary school reach Class 8, and only 38.6 per cent of those who start secondary school actually take the MSCE (World Bank, 2010). For these groups, no links exist to return to formal education and training at a later stage. For reasons of social cohesion and sustainable economic development this is a major flaw in the current policy regime, which, at the very least, is highly inefficient and could also lead to social tensions if not addressed.

Accessing TEVET through the Formal System

There are seven public technical colleges in Malawi; three of them are grant-aided institutions belonging to churches and the rest are government-owned. Because fees for parallel students are notably higher than for formal students, and because colleges do not have to report income and are free to decide how the revenue should be spent, parallel students are an attractive target group. The number of parallel students depends on the location of the institution, (those in urban centres are able to attract more students). Those admitted under government sponsorship pay a token fee of MK 5,000, according to the Deputy Principal of Lilongwe Technical College. Admission of government students is largely limited by the bed space available at each institution. Even with parallel students the enrolment into formal TEVET institutions at 35 per 100,000 inhabitants is substantially lower than other SADC countries with Lesotho at 110, Mozambique 130, Botswana 1228 and Mauritius 1561 (World Bank, 2010). (For further data on access see chapter one)

Access Policies

Entry into a public technical college is purely based on students' grade point average, except for an affirmative enrolment policy in favor of females and disabled students. Each year TEVETA receives about 10,000 applications. Enrolment patterns for the period 2003 – 2007 have fluctuated from the lowest (790) in 2004 to the highest (1330) in 2007, with an annual intake capacity of 700 (as shown in Table 5.1, World Bank, 2010). In comparison, 2,997 parallel students were admitted in 2007. TEVETA handles admissions procedures for the regular boarding students. Once TEVETA has gone through the admissions procedures, students are placed in the seven colleges around the country, based on available bed spaces in each institution. In addition colleges may enrol students that do not require boarding. For this group of students, the colleges administer admissions and are free to set entry requirements and fees, which vary substantially. Parallel students find their own accommodation outside the college or live with their parents or relatives. Currently, the demand from the youth population greatly exceeds the provision from the public TEVET colleges, which has not been adjusted in numerical terms in the last decade.

Table 5.1: Participation Patterns in Public TEVET - Technical Colleges

Ratio of accepted Ratio number of TEVET students/applicants learners/inhabitants		Admissions as per cent of age cohort	Admissions as per cent of MSCE graduates previous year
700/ 10,000 applicants	35/ 100,000 inhabitants	0.21 per cent	3.9 per cent

Data Source: World Bank, 2010

Access to Vocational Education at the Primary and Secondary Levels

Although the review team did not visit any secondary school facility offering vocational education, the Directorate of TEVET at the MOEST informed the team that there were 13 schools with a vocational programme out of about 960 secondary schools. Their impact is thus minimal, even if the introduction of TEVET in secondary education in many developing countries has been implemented to stream youth into the labour market after secondary school. To expand access, some stakeholders argued for a rejuvenation of these institutions and increase in their number, some even proposed the reintroduction of a TEVET curriculum at the primary level. It is hard to perceive the value-added perspective of such a policy intervention across the estimated 960 secondary and over 2,000 primary schools, given the difficulties MOEST has in sustaining quality in the 13 secondary schools and the seven technical colleges regarding teachers, curriculum, equipment and materials. According to the *Malawi Education Sector Implementation Plan* (ESIP, 2009), the government is planning to set up nine primary and four secondary model vocational schools in the country between 2009 and 2013. During the same period the government is planning to rehabilitate technical education wings in two teacher training colleges in order to produce qualified teachers for the intended programme. A UNESCO-sponsored study from 2006 suggests that TEVET at the secondary level should be reviewed so that the curriculum offers learners orientation and exploratory opportunities rather than specific skills.

Access to TEVET through the Informal Sector

According to a recent study, *Understanding Informal Apprenticeship – Findings from an Empirical Research in Malawi* (Phiri, 2009), most of those who enter into apprenticeships in the informal sector are not able to raise fees to enter formal institutions, or lack formal academic entry requirements. There are no available statistics showing the number of persons accessing training through informal apprenticeships, but by extrapolating from Phiri's finding that each master craftsman has about five apprentices at a time, the total number of informal students is much higher than those who are going through the formal TEVET system.

Entry and exit requirements in informal apprenticeships in Malawi are fairly flexible, similar to other countries where this system of training is applicable. The majority of the apprentices in the cited study had completed primary education or higher. However, according to the master craftsmen interviewed, acceptance of apprentices in their workshops was based on trustworthiness, maturity, and level of formal education, in that order. The duration of training depends on the specific trade and the learner's aptitude. Criteria for when the apprentice had acquired sufficient skills to be deemed qualified is decided by the master craftsman, the learners' own perception and ambition, or in a few cases by passing the trade test examination administered by the Ministry of Labour. At the end of their training most apprentices leave to start their own enterprise, with a few remaining with the master craftsman that trained them or seeking employment either in the informal or formal sectors. According to the study, informal sector apprentices usually manage to secure some kind of a livelihood within a year of finalizing the apprentice period (Phiri, 2009).

Most of the master craftsmen charge their apprentices minimal or no fees for their training. In addition, more than half of them start paying a token amount to the apprentices within three months, when they are deemed to have sufficient skills to generate income. The allowance or wages grow progressively with increasing competence.

Amos is 29 years old. He has a wife and a small child at home, plus a sister and her child to take care of, both affected by AIDS. He was with a craftsman for about seven months, and is now working independently and earns MK 900 per week. Amos realizes that he works hard and is also paid well by local standards, but costs are also high due to the number of dependents Amos has. In fact, for several weeks he has had to walk to and from the workshop – about 12 km per day - because his bicycle is broken and he cannot fix it himself and cannot afford to pay somebody to fix it.

The normal working day is eight hours, with Sunday off (but not always) and no holidays. Amos dropped out of school at the start of secondary, because it did not interest him much. He has friends that really wanted to continue, but could not because it was too expensive. He dreams about having his own workshop some day, and is trying to save. It will be hard to open a workshop because he doesn't have a bank account. Asked about microfinance, he reckons he has heard about it, but does not know how it works in practice, or if he would be eligible.

The informal TEVET sector so far comprises the largest volume in training. Income varies substantially for those working in the informal sector and can sometimes be very low. In the informal sector, some have started to set up a business in new areas, for example consumer electronics or the sale and repair of used mobile phones. Diversification of the informal sector can lead to improving living conditions. According to the director of the Employers Consultative Organization (ECAM), training which targets enterprises in the informal sector may improve products and services, leading to a bigger market share. These companies choose to register because the benefits (for example the ability to bid for public contracts) grow with size and market share. However, training for the informal sector channeled through TEVETA remains a small fraction of its overall activities. In 2007, outreach activities for the informal sector comprised 2.5 per cent of TEVETA's overall expenditure, with the highest level being in 2006 at 6.1 per cent. The TEVETA Strategic Plan 2007-2012 pays relatively little attention to the informal sector, particularly regarding the links between informal and formal TEVET. The main instrument is to channel funding to grassroots organizations that work with the informal sector. Even if bottom—up approaches have proven to be successful for these target groups, the approach suggested by TEVETA risks leading to fragmentation and lack of a coordinated approach to the sector. Furthermore coordination of innovative policies to build skills for the informal sector is more likely to yield benefits in terms of employment generation and economic growth.

The TEVETA strategy to accelerate micro-enterprise training is to "enable poor producers in rural and informal sector to access training" (p. 11), with no clear targets or methodologies mentioned. Various models could be envisaged for the informal sector, although any policy intervention should be implemented with caution, so as not to distort the fundamental model of informal apprenticeship. The organization of training activities should take into account the fact that the daily outcomes of many small businesses' operations are minimal. Otherwise, participation will be low. One model could be to introduce access opportunities to the colleges on a part-time basis (for example in the evenings) for targeted courses in the operational aspects of running a small business (marketing, the use of ICT, financial management). Nevertheless it will require trainers for this TEVET segment to have a sound understanding of the basics of operations in the informal sector.

Regrouping a number of small firms in a cooperative model could also be a way forward. In Botswana, for example, this was the original set-up for a group of basket-maker women. They were offered additional training in design and quality management, and today they deliver products to one of Botswana's leading online craft stores and have managed to raise sales prices far above the prices at the local markets. Similar cluster and networking approaches (in particular with a deployment of e-business models) have proven to be successful in other countries, such as Mexico.

Another model could be adopted from the practices of the College of Natural Resources (see chapter 6). Students from the technical colleges undertake part of their industry placements in the informal sector with a view to transferring and building capacity among small producers. The students thus learn how to apply their knowledge in practical contexts. This is a small but significant win-win initiative that could improve the overall industry attachments available, an issue to be considered if access to the formal TEVET system is to be expanded.

Interviews supported by random conversations with people in the informal business sector pointed out the need for improvement in the quality and diversity of their products. When asked in which areas they would need to improve their skills, most indicated that they wanted to acquire more technical and business skills.

Whatever approaches are chosen, training in itself will not be sufficient, unless it is paired with access to micro-finance. It should also be recognized that most persons working in the informal sector do not have the money to buy the proper tools, whether for hairdresing or mobile service repair. In Malawi as in other countries there is weak policy to support the large informal sector. A more coherent approach and flexibility in entry into, and design of, formal programmes are essential to widen the scope of informal sector apprenticeship training.

Access to TEVET through Non-Formal Programmes

In Malawi, non-formal programmes include adult literacy programmes and out-of-school youth programmes. Adult illiteracy in Malawi remains high, particularly among women and the poor. According to the 2005 Integrated Household Survey, 64 per cent of adults (15 years and above) were literate. The corresponding literacy rates for male adults and female adults were 76 per cent and 52 per cent respectively. The link between literacy, development, and TEVET is that literate individuals are able to access information pertaining to their development needs from a variety of sources (NESP, 2008; p. 7). However, current programmes only reach about 260,000 participants per year. So far literacy programmes have attracted more females than males. Currently, literacy programmes are not embedded in TEVET provision. The integration

of literacy training and TEVET has proven successful in several countries, particularly as outreach to unemployed adult males (Shapiro, 2006).

The out-of-school youth programme targets those who have dropped out of school as well as those who have never attended school. To meet the needs of this group, the government has developed Complementary Basic Education (CBE) programmes. The CBE programme is a shortened primary curriculum that condenses the first five years to three; those who are successful are encouraged to join regular primary education at Class 6. At time of writing there was no evidence that TEVET had been integrated in the CBE programme, but government intentions seemed to point in that direction, "bearing in mind the fact that parents and young people often have aspirations in the direction of vocational and entrepreneurial training" (NESP, 2008). However, given the costs to set up workshops even for the most basic crafts, it would make sense for complementary basic education courses to consider inclusion of practice-based creative and technical curricula, but without relying on pedagogical concepts such as traditional workshops that are resource-intensive.

Equity in Access to TEVET

Interviews with stakeholders and existing data indicate disparities in access. An analysis (World Bank, 2010) using geographical data as a proxy for the financial situation, clearly shows that students from better-off neighbourhoods have a higher level of access to formal TEVET programmes. Data processed furthermore show that the northern region has above – average access rates compared to the southern region of the country, a likely reflection of the overall performance rate of students from the northern part of Malawi. In the formal TEVET system, students from low-income families will get financial support. However, those whose parents are better off have fewer access barriers due to the parallel stream opportunity and the access to the range of private TEVET institutions such as the Don Bosco Vocational Institute in Lilongwe, the College for Natural Resources, or a range of other possibilities.

Access to TEVET for the Physically Challenged

The Malawi Council for the Handicapped (MACOHA) is an organization under the Ministry of Disabilities, which focuses on supporting persons with disabilities. It operates two TEVET institutions in Lilongwe and at Mogomero in Chiradzulu. MACOHA runs showrooms for products made by the trainees in their various institutions. It provides training in commercial skills such as secretarial, ICT and accounting with a view to employment, or technical skills in woodwork, metalwork, tailoring, weaving, and farming with a view to self-employment. Trainees undergo standard curricula and take TEVETA-endorsed examinations. According to senior officials of MACOHA, funding has been a major barrier towards serving a greater number of the disabled. In their view the disabled need mainstream training to improve their situation and opportunities in society.

Access to TEVET in Rural Communities

Numerous developments are underway through different initiatives linking literacy and informal education with skills and capacity building. This is the case with the rural population. Giving priority to the population engaged in traditional trades, particularly in agriculture, makes a lot of sense. Better policy coordination between TEVET and the *National Agricultural Development Plan* could improve the livelihood of the rural population. It is not only high growth and high added-value sectors of the economy that will yield worthwhile results. Innovations such as the Electricity Supply Corporation of Malawi's (ESCOM) local energy sourcing are to be encouraged. This involves establishing traditional or alternative energy sources and provision in a limited number of villages, accompanied with training, before handing the facility over to the village, with ongoing support.

Malawi has begun the process of introducing Village Polytechnics in areas that have not been traditionally served by other TEVET institutions. The Village Polytechnic concept is borrowed from Kenya, where it has been used with mixed success to provide training to meet the needs of local communities. According to the NESP (2008), the government plans to "establish 25 village polytechnics in areas within the vicinity of technical colleges so that they are supported by college staff and student practical exercises" (p. 23). Currently the existing TEVET provision does not serve the training needs of rural farmers. In order to succeed, the planned Village Polytechnics must be adequately funded to provide

training programmes that can link to high-quality provision elsewhere. Without proper programme linkages with technical colleges these institutions could be shunned by potential learners, as has been the case in similar attempts in Kenya.

At the time of this policy review there was an initiative underway led by the President of Malawi targeting the development and empowerment of youth. With a proposed funding of MK 3 billion, the project aims at providing youth with training and seed capital to start small enterprises, particularly in rural areas. Only a few Village Polytechnics have been established in Malawi so far; otherwise the new youth initiative could have been channeled through that structure. The government also plans to establish mobile TEVET units to meet the needs of rural areas (ESIP, 2009). Each mobile unit will have master trainers. The model with mobile units has proven to be viable in Mexico for addressing the training needs of informal sector workers, who are located far from any technical colleges, as well as in the formal sector. Such initiatives are to be encouraged and have the potential to be successful. The linking of the initiatives described above is more likely to produce innovative effects instead of setting up initiatives through sponsors who are not connected.

Access and Gender

In the technical colleges visited there are typically more girls enrolled in the parallel programmes, where there is a wider choice of programmes which emphasize "soft" skills. Most of the ordinary programmes are still in traditional technical trades, and there are usually more males than females enrolled. One of the challenges is to persuade more girls to choose male-dominated TEVET programmes. To redress the prevailing gender imbalance, TEVETA has for some years applied an affirmative action policy towards females as previously mentioned. From 2003 – 2007 the share of females that receive the Malawi Advanced Crafts has increased from 11 per cent to 23 per cent of the students, and for Malawi Crafts the share of females has increased to 25 per cent. Pass rates for females are much lower (50 per cent) than for males (70 per cent). Records from trade testing services shows that females are beginning to enter traditional male trades such as electrical installation, bricklaying, and auto electronics. Data from recent years furthermore confirm that TEVETA's proactive admission policy is close to reaching the 30 per cent target (World Bank, 2010).

A promising example of expanded career opportunities through non-traditional education choices is seen in the Mechatronics Centre in Blantyre. The trainer is a young female who originally graduated as an auto mechanic, moved on to be in the first group of graduates from the Mechatronics Centre, and was then hired to become a trainer at the Centre.

The Mechatronics Training Centre in Blantyre

Stansfield Motors is a family-owned company that holds a franchise for a number of car brands including Peugeot, Mitsubishi and more recently Mercedes. Their business model is built on selling vehicles and parts, and repair and maintenance services. In 2002 Stansfield Motors was contacted by Mercedes Benz South Africa to take on the dealership in Malawi. Previously they had sent people abroad for further training and used local colleges for recruiting mechanics, but the dealership for Mercedes would require skills in mechatronics that the technical colleges could not offer due to the status of equipment and skills of the technical teachers. This led to an innovative partnership between the Stanfield Motors company, the Malawian Government, and Mercedes Benz in Germany; the establishment of a Training Centre for Mechatronics which other companies could also use for training purposes. Mercedes Benz donated equipment, vehicles, diagnostic equipment, and computers with training software, and in addition a trainer from Mercedes who worked at the Centre for the first three years. Students receive a diploma issued by TEVETA with the brand of Mercedes Global Training. The 21-month program used to be full time, but currently students are at the Centre for three days a week and the other two days with their employer, offering two intakes per year, also students are trained by a female trainer who was among the first group to graduate.

Access for the Unemployed or those Employed in the Formal Sector

Workforce development and access to TEVET for the employed is mainly limited to the larger, export-oriented industries. These industries furthermore benefit from the TEVET levy. Big firms that contribute to the levy can recover part of their expenditure. As a result TEVETA has increased collaboration with industries that are strongly dependent on a qualified workforce. Recognizing that continuing TEVET training is underdeveloped, the National Construction Industry Council

organizes targeted training measures for member companies, as additional incentives. The Malawi Confederation of Chambers of Commerce and Industry (MCCCI) also organizes training for its members. There is no information about target groups or the volume of training offered by private providers.

For the unemployed there are no formal training offers to increase their opportunities to find employment or be selfemployed. This is likely so because the formal labour market is small and because active labour market policies are undeveloped at this stage.

As the review and data sources show, access to TEVET remains marginal in light of the overall demand and development goals in Malawi. *The National Education Sector Plan* foresees increased investment in TEVET in the coming years, but it also shows that TEVET in a forward-looking perspective is underfunded compared to the higher education sector. Improved access in any structural manner will therefore probably call for increased funding beyond what is budgeted for in the National Education Sector Plan.

Access can be increased through improved utilization of existing infrastructures, by decoupling admissions from the operations of boarding facilities, as suggested by some stakeholders, and by improving utilization efficiency through flexible programming. Depending on local needs, this could be in the form of a second shift or programmes targeting the informal sector, the unemployed, or the existing industry workforce. Development of a demand-driven TEVET system will probably not occur without deregulation of the schools and the introduction of governance mechanisms at the institutional level, building on a strong Public-Private Partnership model. Such linkages are currently underdeveloped, possibly because all dialogue with industry is channeled through TEVETA.

The limited capacity of the public TEVET system is reflected in current admissions policies. Expansion of access cannot be achieved solely through changed admissions policies, because the scale of the demand surpasses current economic reality. The CBET Certification offers a framework for a competence-based and modular approach to training in which informal and non-formal learning may count towards credit through mechanisms for recognition of prior learning, as for example in South Africa. There are numerous countries that have introduced recognition of prior learning with the dual purpose of improving equity and system efficiency. Although the CBET model entails a competence-based approach, the same four-year rigid model, is applied to all programmes; this is inflexible, costly, probably not necessary for graduates to access labour markets, and discourages participation in TEVET for those learners who wish to return to education. Any curriculum review will need to address this issue to be sustainable, as programme duration has an impact on costs-and thus affects the efficiency of the TEVET system.

Pathways and Linkages in the TEVET System

Even if the CBET qualification framework was introduced with a view to improving linkages between the formal, informal and non-formal systems through a competence-based modular system, it has not yet had such effects. This is probably because the ordinary TEVET system is based purely on formal grades and access is highly competitive due to the limitations in student intake. Apprentices from the informal sector may have access to the formal system through the trade test examination managed by the Ministry of Labour. Due to the existing enrolment procedures and criteria there is little evidence that this occurs in practice.

Technician-level programmes were discontinued by Malawi Polytechnics about ten years ago despite the huge demand for technicians, so TEVET graduates currently have no opportunities to pursue post-TEVET education. There is ample evidence from a range of programmes in other countries that access to tertiary professional education improves the attractiveness of TEVET; in addition, the qualification profiles which build on the combination of a TEVET qualification and a tertiary professional degree are highly attractive in the labour market due to the practice-based knowledge that such graduates will typically possess.

Even if more funding is allocated to the sector the current TEVET offer cannot address the technical training needs for the coming generations and for those already in the labour market. The government should follow up on the intentions expressed in the NESP and develop a long-term plan to develop public-private partnerships for TEVET and to expand access whilst adhering to the socioeconomic objectives and visions of the Malawi government. This must include a comprehensive quality framework to ensure that improved access does not leave students to discount second-choice education.

As mentioned, international experiences show that assessment and recognition of informal and non-formal learning supported by coherent qualification frameworks and competency-based curriculum can improve access and equity whilst at the same time contributing to system efficiency. Lessons from the OECD study on *Recognition of Informal and Non-formal Learning* show the multiple effects for individuals, for enterprises, and the society at large. For example:

- Prior to starting an upper secondary vocational qualification a student can undertake an assessment of prior learning in view of recognition of previous relevant work experience corresponding to a TEVET module. However, recognition of prior learning can also be used as part of guidance policies to detect certain learning disabilities or gaps (e.g. dyslexia) so the student can get remedial education from the start, thereby minimizing the risk of dropout or failure to pass exams.
- Provision of accelerated pathways to vocational education at different levels can motivate both youth and adults with work experience to return to education.
- Recognition of prior learning can make visible the actual competencies of low qualified thereby both improving their employability and motivation to return to education through accelerated pathways.
- Recognition of prior learning can give enterprises systematic methods to uncover the competence base of their workforce, thereby enabling them to organize more efficient workforce training.
- Recognition of prior learning can offer improved pathways between vocational education and training and higher education, thereby improving the attractiveness of TEVET.

The existing qualification framework and the modular competency-based approach of the CBET methodology constitute the building blocks of a system for assessment and recognition of formal and non-formal learning in Malawi. Especially for those trained and working in the informal sector, recognition and assessment of informal and non-formal learning can offer more equitable opportunities whilst at the same time also taking into account issues of system efficiency. For Malawi a first step could be to pilot methodologies for recognition and assessment of prior learning drawing on the rich international experiences most recently documented by the OECD. A second step would be to evaluate those pilots against prominent international policies and system practices. Without changes in admissions procedures, policies for recognition of informal learning will have limited impact. As is the case for females, a quota of apprentice places could be reserved for persons who have been trained and/or work in the informal sector. Through an assessment of informal and non-formal learning, students would have the benefit of an accelerated pathway to qualification whilst public policy would contribute to addressing skills needs in the private sector in an efficient way. The OECD study shows that policies for assessment of informal and non-formal learning vary substantially between countries; therefore a consultation process with all key stakeholders is critical to thoroughly explore which models would be most useful to pursue in the Malawian context as the basis for full implementation. If Malawi opts for implementation of policies for recognition of prior learning, international experiences show that well-targeted information campaigns and training of assessors and student counselors are critical to success.

VI. Quality

The chapter analyses how quality management is understood and used in the context of TEVET, and the key characteristics of such quality arrangements, including how quality measures are used to inform policy and practice.

Elements of a Quality Management Framework

The Government of Malawi explicitly recognizes the importance of quality in education as it seeks to have a key role in implementing the Malawi Growth and Development Strategy. Improving the stock of knowledge and skills by improving and reforming education provision across all sectors is given high priority in the national development strategy. Consequently, in the *National Education Sector Plan for 2008-2017* (MOEST, 2008), the Ministry of Education, Science and Technology defines its mission as being a catalyst for socio-economic development and growth:

Education should enable people to acquire relevant knowledge, skills, expertise and competencies to perform effectively as citizens, and as leaders of Malawi, thereby reducing poverty amongst the people of Malawi (p.1).

It has been recognized as a step forward that the education sector's mission is expressed in terms of outcomes for all learners (relevant knowledge and skills) and objectives.

The MOEST has strategic responsibility for all of the sectors of education, some of the sector ministries also have responsibility for TEVET for the specific sector. This opens up the possibility to develop a more coherent, open and quality-led approach to the different sectors of education and training; in other words, a learner- and needs-led approach to lifelong learning.

The Sector Plan, which covers the main sectors of education and training (including some aspects of non-formal learning) is built on the idea of three key, transversal aspects of development, which are:

- to improve the quality and relevance of education,
- to reduce drop-out and repetition,
- to promote effective learning.

Again, this is a helpful pre-condition for moving towards effective quality assurance or quality management.

The National Education Sector Plan recognizes that a number of major challenges have hindered the quality of TEVET delivery, and notes that maintaining and improving quality also featured as a priority in the preceding strategic plans. In summary, the hindrance issues are as follows:

- TEVET provision in Malawi is highly diverse, fragmented and uncoordinated, with multiple private and public provider systems.
- The quality of education is negatively affected by multiple factors including inadequate equipment and facilities, shortage of training materials and high trainee/teacher ratios (MOEST, August 2009, p.p. 15-16).
- The TEVET sector is also under-funded.

Under the heading "Quality and relevance for the TEVET sector", a number of priorities are identified such as improvement of curriculum, diversification of delivery methods, more effective inspection, improvement of infrastructure, the quality of staff and assessment procedures.

The National Education Sector Implementation Plan

Implementing the National Education Sector Plan (MOEST, August 2009), which seeks to operationalize the sector plan, contains a short section devoted to quality. It is noteworthy that the key focus is primary education (Section 1.2.3 p. 18). The quality of provision after the primary stages is also of importance, so the lack of any reference to quality in TEVET can be taken as an indication that TEVET has a low profile, in terms of visibility, policy priorities and funding. In the detail of the implementation plan, a short text indicates that:

'There are increased concerns over the dwindling skill levels of artisans and technicians joining the labour force or production sectors in Malawi. This means that institutions have to improve on the delivery of technical and vocational education, among other areas. Improvements include the adaptation of technologies to local needs, industry-centred approaches to course development and adaptation of international instructional materials to local needs. There is, therefore, a need to raise the profile of quality and relevance of technical and vocation education to meet the demand of the market, industry and economy.' (MOEST, August 2009, p. 71).

One option is a stronger involvement of the private sector as indicated in the Education Sector Implementation Plan. However any policy measure to engage industry in a more substantial manner in the governance and development of TEVET must re-examine the appropriateness of existing certification schemes in the TEVET sector. Tests may be obsolete, as some stakeholders stated, and others are inappropriate because they do not reflect that TEVET is oriented towards the world of work.

The table below provides an overview of measures to improve quality and relevance in TEVET:

Table 6.1: NESP, Goal 3: Improve quality and relevance of technical education and vocational training (p.p. 77-79)

[3.1] Provide relevant skills to academic	3.1.1 Provide in-service training to Directorate of Technical and Vocational Training (DTVT) and technical colleges staff			
staff through continuous training.	3.1.2 Attach instructors to industry			
	3.1.3 Train instructors to degree level			
[3.2] Conduct regular curriculum reviews	3.2.1 Facilitate curriculum reviews, development and harmonization meetings			
to match national needs and modularize courses.	3.2.2 Facilitate development and introduction of new programmes			
	.3.1 Review and develop the curriculum			
[3.3] Reintroduce vocational subjects	3.3.2 Rehabilitate workshops in secondary and primary schools with technical and vocational wings			
in primary curriculum to provide basic	3.3.3 Rehabilitate technical wings in Teacher Training Colleges			
income-generating skills.	3.3.4 Analyse and provide training tools and materials			
	3.3.5 Recruit and train TEVET teachers for primary school			
[3.4] Provide adequate training materials.	3.4.1 Procure and supply training materials			
[3.5] Upgrade training, machines and	3.5.1 Service and repair existing machines and equipment			
equipment	3.5.2 Procure new training equipment and machines			
ro 21 01 11 11 11 11 11 11 11 11 11 11 11 11	3.6.1 Conduct quarterly monitoring and evaluation of implementation of technical college budgets			
[3.6] Strengthen planning, monitoring and evaluation of programmes.	3.6.2 Prepare annual workplans and budgets			
	3.6.3 Inspection of technical colleges			

Data Source: Adapted from MOEST, August 2009, pages 78 to 80

The linked goals are to increase intake into technical and vocational institutions through the renovation and construction of new facilities (NESP, Goal 1), and to expand equitable access to technical education and vocational training (NESP, Goal 2).

Barriers to Implementation of Quality

The NESP indicates that although MOEST, as the ministry with strategic responsibility, sees quality as a priority, there are major implementation hindrances. In particular, a quality management system in TEVET is not in place. The review provided many illustrations of how TEVET provision is under-resourced in terms of personnel, equipment and funding.

Nevertheless government expenditure 2007/2008 shows that only a fraction of the capital budget was executed. Perhaps the most extreme example is that since the Polytechnic ceased to provide technician-level TEVET programmes, no other provider was made responsible to step in. This leaves major gaps in skills provision at the point of labour market entry.

The immediacy of challenges in other sectors such as primary education means that TEVET will not receive the priority or funding it merits unless the MOEST makes TEVET a high priority. In any case, improvement in TEVET quality will need a budget, as discussed in Chapter 4.

Further challenges related to quality in TEVET emerged during the review:

- The emphasis of the MOEST is generally placed on inputs into TEVET such as the provision of equipment for woodworking and metalwork. The manner of allocating equipment to the technical colleges seems to be centrally decided, rather than needs-led.
- As important as equipment is, there are also other factors critical to the quality of TEVET (notably teacher training, the quality of the learning processes, school leadership, and industrial and business partnerships). Although TEVETA has placed a strong emphasis on developing a competence-based approach that meets the needs of both the learner and the labour market, this is only partially and inconsistently applied and does not currently provide the 'motor' for teacher training, school and technical college management. Due to the tensions regarding governance of TEVET, there is no overall and clear model of MOEST strategic leadership working with TEVETA as a powerful implementation agency, able to work in partnership with ministries, agencies and employers.
- The overwhelming emphasis in TEVET is on traditional technologies. While these are important and should remain a part of the curriculum as they play a role in the traditional and informal labour markets the impact of information and communication technologies (ICT) is not visible in TEVET. Yet within a few years there will be a call for both generic and specialist IT skills from both employers and learners in Malawian society, as ICT could be used for innovation purposes, for example in teaching.
- TEVETA is at early stage of reaching non-traditional learners, notably those working in the informal sectors of the labour market, and females.

Steps Forward

A step towards achieving greater coherence at the policy level would mean that the key stakeholders come to an agreement on how to better integrate the MOEST sector and implementation plans with the TEVETA strategy, (see chapter 3 on governance). The question remains as to whether an explicit quality management framework is in place and is applicable in the different TEVET contexts. Unfortunately the answer is that quality assurance is a recognized weakness of the system of TEVET – and other sectors – in Malawi. There is no overall approach to quality assurance covering the formal and informal sectors, and a major challenge for innovative policy-making is for such an approach to develop effectively.

Besides the formal recognition of quality in policy documents, there are two more factors which could contribute to development and implementation of a coherent quality framework.

First, the strategy for implementing the *National Education Sector Plan* (MOEST, August 2009) contains a section on monitoring and evaluation. It would be premature to describe this as a design for an overall approach to an explicit quality framework for the entire education sector – but it does set down some markers and principles. Section 6, on a monitoring and evaluation framework, states explicitly that research, monitoring, and evaluation (R, M, & E) have to be key components in the MOEST. Yet the Implementation Plan recognizes that:

'For a long time, the education system in Malawi has relied on an uncoordinated M & E system, with monitoring activities at different levels not well coordinated. As such, there has not been effective sharing of results and the information collected has not been used to inform the decision-making process in the sector.' (MOEST, August 2009; p. 97)

The guiding principles for research, monitoring and evaluation are described as participation and partnership, producing quality information, emphasis on analysis and decision-making, capacity-building and dynamism. Whilst they are not yet a full quality assurance system, it is helpful that these ideas have been set out in the implementation plan. A marker is established.

TEVETA's Role in the Implementation of Quality Assurance Processes

TEVETA has actively engaged in important aspects of quality management. Quality is recognized in TEVETA's 2007-2012 strategy (Goal 3), and closely linked to TEVETA's role of regulating TEVET training. The quality approach to TEVET is exemplified in TEVETA's work in establishing participative, partnership-based sector groups to develop specific TEVET qualifications and approaches based on the CBET principles. These groups have been slow to be established. This could indicate not only the lack of coordinated strategy within the MOEST providing a clear and committed lead, but also confusion about the respective roles of MOEST, and the Board of TEVETA.

The principles that TEVETA has set out in its *Strategic Plan for Technical Entrepreneurial Vocational Education and Training Authority* (TEVETA): 2007–2012 (TEVETA, March 2007) are compatible with the thrust of the sector strategy, provided that the relationship between the Sector strategy and the TEVETA strategy is clarified, and that more effective implementation can be set in motion.

The principles are:

- Comprehensiveness: Implying that TEVETA intends to be all-embracing, covering various trades, occupations and professions, both traditional and new.
- Demand-driven approach to skills development: TEVETA will only support training interventions that demonstrate that they are demand-driven.
- Participation and partnership: TEVETA-supported programmes are built to some extent on the active partnership
 and participation of key stakeholders, involving employers (public, private and NGOs), training services providers,
 the recipients of training, and stakeholders contributing to funding of TEVET through the levy system.
- A competence-based approach and modular system to skills development: To permit a flexible response to demands, TEVETA-supported programmes take the form of competency-based modular systems with multiple entry and exit points, potentially turning the acquisition of technical, managerial and business skills into lifelong learning processes.
- Transparency and accountability: The mechanism that TEVETA suggests is to decide on funding between different providers linked to specific performance criteria developed with the key stakeholders, though there was little evidence on whether this is already implemented.
- Equity and cost-effectiveness: To develop a mechanism that will encourage demand-driven and equitable training to be provided through public and private training institutions and financed through contributions by government, donors, students and employers.

Data Source: adapted from TEVETA, March 2007; p.p. 6-7)

Goals and Strategies for Quality

For its strategic plan, TEVETA has identified the main thrust in terms of goals and strategies as follows (Table 6.2).

Table 6.2: Key elements of TEVETA strategic planning

Goals	Strategies		
1	1.1 Maintaining effective labour market information system		
To maintain labour market information for policy and	1.2 Rationalizing planning and monitoring		
programme planning	1.3 Intensifying marketing/public relations activities		
2	2.1 Developing mechanisms and systems for decentralizing planning and execution by organized sector committees and/or associations/industrial groupings		
To broaden equitable access to pre-employment and in-	2.3 Leading and supporting the implementation of specific demand-driven responsive training in both the industry and the informal sector		
service quality TVET and re-training and effectively support demand.	2.2 Accelerating micro-enterprise training & the informal sector		
demand.	2.3 Building responsive training markets		
3	3.1 Accelerating the development of transparent training standards		
To regulate training markets effectively	3.2 Emphasizing quality control (audits/inspections)		
	4.1 Intensifying TEVET levy collection		
4	4.2 Accelerating implementation of the principle of cost-sharing		
To maintain adequate and sustainable funding mechanisms for the TEVET system	4.3 Diversifying funding sources for TEVET		
	4.4 Accelerating TEVET levy payment inspections		

Data Source: Adapted from TEVETA, March 2007; p. 9

TEVETA elaborates this outline further in terms of objectives, expected outputs and Key Performance Areas. It is particularly important that TEVETA, in collaboration with other institutions, has developed a TEVET Qualifications Framework (TQF), which has achieved some recognition from employers, schools and technical colleges. The TQF marks a shift – technical and vocational qualifications are now allocated to one of a number of levels, according to broad criteria of knowledge, skills and competences. This opens the way to supporting a number of objectives such as: access to TEVET for learners in the informal sector and recognition of informal and non-formal learning; more equitable entry conditions and clearer progression opportunities; more fit-for-purpose and engagement of the social partners. The TQF, which is a part of the National Qualifications Framework (NQF), can link the different sectors and stakeholders in a more effective way, and provide a basis for regional and international benchmarking in terms of qualifications.

In short, TEVETA has actively attempted to identify some of the quality management gaps in the TEVET sector, and to fill some of the gaps that labour market stakeholders have identified, though this has also caused some side effects as previously mentioned.

As we have seen, it still remains the case that TEVET still needs an effective quality management or quality assurance strategy, which is also reflected in the quality indicators for TEVET.

Quality Indicators

The quality indicators for TEVET published in the Implementation Plan (MOEST, August 2009) are the following (see table 6.3).

Table 6.3: MOEST quality indicators for the sectors, including TEVET

Goal for TEVET	Indicators	
Goal 1: Improve equitable access to TEVET	Number of students enrolled	
Goal 2: Improve quality and relevance of TEVET	Student-lecturer ratio Number of inspection visits	
Goal 3: Improve governance and management of TEVET	Expenditure on TVET as a total percentage of total required expenditure on education	

Data Source: Adapted from MOEST, August 2009, Table 22 on page 105

These indicators are important, but insufficient as indicators, which can drive quality development due to the fact that they are primarily input-based and do not address issues of system performance. The goals for TEVET are naturally broad because they are common to all the sectors of education and training, and they are elaborated elsewhere in the plan. (See Table 6.3).

Thus, although current strategic approaches can provide the beginnings of a quality assurance approach for TEVET, the Government's overall strategy and implementation strategy both need to be strengthened. A realistic, active and effective system of quality assurance – developing a quality management framework – requires comprehensiveness, outcome orientation, and implementation.

As the chapter on governance showed, MOEST and TEVETA are the two public bodies engaged in defining quality assurance mechanisms.

All parties state that they want to see the ambiguities and conflicting roles of MOEST and TEVETA resolved, so that improved quality and relevance of training – the mission of MOEST – can be achieved.

Use of Existing Quality Assurance Approaches

Undoubtedly, some of the approaches to improve quality in TEVET have gained ground. There is widespread belief that a demand-led approach involving the social partners improves quality, and that the learning outcomes or competence-based approach has to guide developments in teaching and learning. This view has been expressed cogently by the public authorities, as well as employer representatives, the ministries and TEVETA. Also, a widespread consensus exists that teachers are not yet appropriately trained for modern approaches to TEVETA.

However, most of the quality criteria applied by the MOEST have to do with basic inputs to the system, rather than quality outcomes. The public technical colleges come within a centralized management system: the emphasis is on inputs in a situation of scarcity, not outcomes. Local tracer studies of student destinations or the adequacy of their skills to labour market needs are rare or non-existent. The approach is to achieve targeted student enrolment, based on inputs, rather than outcomes based on quality.

On the other hand, the independent technical colleges are more clearly geared to the quality of processes and outcomes, due to the fact that their boards of governors have a clearer education vision and expectations and more direct responsibilities.

Public utility agencies such as the Roads Authority and the Water Board gear training to industry needs as far as resources allow. In particular, the Electricity Supply Corporation of Malawi (ESCOM) has an established human resource management policy for all its employees and has individually identified training needs as an integral part of employees' development in the electrical power sector.

The state-controlled technical colleges are placed within a framework of centralized management, and in formal terms have little or no autonomy. Teachers are appointed and allocated centrally, and the programmes, provision of equipment, etc. are a matter of central planning. New equipment and refurbishment, in the same manner, seems to be provided upon availability of resources, rather than in response to locally assessed need. The centralized culture is reflected in formal funding mechanisms. The overall result is that school leaders tend not to take initiatives, for example to develop their own networks with local employers and primary and secondary schools.

On the other hand, more independent colleges are able to use formal or informal quality criteria to guide initiatives. In this regard, the Don Bosco Youth Technical College is able to make considerable use of international links and has gradually re-invented its role in terms of specializations offered and the geographical origins of its student population. In particular, the re-established Natural Resources College has introduced many innovative aspects to its student offer. One striking example of this is the initiative that supports local subsistence farming communities by pairing a student with a family for the duration of the student's stay. Objectives are set and progress is carefully monitored; the family gains insights from what the student has learnt and been able to share with the family; the student gains a range of wider skills and confidence, and insight into working constructively with families engaged in traditional agriculture.

The Natural Resources College

The Natural Resources College is an agricultural and natural resources training institution situated close to Lilongwe. The college is on a large estate and has good training facilities, including a farm, a natural forest and good links with neighbouring farming communities. The Board of Governors is appointed by the Minister of Agriculture, and operates with considerable management autonomy. The college is oversubscribed, entry requirements are published and entry exams have to be taken. All students are fee-paying, and some 650 of the 900 students are residential.

A decade ago the college offered two diplomas as well as certificate courses, and has updated its qualifications and curriculum continuously. It now offers seven diplomas, and is working on the introduction of degree-level programmes and research involving stakeholders that include government, universities, NGOs and major employers. The diplomas currently offered are: agriculture and natural resources management; irrigation technology; animal health and production; horticulture; environmental management for sustainable development; food; nutrition and livelihood security; and land administration. The courses are developed in response to perceived demand. The college has good links with the stakeholders identified above, and informal feedback is used to identify qualification and training needs. This includes feedback from student placements and annual work supervisors' visits to the college.

Teaching staff are qualified, with a small permanent staff and larger numbers of part-time staff. Emphasis is placed in the teaching programmes on developing the skills and competences of students. All courses are modular. On the one hand, studies have been introduced to strengthen the basic skills of some students. On the other hand, openings are available for successful students to progress to the University of Malawi, including an opportunity for credit for the first year of study.

Source: Notes taken on visit and NRC website

It could be beneficial to link reform and the introduction of quality criteria to a greater level of autonomy in local training settings. This can make a contribution to improving learners' technical skills and broader competences, as well as to local community and economic development. Providing that appropriate quality criteria and quality assurance measures can be introduced; there is a strong case for systematically introducing more decentralization and devolved management into the MOEST system of technical colleges.

There is a little evidence of a coherent shift towards quality approaches in the teaching and learning of technical and generic competences. The commonly-used acronym 'TEVETA' is intended to signal the element of generic competences or key skills, in particular entrepreneurship skills. However, there is not yet much evidence of this becoming a matter of good practice in systems of provision, which have also been discussed in international reviews.

Qualifications of TEVET Professionals

The current situation for both the initial and in-service trainers of teachers and lecturers in TEVET calls for urgent action. This is fully recognized in the *Education Sector Implementation Plan*.

'Teacher education lacks a coherent policy and clear strategies to address the increased demand for qualified teachers at the primary, secondary and tertiary levels. Failure to meet the demand for teachers, instructors and technicians has compromised the quality of learning for students.' (MOEST, August 2009; p. 66)

The situation for technical and vocational teachers is particularly serious, because there is currently no provision for full training through the Polytechnic or Universities, and a proper system of registration of the TEVET workforce does not yet exist. Furthermore, opportunities for continuing training and industrial placements are severely limited. Without greater and sustained attention to improving teacher education and aspects of a teaching career the prospects for success of the educational reform agenda are severely compromised.

There are no procedures in place to build the capacity of technical college leaders. This is recognized by MOEST in the section on teacher training in the Education Sector Implementation Plan. In practice, more autonomy will require a stronger degree of school leadership. Some useful models already exist in Malawi, such as the management of the Natural Resources College.

The issue of inappropriate skills for the TVET teacher workforce was repeatedly mentioned by informants. Statistics from 2007 (CSR 2009) show the formal qualification level of the teacher workforce is low – not least in a context where there is no formal offer for in-service training of the TVET teacher workforce.

Table 6.9: Qualifications of Teachers in TCs (2007)

Highest qualification	% of all regular teachers in TCs
Bachelor of Science in Technical Education	50.9
Diploma in Technical Education	36.6
Certificate in Technical Education	10.7
Others	1.8
Total	100

Data Source: Education Statistics 2007

Measures to Monitor the Quality of Informal and Non-Formal TEVET

It is encouraging that both the *National Education Sector Plan for 2008 to 2017* (MOEST, June 2008) and *Implementing the National Education Sector Plan* (MOEST, August 2009) state that the national strategy applies to all Malawians. It is even more encouraging that parts of the sector plans are devoted to the education of out-of-school children and youth, and to adult literacy. It is an omission and a severe policy gap that these sections do not really link this up to the skills agenda for those outside the formal sector and within the informal sectors of the labour market.

Better co-ordination of the different initiatives targeting the informal sector and rural communities, along with a clear definition of roles of the range of ministries and organizations involved, could lead to greater added value in rural, social, and economic development and in tackling rural poverty. This could involve: a research project to identify the minimum range of developments needed in different rural communities for sustainable alleviation of poverty; identification of the minimal resources, including skills training, required; and a more coherent strategy for implementation. This way a quality cycle would be defined, comprising planning, implementation, assessment, continuation and review, within a process that is more comprehensive than a one-off initiative.

The Private Sector

TEVETA has started the immense task of compiling an overview of the multiplicity of training providers in the TEVET training market, which is a must if TEVETA is to undertake an overarching regulating role. This exercise can also assist in identifying important gaps where public intervention is needed. A coherent quality assurance framework will not be complete if it is not applied to private TEVET institutions. Better information about private sector provision, its costs and results, is a step towards a more transparent TEVET market. The implementation of a quality assurance framework that spans different type of providers will need to find a proper balance between regulation, control, and development of institutional capacity to undertake self-assessment. It will also be important that quality arrangements do not function as a disincentive for private investments in TEVET.

VII. Relevance and Impact

This chapter provides an assessment of the impact of the TEVET system in terms of efficiency, effectiveness, and relevance. Impact remains low due to the limited number of annual graduates, and there are reported skills gaps in a range of occupations in the private sector. Consequently the public sector remains the dominant employer for new graduates. Impact is further hampered by lack of robust labour market data.

Assessment of Impact and Efficiency

The fragmentation in provision and the limited scale of public TEVET provision makes it difficult to assess its actual impact in economic and social terms, not least in comparison to the scale of training that occurs through informal apprenticeship without cost to the public sector. The lack of robust performance data furthermore hampers an assessment of the relevance and impact of TEVET.

Secondly, as recognized by all stakeholders and industry representatives, Malawi does not have a functioning, up-to-date labour market information system which could help the TEVET system to better match demand and supply. The Integrated Household Surveys and censuses conducted by the National Statistical Office provide limited labour market and employment data. The Ministry of Labour has the formal responsibility for monitoring labour market developments. Senior officials recognize that due to lack of resources they are not capable of collecting and disseminating information as needed. To address this gap TEVETA has begun developments of what could become a functional Labour Market Information System (LMIS) (according to the TEVETA director). However, the Ministry of Labour has better access to labour market data and has the formal responsibility for monitoring it. Funding for the development of a LMIS system to inform TEVET planners would therefore probably be spent more efficiently through a collaborative model with each actor responsible for the aspects that are at the core of its operations. This could be done with the MOL responsible for identifying and anticipating skills needs and with TEVETA as the connecting agency between demand and supply. There are numerous examples from other countries of complex labour market information systems that have developed with very little relevance to TEVET policies and planning. So more fundamentally, it is a question of how core TEVET activities are mandated, resourced, and planned, and the quality of coordination and dialogue mechanisms in place among key stakeholders.

Internal Efficiency

Examination results are one of the few available proxies to measure TEVET internal system efficiency in Malawi. Information is available for the MANEB-based Malawi (Advanced) Craft (MAC) system and for the Ministry of Labour-administered National Trade Testing (NTT) system (CSR, 2009).

Figure 7.1 shows that the overall pass rate for MAC examinations over the last five-year period for which data were collected (2003 – 2007) was 67.2 per cent, and almost the same as for the lower level Malawi Craft (67 per cent) and the higher level Malawi Advanced Craft (67.7 per cent). This means that a third of students do not reach their educational goals after two and four years of training respectively. For the trade testing system, an average of only 52.8 per cent of students passed the tests during the same time span.

Results in the MAC examinations vary substantially by training institution, with differences between the rates of individual institutions of 27 per cent Malawi Craft and 20 per cent Malawi Advanced Craft. The situation is similar for the trade testing system. In general, however, those who have completed training programmes in TEVET institutions have a much better success rate (57 per cent) than external candidates (40 per cent).

No analyses have been carried out so far to investigate why the pass rates are so low, and why there are such differences from institution to institution and from trade to trade; such an analysis will be needed for any targeted approach to improve quality.

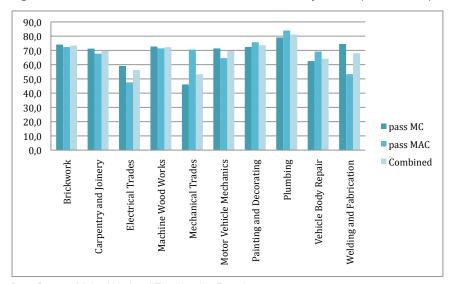


Figure 7.1: Pass Rates for MC and MAC Examinations by Trades (2003 - 2007)

Data Source: Malawi National Examination Board

Information on dropout rates is only available for the regular apprenticeship system, and the rates are very low (around 6-8 per cent) especially compared to primary and secondary education where dropout rates are substantially higher. TEVETA assumes that dropout mainly occurs because alternative options open up for students, such as more attractive educational paths (admission to a university) or employment opportunities. Regular apprenticeship training is subsidized and poor students receive scholarships, so social reasons would not cause students to drop out of the apprentice system, which could be the case for students in the parallel TEVET system, but there are no data available.

The table shows that pass rates for the different trades in general are low and they vary from occupation to occupation.

Table 7.1: Distribution of Workforce by Level of Education and Type of Employment in Percentages for 15-year-olds and over (2004)

	Non-formal agriculture	Non-formal other than Agriculture	Formal Public Sector	Formal Private Sector	Student or Non- active	Unem- ployed	Total	Unemployment rate*
No school	75.0	4.1	2.1	6.8	11.1	1.0	100.0	1.1%
Lower primary	66.5	4.8	2.1	8.2	17.2	1.1	100.0	1.3%
Upper primary	50.5	6.2	2.3	9.7	29.8	1.4	100.0	2.1%
Lower secondary	30.1	6.6	4.5	10.4	46.4	2.0	100.0	3.7%
Upper secondary	20.5	7.1	12.6	18.6	34.5	6.6	100.0	10.1%
Technical college	3.5	1.2	44.0	20.9	27.3	3.0	100.0	4.2%
Higher	4.1	4.6	28.7	39.9	20.7	1.9	100.0	2.4%
Total	55.7	5.4	3.7	9.7	23.7	1.8	100.0	2.3%

^{*} The unemployment rate is based on the economically active population (i.e., total without non-active, incl. students). Data Source: IHS 2004

External Effectiveness

Improved education leads to better chances for formal employment. Even if TEVET especially targets technical and crafts trades (although programmes in administration and ICT are increasingly offered) the employment level in the public sector is high, with 44 per cent of TEVET graduates compared to 20.9 per cent who find work in the private sector. This could be an effect of the limited number of graduates annually, which in turn could lead to a TEVET diploma having a broad value for the labour market. The recorded unemployment level for TEVET graduates was low, at the level of 4.2 per cent.

In recognition of the existing gap in updated labour market data, GTZ and the World Bank carried out a tracer study in 2008. In parallel, a similar study was carried by TEVETA with a slightly different focus.

The Malawi Labour Market Survey (GTZ/World Bank). The tracer study carried out by Jimat (2008), a consultant for TEVETA, comprised five individual surveys: a tracer survey of TEVET graduates, a skills demand survey of formal companies, an informal sector survey, an informal sector employees survey, and a tracer survey of TEVETA's informal sector training programme.

The tracer study commissioned by the GTZ and the World Bank in the context of the Centre for Social Research (CSR) covered higher education graduates and TEVET completers from all TEVET provider systems. The studies provide some indications on system impact and relevance, but the data should be read with caution, given the limited scope of the TEVET system.

Both studies show that most students found employment in occupations for which they were trained. Some 15 per cent of the students in the GTZ/World Bank study and 9 per cent of the students in the TEVETA tracer study were unemployed at the time of the study. The tracer study conducted by GTZ and the World Bank shows that transition to the labour market for TEVET students is high, whether as employed or as self-employed. According to the CSR, the outcomes are considerably higher than the situation in other African countries (Table 7.2).

Table 7.2: Employment Status of TEVET Completers

Current Employment Status	Per cent of Total GTZ/World Bank Study	Per cent of Total TVETA Study	
Wage employed full-time	38.3	85.4	
Wage employed part-time	8.0	00.4	
Self-employed (own business)	28.7	5.7	
Self employed and wage employed	4.1		
Unemployed but looking for employment	15.2	0.0	
Unemployed, not looking for employment	1.4	8.9	
Continuing studies	4.4		

Data Source: CSR 2009 Malawi, p 241.

According to the TEVETA LMS, 86 per cent of all employed former apprentices found jobs within the first six months, in comparison to only 64 per cent of the mixed group of TEVET graduates. This might also explain why a larger cohort of graduates from the mix of TEVET providers work as self-employed, as indicated by the GTZ/World Bank study.

Data could indicate that TEVET graduates replace unskilled labour to a large extent. However, the fact that a large number of graduates work in jobs with little formal responsibility could also reflect the size and work of organizational practices in the companies in which they get employment.

The few data available on TVET graduates suggest that TEVET completers have generally good chances to find employment by African standards (CSR 2009). However, students that find employment are low paid when they enter the labour market, probably because they replace unskilled workers, but also reflecting that the formal private labour market is still underdeveloped in Malawi. Most TVET graduates tend to remain as helping hands in the company, and the Jimat study indicates that only a small amount of TVET graduates (14%) over time are able to advance to more qualified positions.

Table 7.3: Position of TEVET Completers at First Employment and Time of Study in per cent

Position	At First Employment	At Time of Study
Ordinary hand	89.4	74.8
Supervisor	5.0	11.0
Foreman/middle management	2.8	11.5
Other	2.8	2.8

Data Source: CSR 2009

Although the two studies provide the same insight into the relative value of the different TEVET certificates in the labor market there are some doubts about the validity of replies in both surveys, according to CSR 2009.

Supply and Demand Issues

The diversification in types of TEVET training and its providers and the lack of a comprehensive quality management framework have led to a situation where there is not yet a full overview of the TEVET training. More recently, training programmes in commercial trades have become part of the training, which also applies to parallel students in the technical colleges. It could be expected that this will increase, partly because it does not make the same demands on equipment as the technical trades. However, it is evident that the formal public TEVET system, with its traditional range of technical trades, caters for only a small segment of the labour market. The technical college in Lilongwe can host up to 300 students in the ordinary TEVET system and has in addition about 200 daytime students. For the parallel students, programmes in HIV care, CISCO certifications, and rural development programmes. The college believes that if it had greater autonomy it would be better able to address local needs in a responsive manner. The College for Natural Resources, which is a private institution, offers degree programmes in agriculture-related fields. However, the lack of a diversified TEVET-level training related to the agricultural sector appears to be significant in an agriculture-dominated economy such as Malawi's, especially if agricultural products and agro-processing industries are going to form part of Malawi's export strategy. As described previously, the relevance of TEVET suffers from the lack of institutional mechanisms to ensure an ongoing engagement of industry in TEVET development, revision, and certification. In some instances industry has taken a lead to make up for the deficiencies in the TEVET system in initial training.

Reported Skills Gaps

Even if good practices such as the Mechatronics centre exist (see chapter five on Access), The GTZ/World Bank study shows significant training needs in other fields such as: advanced mechanics, welding and fabrication, general fitting, electronics, plant operators, steel fixing, advanced moulding, and fire drill evacuation.

Figure 7.2 shows that the public sector employs a larger cohort of TVET graduates than the private sector even if substantial skills gaps have been reported by different industries.

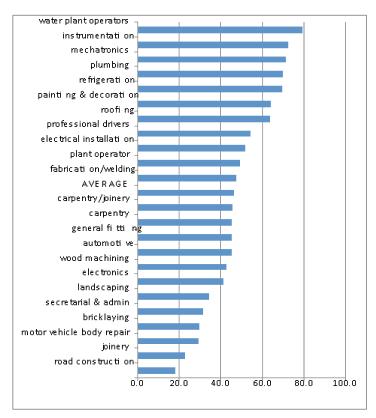


Figure 7.2: Skills gaps in Malawi

Source: CSR Malawi 2009

Although training needs for the informal sector have not been assessed, the director for the Association for Employers – ECAM – believes that gains would made across industries if there were training options for the part of the informal sector that undertakes repair services. According to the director, insufficient skills impact the quality of repairs, which negatively affects both private households and companies. Policy interventions addressing the informal sector should however not be introduced at the expense of the existing traditional apprentice system. Even if the existing TEVET apprentice programme includes an entrepreneurial component, it most likely does not correspond to the range of skills needed for productive self-employment in informal markets.

Improving Relevance through ICT

Internet use in Malawi is the lowest among countries in the region due to high costs. Internet access is mainly available in urban areas. ¹¹ ICT need to be embedded in curriculum and learning processes in TEVET as it begins to penetrate in industry sectors such as mechatronics. Mobile phone usage is expanding rapidly and the cost of accessing the internet is decreasing globally. A good working assumption is that within five to six years many young people and teachers will be ICT users. Internet can be used for a number of purposes: leisure, personal networking, informal, access to learning resources, organization of work and studies, and as a necessary skill in the labour market (generic or specialistic). The ministry, TEVETA and the stakeholders should consider this development carefully, and begin to plan accordingly.

If technicians' qualifications are to be reinstated, then the equipping and modernization of workshops will be an important issue, including the use of simulators and other computer-aided materials replacing traditional equipment, as is the case for example in the Mechatronics Centre in Blantyre. If future investment in equipment should be prioritized should it be allocated mainly to traditional equipment or should investments be made in ICT-based workshops like the Mechatronics centre in Blantyre? This is a question that has to be addressed as part of TEVET policies if Malawi is to follow the information highway as stated in its ICT strategy.

VIII. The Knowledge and Evidence-Base

This section discusses the role of the formal knowledge base: how evaluations, development of statistics and indicators, development projects and research are used as systemic features to build capacity for evidence-based policymaking.

Feedback mechanisms between practice and policy are poorly developed at present. The knowledge base on the labour market is limited. There is little evidence that pilot projects and evaluations are used systematically to build system capacity for change, and to improve evidence-based policy making. However, the Education Sector Implementation Plan could form the cornerstone for such a development. In a forward-looking perspective, improvement in labour market information systems will be needed in order to enable the TEVET system to respond to changing patterns of skills demands. There is ample international evidence that manpower forecasting systems do not take into account the dynamics of labour market supply and demand. This dynamic should be integrated in the design of the proposed labour market information system, especially in order to capture emerging trends that could be translated into new skill demands. Information on sector growth combined with information on placement and unemployment rates by skill levels, vacancy rates, and employer projections of employment needs, can, if gathered on a regular basis, contribute to more informed planning. Better links between training institutions and employer organizations and enterprises can also improve the responsiveness of the system, for example through institution-based tracer studies and evaluation after attachment periods. This is provided that the TEVET institutions have a level of autonomy to react to local needs in terms of tailoring existing apprentice programmes to particular needs in the local industry base.

The Role of Evaluations and Statistics in Policy Making

Evaluations have mainly taken place in specific project and donor contexts, and it is not evident that such studies have informed policy-making. UNESCO, for example, undertook a study on the TEVET system in 2006 which explicitly addressed governance issues. Additionally, an empirical study on informal apprenticeship in Malawi was commissioned by the ILO and published in 2009. Two tracer studies were commissioned by TEVETA and GTZ & DANIDA respectively in 2008 with a somewhat different focus.

In the Strategic Plan 2007-2012 there is a formulated goal to develop capacity to undertake rapid tracer surveys of appropriate cohorts of graduates of all types especially for those where there are signs of serious labour market imbalances (on supply or demand side) (p. 15, TEVETA's action programme 2007-2012). No timeline is given for the implementation phase. The director indicated that TEVETA has started developing a Labour Market Information System, though this is also the role of MOL, and it is therefore one of the issues that must be addressed as part of the clarification of roles and responsibilities to avoid duplication of efforts. Pilot projects before full scaling up do not seem to be a systemic feature of policymaking and policy implementation, even if there is ample evidence (OECD – CERI, 2009) that such an approach can support the articulation between practice, research, and policy making.

There are indications that a process was initiated some years ago to introduce autonomy in the technical colleges to stimulate the development of professional management and leadership capacity. If properly supported this could stimulate the ability to drive bottom-up innovations as seen in some autonomous TEVET institutions – for example the College of Natural Resources, and the Mechatronics Centre in Blantyre, as described in previous sections.

Statistics and Indicators

The lack of proper statistics severely hampers evidence-based policy-making and efficient use of scarce resources, because the indicators that are in place are largely input-oriented. Unless there is a sharp change in policy this is likely to remain the case, since all the indicators for TEVET that are cited in the implementation of the sector strategy report (MOEST, August 2009) continue to emphasize inputs. These are: numbers of students enrolled, student/lecturer ratios, number of inspection visits, and expenditure on TEVET as a percentage of total education expenditure.

However, work has been done in Malawi that could contribute to incorporating process-and outcome-based indicators, a step that governments in other countries are taking to support informed decisions and priorities of resource allocation. As TEVET policies will have to cope with a rapidly expanding youth population, output and outcome indicators will be needed to inform policy and to ensure efficiency in public funding. Process indicators for TEVET qualifications and provision would include such factors as partnership with employers, the quality of teacher initial and continuing training, leadership training, and labour market skills needs analysis. Outcomes criteria could include completion and qualification rates, reference to tracer data for the destinations of graduates, satisfaction of both learners and employers with the technical skills, and generic competences.

So far, no instruments or mechanisms have yet been developed to build institutional self-assessment capability. If greater institutional autonomy is implemented the need for such approaches will grow. The authorities could consider implementing 1) a gradual approach to decentralization to allow local management to take appropriate decisions at the local level, and 2) an explicit and purposeful approach to quality management and quality assurance. In this case, measures for institutional capacity building will have to include a strong element of self assessment – probably with external validation or inspection – based on new quality criteria.

X. Conclusions and Recommendations

Conclusions

In recent years the Malawi government has agreed on a comprehensive policy framework as expressed in the *Malawi Growth* and *Development Plan and Vision 2020*. This gives Malawi advantages, because the overall policy framework recognizes the key role the education sector – and more specifically the TEVET system – plays in realizing these ambitions. Innovations in the TEVET system do not have to start from point zero, since there are TEVET policies in place and to some extent also formulated implementation plans. This gives the Malawi government and all TEVET stakeholders a relative advantage when it comes to implementing comprehensive TEVET policies that can sustain transformation of Malawi society. Key stakeholders recognize that TEVET is a catalyst for sound socio-economic development in Malawi. In this sense there is a solid platform for change.

However, progress on a skills agenda for the future of Malawi is severely impeded and implementation of reform is blocked, mainly due to governance challenges. These have been brought to the attention of the government on numerous occasions by external agencies such as UNESCO and the World Bank, and have been recognized in meetings held among stakeholders¹², yet they remain unsolved. Therefore, the government and the MOEST as the formal policy holders must take the lead as their highest priority to insure that policy visions are translated into dynamic governance capable of formulating and implementing strategies, actions, and targets. This will occur only when the central stakeholders agree on a task-appropriate governance framework that can bring the TEVET system forward. For example, the opportunities to develop and implement a coherent lifelong learning policy have not yet been grasped, even if several of the building blocks are present in the form of the modular competence and outcome-based CBET system, qualification framework, and important aspects of partnerships that are developing between supply and demand stakeholders.

It will take sustained strategic planning, prioritization of resources, and strong, innovative and engaged leadership by the MOEST, to ensure that reform intentions go beyond the publication of policy statements and materialize in concrete actions and targets. As the system is in transition, some recommendations contained in this report will be in close alignment with policy perspectives and views already shared between the MOEST and the key stakeholders, or addressed in previous external reviews. Where this is the case, the external perspective and views expressed may serve as a reinforcing and consolidating influence that may benefit policy implementation. Other recommendations may be more novel or indicate new approaches that will hopefully be beneficial in policy deliberations and further planning.

The preceding chapters provide comprehensive coverage of elements central to a responsive TEVET system. Thus the evidence-base, context and rationale for the recommendations can be found in the individual chapters. Some recommendations can be implemented right away, while others will require policy prioritization and more preparatory work and will thus require a longer timeframe.

This review has sought to emphasize practical steps for implementation rather than sweeping changes. A key to success as the emphasis shifts to successful implementation is to enable changes to take root, rather than overload key actors with a change agenda so broad or abstract that it will be almost impossible to begin effective implementation. The review has showed that there is a broad willingness to commit from many stakeholders so the government should not lose precious momentum by delaying the implementation of an agenda for sustainable innovations in the TEVET system.

The review team has maintained the view that TEVET and other sectors of education are not compartmentalized entities, but interlinked and connected to many features of prevaling social conditions, and come under the governance of other ministries. The team therefore welcomed the broad participation of key ministerial stakeholders in the debriefing after the end of the review. This will undoubtedly contribute to taking actions forward into a coherent and coordinated policy implementation.

¹² Unsolved governance issues were addressed in September 2009 at a meeting among stakeholders and attended by UNESCO. Some agreements and deadlines were set on aspects relating to TEVET governance, but at the time of the review the deadlines for the reached agreements had passed.

Recommendations

The recommendations are structured under six headings and according to timelines for probable implementation. Each theme is introduced by a short rationale and followed by proposed policy options. The headings for the recommendations are:

- TEVET System Efficiency
- Governance
- Funding
- Access and Participation
- Quality
- Relevance and Knowledge Base

TEVET System Efficiency

Rationale

There is discord between the *Malawi Growth and Development Strategy*, TEVETA's strategy for the period 2007-2012, the *Education Sector Implementation Plan* (p. 71), and realities on the ground. Although key policy documents recognize that access to TEVET has to be expanded to meet economic and equity needs, access policies are, in practice, elitist because they are based on an examination pass mark – except for affirmative action for better inclusion of females in the system. The enrolment of parallel students, which all technical colleges currently practice, is a symptom of overregulation and inflexible and insufficient funding. This entails a risk that students are enrolled in programmes that do not require investments in infrastructure, rather than in areas where there are recognized needs. As such they become hostages of poor public funding regimes. With scarce resources available to a system which is costly to run, public funding should be allocated to areas where it adds most value.

Short-term policy options

The key to immediate expansion of access is to separate the management and delivery of TEVET from the boarding facilities, which could be operated by the private market or in a public/private partnership model primarily for youth from rural areas or that for social reasons need boarding facilities. In addition, each technical college should prepare a three-year strategic plan for optimal utilization of the specific technical college, for example though double shifts for apprentice programmes, programmes for the informal sector and workforce training, and by replacing existing TEVET activities for parallel students as necessary. In each instance, the plan should build on an assessment of regional needs where the school is located, and should also include an estimate of the funding implications (teachers, equipment, materials). TEVETA should provide technical assistance as needed to draw up these plans. Responsibility for recruitment and enrolment as well as the management of industry attachments should gradually be transferred to the technical colleges as part of increased institutional autonomy associated with quality assurance measures. This would enable schools to build stronger links with the local community, which could improve demand orientation. Stronger institutional links with employers would also lead to stronger industry engagement with TEVET.

The review team strongly suggests that investment in equipment at the secondary school level, which was in progress when the review occurred, should in the future be phased out and replaced with courses relating to applied technology, science, and innovation. As higher skills are in demand, abilities to communicate clearly, the use of math and science to solve problems, and creative approaches to tackling complex issues all become more pronounced and a precondition to learning later in life. Funding could be better used to expand access to post-secondary TEVET and/or to update the secondary school curriculum with emphasis on critical core competences and applied skills. There is plenty of evidence and material available from international examples, and online, as to how such curricula can be implemented.

Governance

Rationale

The existing TEVET policy dates back to 1998 and led to the creation of TEVETA in 1999 (TEVET Act, No. 6 of 1999). This has since been followed by the development of strategies for the education sector as a whole and for TEVETA.

While the legislation provides a strong frame for the TEVET Authority, TEVET policy responsibility is not clearly spelled out in the legal mandates and functions of the Directorate for Technical and Vocational Training and the MOL. This creates operational problems and causes delays in decision-making processes. The issue of unresolved conflicts and role overlaps in governance is not a new topic. In externally commissioned reports this has long been recognized as one of the key reasons why the TEVET sector has not developed as it was intended under the 1999 Act. Since 2005, there have been ongoing meetings and task forces to identify and assess gaps in implementation of the TEVET policy. The most recent meeting was held in September 2009, and was supported by UNESCO: the aim of the UNESCO support is to build capacity to strengthen the TEVET system in Malawi. According to the evidence from the interviews conducted during this review (March 2010) and the record of commitments made at the September 2009 meeting the agreed decisions and deadlines for certain aspects of TEVET policy clarification have not materialized. Unsolved governance tensions and delays in policy implementation risk losing the commitment from the private sector, which in fact was one of the more successful outcomes of the TEVET policy revision since 1999.

Short-term policy options

A clear governance framework is the key to an efficient TEVET system in Malawi. It is therefore time for a decision on the organization of governance that can contribute to the realization of strategic goals for the TEVET sector. At the debriefing in Lilongwe at the end of the review, the governance issue was also addressed. It is strongly recommended that the MOEST take the lead at the highest level and convene a meeting in collaboration with the UNESCO cluster office so as to find an operational solution to the many unsolved governance issues that were mapped in September 2009, addressed in this review and also at the debriefing meeting at the end of the review.

A way forward, which has worked in other contexts, could be to take the outputs from the meeting one step further by identifying interaction mechanisms, roles, and responsibilities which can enable an efficient, transparent, informed, and faster decision-making process. The guiding principles for a revised governance framework should be efficiency, transparency, public-private partnership and agility to respond to changes in the external environment. It is essential to set a date for the conclusion of this process; this should be communicated forthwith by the Ministry of Education, Science and Technology, so that key stakeholders all see that there is a policy willingness to commit to decisions and targets. Otherwise an important window of opportunity will be lost. The MOEST should then start a consultation process with sector ministries and labour market representatives to secure their commitment. This process and outcome should clarify how these stakeholders are able and willing to participate in TEVET governance in a systemic way and within the broader socio-economic policy framework in Malawi. Once the governance framework is in place the TEVET Act should be revised accordingly, and where necessary the Education Sector Plan, the Education Sector Implementation Plan, and the TEVETA strategy should also be revised and brought into alignment.

Medium-term policy options

Coherent lifelong learning policies are central to efficient, inclusive and dynamic education policies. Therefore the MOEST should start a process of consultation to develop the National Educational Sector Plan into a lifelong learning policy for Malawi step by step with the eventual endorsement of the president and cabinet. In the process, important lessons can be learned from other countries that have already embarked on the same route – most recently, for example, Botswana. In addition, the MOEST should take leadership to draw up a more detailed strategy document for the TEVET sector through a broad consultation process to inform transparent resourcing and policy prioritization for which the Government can be held accountable. For this, TEVETA is already well placed to be the effective delivery arm, and to act innovatively within a well-defined field of responsibilities that link demand in the formal and informal labour markets to the supply of appropriately skilled citizens.

Funding

Rationale

The quality, outreach, and efficiency of the public TEVET system are negatively affected by a range of factors.

TEVET is under-funded compared to other education sub-sectors, and funding is purely input-based. The funding model is highly regulated, leaving institutions with no room to redistribute according to needs, and it gives incentives to speculate in parallel student programmes. The institutions can decide which programmes they want to offer to parallel students, regardless of labour market perspectives. The system of parallel students does not, in the view of the review

team, contribute to making the TEVET system more responsive to labour market needs; rather, it is part of a supply-side dominance, and it does not contribute to equity goals and is thus in disharmony with government poverty reduction strategies. Institutions have furthermore discretionary powers to use the fees from parallel students as they wish, and the fees received are much higher than the funding generated for ordinary students. Indirectly, the existing funding model increases inequity. The previous sections have given some indications how funding can be used more efficiently while also improving access.

Changes in the financing regime should include clear guidelines regarding financial management of public funds and the utilization of generated funds with a view to improving accountability, as well as responsiveness to the needs of the labour markets. An important aspect to consider is the potential impact of different funding models on institutional behavior. The current rigid public funding mechanism functions as an incentive for institutions to enroll parallel students because it gives them some level of financial autonomy.

TEVET is costly. Stakeholders should however be aware that an investment in TEVET is also an investment in the country's development. Even if TEVET funding is increased over the years to come, the overall level of funding will still be very low compared to investments in higher education, and likely to be extremely low if the TEVET system is to be expanded and furthermore undergo a necessary quality overhaul. The reviewers have not had access to details of proposed funding levels in coming years. However, this review has taken into account that the proposed increase in TEVET funding starts from a very low baseline, in both an African and international context.

Short-term policy options

The MOEST should take the lead in collaboration with the Ministry of Finance and TEVETA to assess different funding models of TEVET in developing countries (how they are managed, the institutional capacity required, accountability and monitoring mechanisms, and their impact on broader socio-economic policy priorities), as a basis for the development of a sustainable funding model for TEVET. Demands on the TEVET system will increase in the years to come. All relevant stakeholders should therefore be consulted from the outset to ensure a medium-term sustainable funding model.

Medium-term policy options

There is a need for a funding model that will improve utilization rates, while also contributing to broader objectives regarding access to and the relevance and outcomes of programmes offered. The Government should therefore elaborate a financial framework that takes these factors into account, whilst also giving the institutions some level of autonomy to reallocate funding streams. The Government should establish transparent and manageable accounting mechanisms for public funding and the generation and spending of income from other sources aligned to the quality assurance framework. The regulatory financial framework needs to consider different conditions in urban versus rural schools. Sustainable priority should be given to skills development in traditional sectors, particularly agriculture, as well as to high growth areas of the economy.

A revision of the funding stream cannot be a one-off policy intervention, but needs to be complemented by an increasing level of autonomy at the institutional level, including financial management. Capacity-building of the college directors and core staff will be critical to the success of a revision of existing funding models.

The team urges the MOEST, working with the Government, to revisit the proposed budgetary framework for the years to come for the education sector, to re-assess what level of recurrent and capital funding will be needed to improve the quality and access of TEVET with a view to reprioritizing TEVET funding. Efficient funding and accountability will also require that the MOEST, other ministries that have a stake in TEVET as well as TEVETA see that administrative processes are lean so to ensure that the majority of funding goes to value-added activities.

Access and Participation

Rationale

The expansion of the TEVET system will be a major challenge in the years to come. Therefore it is vital that policy instruments enable efficiency, equity, relevance, and articulation between sub-systems. The reform of TEVET and the establishment of TEVETA led to an important innovation, the creation of the CBET certification. CBET has the advantage of being modular and competence-based rather than curriculum-driven, as it offers a frame for aligning competences

whether acquired informally, non-formally, or formally. This is the purpose of the TEVET qualification framework and is consistent with how other countries are working to create efficient lifelong learning systems. But there are inefficiencies in the way CBET is implemented. The CBET qualifications offered by the technical colleges are built over the same four-year model regardless of the occupational content. The articulation to sub-systems is not used in practice. This leads to inefficiencies in two ways: students remain longer in school than necessary from a labour market perspective, and some students "block" access opportunities for others, because they cannot move on to another level until the previous one is passed. Furthermore, the modular approach has not expanded access for students in the informal sector. Longer programmes and access criteria based on a grade point average tend to favour students from better-off families. The situation is exacerbated by the fact that TEVETA funding for the informal sector is small-scale.

Short-term policy options

The MOEST should take the lead with the involvement of TEVETA to set up a coordinating, overarching framework for TEVET – open to different priority groups (disabled, rural population, single mothers, the informal sector) to improve outreach, networking and mainstreaming and thereby enhance efficiency and impact, and ensure that promising practices are documented, shared, and evaluated as a basis for mainstreaming.

The MOEST must take the lead to ensure harmonization of certifications. Multiple certifications that do not have clear purposes and functions cause confusion. They increase administration costs, where resources should instead be used to expand and diversify access and to improve the quality of the existing provision. Harmonization may mean clarifying the roles of different qualifications in different contexts, or reducing the range of qualifications available if they do not comply with current work processes and job functions. Due to the strong feelings stakeholders have about the different certifications, the harmonization process has to be kick-started by a targeted and factual information campaign about the added-value of a competence-based approach added-value for the individual students, the adult learner, the institutions, and not least employers. It will be important for information campaigns to also emphasize that the competence-based approach to TEVET is a global trend. This will enable the development and revision of curricula to be measured against international benchmarks, an additional value added, not least if the TEVET system is to contribute to increasing exports and attracting Foreign Direct Investment.

System efficiency can be improved by implementing a policy framework supportive of assessment and recognition of informal and non-formal learning. The building blocks are there through the CBET qualification framework, but this framework is not applied to enrolment procedures. Assessment of prior learning makes competences visible regardless how they are obtained. It improves opportunities to obtain a formal qualification, notably to individuals who have learned skills through work in the informal sector. It would also provide an opening for the approximately 200,000 young people who annually drop out of the education system. There are many lessons to be learned from the OECD large-scale project on recognition of informal and non-formal learning policies and practices (OECD, 2010). Assessment of prior learning can be used to indicate whether some students need remedial education, and to provide access to an accelerated route for learners who have worked in the informal sector for some years.

Medium-term policy options

In the medium term the Government should build capacity in some of the technical colleges so that they can function as centres of excellence for value-based entrepreneurship and innovation. Entrepreneurship in low-value areas tends to barely provide a livelihood and does not lead to job creation. Many countries have embarked on similar roads. This implies an expansion of the network of technical colleges.

One model could be a programme where the curriculum is built on the principle that students acquire competences in a given domain while working on a "real life project" that would add value to a business portfolio or a community. In the last part of a programme the college could "incubate" the student with support schemes such as physical space or workshop facilities, access to tools/and or equipment, financial, business and marketing advice from a person with entrepreneurial experience. Access to and training in ICT, quality and design as value-added elements of product and service, and/or assistance in accessing micro-financing are elements to consider, if training is to lead to productivity gains, employment generation, and innovation.

Quality

Rationale

It is recognized by key stakeholders that the TEVET programmes do not live up to expectations regarding quality and relevance, and that this results in severe gaps in the labour market. So far, graduates have been absorbed in the Malawi labour market, probably because the volume in public TEVET is so limited. While the *Education Sector Implementation Plan* includes limited policy direction regarding the implementation of a coherent quality assurance framework for TEVET, the elements of such a framework are more explicitly stated in the TEVETA Strategic Plan for 2007 – 2012.

The competences of the TEVET teacher and trainer workforce are also critical to quality in the delivery of TEVET. Many countries have taken measures to develop or reform training programmes specifically tailored to the TEVET teacher workforce, from which promising practices can be deduced and adapted to the Malawi context.

Short-term policy options

An evaluation of the existing CBET-based programmes should be made by an external and independent body to assess how the involvement of industry should be organized to yield the best results. It should also assess what competences and capacity building are needed to undertake job and task analysis as the basis for a competence-based curriculum, the perceived relevance and gaps in the programmes from the perspective of different employers, and whether the graduates of apprentice training find employment in the private, public or informal sector. Such a study can in addition contribute to medium-term policy objectives.

The MOEST should take the lead together with TEVETA to assess the current level of implementation of the TEVETA strategic plan 2007-2012 as concerns a quality assurance framework for all formal, informal, or non-formal TEVET. This will identify implementation at this stage, and whether elements critical to quality in TEVET are missing from the TEVETA strategic plan or the MOEST's implementation planning. Both these approaches must be aligned, as a matter of urgency. The review process should assess progress towards each of the relevant goals, and identify how to overcome barriers to implementation. The outcome should be an action plan with clearly identified tasks, deadlines, responsible actors, and resource implications.

To take immediate action on the knowledge and skills deficit among the existing TEVET teachers and trainers, TEVETA should explore whether a combination of industry placements combined with weekend courses could be a way to solve the immediate skills deficit in the teaching workforce.

Medium-term policy options

Based on the assessment of the existing CBET curriculum, new programmes should be developed where there is an identified labour market demand and gaps in provision. The modular approach is flexible, and can therefore be used with a view to different employment destinations. Modularization should contribute to diversification of the TEVET offer. Diversification should extend along both horizontal and vertical pathways. Development, revision, implementation, and updating TEVET curricula is costly and time-consuming. It is therefore important to strike a balance between costs, flexibility and the degree of prescriptive detail in curricula.

To learn from best practice and to guide the development and revision of teacher training programmes, TEVETA should, possibly in partnership with the UNESCO Cluster Office, take action to identify promising practices in content and delivery methods for pre-service teacher education and in-service teacher training. Programme content and delivery mechanisms should take into account the opportunities offered by ICT. The government should explore opportunities to collaborate with other countries in the SADEC region on the development and implementation of such pre-service and in-service programmes for TEVET teachers.

Relevance and Knowledge Base

Rationale

The strategy for *Implementing the National Education Sector Plan* (MOEST, August 2009) contains a section on monitoring and evaluation. It would be premature to describe this as a design for an overall approach to an explicit

quality framework in any particular sector – let alone across the whole formal and informal education and training system including workforce development – but it does set down some principles. The section on a monitoring and evaluation framework states explicitly that research, monitoring, and evaluation have to be 'key components in the Ministry of Education, Science and Technology'. Yet the *Education Sector Implementation Plan* recognizes candidly that it lacks coordination and thus does not contribute to building policy capacity by sharing results or to forming policy decisions. Better data are prerequisites for quality and efficiency in public spending.

One of the important elements is better data on TEVET students' transition to the labour market; whether they work in the informal or formal sector, in which type of job, and at what income level. Such data may not tell the whole story, but can be used to better organize supply and demand. Many countries have embarked upon developments of manpower projections systems which are costly to develop and to maintain. Furthermore, they are not particularly reliable for planning purposes, as they tend to make simplistic assumptions about the linkages between training and the labour market.

Medium-term policy options

The MOEST should take the lead in collaboration with the National Statistics Office, the MOL and TEVETA to begin baseline work of identifying what types of process-, output-, and outcome-based data and indicators will be useful and can contribute to an efficient, responsive, and high-quality TEVET system. The UNESCO Institute of Statistics could offer technical assistance so decisions are methodologically sound and aligned to international trends.

The MOL should undertake a study in partnership with the MOEST and TEVETA to learn from international best practices on labour market monitoring and skills anticipation. Based on such a study they should develop a consolidated strategy and action plan which should form the basis for a consultation with stakeholders and inform task allocation and implementation. The private sector labour market will probably undergo a number of changes in the years to come, so any methodology adopted has to be agile and not demand immense resources to update and maintain. Overhasty decisions risk yielding poor results and high costs. Medium-term, it will also be important to develop a coherent approach to reform with use of pilots and evaluations as a systemic feature to gradually develop capacity for evidence-based policy making.

Sources and References

African Development Bank Group. 2009. Skills for Private Sector Development. Not published.

Chafa, J. W. 2003. The TEVET Reform in Malawi: The Development of TEVET Qualifications Framework (TQF) as a Reform Element. Presented at the Conference on the Reform of Technical and Vocational Education and Training (TVET), Gabarone, Botswana, August 4-6. Gaborone. http://www.bota.org.bw/docs/Tvet_in_malawi.pdf (accessed April 2010).

Farrell, G., and I. Shafika. 2007. Survey of ICT and Education in Africa: A Summary Report, Based on 53 Country Surveys. Washington. http://www.infodev.org/en/Publication.353.html (accessed April 2010).

Government of Malawi. 2004: Technical, Entrepreneurial and Vocational Education and Training (Qualifications Framework) Rules.

Government of Malawi. 1998. Technical Entrepreneurial and Vocational Education and Training, TVET Policy.

Government of Malawi. 1999. TEVET Education Act.

GTZ. 2007. Proceedings: International Symposium on Implementation Issues of Diversified Financing Strategies for TVET. Eschborn. http://www.gtz.de/de/dokumente/en-conference-ethiopia-2007.pdf (accessed April 2010).

International Monetary Fund. World Economic Outlook: Sustaining the Recovery. Washington. http://www.imf.org/external/pubs/ft/weo/2009/02/pdf/text.pdf (accessed April 2010).

International Monetary Fund. 2007. *Poverty Reduction Strategy Paper – Growth and Development Strategy*. IMF Country Report No. 07/55. http://www.imf.org/external/pubs/ft/scr/2007/cr0755.pdf (accessed April 2010).

Jimat Consultants. 2009. Malawi Labour Market Survey, TEVETA.

Lilongwe University of Science and Technology (LUSTECH). 2009. The STI Training Needs Assessment Report.

Ministry of Education, Science and Technology, Malawi. 2008. *National Education Sector Plan 2008-2017: A Statement*. http://planipolis.iiep.unesco.org/upload/Malawi/Malawi_NESP.pdf (accessed April 2010).

Ministry of Education, Science and Technology, Malawi. 2009. Education Sector Implementation Plan: Towards Quality Education: Implementing the National Education Sector Plan 2009 - 2013. http://planipolis.iiep.unesco.org/upload/Malawi/Malawi_ESIP_FINAL.pdf (accessed April 2010).

Ministry of Education, Science and Technology, Malawi. 2009. *Report on National Seminar on Technical and Entrepreneurial Vocational Education and Training*.

Ministry of Education, Science and Technology, Malawi, and Malawi National Commission for UNESCO. 2008. *The Development of Education: National Report of Malawi*. http://www.ibe.unesco.org/National_Reports/ICE_2008/malawi_NR08.pdf (accessed April 2010).

Ministry of Education, Sports and Culture. 2001. *Malawi Education Sector: Policy & Investment Framework (PIF)*. http://planipolis.iiep.unesco.org/upload/Malawi/Malawi%202000-2012%20Policy%20Framework.pdf (accessed April 2010).

Ministry of Labour and Vocational Training. 1998. Strategic Paper for Implementing TVET Policy 1999-2003.

Mwenifumbo, F. T. *Malawi's Efforts in Harnessing Increased Agricultural Production, Sustainable Food Security, and Socio-Economic Development.* New York. http://www.un.org/ar/ecosoc/docs/statement08/Frank_Tumpale_Mwenifumbo.pdf (accessed April 2010).

National Statistical Offices Malawi. 2008. Welfare Monitoring Survey. http://www.nso.malawi.net/ (accessed April 2010).

Natural Resources College. 2010. Natural Resources College. Lilongwe. http://www.nrc.mw/ (accessed April 2010).

OECD - Centre for Educational Research and Innovation (CERI). 2009. Working out Change: Systemic Innovation in Vocational Education and Training. Paris.

OECD. 2010. Recognising Non-Formal and Informal Learning: Outcomes, Policies and Practices. Paris.

Phiri, M., and R. Alexander. 2009. *Understanding Apprenticeship: Findings from Empirical Research in Malawi*. Draft report submitted to International Labour Organization.

Price, W. 2007. An Exploration of Vocational Training in Malawi. Virginia: School of Education, Virginia Tech.

Shapiro, H. 2006. Strategier for at nå utraditionelle kortuddannede målgrupper – hvad kan vi lære?Baggrundsnotat til Globaliseringsrådet. In Danish.

TEVETA. 2007. Strategic Plan for Technical Vocational and Entrepreneurial Education and Training Authority 2007-2012.

UK Department for International Development (DfID). 2008. PSA Country Report: Malawi.

UK Department for International Development (DflD). 2008. *The UK Government's Programme of Work to Fight Poverty in Malawi: 2008-2011*. http://webarchive.nationalarchives.gov.uk/20100423085705/http://dfid.gov.uk/Documents/publications/countryplan/malawi-country-plan10.pdf (accessed April 2010).

UNESCO. 2006. Present Status and Future Directions of Technical and Vocational Education. Paris: UNESCO.

United Nations Development Programme. 2007. *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World.* New York. http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf (accessed April 2010).

World Bank. 2002. World Bank Study on: Vocational Skills Development in Sub-Saharan Africa - A Working Group Review. Edinburgh. http://info.worldbank.org/etools/docs/library/243619/tvetskills%20development%20in%20Africa. pdf (accessed April 2010).

World Bank. 2010. *Doing Business: Measuring Business Regulations*. Washington. http://www.doingbusiness.org/(accessed April 2010).

World Bank. 2010. *The Education System in Malawi*. World Bank Working Paper No. 182. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/03/05/000333037_20100305002953/Rendered/PDF/533020 PUB0educ1010fficial0Use0Only1.pdf (accessed April 2010).

Annex: List of people consulted during the Malawi TVET Policy Review

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1	Dr Francis Mkandawire	Executive Secretary	Malawi National Commission for UNESCO
2	Mr Emmanuel Kondowe	Assistant Executive Secretary	Malawi National Commission for UNESCO
3	Mr Jones Chafa	UNESCO Programme Coordinator in Malawi	UNESCO
4	Mr Andionanji P.A Banda	Director of Technical and Vocational Training	Ministry of Education, Science & Technology
5	Dr Godfrey Kafere	Deputy Director of Technical & Vocational Training	Ministry of Education, Science & Technology
6	Mr Mwadiwa	Principal Secretary	Ministry of Energy, Natural Resources and Environment
7	Mr Kingsley Mikwamba	Acting Director of Programmes	Natural Resources College
8	Bro. Walter Thyrniang	Principal	Don Bosco Youth Technical Institute
9	Mr Kamanga	Deputy Director SME Directorate	Ministry of Industry and Trade
10	Engineer Benjamin Kapoteza	Director of Construction	Roads Authority
11	Mr Gerald Khonje	Technical Director	National Construction Industry Council of Malawi
12	Mr Yusuf Alide	Executive Director	TEVETA
13	Mr Wilson Makulumiza	Director of Technical Services	TEVETA
14	Mr Phanuel Hamsini	Director of Finance	TEVETA
15	Mr Clement Gondwe	Head of Training	TEVETA
16	Rodgers Chandidya	Head of Quality Assurance	TEVETA
17	Modesto Gomani	Head of Planning & Monitoring	TEVETA
18	Mr Wesley Muwalo	Chief Trade Test Officer	Ministry of Labour

	NAME	POSITION	DEPARTMENT
19	Mr Elias Zilikundodo	Labour Commissioner	Ministry of Labour
20	Mr Robert Mkwezalamba	Secretary General	Malawi Congress of Trade Union
21	Mr Evance Mulelemba	Deputy Principal	Lilongwe Technical College
22	Mrs Matilda Makuluni	Head of Commercial Department	Lilongwe Technical College
23	Mr Chilongozi Nyasulu	Director of Administration	Lilongwe Water Board
24	Mr Samson Mwandira	Deputy General Manager	Lilongwe Water Board
25	Mrs Gladys Mwale	Executive Secretary	Employers' Consultative Association of Malawi
26	Mr Enock Magola	Senior Technical Training Officer	Electricity Supply Company of Malawi
27	Mr Noel Kufaine	Head of Technical Department	Malawi Polytechnic
28	Peter Ng'oma	Director of Rehabilitation Services	Malawi Council for the Disabled
29	Mr Henderson Chipeta	Director of Administration and Finance	Malawi Council for the Disabled
30	Mr Henderson Nyondo	Centre Manager (Bangwe)	Malawi Council for the Disabled
31	Mr Montfort Mwalija	Rehabilitation Manager	Malawi Council for the Disabled
32	Mrs Amri Grace	Public-Private Dialogue Coordinator	Malawi Confederation of Chambers of Commerce and Industry
33	Mrs Rehema Mvula	Economist	Malawi Confederation of Chambers of Commerce and Industry
34	Mr Daniel Thupa	Engineering Manager	Packaging Industries
35	Mr David Grahams	Managing Director	Stansfield Motors
36	Mr Benedict Kunene	Social Development Specialist	African Development Bank

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he success of universal primary education in developing countries over the last decade has translated into huge systemic pressure to expand both general and technical and vocational secondary education. Skills are increasingly seen as critical to educational development, labour market inclusion and economic growth making Technical and Vocational Education and Training (TVET) one of the four priority areas in UNESCO's education programme.

TVET is an integral part of the Education for All initiative and through its orientation towards the world of work and the acquisition of skills plays an essential role in promoting a country's economic growth and contributing to poverty reduction, ensuring the social and economic inclusion of marginalized communities.

Malawi is a land-locked country in south-east Africa with a population estimated at 13 million. The country is among the poorest in Africa, but in recent years the government has succeeded in consolidating the macroeconomic environment. A long-term Malawi Growth and Development Strategy (MGDS) aims to transform Malawi from an import-based agrarian economy to an export-oriented country in the years to come. The combined effects of the economic development strategy and a projected population growth will call for major reforms of the education system – not least the TVET system as it is currently fragmented, offers limited access, and is poorly funded.

The purpose of this policy review is to identify concrete options and strategies for enhancing TVET policies and efficiency and effectiveness of TVET, aligned to broader socio-economic objectives in the country. Secondly, it is intended to contribute to learning and participatory processes among stakeholders to stimulate dynamic and evidence-based policymaking.