



# World TVET Database Kenya

Compiled by  
UNESCO-UNEVOC International Centre for  
Technical and Vocational Education and Training  
UN Campus  
Platz der Vereinten Nationen 1  
53113 Bonn  
Germany

Tel: +49 228 815 0100  
Fax: +49 228 815 0199  
[www.unevoc.unesco.org](http://www.unevoc.unesco.org)  
[unevoc@unesco.org](mailto:unevoc@unesco.org)

Country profiles are compiled from a variety of national and international sources and have been informed and validated by UNEVOC Centres in the country or other TVET national authorities.

The designations employed and the presentations of material throughout this report do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

UNEVOC/2013/TVETDB/KEN/1

© UNESCO 2015  
All rights reserved

## Contents

Abbreviations .....	4
1. TVET mission, strategy and legislation .....	5
2. TVET formal, non-formal and informal systems .....	7
3. Governance and financing .....	9
4. TVET teachers and trainers.....	10
5. Qualifications and Qualifications Frameworks.....	11
6. Current reforms, major projects and challenges .....	13
7. Links to UNEVOC centres and TVET institutions.....	13
8. References and further reading .....	14

## Abbreviations

DTE	Directorate of Technical Education
KTTC	Kenya Technical Teachers College
MoHEST	Ministry of Education, Science and Technology
NGO	Non-Governmental Organisations
STI	Science Technology Innovation
TE	Technical Education
TVET	Technical Vocational Education and Training
TVETA	TVET Authority

## TVETipedia Glossary

Below are listed TVET terms mentioned in this report. Click on a term to read its definitions on the UNESCO-UNEVOC TVETipedia glossary.

Accreditation	Monitoring
Admission criteria	National Qualifications Framework
Apprenticeship	Non-formal education
Career Counselling/Guidance	Post-secondary education
Certificate	Prior Learning
Competence	Qualification
Curriculum	Quality
Diploma	Quality Assurance
Employment	Skills
Evaluation	Stakeholder
Flexibility	Teacher
Formal Education And Training	Teacher In Vet
Informal Learning	Tertiary Education
Informal sector	Trainee
Knowledge	Trainer
Learners	TVET
Lifelong Learning	TVET institution
Mobility	Work experience

# Kenya

Population:	46,050,000 (2015)
Youth population <sup>1</sup> :	8,961,000 (2015)
Median population age:	18.9 (2015)
Annual population growth (2010-2015) <sup>2</sup> :	2.65%



Data © OpenStreetMap Design © Mapbox

## 1. TVET mission, strategy and legislation

### TVET mission

Training and education in Kenya is seen as a lifelong endeavour that aims to provide an individual with relevant skills for better employment. To achieve that, learners need to develop the ability to learn rapidly and to be innovative, whereas trainers need to become more adaptive to the changes in technology.

### TVET strategy

According to Kenya Education Sector Support Programme 2005-2010 the aims and purpose of TVET in Kenya are defined as follows:

- Involve all relevant stakeholders in the development of a comprehensive national skills training strategy;
- Establish mechanisms and appropriate incentives to promote private sector investments in the development of TVET for increased access;
- Provide scholarships and other merit awards for staff and students to promote excellence, creativity and innovation in the field of science and technology;
- Provide loans and bursaries to learners to enhance access to TVET;
- Encourage secondary schools that have infrastructure, equipment and staff to offer industrial and technical training curriculum;
- Establish a national coordinating body, the Technical, Vocational Education and Training Authority (TVETA), for TVET institutions in order to provide relevant programmes and effective management and governance; and
- Mobilise resources to rehabilitate facilities in public TVET institutions.

### TVET legislation

Education and training in Kenya are governed by the Education Act (1968) which gives policy guidelines on the establishment and development of institutions, their management and administration, development of curricula, and teacher education.

---

<sup>1</sup> Population aged 14-25

<sup>2</sup> All statistics compiled from the United Nation's Population Division's *World Population Prospects, the 2015 Revision* (<http://esa.un.org/unpd/wpp/DVD/>)

Vision 2030 is an important country development document that among other things places great emphasis on science, technology and innovation in general and TVET in particular as the vehicle for socio-economic and technological transformation.

The Sessional Paper №1 of 2005, a Policy Framework for Education, Training and Research, was formulated to articulate specific objectives and strategies for each level of education and gave an impulse to specific subsector policies and reforms. The National Skills Training Strategy and the revision of the legal framework for TVET (TVET Bill) were meant to strengthen the mechanisms for the implementation of the necessary TVET reforms.

TVET Bill of 2012 contains revision of legal framework in the TVET sector and provides for the establishment of a TVET Authority to oversee the TVET system.

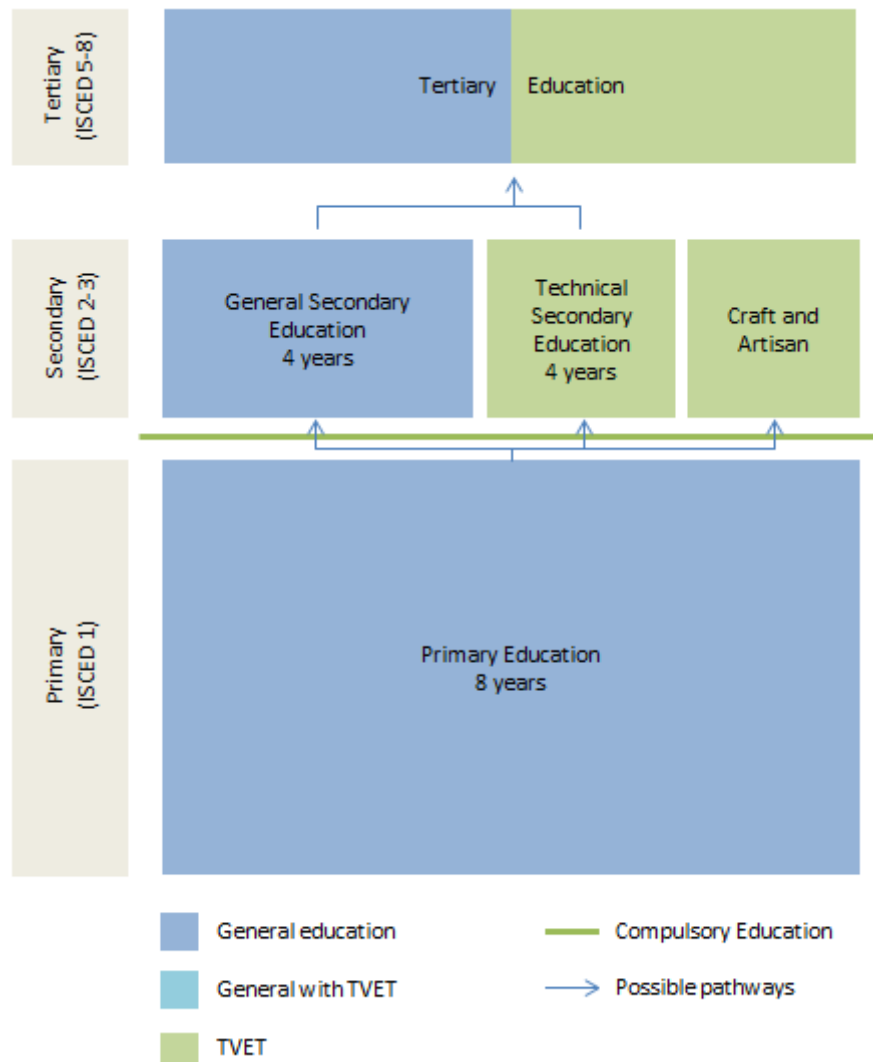
Kenya Qualifications Framework Bill (2012) provides for the establishment of Kenya Qualifications Authority and its functions.

***Sources:***

John Nyerere (2009). Technical and Vocational Education and Training (TVET) Sector Mapping in Kenya. Amersfoort: Edukans Foundation.

UNESCO-IBE (2010). World Data on Education VII ed. Kenya. Geneva: UNESCO-IBE.

## 2. TVET formal, non-formal and informal systems



Scheme compiled by UNESCO-UNEVOC from UNESCO-IBE (2010). World Data on Education VII ed. Kenya.

### Formal TVET system

Since 1984, the structure of the education system in Kenya has consisted of eight years of primary education, four years of secondary education and four years of tertiary education. It replaced the 7-4-2-3 structure and was meant to introduce a broad-based curriculum that would provide learners with pre-vocational skills and technical education.

The education and training system in Kenya offers a wide range of vocational and apprenticeship programmes. The TVET subsector provides parallel opportunities either as alternatives to the general education or as after-school training (Chen, Hamilton, Kamunge 2004).

These innovations were introduced to offer equal opportunities to the learners to advance to the highest level of learning, through either the academic or TVET channels. The structure also provides flexible mechanisms and opportunities for entry and re-entry into either channel.

TVET programmes in Kenya are mainly offered in:

- Institutes of Technology (ITs), formerly institutions constructed through community efforts;
- Technical Training Institutes (TTIs), which have replaced former technical secondary schools established in the 1960s after the independence;
- Youth Polytechnics and Village Polytechnics catering for mostly primary school leavers; and
- National Polytechnics

There are seventeen (17) ITs and twenty (21) TTIs, which offer Diploma|diploma and certificate courses. (Sessional paper n 5)

TVET programmes are also offered by other institutions spread across government ministries as well as over 1 000 private institutions, that offer courses in computers and non-technical areas of training.

Kenya has recognised the need to link training to employment. That is why enterprises are being well involved in determining the content of training, so that the content of training is more relevant for young people and the workplace. Furthermore, entrepreneurship has been integrated into TVET education and training as part of the curriculum to provide trainees with business techniques (Simiyu 2010).

## **Non-formal and informal TVET systems**

Youth polytechnic Programmes provide a non-formal training to unemployed school-leavers in skills related to local income-generating opportunities.

Within the informal sector, a training system based on the apprenticeship model is thriving. It is estimated that the sector provides training to more youth than all the formal systems put together (A. Ferej, K. Kitainige, Z. Ooko 2012). The informal (traditional) apprenticeship system in Kenya was born with the Indian craftsmen imported by the British Colonial Government to construct a railway line linking the seaport of Mombasa with the interior of the country (King 1977). People from the local communities worked alongside the Indian craftsmen as labourers on the construction projects and gradually acquired enough trade skills to work as semi-skilled and, later, skilled workers.

In Kenya, the informal sector is known as Jua Kali, in Swahili "hot sun", which came to be used for the informal sector artisans who were working under the hot sun because of a lack of premises. The sector now encompasses small-scale entrepreneurs and workers who lack access to credit, property rights, training, and good working conditions. Originally restricted to artisans, the term has come to include a number of professions, including auto mechanics and market vendors (Orwa 2007). Local voluntary associations started emerging in the 1980s as true advocates on behalf of these informal businesses. These associations work in the community to identify problems, propose solutions and act on them. Through associations, Jua Kali artisans



have access to knowledge and skills to enable them to improve on their products and services. For example, Kamkunji Jua Kali Association, considered to be the pioneer of the Jua Kali movement in Kenya, helps improve the technical and managerial skills of members through training. In 2005, the local Jua Kali associations created and registered the National Informal Sector Coalition (NISCO) to address the problems inhibiting the development and growth of the Jua Kali sector (Orwa 2007).

Informal skill training in Kenya has been featured by its relative ease of entry as the informal apprenticeship in Kenya has no rigid rules or time constraints about the duration needed to learn a trade (Ferej, 1994). The Kenyan apprenticeship system has also flexible fees and a low regard for formal certification.

Non-Governmental Organisations (NGO) play a major role in the TVET informal sector. In the 1990s, the Kenyan NGO SITE (Strengthening Informal Training and Enterprise) implemented in collaboration with Appropriate Technology (APT UK) the Skills Upgrading Project (SUP) to: (i) upgrade the technical and managerial skills of mastercrafts(wo)men/trainers, (ii) strengthen their capacity to provide quality training to their apprentices, and (iii) strengthen the capacity of selected vocational training institutes to support mastercrafts on an ongoing basis (Haan 2006). In total 420 host trainers were trained and 1400 apprentices received improved training from the trained host trainers.

### *Sources:*

Ahmed Ferej, Kisilu Kitainge, Zachary Ooko (2012). Reform of TVET Teacher Education in Kenya: Overcoming the Challenges of Quality and Relevance. Tunis: ADEA.  
UNESCO-IBE (2010). World Data on Education VII ed. Kenya. Geneva: UNESCO-IBE.

## 3. Governance and financing

### Governance

In May 2008, the responsibility for technical, tertiary and higher education was transferred to the Ministry of Higher Education, Science and Technology (MoHEST), which is in charge of most Technical, Vocational Education and Training (TVET) institutions in the country. The Ministry's mandate includes Science Technology Innovation (STI) Policy, research development, research authorisation and coordination of Technical Education (TE).

TVET development lies under the responsibility of the Directorate of Technical Education (DTE), which is in charge of policy, curriculum development, registration and supervision of TVET institutions. Its core functions are:

- The provision of support for development activities in technical and vocational training;
- The management of technical education programmes; and
- Career guidance and counselling on matters relating to liaison between technical institutions and the industry.

In addition to the MoHEST, TVET is provided by several government departments, including the Ministries of Defence; of Labour; and of Youth Affairs and Sports, the latter being responsible

for Youth Polytechnics. In total, more than ten ministries are responsible for managing TVET institutions.

Nevertheless, the Government has developed a blue print to establish an independent umbrella body which would coordinate all TVET activities under one organisation to be known as TVET Authority or TVETA. This blue print is yet to be approved by the legislation.

## Financing

Most TVET institutions are owned by the Government and funded through the direct involvement of 13 ministries in the sector.

However, donor support plays an important role in TVET development. The large amount of international aid has contributed to the establishment of training capacity, like the creation of infrastructure and facilities, the training of staff and the implementation of instructional systems (Ferej, Kitainge, Ooko, 2012).

### *Sources:*

John Wanyonyi Simiyu (2010). Factors influencing the attractiveness of a Technical and Vocational Education and Training Institution: a case study of a Technical Institute in Kenya. Eldoret: Moi University.

John Nyerere (2009). Technical and Vocational Education and Training (TVET) Sector Mapping in Kenya. Amersfoort: Edukans Foundation.

## 4. TVET teachers and trainers

Kenya generally practices two types of TVET teacher training:

- Trainees are recruited after secondary cycle of education and put through an integrated curriculum featuring subject-specific and pedagogical courses, followed by a practical period in the industry before a student is certified as a diploma or degree holding TVET teacher; and
- Trainees initially obtain subject-focused specialisation and work experience in the industry before undertaking pedagogical training to become a TVET teacher.

In order to increase the number of practicing TVET teachers, qualified technicians were also recruited from the industry to join the one year teacher training.

Untrained technical teachers with appropriate skills may also join the programme for pedagogical training. Due to the difficulties associated with attracting qualified individuals for technical training, the government offers various incentives to the trainees.

With the mushrooming of TVET institutions in the country (Institutes of Technology, Technical Training Institutes, private and Government Training Institutions, the four national polytechnics), the Kenya Technical Teachers College (KTTC) was created in 1978 to replace the programme of the Technical Teacher Training department at the Kenya Polytechnic. KTTC has been established under MoHEST with the primary objective of training technically skilled

personnel, among which technical teachers to teach in secondary schools and tertiary institutions. Successful candidates are awarded with certificates, diploma and higher diploma.

### ***Sources:***

Ahmed Ferej, Kisilu Kitainge, Zachary Ooko (2012). Reform of TVET Teacher Education in Kenya: Overcoming the Challenges of Quality and Relevance. Tunis: ADEA.

## **5. Qualifications and Qualifications Frameworks**

The Government established the Kenya National Examination Council (KNEC) in 1980 as the national body responsible for overseeing national examinations, and awarding certificates in both the formal and the informal sectors in Kenya.

Formal education in Kenya has a system of nationally recognised certification from primary through secondary, post-secondary and tertiary levels of education and training. In the informal training sector, the government has established a mechanism for providing trade tests for certification at the artisan and craft level. Grade 3 corresponds to the initial qualification for artisans, followed by grades 2 and 1 culminating in master craftsman certification (Kerre, Hollander 2009).

### **National Qualifications Framework (NQF)**

A national symposium held in November 2003 reviewing the status of TVET in Kenya recommended the implementation of a National Qualifications Framework, which is being developed by the Ministry of Higher Education, Science and Technology in Kenya.

In 2012 a Bill on the Kenya Qualifications Framework was approved. It establishes the Kenya Qualifications Authority that has the following functions:

- Establish a framework for description and development of accreditation indicators for each qualification level;
- Establish a structure for comparing and equating qualifications at all levels ;
- Advise institutions in designing new programmes that will respond to market needs;
- Describe the interrelationship and linkages across qualifications;
- Document and maintain a national database of existing academic and professional qualifications in Kenya;
- Advise all Governments on policies on qualifications and on the standards on the long term development and reform in the education systems and training programmes to match the industry needs; and
- Maintain, monitor and promote the Kenya Qualifications Framework and support the users.

No institution shall offer a qualification that is not authorised by the Authority and accredited by authorised accrediting agencies.

According to the Bill the objectives of the Kenya Qualifications Framework are:

- Creating confidence in qualifications that contribute to national development obtained by recognising qualifications and competencies obtained through formal, informal and prior learning;
- Developing a structure to support pathways that provide access to qualification that contribute to skills and competence development and life-long learning;
- Alignment of the Kenya Qualifications Framework with international qualifications to enhance national and international mobility of graduates and workers; and
- Strengthen national regulatory and quality assurance systems for education and training.

## Quality assurance

The Directorate of Technical Accreditation and Quality Assurance of the Ministry of Higher Education, Science and Technology performs a number of functions that oversee proper provision of quality education and training. The functions of the Directorate are as follows:

- Development, maintenance and coordination of training standards in Technical, Vocational Education and Training Institutions;
- Coordination and supervision of Technical, Vocational Education and Training Institutions programmes;
- Initiating curriculum development and review for Technical, Vocational Education and Training programmes;
- Ensuring quality in development and implementation of Technical, Vocational Education and Training Institutions curricula;
- Coordination and promotion of Technical, Vocational Education and Training Institutions co-curricular activities;
- Assessment of Technical, Vocational Education and Training Institutions for purposes of registration and quality assurance;
- Coordination and facilitation of in service training programmes for technical teachers and managers of Technical, Vocational Education and Training Institutions;
- Setting standards for evaluation and approval of training materials and text books for Technical, Vocational Education and Training Institutions programmes;
- Recommending staffing levels and qualifications of Technical, Vocational Education and Training Institutions trainers;
- Equating Technical, Vocational Education and Training Institutions certificates offered by various examining bodies;
- Developing specifications for training equipment, classrooms, workshops, laboratories, and libraries and students enrolment guidelines;
- Developing management guidelines for Technical, Vocational Education and Training Institutions; formulating and implementation of credit transfer policy; and
- And setting admission criteria for students joining Technical, Vocational Education and Training Institutions programmes.

### *Sources:*

Ministry of Higher Education, Science and Technology (2012). Kenya Qualifications Framework Bill. Nairobi: MoHEST.

Directorate of Technical Accreditation and Quality Assurance. Accessed: 10.08.2012.

## 6. Current reforms, major projects and challenges

### Current reforms and major projects

TVET Bill 2012 contains revision of legal framework in the TVET sector and provides for the establishment of a TVET Authority to oversee, manage and govern the TVET system including maintaining a register of all institutions accredited under this Act leading to high training standards.

### Challenges

According to the National Report for Kenya (2008) issued by the Ministry of Education, challenges of Kenyan TVET include inadequate facilities and capacities to cater for the large number of those who complete primary and secondary education and wish to undertake TVET, together with the restricted ability to produce graduates with skills which are relevant to the industry.

Above that lack of modern technologies in the industries leave the country unable to compete effectively on the world arena due to outdated training curricula of TVET programmes.

The large informal sector complicates the situation since it absorbs most of the TVET graduates and at the same time is the largest skills training ground through its informal apprenticeships.

### *Sources:*

John Nyerere (2009). Technical and Vocational Education and Training (TVET) Sector Mapping in Kenya. Amersfoort: Edukans Foundation.

Ministry of Education (2008). The Development of Education, National Report of Kenya. Nairobi: MoE.

## 7. Links to UNEVOC centres and TVET institutions

### UNEVOC Centres

- [<http://www.unevoc.unesco.org/go.php?q=UNEVOC+Network+--+Centre&tid=390> Ministry of Higher Education Science and Technology/Directorate of Technical education]
- [<http://www.unevoc.unesco.org/go.php?q=UNEVOC+Network+--+Centre&tid=458> Department of Technology Education, Chepkoilel University College (A Constituent College of Moi University)]

### TVET Institutions

- Youth Polytechnics (YP)
- Technical Training Institutes (TTIs)

- Institutes of Technology (ITs)
- National Polytechnics

## 8. References and further reading

### References

Ahmed Ferej, Kisilu Kitainge, Zachary Ooko (2012). Reform of TVET Teacher Education in Kenya: Overcoming the Challenges of Quality and Relevance. Tunis: ADEA.

B. Orwa (2007). Jua Kali Associations in Kenya: A force for development and reform. Reform Case study. Washington: CIPE.

B. W. Kerre, A. Hollander (2009) National Qualifications Frameworks in Africa – International Handbook of Education for the Changing World of Work. Bonn : UNESCO-UNEVOC.

Directorate of Technical Accreditation and Quality Assurance. Accessed:10.08.2012.

H.C. Haan (2006) Training for Work in the Informal Micro-Enterprise Sector – Fresh evidence from Sub-Saharan Africa. Bonn: UNESCO-UNEVOC.

J. Simiyu (2010) Entrepreneurship Education as a Tool to Support Self-Employment in Kenya – TVET Best Practice Clearinghouse. Bonn: UNESCO- UNEVOC.

John Nyerere (2009). Technical and Vocational Education and Training (TVET) Sector Mapping in Kenya. Amersfoort: Edukans Foundation.

John Wanyonyi Simiyu (2010). Factors influencing the attractiveness of a Technical and Vocational Education and Training Institution: a case study of a Technical Institute in Kenya. Eldoret: Moi University.

K. King (1977). The African Artisan: education and the informal sector in Kenya. New York : Teachers College Press.

K.King (1996). Jua Kali Kenya – Change and Development in an Informal Economy – 1970-1995. Nairobi: Eastern African Studies.

Ministry of Education (2008). The Development of Education, National Report of Kenya. Nairobi: MoE.

Ministry of Higher Education, Science and Technology (2012). Kenya Qualifications Framework Bill. Nairobi: MoHEST.

UNESCO-IBE (2010). World Data on Education VII ed. Kenya. Geneva: UNESCO-IBE.