Malawi is a landlocked country situated in South-East Africa, and is bordered by Mozambique, Zambia, and Tanzania. Lake Malawi, which flows through from the north to south of the country, comprises of 20% of Malawi’s total surface area. Malawi has had a fairly stable democratic government.

The current president Prof. Arthur Peter Mutharika is the head-of-state whose five-year term will end in 2019 when the next presidential elections will be held. Malawi is densely populated with a population of 18,570,321 in 2016. Lilongwe is the capital city of Malawi.

Malawi is a member of the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa (COMESA) regional integration groups of countries in Africa.

Malawi has an overall governance ranking of 17 out of 54 African countries, giving it a score of 56.6 out of 100.

How is Malawi doing in terms of Information, Communication Technology, Education, Science Technology and Innovation which are the pillars of the African Leadership in ICT and Knowledge Society Development (ALICT) course?
2. Information Communication Technology

The Ministry of Information and Civic Education provides policy guidance on ICT within the government. The ICT Association of Malawi (ICTAM) is a body that provides a connection between the private sector, academia, and government. It represents all ICT professionals in Malawi.

There are 1.67 million internet users in the country, translating to 9.3% of the population according to 2016 estimates.

The ICT Development Index (IDI) ranks Malawi at 168 out of 175 countries with an IDI value of 1.62. The rankings also place Malawi at number 32 in the 2015 regional rankings, behind South Africa and Botswana.

National ICT Policy

Malawi has a National ICT Policy, which was released in 2013. The policy covers Information Technology, Telecommunications, Broadcasting, and Postal Services and aims to deliver ICT services to rural areas and vulnerable groups, invest in ICT priority areas, guide the public sector in laying out a plan to nationalize and use ICT to its full potential in the country, and to draw up a sound legal and regulatory framework in order to ensure the preservation of human rights, privacy for all citizens, the promotion of electronic services (e-services) as well as competition in the ICT sector.

- **45,678** Malawi’s total fixed line telephone subscriptions
- **6.116** million mobile phone users in the country with 34 subscriptions per 100 inhabitants (2015).
- **7.6% in 2013 and 11% in 2014** – the telecommunications sector in Malawi was estimated growth.
- **48%**: the highest service uptake of internet services in Africa in the final quarter of 2013.
- **5** mobile phone operators in the country as of 2016,
- **2** fixed line service providers; 1) Malawi Telecommunication Limited (MTL) and 2) Access Communications Limited.
- **2,112km** of fibre optic cable that had been laid in the country and most of it was in urban areas as of 2012.
- **25 computers worth MWK5 million donated by Standard Bank Malawi** in 2017, which will be given to community technical schools that the government opened. The computers will be used to encourage ICT use in Malawian communities and upskill people so that they become more adept with using computers.

E-health Project

The e-Health project was launched by the Malawian Ministry of Health and Baobab Health Trust, an NGO in Malawi that endeavours to provide technology-based solutions for health in the country.
This system will allow healthcare professionals to register patients’ data on a system which will provide better healthcare management and more efficient patient care.

**Internet Governance Forum**

In 2014, Malawi also started an Internet Governance Forum following a consultative process that involved representatives from several sectors in the country including academia, private sector and the NEPAD Secretariat. The Malawi Internet Governance Forum (Mw-IGF) is intended to create a multi stakeholder initiative that will strive to optimally develop Malawi’s internet economy by building national capacity; encouraging dialogue between stakeholders; discuss and make suggestions on relevant issues affecting the sector; contribute to the drafting of national policy; and joining the discussion between different stakeholders about internet governance in the SADC region and Africa at large.

**Challenges facing ICT development.**

- Low adoption rates of e-services
- Too few regulatory frameworks for the sector.
- High costs of communication which make ICT products and services inaccessible for a large portion of the population.
- Little coordination on ICT infrastructure development.
- The sporadic availability of ICT services.
- Scarce geographic coverage of these services.
- Little institutional and human capacity in ICT services and low adoption rates of modern broadcasting technologies.
- Over-dependence on donor-aid which poses a threat to the ICT sector if international funding sources dry up.


3. Education

The Ministry of Education, Science and Technology (MoEST) is responsible for education related matters in the country. The country’s education system is divided into an 8-4-4 system: primary, secondary, and tertiary school. The first eight years of schooling are compulsory and most children start primary school at the age of six. The Free Primary Education Policy (FPE) was introduced in 1994, aiming to provide FPE to all citizens.

The National Council for Higher Education (NCHE) was established in 2011 and is responsible for the provision of accreditation and quality assurance services for the higher education sector in Malawi.

- **2012 - 2015**: the number of permanent classrooms in primary schools increased, although there was a significant decrease of 1.7% between 2015 (38,241) and 2016 (37,601).
- **260,064 in 2012 to 351,651 in 2016**: increase in the number of students enrolled in secondary schools.
- **59,178 in 2013 to 61,628 in 2016**: number of qualified teachers in Malawi has been increasing steadily.

Education Initiatives

Computers 4 Africa is another initiative that has provided thousands of computers to African countries including South Africa, the Gambia, and Malawi.

The Unlocking Talent Project provides Digital Education Technology (DET) to primary school children, with a special focus on marginalized groups. The programme gives children a knowledge base in the early years of education, which they can deepen in later primary and secondary school.

ICT Training

ICT has been highlighted as a national priority. In 2005, Computer Sciences was introduced as a subject in some schools. The overall policy outcomes for Malawi’s National ICT Policy include mention of increasing educational facilities and increasing ICT skills.

Computers for Malawian Schools (CFMS) is an NGO that operates out of Blantyre and under the banner of Computers for African Schools (CFAS). CFMS provides computers for Malawian schools and it also assists with creating computer laboratories.

The Malawian Government is also launching a Skills Development Project in The Polytechnic, Chancellor College, Lilongwe University of Agriculture and Natural Resources, TEVETA, and Mzuzu University. One element of the project is to develop a Higher Education Management Information System (HEMIS) for the NCHE which will enhance access to data on higher education in the country from a central system.

Teach the Teachers community initiative was undertaken at the beginning of 2016, which seeks to impart basic computer skills on Malawi’s teachers so that they know how to use a computer and how to access the Internet in order to improve their teaching and make it more effective.

Challenges facing the education sector.

- Low levels of literacy
- Insufficient schooling facilities, high dropout rates, and a low completion rate.
- Imbalanced student to teacher ratios
- High prevalence of HIV and AIDS, especially for students in rural areas who sometimes lose one or both parents to the disease or are afflicted with the disease themselves.
- Early marriages.

4. Science, Technology, and Innovation (STI)

The Government of Malawi acknowledges the importance of advocating for Science, Technology, and Innovation (STI) in the country, particularly because of STIs’ possible contribution to the knowledge society. The MoEST is tasked with promoting STI in Malawi on behalf of the government.

Within the Ministry is a Department of Science and Technology which uses STI to attain socio-economic development for Malawi. The National Commission for Science and Technology (NCST) advises government and relevant stakeholders on matters relating to science and technology in order to promote STI development in Malawi.

The Malawi University of Science and Technology (MUST) is playing an important role in the output of STI personnel.

The government of Malawi has been conducting regular Research and Development (R&D) surveys since 2010. Malawi’s Gross Domestic Expenditure on Research and Development was 1.06% of their GDP in 2010. This ranked them as the highest spending SADC country, ahead of South Africa which had a GERD of 0.73 as a percentage of GDP, and Mozambique’s GERD of 0.42%.

Challenges facing STI sector.

- A great dependence on donor support, which is not consistent or guaranteed in the future;
- Demographic restrictions which include early marriage for girls, a high birth rate in a country that struggles economically, and teenage pregnancies;
- The effects of climate change which pose a threat to socio-economic development and the well-being of the population;
- Insufficient participation of the business sector in R&D; and
- Intermittent energy supply and difficulty in connecting ICTs are slowing down progress in STI.
5. In conclusion:

- Malawi recognizes ICT as a significant driver of development, as articulated in the country’s ICT policy. However, the ICT Development Index (IDI) ranks Malawi at 168 out of 175 countries. The country faces challenges such as limited coordination of ICT infrastructure development, sporadic availability of ICT services, scare geographic coverage of these services, little institutional and human capacity in ICT services, and low adoption rates of modern broadcasting technologies.

- Exposure to ICT at school remains a luxury, and teachers have little or no professional development in ICT, both of which pose a threat to the development of a KS. However, there are several initiatives to address this.

- STI is a priority in the Vision 2020, and the government and institutions are involved in initiatives towards making science and technology more accessible to the general population.

- Malawi still has a long way to go in achieving a KS. The measures that have been undertaken thus far have provided a good start, but projects that make a larger impact and that do not rely so heavily on donor funding will be crucial. Equally as important will be solid governance mechanisms, political stability, and public education that emphasizes the importance of ICT and STI for the country.

**Key Partners**

- Malawi Communications Regulatory Authority (MACRA)
- Ministry of Information and Communication Engineering (MICE)
- Telekom Networks Malawi (TNM)
- International Telecommunications Union (ITU)
- Airtel
- Malawi Telecommunications Limited (MTL)
- ICT Association of Malawi (ICTAM)
- Malawi Centre for Education Research and Training (CERT)
- Chinese government
- National Commission for Science and Technology (NCST)
- MoEST
- International Research Development Centre (IRDC)
- World Bank
- Malawi University of Science and Technology (MUST)
- UNESCO
- National Research Council of Malawi (NRCM)
- Ministry of Education, Science and Technology (MoEST)
- National Council for Higher Education (NCHE)
- Technical, Entrepreneurial, and Vocational Education and Training (TEVETA)
- Malawi National Examinations Board (MANEB)
- SchoolNet
- Computers for Malawian Schools (CFMS)
- German Federal Ministry for Economic Cooperation and Development (BMZ)
The number of qualified teachers in Malawi has been increasing steadily from 59,178 in 2013 to 61,628 in 2016.

Malawi’s Gross Domestic Expenditure on Research and Development was 1.06% of their GDP in 2010. This ranked them as the highest spending SADC country, ahead of South Africa.

There are 1.67 million internet users in the country, translating to 9.3% of the population according to 2016 estimates.

As of 2012 there were just 2,112km of fibre optic cable that had been laid in the country and most of it was in urban areas.

There are 6.116 million mobile phone users in the country with 34 subscriptions per 100 inhabitants (2015). Malawi achieved the highest service uptake of internet services in Africa in the final quarter of 2013 at 48%.

There has been a marked improvement in the number of students enrolled in secondary schools, which has increased from 260,064 in 2012 to 351,651 in 2016.
KEY HIGHLIGHTS
Malawi Country Study June 2017

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