

# KEY HIGHLIGHTS

## Mozambique Country Study June 2017

### 1. About Mozambique

Mozambique is located in South-eastern African, bordered by the Indian Ocean and the Mozambique Channel to the east, Tanzania to the north, Zimbabwe to the west, Zambia and Malawi to the northwest, and Swaziland and South Africa to the southwest.

It has 2,500 km of ocean coastline. The country occupies an area of 799,380 km<sup>2</sup>, with 13,000 km<sup>2</sup> of this water. The total population is 25.9 million people with a population growth rate of 2.45%.

In 2015, Mozambique ranked 21 out of 54 African countries on the Mo Ibrahim Index which offers a comprehensive assessment of governance that informs and empowers citizens, civil society, parliaments and governments as a tool of measuring progress in governance.



**18° 15' S and  
35 ° 00' E**



**25.9 million**



**35.01B (PPP)**

*How is Mozambique 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 telecommunications regulatory authority in Mozambique is the Instituto Nacional das Comunicações de Moçambique (INCM) (National Institute of Communications of Mozambique). Established in 1992, its mandate includes licensing, spectrum management, numbering, regulation of tariffs and quality. The INCM is an autonomous entity under the administrative supervision of the Ministry of Transportation and Communications.

The Mozambique government established an ICT Policy Commission with the mandate to draw up a national ICT Policy. After a two-year nationwide debate involving public and private sectors, civil society, academic and research institutions, and donor agencies; the national ICT Policy was approved by the Council of Ministers in 2000. In 2002, the ICT Policy Implementation Strategy (Estratégia de Implementação da Política de Informática) was adopted, and provided concrete benchmarks and targets to be achieved and indicators to assess progress. Human capacity, infrastructure, legal and regulatory framework, e-Government, content, applications and business development were selected as key areas of intervention to ensure ICT as an enabler and a cross cutting issue in all sectors and development programmes.



There is only one fixed-line operator, Telecomunicações de Moçambique (Tdm), and three mobile operators, namely mCel (the subsidiary of TDM), Vodacom Mozambique, and Movitel.

In 2015, fixed-line telephone subscriptions in Mozambique were amounted to 89,292 though not enough for the customers.

Mobile cellular subscriptions totalled 20.135 million, which is 80 subscriptions per 100 inhabitants. In 2016, it was estimated that the country had 1.8 million internet users, equalling 6.4% of the population.

The country has a number of projects and initiatives are in place for promotion of ICT use in broad socio-economic sectors to fast track the achievement of the Knowledge Economy and Society development in Mozambique. The **Electronic Government Network (GovNet)** connects all ministries and all other government institutions across Mozambique. The World Bank, the Italian government and the Government of Mozambique fund the network. It provides connectivity, internet access, a host for government web pages and applications, as well as providing a secure environment and the quality services for running sectoral applications. The National ICT Institute (INTIC) implements the network.

**Mozambique eGovernment Communication Infrastructure Project (MEGCIP) 2010–2014:** Its main aim is to lower communication costs and in improving the efficiency and transparency through e-Government applications.

There is also a **Mobile ICT Unit** to provide relevant programmes for public servants and other community members. Within the Mobile Unit, these groups can also access a variety of information via the internet and email

As at 5th June 2017, it was noted that about 203,407 persons have followed ICT Literacy and ICT Awareness Courses.

## **Challenges in ICT sector**

- The development of the ICT sector is still limited, with only 6.4% of the population with access to the internet.
- The major issue seems to be the national expansion of network backbone, which is still limited to the capital of Maputo and provincial capitals.
- Low levels of skills in ICT applications.
- Poor coordination mechanism among the stakeholders challenges the effectiveness projects.

### 3. Education

The Ministry of Education and Culture (MEC) is responsible for planning, managing and monitoring the national education system, with the Ministry of Science and Technology, Higher Education and Technical-Professional (MCTESTP) directs, plans and coordinates activities in the higher education sector, while promoting access, expansion and quality assurance of teaching at the levels of Technical and Vocational Education and Higher Education in Mozambique.

The education structure in Mozambique is in four levels, these are seven years of primary education, three years of secondary education, two years of second level secondary education, and four years of higher education. While pre-primary education is provided in pre-schools and kindergarten, it is not compulsory and is beyond the means of majority of Mozambican citizens. As a result, only a small percentage of the target age participates in formal pre-school education.



Primary education is free and compulsory. It is divided into two levels; the lower primary (Grade 1 to 5) and upper primary (Grade 6 to 7). The official age of entry into school is six years. In Mozambique, due to shortage of school places at this level, primary usually operate in shifts. After seven years of primary education, the pupils have a choice of enrolling for general secondary education, lower primary teacher training colleges, basic technical and vocational schools or secondary education for adults. The greater emphasis in the primary education sector has been on improving the quality of education and retaining students until the seventh class.

#### Basic education programme

Humana People to People and local NGO, ADPP Mozambique, operate eleven teacher training colleges, and also conduct pedagogical workshops that offer in-service training for teachers currently employed in rural schools. Humana People to People and ADPP operate One World University, which trains instructors for teacher-training colleges, and is the first of its kind in sub-Saharan Africa.

#### Challenges facing education sector

- Shortage of schools leading to disproportionate teacher student ratio that compromises the quality of education.
- TVET institution lacks uniformity and coherence in leadership; making them slow to respond to changing labour market demands in the formal sector.
- No clear plans for curriculum reform to include ICTs, or for teacher training to include ICTs.
- Lack of electricity supply in rural areas and harsh reforms in Mozambique whereby getting electricity is made more difficult.

## 4. Science, Technology, and Innovation (STI)

The Ministry of Science and Technology, Higher Education and Technical-Professional (MCTESTP) is the central organ of the state apparatus, which directs, plans and coordinates activities in the STI sector. The MCTESTP aims to promote the provision of scientific and technological solutions to citizens in the strategic areas of development.

**The Mozambique Academy of Sciences** promotes and stimulates scientific research; enriches scientific thinking in society and participate in the economic and social development of the country, through advice to state institutions, market and civil society.

Mozambique has research capacity and a track record in collaborative research. The level of research maturity is steadily strengthening, supported by the experience of being involved in internationally funded research. There is now a considerable sense of urgency in the government and in the research community to build on recent successes and momentum achieved to date.

A partnership between UEM and University of California, San Diego (UCSD) was formed. This partnership has invigorated research development in Mozambique.

### Challenges facing the STI sector

- 1** The uncoordinated institutional relationships and interactions, as well as the fact that this strategy is out of date, with no evidence of any update.
- 2** Inadequate funding
- 3** Lack of well-qualified researchers and technology professionals to accelerate research and development in Mozambique.
- 4** Low activity levels and little information relating to innovation Mozambique has limited resources related to STI

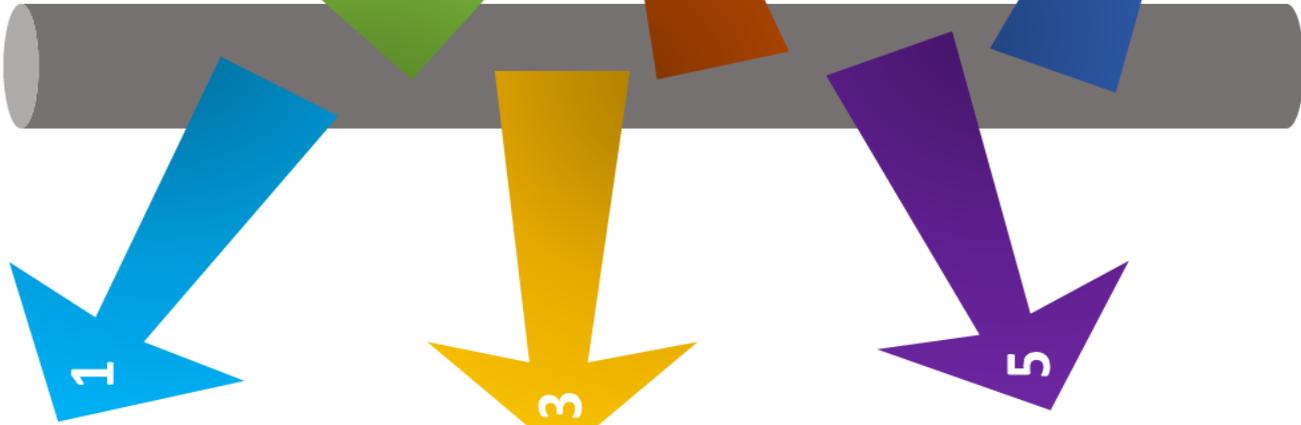
## 5. In conclusion:

- Development of a KS in Mozambique is still in its nascent stages.
- The various policies and plans in place indicate willingness and commitment from the Mozambican government to transform the country towards a KS. The major focus is accelerated national development by integrating ICT in different sectors of the economy, providing free and compulsory primary education, and development of the STI sector for socio-economic development.
- While there is a commitment by government, many policies and strategies are outdated, impeding the development of the country.
- Key challenges faced in education include low completion rates, high student-to-teacher ratios, lack of ICT integration into teacher training and the curriculum, lack of qualified mathematics and science teachers, and lack of equipment in schools.
- Research, innovation, and human resource development face challenges including lack of equipment and funding for research institutions, high unemployment rates particularly among the youth population graduating from basic and secondary education, low ICT skills, lack of connectivity, poor distribution of electricity supplies, low levels of innovation activities, a heavy reliance on donor funding, and uncoordinated cross-ministerial relationships.

### Key Partners

- ⇒ Ministry of Science and Technology, Higher Education and Technical-Professional (MCTESTP)
- ⇒ The Centre for Research and Transfer of Technologies for Community Development (CITT)
- ⇒ The Centre for Research and Development in Ethnobotany (CIDE)
- ⇒ National Research Fund (FNI)
- ⇒ Water Research Institute (IIA)
- ⇒ Mozambique Academy of Sciences
- ⇒ Maluana Science and Technology Park (PCTM)
- ⇒ Eduardo Mondlane University
- ⇒ Mozambican ICT Institute (MICTI)
- ⇒ Swedish International Development Cooperation Agency (Sida)

In Mozambique, due to shortage of school places, primary schools usually operate in shifts.



**STI Challenge:** Lack of well-qualified researchers and technology professionals to accelerate research and development.

In 2016, it was estimated that the country had 1.8 million internet users, equaling 6.4% of the population.

The major issue in the national expansion of network backbone, is that it is still limited to the capital of Maputo and provincial capitals.

Mobile cellular subscriptions totaled 20.135 million ie 80 subscriptions per 100 inhabitants.

The World Bank indicates that by 2015 the adult literacy rate was at 58.8%. Mozambique grew at an average annual rate of 6% to 8% in the decade up to 2015, one of Africa's strongest performances.

## INTERESTING FACTS ABOUT KS DEVELOPMENT IN MOZAMBIQUE

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