



OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

MAGDEBURG RESEARCH AND COMPETENCE CLUSTER
FOR VERY LARGE BUSINESS APPLICATIONS
VERY LARGE BUSINESS APPLICATIONS LAB



Africa

ERP – CDI

Enterprise Resource Planning -
Capacity Development Index

social structure politics economy technology education

Credits

Constanze Couzens
Kevin Rosenberger
Frances Weiß
Patrick Wirz [editor]
Catherina Zschieck

Version 2.0

© 2013, Otto-von-Guericke University Magdeburg / VLBA-Lab

All Rights Reserved

No part of this work covered by the copyright hereon may be published, reproduced or used in any form or by any means without the written permission of VLBA-Lab.

Contents

- 1 Prologue..... 1**
 - 1.1 Project Context..... 1
 - 1.2 Aim of Evaluation 2
- 2 ERP-CDI System 3**
 - 2.1 Sectors and Indicators 3
 - 2.2 Normalization and Calculation 11
 - 2.3 Clustering..... 13
- 3 Country Profiles..... 14**
 - 3.1 Republic of South Africa 15
 - 3.2 Republic of Botswana 18
 - 3.3 Republic of Ghana 21
 - 3.4 Republic of Namibia 24
 - 3.5 United Republic of Tanzania..... 28
 - 3.5 Republic of Rwanda 31
 - 3.6 Kingdom of Lesotho..... 35
 - 3.7 Federal Republic of Nigeria 38
 - 3.8 Kingdom of Swaziland 41
 - 3.9 Republic of Kenya 44
- 4 Prospect 47**

- I Data**

- II Tables**

- III Illustrations**

- IV Bibliography**

Acronyms

CEPGL	Economic Community of the Great Lakes Countries
COMESA	Common Market for Eastern and Southern Africa
EAC	East-African Community
ERP	Enterprise Resource Planning
ERP-CDI	ERP Capacity Development Index
EU	European Union
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IT	Information Technology
MoEVT	Ministry of Education and Vocational Training
NEPAD	New Partnership for Africa's Development
SACU	Southern African Customs Union
SADC	Southern African Development Community
TCRA	Tanzania Communications Regulatory Authority
telecom	telecommunications
TTCL	Tanzania Telecommunications Company Limited
UN	United Nations
UNEP	UN Environment Programme
UN-HABITAT	UN Human Settlements Programme
USD	United States Dollar
VLBA	Very Large Business Applications

1 Prologue

1.1 Project Context

Africa is a continent full of contradictions. Economic growth mismatches the poverty of the people. Rural life meets strong tendencies of urbanization. Tradition contrasts future hopes.

In the next years, substantive economic changes will influence people's lives. New industries arise with a heavy impact on local job markets. Companies will have demand for highly skilled employees who are familiar with modern information and computer technology in order to manage complex tasks and projects. In consequence, there is now a need to offer development opportunities to upcoming generations of workers.

Nearly all business processes of modern companies are mapped into Very Large Business Applications (VLBAs), more precisely into so called ERP (Enterprise Resource Planning) software. Having the ability to understand and work with these systems is a major advantage for African students on the local job market in the near future.

With support of the DEG Deutsche Investitions- und Entwicklungsgesellschaft, SAP University Alliances and the Otto-von-Guericke University Magdeburg run a Public Private Partnership project that has the aim to develop ERP learning capacities in cooperation with African Universities.

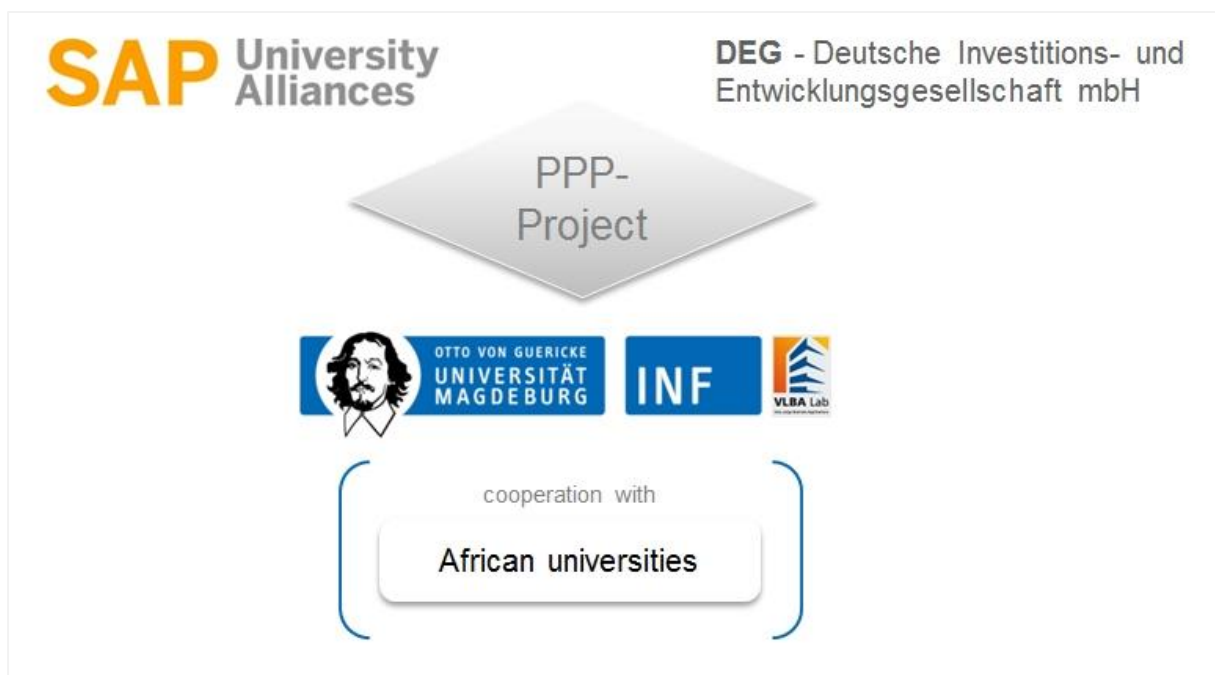


Figure 1: Project Partners

The project's purpose is the advancement of ERP education in Sub-Saharan Africa. The first main objective is the development of an on-demand ERP learning and teaching platform to provide online and offline learning material. Second, curricula and content have to be developed or adapted to meet regional learning needs. Third, ERP courses for African students and lecturers are offered at selected partner universities.

In preparation for and complementing the operative project management, related academic research and course evaluation is conducted by the Otto-von-Guericke University Magdeburg.

1.2 Aim of Evaluation

Understanding the real-world conditions in Sub-Saharan Africa is a basic requirement to develop learning environments for ERP teaching in those regions. This study follows a systematic approach to identify and structure prerequisites for ERP learning. The aim was to develop an instrument by which a comparison between different African countries is possible and that helps to identify areas with high potential for ERP capacity development.

Although the project is about ERP learning and teaching, it is not sufficient to merely focus on the educational situation. Educational development is always strongly interconnected with societal aspects and the general standards of living in a country. To understand learning characteristics, research needs to consider social, political, economic and technological prerequisites.

A well balanced system of indicators takes these different societal features into account and merges a complex system of factors into one single indicator – the ERP Capacity Development Index (ERP-CDI). Moreover, reliable and comparable information about the targeted countries are the foundation for a project design that conforms to real-life conditions in Sub-Saharan Africa. The research results are the basis for project management decisions and lead to a reasonable and sustainable project framework.

The developed system of indicators is the first macro step to gather findings about African learning characteristics related to ERP education. It comprises the identification of potential geographical hot spots for ERP learning and a list of capable project partner institutions. In cooperation with African Universities, this research will be extended by local field studies to involve the perspective of African students. This will expand knowledge about ERP learning and teaching in Africa and open ways to improve ERP learning scenarios within the present project.

2 ERP-CDI System

The ERP-Capacity Development Indicator was developed to enable comparability between the countries of Sub-Saharan Africa. The aim was to single out the countries where an ERP education is most reasonable. A two level research approach operationalized the ERP capacity development through, first, quantitative and, second, qualitative methods.

2.1 Sectors and Indicators

Quantitatively, the ERP-CDI projects the Sub-Saharan countries on a numerical level. Five different sectors were looked at to give the best possible picture of a country with regard to the project's aim. For every sector, distinctive indicators were selected which measure the performance of a country.

(1) The social structure considers aspects of the terms of living and gender equality. As parameters of the social progress within a population, they are an indispensable contribution to advance development and reduce poverty.

A higher *urban population* amplifies both technological progress and demand for human capital. It is closely correlated with economic development, indicating an increasing number of activities primarily centered in government, trade and manufacture, among others. Social change is triggered as well, enhancing social mobility and differentiation.

Urban population*

(percent of total)

Urban population refers to people living in urban areas as defined by national statistical offices.

The *labor force participation rate* is a distinctive attribute of the economy of a country. It informs about the state of employment and the potential of the labor market.

Labor force participation rate*

(percent of total population ages 15 and older)

The *labor force participation rate* is the proportion of the population ages 15 and older that is economically active: all people who supply labor for the production of goods and services during a specified period.

* data source: The World Bank, see annex

The *labor force gender balance* has an impact both on the societal and economic structure. On a societal level, participation in the labor force improves women's self-determination and economic freedom. On an economic level, the overall economy benefits from a gender equal labor force by utilizing the full productive and creative potential of both women and men.

Labor force gender balance#

(percent)

The *labor force gender balance* is a measure for the equal distribution of both genders in the labor force. Labor force comprises people ages 15 and older who meet the International Labour Organization's definition of the economically active population. Based on the female proportion in the labor force, the distance to equal distribution of men and women was determined.

The proportion of men and women that can read and write is used to gauge the state of gender equality in education, illustrated by the *literacy gender balance*.

Literacy gender balance#

(percent)

The *literacy gender balance* is a measure for the equal distribution of both genders regarding their literacy. The adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life. This ERP-CDI indicator was generated by evaluating the difference of the proportions of literate men and women through the subtraction of the two values from each other.

(2) The political sector evaluates the stability and reliability of the state. On the one hand, this concerns the physical and judicial security of people and other entities. On the other hand, it relates to the economic framework provided by the government and how supportive these conditions are.

A country that offers *political stability and absence of violence* is more likely to provide a reliable political and economic framework for all aspects of everyday life, including education and business operations.

Political stability and absence of violence*

(ranking)

source of raw data: The World Bank, see annex

* data source: The World Bank, see annex

Political stability and absence of violence reflects perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

The willingness to invest and advance the project will be higher, if activities and proceedings in a country abide by the *rule of law*. It ensures consequences like law enforcement and legal repercussions in case contracts are infringed or property is damaged.

Rule of law*
(ranking)

Rule of law reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

The indicator *control of corruption* was chosen to underline that money should be dedicated for its intended purpose. The rightful use of invested money and the independence of people in charge are a prerequisite for the efficiency and success of the project.

Control of corruption*
(ranking)

Control of corruption reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

The *quality of public service* determines whether policies formulated by the government are transferred into practical politics, adhered to and executed. An effective government and civil service enhance proceedings as well as the success of spending and other efforts on sectors like the economy and education.

Quality of public service*
(ranking)

Quality of public service reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

The *ease of doing business* premises that good rules are a requirement of successful economic activity. This indicator serves two purposes: First, there should be a market for ERP systems for the project to

* data source: The World Bank, see annex

make sense. Second, a dynamic economic sector contributes to growth and develops new opportunities for people.

Ease of doing business[#]

(ranking)

The World Bank's *Doing Business Index* consists of the following ten categories: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency - as they apply to domestic and medium-size enterprises. The index ranks the simple average of the country's percentile rankings on these ten topics.

The ERP-CDI value was determined by calculating the arithmetic mean of all individual category rankings per country for the Sub-Saharan region. A high value means that the regulatory environment is conducive to business operation.

(3) The economy sector examines a country's past economic performance and its future development potential. The state of a country's economy is an indicator for its abilities in numerous areas. Macroeconomic data has the virtue of generally being measured on a regular and consistent basis.

The *Gross Domestic Product (GDP)* is one of the primary indicators of a country's economic performance. It's the most prominent indicator for a country's stage of development and its economic prosperity. Therefore, it strongly influences the public economic discourse concerning international comparisons and serves as a benchmark in economic analysis. It is customary to judge the state of a country's development simply by looking at its GDP.

Gross Domestic Product*

(current US\$)

GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates.

The *Gross Domestic Product per capita* as a proxy of social welfare is often considered an indicator of a country's average standard of living.

Gross Domestic Product per capita*

(current US\$)

GDP per capita is the GDP divided by the midyear population.

[#] source of raw data: The World Bank, see annex

* data source: The World Bank, see annex

The *growth in GDP per capita* indicates the pace of income growth per head of the population. An increase in GDP per capita signifies national economic growth. As such, economic planners and forecasters use the GDP per capita in monitoring the economic growth trend for a time series. By using the average over four years for the ERP-CDI, the long-term trend becomes apparent.

Gross Domestic Product per capita growth*

(percent)

The annual percentage *growth rate of GDP per capita* is based on constant local currency.

Foreign direct investments on local firms, especially in developing countries, lead to an increase of local productivity growth through the transfer of skills and technology. It is therefore a strong indicator for a country's economic success in the future.

Foreign direct investments*

(balance of payments, current US\$)

Foreign direct investments are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors.

Public expenditure on education as a percentage of GDP gives an indication of how a country prioritizes education in relation to its overall allocation of resources. The indicator thereby gives a prospect of how the educational system - and hence the education of the population - will improve in the future.

Public spending on education*

(percent of GDP)

Public expenditure on education as percentage of GDP is the total public expenditure (current and capital) on education expressed as a percentage of the GDP in a given year. Public expenditure on education includes government spending on educational institutions (both public and private), education administration, and transfers/subsidies for private entities (students/households and other private entities).

(4) The technology sector looks into the electric supply and connectivity a country offers. Electricity is obviously needed to run all kinds of electronic devices, be it light bulbs or air conditioning. It is a prerequisite not only to work with ERP systems in education and in business. On a more fundamental level, you also need it to connect with and take advantage of telecommunications. Connectivity via

* data source: The World Bank, see annex

telephones and the Internet improves studying conditions, business activity and simply the communication with ERP students and project partners.

The *electricity production per capita* implies whether a country has sufficient independent resources to power daily activities in schools, universities and businesses, among others.

Electricity production[#]

(kWh/capita)

Electricity production is measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity only as well as that of combined heat and power plants. The indicator is adjusted by the exported energy to disregard the energy not actually available within the country.

How many people have *access to electricity* indicates how well the electric infrastructure is developed and signifies the standard of living in a country, e.g. the possibility to utilize personal computers can be gauged.

Access to electricity^{*}

(percent of population)

Access to electricity is the percentage of population with access to electricity.

The number of *mobile cellular subscriptions* is one of the most important aspects in the description of the African telecommunications landscape. People use their mobile phone not only to call and text one another, but also increasingly to access the Internet. Also, mobile phones can possibly serve as a learning device.

Mobile cellular subscriptions^{*}

(per 100 people)

Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service using cellular technology, which provide access to the public switched telephone network. Post-paid and prepaid subscriptions are included.

The number of *fixed broadband Internet subscriptions* is the quantity of fixed-line access points available to people willing to use the Internet. It hints at how many people have to share one

[#] source of raw data: The World Bank, see annex

^{*} data source: The World Bank, see annex

connection and how many have private fixed-line broadband access. Even though the connection speed can't be inferred from the term "broadband", the indicator can still provide information on the potential for an E-learning platform.

Fixed broadband Internet subscribers*

(per 100 people)

Fixed broadband Internet subscribers are the number of broadband subscribers with a digital subscriber line, cable modem, or other high-speed technology.

The number of *Internet users* reveals how many people in total have Internet experience regardless of the mode of access. It complements the previous indicator, so a more accurate picture can be drawn of the Internet use of the population.

Internet users*

(per 100 people)

Internet users are people with access to the worldwide network.

(5) The education sector estimates the studying capacities provided. Education is generally important for a society because it permits its members to achieve values and skills, be critical and creative and thereby develop its full potential. With regard to the project, education should ensure that the necessary skills are taught, appropriate learning conditions are provided and there is a sufficient number of students.

The *literacy rate* is a meaningful indicator for the level of education of a population. The ability to read and write gives people a certain kind of independence and self-determination. It is also a prerequisite for more advanced studies.

Literacy rate*

(percent of total population ages 15 and older)

The *literacy rate* is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.

The *enrollment ratio at the tertiary level* indicates how many students a country is able to accommodate in its higher institutions. Higher education serves to teach specialized skills and

* data source: The World Bank, see annex

knowledge, so a high enrollment rate equals better educated people and a larger target group for ERP education.

School enrollment at tertiary level*

(percent of relevant age group)

Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

The *expenditure per student at the tertiary level* illustrates the priority the government gives to higher education, implying how much government support can be expected for the implementation or further development of ERP resources at higher education institutions. In general, it also gives testimony on how well equipped the facilities are.

Expenditure per student, tertiary level*

(percent of GDP per capita)

Public expenditure per student is the public current spending on education divided by the total number of students by level, as a percentage of GDP per capita. Public expenditure (current and capital) includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other private entities).

The *number of higher education institutions* is interesting from two points of view: First, it is an indicator for the enrollment opportunities a student has and also how diverse the tertiary education landscape is. Second, it implies how many potential project partners there are in higher education in a country.

Higher education institutions⁺

(absolute number)

Higher education institutions is the absolute number of higher education institutions collected by the African Studies Center of the Michigan State University.

* data source: The World Bank, see annex

+ data source: African Studies Center, Michigan State University, see annex

The choice of indicators was restricted by several factors: Some indicators were excluded due to too many missing values or altogether non-existing data-sets. The data should be as up-to-date as possible, but not older than 2005. Some indicators were thus rejected.

2.2 Normalization and Calculation

All indicators were normalized to a maximum value of 1. The normalization serves to summarize the different values and acquire comparability. To normalize, the maximum value was identified first. Second, all values received norm values in relation to the maximum of 1. Also negative values can occur since all values correspond to the maximum and to accommodate regressive developments. In some instances, the indicator values were grouped into standardized categories in order to capture outliers, as was the case for *labor force gender balance*, *literacy gender balance* and *higher education institutions*.

The norm values of the indicators most relevant for the project were double or triple weighted. Finally, all norm and weighted norm values were added up and the weighted average of this sum was calculated, resulting in a value for every country and a corresponding ranking – the higher the ERP-CDI value, the better the ranking.

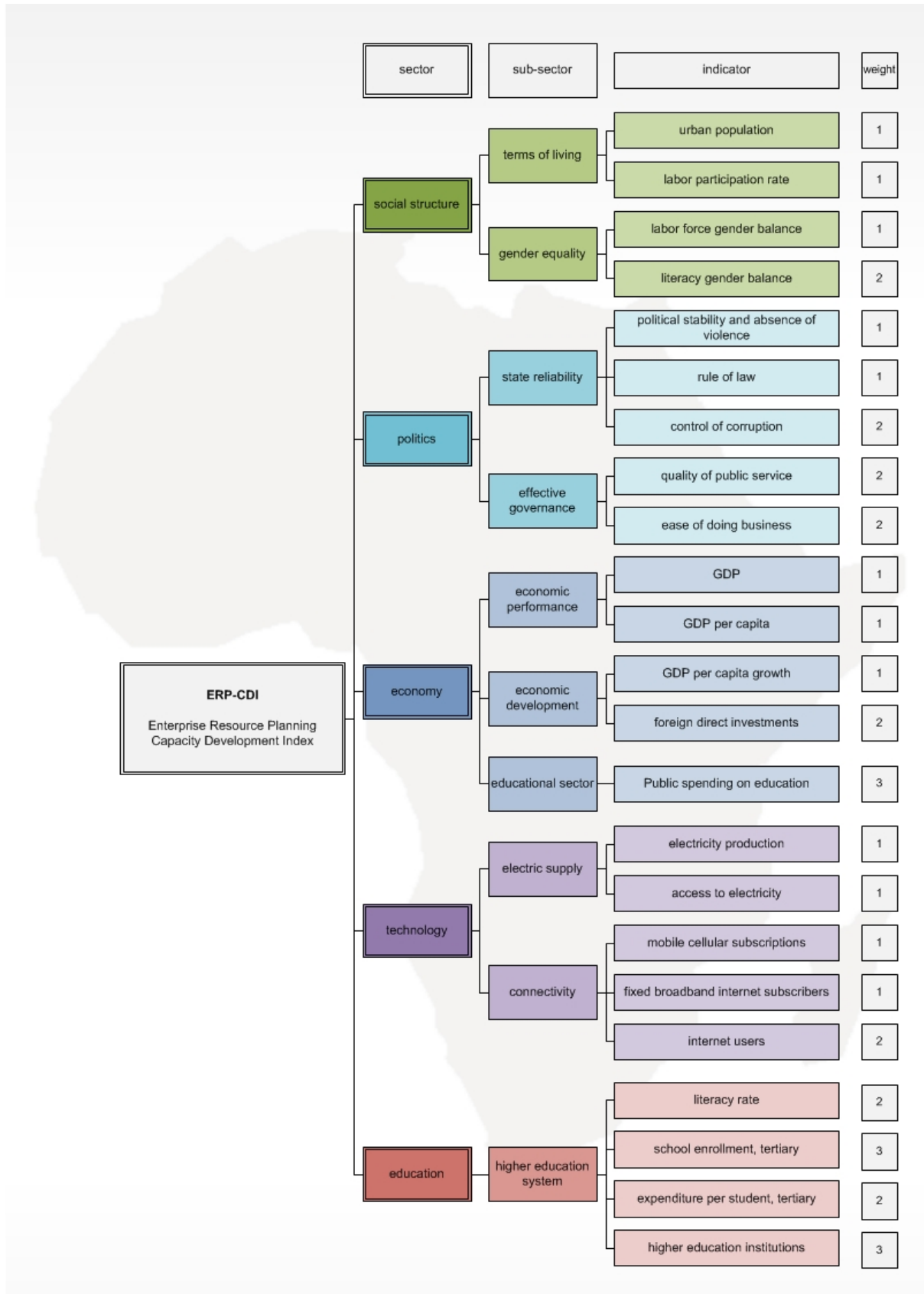


Figure 2: ERP-CDI System

Figure 2: ERP-CDI System shows the structure of the ERP-CDI. The Index comprises five sectors. The number beneath the name is the proportion of each sector for the final ERP-CDI. The percentage results from the sum of a sector's indicators and their respective weight. The sectors are divided into several subsectors for structuring reasons and each indicator belongs to such a subsector.

Country Name		ERP-CDI	ERP-CDI ranking
Mauritius	●	0,6035	1
South Africa	●	0,5686	2
Botswana	●	0,4889	3
Ghana	●	0,4876	4
Cape Verde	●	0,4869	5
Namibia	●	0,4508	6
Seychelles	●	0,4491	7
Tanzania	●	0,4419	8
Rwanda	●	0,4200	9
Lesotho	●	0,4172	10
Nigeria	●	0,3985	11
Swaziland	●	0,3890	12
Kenya	●	0,3846	13
Malawi	●	0,3719	14
Senegal	●	0,3709	15
Madagascar	●	0,3355	16
Gabon	●	0,3337	17
Cameroon	●	0,3311	18
Uganda	●	0,3309	19

Table 1: ERP-CDI value and ranking

The best 19 countries of the ERP-CDI are shown in *Table 1: ERP-CDI value and ranking*. The second column contains the calculated value and the third column the corresponding ERP-CDI ranking.

The colors illustrate the prioritization of the countries following from their respective ranking. The top 10 are green. They will be targeted first. The five subsequent countries are colored orange. Red marks the islands which have been excluded in the process of clustering due to their difficult geographical accessibility and their strong focus on the tourism industry.

2.3 Clustering

The final ERP-CDI ranking was then qualitatively examined. All of the top countries were geographically clustered. The objective was to improve network-building as well as the logistic movement of people and goods. Previous cultural and political cross-border experiences are an additional advantage. Also,

with regard to the development aim of the project, only countries were included which offer a larger spectrum of market opportunities besides tourism. Three clusters were formed, in Western Central, Eastern and Southern Africa and each of them is a hot spot which will be targeted first. The hot spots are the countries with the highest ranking within a region.

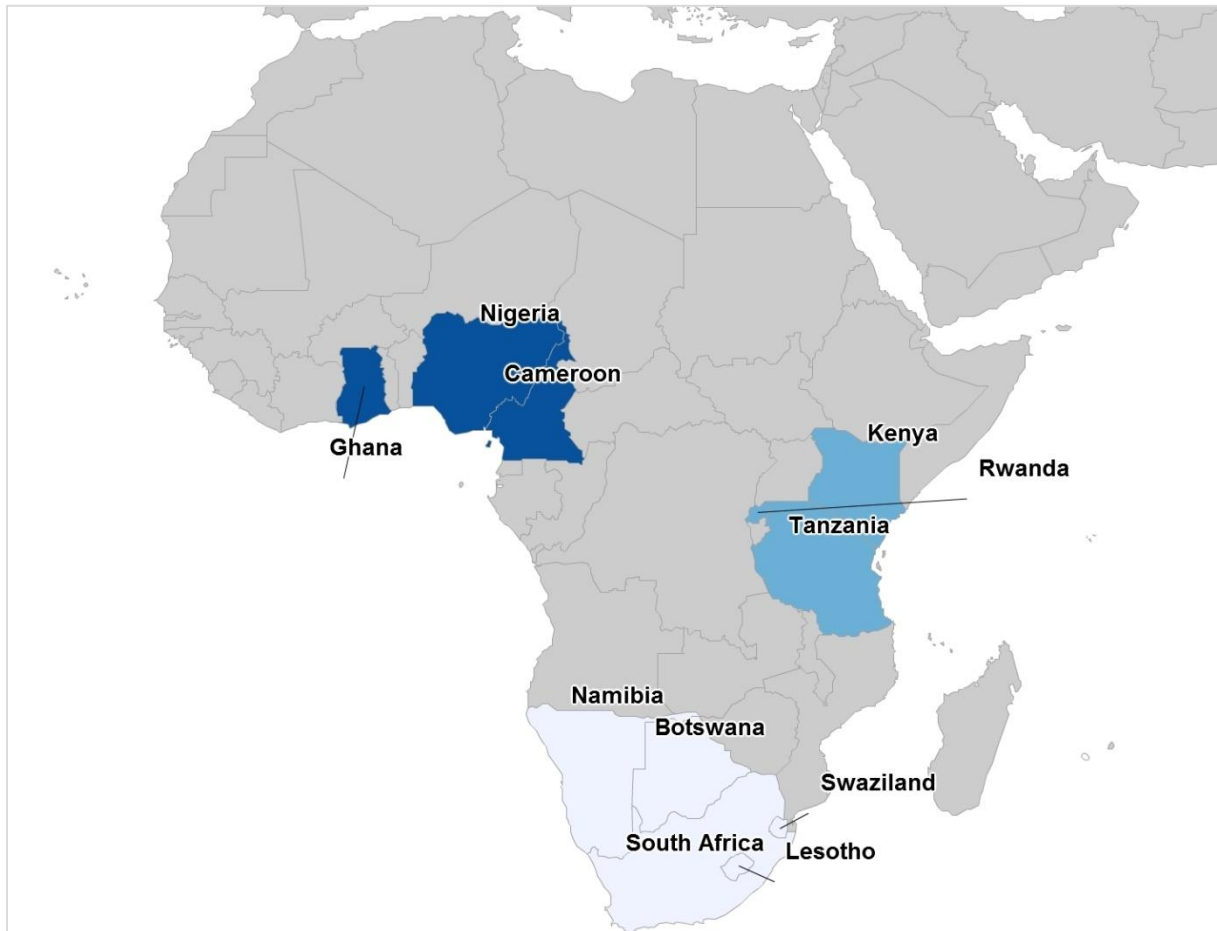


Figure 3: African Clusters

3 Country Profiles

For the implementation of the project, the countries are prioritized in their ERP-CDI ranking order. The country profiles serve to give a comprehensive overview of the countries which performed best. On top of each profile, you will find a box containing the ERP-CDI value, ranking and cluster as well as a box providing concise information. The text outlines significant aspects for each sector. Comparisons and rankings are always understood to be within the Sub-Saharan region unless mentioned otherwise.



Republic of South Africa

ERP-CDI

value	0.5686
ranking	2nd
cluster	south



capital	Pretoria
top3 cities (number of inhabitants)	Johannesburg (3.607 Mio.) Cape Town (3.353 Mio.) Ekurhuleni (3.144 Mio.)
population	50,586,757
area [km²]	1,214,470
official languages	IsiZulu, IsiXhosa, Afrikaans, Sepedi, English, Setswana, Sesotho, Xitsonga, siSwati, Tshivenda, isiNdebele
political system (since)	presidential republic (1994)
date of independence	31 May 1910 (Union of South Africa formed from four British colonies: Cape Colony, Natal, Transvaal, and Orange Free State); 31 May 1961 (republic declared); 27 April 1994 (majority rule)
currency	rand (ZAR)
exchange rate per 1 US\$	7.26
GDP per capita [current US\$] (Sub-Sahara ranking)	7,279.52 (6)

Social Structure

Cultural and linguistic diversity is a characteristic feature of South Africa. It is a multi-ethnic nation and among the wealthiest countries in Sub-Saharan Africa – nevertheless, it faces multidimensional challenges concerning poverty, unemployment and inequality. These deep-rooted development challenges are mainly the legacy of apartheid.

The government's anti-poverty strategy addresses the most vulnerable members of the population and provides a broad-based social security program that combines income support with a social wage package. As a result of active government intervention in poverty alleviation, South Africa halved the population living in extreme poverty.

Since 1994, South Africa significantly increased public spending on basic public services. Substantial progress has been made in expanding access to services such as education, health, electricity, water and sanitation. However, it often lacks the implementation capability to transfer these policies into tangible results.

South Africa has made great strides concerning gender disparities in health and education services. Within a decade, the female representation in the South African Parliament increased from 27 percent to 44 percent. Although South Africa has signed and ratified the Convention on the Elimination of

Discrimination against Women and various international human rights treaties and conventions, gender violence remains high.

Politics

South Africa's transition from apartheid to constitutional democracy in 1994 laid the foundation of further political progress in government activity. The country has an advanced constitution, a strong institutional structure and a well-developed regulatory framework. The advancement of human rights and freedom as well as the achievement of equality are the mainstay of the Constitution.

Since 1994, the African National Congress won all four democratic elections with considerable success. Elections are well-managed and fair, the press is unrestricted. Opposition parties such as the Democratic Alliance, the Independent Democrats and the Congress of the People enjoy full political freedom.

Despite a striking institutional establishment with strong checks and balances in the judiciary, media and civil society, maladministration and corruption is perceived to be widespread. According to the Transparency International's 2011 Corruption Perception Report, the rate of corruption is rising in the country, as South Africa ranks 64th out of 183 countries – declining from 54th in 2010. Facing that issue, the government has created a number of initiatives and structures to fight corruption and thus triggered a comprehensive conflict-of-interest policy.

Economy

South Africa is the economic powerhouse of Africa, leading the continent in industrial output as well as mineral production and generating a large proportion of Africa's electricity. It's ranked as an upper-middle income economy by the World Bank as one of only four countries in Africa (besides Botswana, Gabon and Mauritius).

The country has many natural resources, well-developed financial, legal, communications, energy and transport sectors and a modern infrastructure supporting efficient distribution of goods throughout the southern African region. Therefore, it's also the gateway to other African markets, because of its significant role in supplying energy, relief aid, transport, communications and investment on the continent. The stock market is one of the top 20 worldwide. The country's financial systems are highly developed and robust. The banking regulations are among the best in the world, and the sector has long been ranked among the top 10 globally.

In addition to poverty, large wealth disparities and a high incidence of HIV/Aids, unemployment is one of the biggest challenges to economic growth in the country. However, unemployment fell to 23.9

percent down from 25 percent in 2011. Facing the loss of one million jobs within two years, the government initiated a comprehensive strategy against unemployment with an objective of creating five million jobs over a decade. The GDP is estimated to have increased to 3.1 percent in 2011, up from 2.9 percent in 2010.

Technology

The South African ICT sector is the largest on the African continent and an increasingly important contributor to the country's GDP. South Africa is among the largest consumer of IT products and services in the world, assuming a role model function of ICT development in Africa. The country's IT industry takes a lead in technology, particularly within the scope of electronic banking services. Several South African companies are world market leaders in pre-payment, revenue management and fraud prevention systems as well as in the manufacture of set-top boxes which are successfully exported to the world.

The South African network is highly digitalized including fixed-line, wireless and satellite communications. Various leading international IT corporations run subsidiaries in South Africa, such as IBM, Unisys, Microsoft, Intel, SAP, Dell, Novell and Compaq. These locally based subsidiaries and South African companies have provided most of the new fixed and wireless telecom networks which have been established countrywide in recent years. South Africa as an aspiring information society is expected to show a strong future growth in the ICT sector facing the local and global challenges of international competition and ICT development.

Education

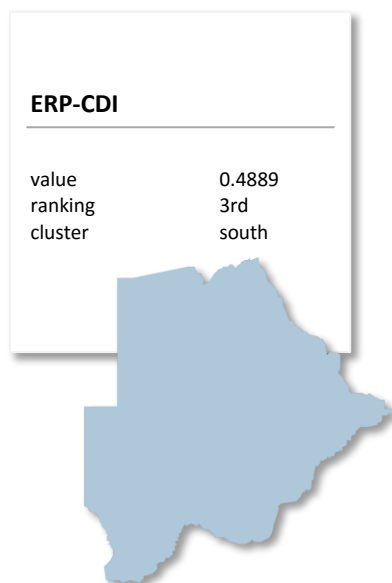
The education system of South Africa can be divided into three sections: general education and training (grades 0-9), further education and training (grades 10-12) and higher education. Although the educational system is controlled by the national Department of Education, each of the country's nine provinces has its own education department. Over the last 17 years the South African government has doubled expenditure on education.

Since the enactment of the South African Schools Act of 1996, schooling is compulsory for all children ages 7 to 15 who must attend grade 1 through 9. Consequently, the enrollment in primary and secondary schooling has reached a total of 98 percent of children. There are independent (private) and public schools. At public schools, parents can vote on the level of school fees, while poor parents are given exemptions or reductions.

In 2003, the South African government began restructuring its higher education system to widen access to tertiary education and reset the order of the old apartheid-based system. Now, there are 23 public higher education institutions in addition to many privately operated universities. Besides the eleven traditional universities, which offer theoretically oriented university degrees, there are six so-called comprehensive universities, which offer a combination of academic and vocational diplomas and degrees as well as six universities of technology. Some of South Africa's universities are world-known academic institutions and offer a range of study and research options for local and international students.



Republic of Botswana



capital	Gaborone
top3 cities (number of inhabitants)	Gaborone (196,000) Francistown (89,979) Molepolole (63,248)
population	2,030,738
area [km²]	566,730
official languages	English
political system	parliamentary republic (1966)
date of independence	30 September 1966 (from the UK)
currency	pulas (BWP)
exchange rate per 1 US\$	6.84
GDP per capita [current US\$] (Sub-Saharan ranking)	7,403.42 (5)

Social structure

Botswana is a small, dynamic and sparsely populated country characterized by a visionary leadership. The population is relatively young – approximately 57 percent are under the age of 25 and about 20 percent fall within the range of 15-24 years.

The country's government recently put main emphasis on the need for economic growth as well as the eradication of poverty. 20.7 percent of the population lives below the national poverty line. Unemployment has remained close to 20 percent, giving rise to income inequality and discontent. The

government's long-term focus is on the creation of new job opportunities for the poor. The access of the population to potable water and sanitation has already gradually improved. Continuing investments in social services provide prospect for further progress.

Concerning gender equality, the government of Botswana has made significant progress, signing and ratifying international conventions such as the Convention on the Elimination of all Forms of Discrimination Against Women in 1996, the African Charter on Human and Peoples Rights in 1986 and the SADC Declaration on Gender and Development in 1997. In 1999, the government implemented a national gender program framework, thus laying the foundation for an increasing number of women in key government positions and parastatal organizations.

Politics

The political environment of Botswana is among the most stable in Africa showing an impressive track record of good governance supported by prudent macroeconomic and fiscal management as well as poverty reduction policies. The country's mature democracy is reflected in its constitution providing for fundamental rights and freedoms. Within the framework of a multiparty-system, free and fair elections have been held regularly since independence in 1966. The dominating Botswana Democratic Party has been in power since the first elections were held in 1965. Botswana's President, Lieutenant General Seretse Khama Ian Khama, was inaugurated in October 2009 and is both head of state and government. Due to strong political, administrative and financial management accountability mechanisms, Botswana ranks at the top of African countries in governance and transparency indices. The country was ranked 33rd out of 178 countries in the Transparency International 2010 Corruption Perception Index, outperforming all Sub-Saharan African countries. Moreover, Botswana is considered one of the most peaceful countries in the world, ranking 33rd out of 149 countries in the Global Peace Index 2010.

Economy

Botswana's economy is one of Africa's success stories, scoring one of the world's highest growth rates. Within three decades, Botswana transformed itself from a Least Developed Country to a Middle Income Country. Prudent macroeconomic policies, good governance, well-functioning institutions and a judicious management of diamond resources are the hallmarks of the country's considerable economic performance. Botswana has a favorable business environment with a good infrastructure development, regulatory frameworks and taxation system. Diamond mining and tourism as well as financial services, subsistence farming and cattle breeding are the key sectors of Botswana's economy.

Despite the impressive economic development, the country still faces high levels of poverty and inequality as well as high HIV/AIDS prevalence rates. To meet these challenges, the country's government and non-governmental organizations launched a number of poverty reduction initiatives including the implementation of various job creation programs.

Technology

Botswana's ICT infrastructure is very solid, but not fully utilized. It is vital to close the gap between the increasing importance of Internet usage and a yet insufficient demand by the population. The Internet needs to become more relevant to the Botswana, e.g. through the development of local online content tailored to the needs of the population. Other challenges include the relatively high cost of personal computers, the lack of electricity in many rural locations, and high charges for Internet usage. A considerable disparity can be identified in terms of urban and rural access to ICT services.

Botswana shows one of the highest personal computer penetration rates in education institutions compared to other Sub-Saharan countries. All junior and senior secondary schools as well as governmental tertiary institutions provide computer labs for learning purposes. The government has committed financial resources in order to improve connectivity and promote the educational use of ICT. In addition, the government-supported "Botswana Telecommunication Corporation" has deployed a fully digital telecommunication network along with the required infrastructure in all major cities. With about 200 registered companies operating in the IT-sector, Botswana is at the very beginning of an emerging IT-industry.

Education

In recent years, Botswana made significant progress in the educational sector, including the provision of nearly universal and free primary education. The country's government provides 30 percent of the public expenditure to the educational sector. The adult female literacy rate with 82.91 percent does not differ significantly from the adult male literacy rate with 82.19 percent.

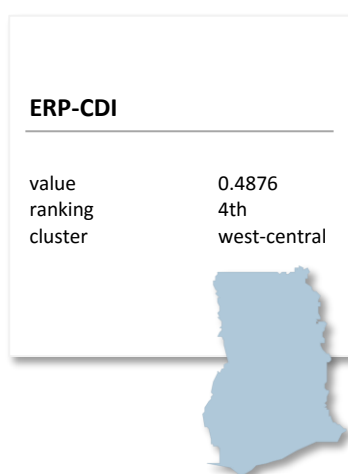
In 2001, the government encouraged substantial reforms concerning the educational system. The new system features a 7-3-2 structure and comprises seven years of primary education, three years of junior secondary education and two years of senior secondary education. In primary school, children will be educated in Setswana first, later in English.

In 1982, the University of Botswana was established as the first institution of higher education enjoying full independence from governmental control. In an attempt to transform Botswana's economy from

a resource-based to a knowledge-based economy, the country's government founded the Botswana International University of Science and Technology in 2008. To address Botswana's high unemployment rate, which is closely linked with the mismatch of the quality of education and market demands, academic programs are to be diversified equipping learners with required skills.



Republic of Ghana



capital	Accra
top3 cities (number of inhabitants)	Accra (2.269 Mio.) Kumasi (1.773 Mio.) Tamale (360,579)
population	24,965,816
area [km²]	227,540
official languages	English
political system	constitutional democracy (1996)
date of independence	6 March 1957 (from the UK)
currency	cedis (GHC)
exchange rate per 1 US\$	1.51
GDP per capita [current US\$] (Sub-Sahara ranking)	1,324.59 (13)

Social structure

Trade is a vital element of present-day Ghana. Its roots date back to colonial times, when Europeans first arrived to deal in gold and later on in slaves. Gaining independence in 1957, Ghana became the first Sub-Saharan country in Africa that abandoned colonial commitment to the British power.

Despite a strong economic performance since the 1990s, poverty reduction remains a major challenge concerning income inequalities and regional imbalances between the north and the south of the country. Various plans addressing the persistent poverty gap and the development of economic opportunities have been initiated by the government, such as the National Employment Policy and the National Protection Strategy. To support the most vulnerable parts of the population, several social intervention programs have been established, for instance the National Health Insurance Scheme and the Micro-Finance and Small Loans Scheme.

Significant progress has been made in addressing gender equality and women's empowerment. Nevertheless, the implementation of those achievements is slow-moving. For instance, the share of women in Parliament declined from 10.9 percent in 2002 to 8.3 percent in 2011.

Politics

With regard to civil liberty, political rights and political stability, Ghana assumes a leading role within the circle of consolidating democracies. Becoming a more open society with a strong public dialog, the country outpaces most of the countries in West Africa. A constitution allowing for a multi-party system ratified in 1992 laid the foundation of a developing democracy. The presidential elections expected in December 2012 will show the legal basis of democracy and political competition. The National Democratic Congress and the New Patriotic Party, as the dominant political parties, will stand for the upcoming elections. The implementation of biometric registration is conducive to avoid double listing and ghost names in the voter registry.

Significant progress has been made in maintaining and improving achievements concerning human rights, public administration, transparency and accountability. The government passed several laws to control the management of oil and gas revenues assuring more transparency. However, Ghana – a country rich in natural resources – faces substantial challenges such as corruption allegations, rent-seeking behavior, poverty and income equality.

Economy

Ghana is the world's second largest cocoa producer behind Ivory Coast, and Africa's biggest gold miner after South Africa. It's one of the continent's fastest growing economies. For a few years, the country has also been an important oil producer.

The economy of Ghana is based on two distinct sectors: a large, traditional sector (principally agricultural and informal activities) and a relatively small, labor intensive industrial and a service sector. Ghana's economy is predominately agricultural, with about 60 percent of the labor force employed in subsistence agriculture. Besides cocoa, rice, coffee, cassava, peanuts, corn, shea nuts and bananas are also widely grown. In the north, south and coastal regions, important minerals were found like gold, bauxite and manganese, also industrial diamonds.

Mining, lumbering, light manufacturing, aluminum smelting, food processing and shipbuilding are the major industries of the country. Besides gold and other minerals, timber and tuna are the major exports. Capital equipment, petroleum and foodstuffs are among the most important imports. Ghana's major trade partners are the Netherlands, Nigeria, Great Britain, the United States and China.

Ghana still faces key challenges such as infrastructural bottlenecks, including weak capacities in the energy, transport and telecom sectors, skills shortages and productivity constraints. The country has a large but poorly maintained road system; rail lines connect the major centers in the south. The labor

market faces a substantial gap between supply and demand that triggers a large scale underemployment as well as unemployment in the broader sense.

Technology

Ghana's ICT sector is becoming more important displaying a progressive digital development in recent years. Due to governmental efforts and interventions, substantial achievements have been made in the development of ICT infrastructure. Various private investments have been made by Internet service providers and telecommunication companies such as the Ghana Telecom, Scacom, Millicom and Westel. A further initiative – the development of a national fiber optic network (Voltacom) – was launched by the country's electricity provider Volta River Authority. Because of a highly competitive private sector, investment increased, resulting in a remarkable telephone penetration rate of 80 percent in 2011 and a considerable decline of Internet access prices from US\$ 3 to less than US\$ 1 per hour. The Kofi Annan ICT Centre of Excellence is assuming a central position concerning the provision of human capacity, which is needed for the nascent ICT sector. Beyond that, the government and private companies have trained a vast number of professionals in ICT, providing the required knowledge for future ICT activities. Most of the ICT-companies such as ExZeed, Rising Data Solutions and Ghana Cyber Group are located in the capital Accra. Further great strides have been made in ICT-education in basic schools since the introduction of ICT-basics is part of the current curriculum.

Education

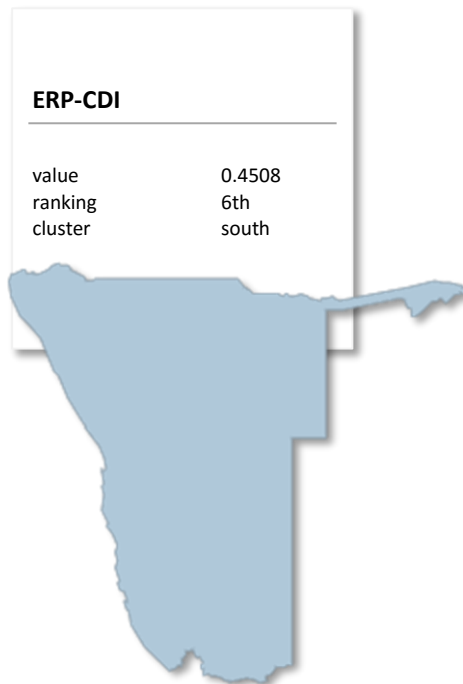
The educational system of Ghana is organized in a 6-3-4-4 structure: primary school (six years), junior high school (three years), senior high school (four years) and university system (four years). The first nine years of education are compulsory, beginning at the age of six. In 1986, the system was reformed in line with the American educational system. The official language of instruction is English. During the first three years, students may study in any of eleven local languages before English becomes the medium of instruction. Students continue to study a local language as well as French as subjects at least until the ninth grade. All other textbooks and materials are in English. The adult literacy rate was over 67 percent in 2010.

Ghanaian university admission is highly competitive, especially in fields such as medicine, engineering, law and pharmacy. The quality of education is considered reasonably high. In an effort to attract international enrollment, all Ghanaian universities operate on a modular, semester system. The University of Ghana is committed to matriculate 10 percent international students and attracts significant numbers of American students, as well as students from Africa and Europe. The United Nations University operates several programs on campus in fields of health and development.

Ghana is one of the few countries in Africa whose public school graduates can attain admission to the most competitive universities in the United States.



Republic of Namibia



capital	Windhoek
top3 cities (number of inhabitants)	Windhoek (342,000) Rundu (58,172) Walvis Bay (52,058)
population	2,324,004
area [km²]	823,290
official languages	English
political system	presidential republic (1990)
date of independence	21 March 1990 (from South African mandate)
currency	Namibian dollars (NAD)
exchange rate per 1 US\$	7.26
GDP per capita [current US\$] (Sub-Sahara ranking)	5,330.85 (7)

Social structure

Namibian everyday life is characterized by constantly switching from one's mother tongue to Afrikaans, the lingua franca, or English. There are about a dozen different ethnic groups practicing and cultivating their constitutionally guaranteed cultural independence. Nevertheless, Namibians have developed a common national identity thanks to the inter-ethnic achievements and co-operations in sports, music and film.

Namibia is an upper middle income country, but the income is unequally spread. A third of the population lives on less than 1 US\$ per day. Root causes lie in the high unemployment rate and problems inherited from apartheid and colonial times, when the majority was excluded from education, labor, resources and capital. The government tries to alleviate inequality by implementing a progressive tax system with some beneficial effects on lower incomes, spending on education, health and other social services as well as social safety net programs for vulnerable groups.

The rights of women have significantly strengthened in recent years and gender parity in education is almost achieved. Challenges remain in targeting gender-based violence, informal practices disadvantaging women, bringing women into jobs and informing them about their rights, enabling them to take (legal) action. To target these issues, the government has signed international conventions and acts and is in the process of getting their revised National Gender Policy through legislature.

Politics

Namibia is politically stable and elections are considered fair, peaceful and largely free. Since independence, the South West African People Organization party has been ruling the country, gaining the majority in both chambers of parliament and providing the prime minister and president. The political system is de facto a centralized presidential democracy, due to the strong role of the president as well as his party and the fragmentation of the weak opposition parties.

The independence of the judiciary, the separation of powers, transparency and accountability are adhered to. However, access to justice is difficult for people living in remote regions and economically strenuous situations.

Freedom of speech, association, media and religion are constitutionally guaranteed and largely respected. There's some concern about government and party leaders' criticism against the independent media and influence over programming and personnel, though.

Namibia has been continuously evaluated as providing good governance. Corruption control is treated very seriously. There are some cases of official corruption, but it's not endemic hence the country is considered as one of the least corrupt in Sub-Saharan Africa. Overseeing and checking institutions are strong and further strengthened. In 2010, the constitution was amended with anti-corruption measures, making the Anti-Corruption Commission a constitutional institution.

Economy

Because of its small domestic market, integration is vitally important for Namibia to access the regional market. The country is a member of three regional groupings and trade agreements, the Common Monetary Area, the Southern Africa Customs Union (SACU) and the Southern African Development Community (SADC). Thereby, it gains access to the South African money and capital markets, profit from reduced tariffs and can unrestrictedly transfer funds without transaction costs. About 80 percent of all exports benefit from free trade agreements. Since 2007, Namibia is part of an Interim Economic Partnership Agreement with the EU, opening a duty- and quota-free market for beef, fish and grapes,

as well as other exports. The negotiations for a full partnership are halted until issues relating to unfair competition are resolved (deadline January 2014).

Namibia is rich in resources like diamonds, uranium, copper and zinc as well as fish and livestock. Resources and agricultural products make up about 60 percent of exports, of which a half goes to Europe and a quarter to countries within SACU. Nonetheless, three-fifths of the gross value are earned in the third sector, especially tourism, banking and telecommunications. Enterprises from South Africa are very present in this sector. The neighboring country is also the number one importer.

The government targets the high unemployment rate of over 50 percent by spending on infrastructure and other public programs in agriculture, tourism, transport, sanitation and housing. The initiative aims at directly and indirectly creating 104,000 jobs, especially for unskilled workers who make up the largest part of the unemployed. Even before these further investments in this sector, the transport infrastructure was well developed on land and sea.

The economic growth slowed down in 2011 due to moderate production in mining and agriculture, following severe flooding in the north, industrial action and the low demand for mineral products in the current global economic crisis.

Technology

The telephone system is generally well developed, connections are digital and most centers are linked via fiber-optic networks.

The mobile cellular phone is the most important telecommunication device in Namibia. Three main operators share the market: Telecom Namibia, Leo and the most dominant MTC. Almost 70 percent of people own a mobile phone not only to talk and text, but also to use the Internet. Generally, the number of Internet users is comparatively low due to the lack of fixed lines. Plus, only a third of the population has access to electricity. However, the changing and growing mobile market enables people to go online without a fixed broadband subscription. Other common ways of accessing the Internet are in an Internet café, at a place of education or at the workplace.

Education

The literacy rate is comparatively high almost nine out of ten people can read and write. Education receives 22 percent of the national budget, underlining the high priority the government gives to provide basic education for every child and enable all of them to study until the age of 16.

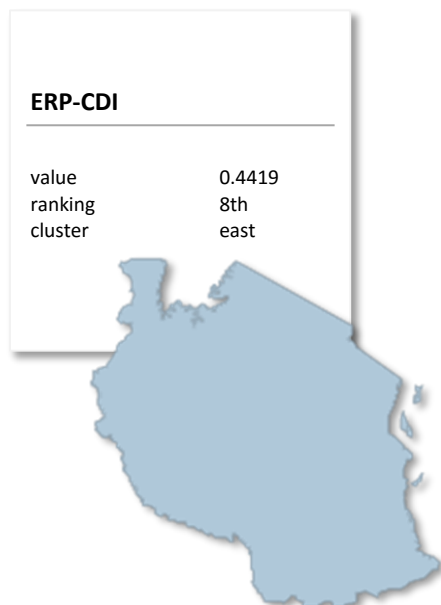
Namibia's schools are mainly run by the state, only a few are privately run and most of them are farm schools. Primary education is divided into lower (grades 1-4) and upper (grades 5-7) primary school. These seven years of school are compulsory for all children and have to be taken between the ages of six and sixteen. During the first three years of education, the language of instruction is the mother tongue of the majority of students. English is introduced in grade 4 and as of grade 5, it's the only language of instruction. Junior secondary education lasts from grade 8 to 10. At the end of the senior secondary level (grades 11-12), students receive the Namibia Senior Secondary Certificate which allows them to enter a Namibian university. Most university subjects have restricted admission, so a student might need to voluntarily retake grade 12 to achieve a better grade.

There are only two public universities, the Polytechnic of Namibia, focusing on skills relevant to the industrial sector, and the University of Namibia with three campuses, concentrating on other classical university subjects. There's no strict division of disciplines, though. The International University of Management, the only private university, offers courses in management. Fees are demanded by all universities, but some scholarships for good students in financial need are provided.

Even though the enrollment and school survival rates have recently increased, the quality of education is still a concern. Secondary and tertiary education levels are unable to teach the skills demanded by the economy. Therefore the government has invested in human development and education and started the Education and Training Sector Improvement Program intended to produce relevant skills and knowledge.



United Republic of Tanzania



capital	Dar es Salaam
top3 cities (number of inhabitants)	Dar es Salaam (3.207 million) Mwanza (436,801) Zanzibar (403,658)
population	46,218,486
area [km²]	885,800
official languages	Kiswahili or Swahili, Kiunguja (name for Swahili in Zanzibar), English
political system	republic (1995)
date of independence	26 April 1964; Tanganyika became independent on 9 December 1961 (from UK-administered UN trusteeship); Zanzibar became independent on 19 December 1963 (from UK); Tanganyika united with Zanzibar on 26 April 1964 to form the United Republic of Tanganyika and Zanzibar; renamed United Republic of Tanzania on 29 October 1964
currency	Tanzanian shillings (TZS)
exchange rate per 1 US\$	1,572.12
GDP per capita [current US\$] (Sub-Sahara ranking)	523.80 (31)

Social structure

Tanzania is well-known for its great appeal to visitors from abroad due to its unique landscape, including wildlife-rich national parks. Nevertheless, Tanzania faces substantial challenges as one of the poorest countries of the world. The rate of poverty remains persistent, becoming crucial to the development debate despite recent household budget surveys showing a slight decline of poverty as well as the share of people suffering from starvation in 2007. One of the major aims of the Tanzanian government is to improve livelihoods for the most vulnerable people, scaling up social protection interventions and insurance schemes.

Another significant challenge is the high population growth rate accompanied by a rapid inflow of people in urban areas. Especially the situation of the youth population is critical with regard to unemployment. An increasing share of young women participating in the labor market is confronted with an overall lack of sufficient employment opportunities that aggravates the situation.

Significant progress has been made towards gender equality, ratifying key documents such as the Convention on the Elimination of all Forms of Discrimination against Women and the SADC Protocol on Gender Equality. With these achievements, women's representation in parliament was encouraged, increasing from 30 percent in 2005 to 36 percent in 2008.

Politics

Tanzania was formed in 1964 by the unification of Tanganyika and the isles of Zanzibar. The country is one of the most politically stable nations of Sub-Saharan Africa. Since its independence the ruling party Chama cha Mapinduzi has dominated national politics. During 2011 the government was put under pressure as economic distress, allegations of corruption and discontent concerning fundamental rights and liberties called for constitutional reforms. In response the opposition parties currently campaign for political changes such as limiting presidential powers, introducing electoral reforms and allowing independent candidates standing for presidency. A draft of a new constitution is expected to be published in 2014, one year before the next parliamentary and presidential elections will take place. Significant progress has been made in addressing corruption, especially investigations on high profile cases. According to the Transparency International's Corruption Perception Index, Tanzania's rank fell down from 126 in 2009 to 116 in 2010. However, rent-seeking is still a major problem, hampering the private sector of the economy.

Economy

Tanzania is a lower income economy in Sub-Saharan Africa and ranks within the bottom 10 percent of per capita income of world economies. The GDP per capita is also one of the lowest worldwide, ranking the nation at 85th in the world.

The World Bank identifies tourism as one key sector for growth. Gold and tin reserves make mining the other main sector.

As member of the EAC, Tanzania mainly exports agricultural products like cotton, coffee, cashew nuts, manufactured products and gold to Europe (Germany, Netherlands) and Asia (India, China, Japan). Tanzania's primary import products include consumer goods, machinery and transportation equipment, industrial raw materials and crude oil, mainly from Europe.

The biggest challenges for the Tanzanian economy are the traditional economic infrastructure, the strong dependency on agricultural activities and unemployment with more than 22 of 43.7 million people out of work. Tanzania's growth potential is hampered by insufficient and unreliable infrastructure services, rising transaction costs and lowering productivity.

The agro sector generates more than two-thirds of the GDP, accounts for almost 85 percent of total exports and employs nearly 80 percent of the population. Nonetheless, agriculture is restricted to the coastal plains, since almost 90 percent of the land is not arable.

The industry sector is among the smallest in Africa and basically consists of small and medium-sized enterprises, specializing in the production of textile and apparel, leather tanning and plastics as well as food processing, including dairy products, meat packing, preserving fruits and vegetables. A small part of larger factories (10 percent) manufacture cement, rolled steel, corrugated iron, aluminum sheets, cigarettes, beer and bottling beverages, fruit juices and mineral water.

Technology

Tanzania is one of the fastest growing nations in Africa in terms of ICT development and mobile deployment. The country ranks 6th on World Internet Stats' African chart with 6.8 million users, just below South Africa. In a recent study, it was revealed that 11.5 percent of the population, which equals more than 5.9 million citizens, have access to or use the Internet on a daily basis. Tanzania is a good example that mobile Internet usage is on the rise in Africa.

The country also has a large number of websites registered, with 339,712 websites owning the .tz Internet TLD. That is 7.79 IP addresses for every 1000 people.

There's only one fixed-line operator, Tanzania Telecommunications Company Limited (TTCL), and seven mobile phone operators. TTCL is also the oldest and largest fixed-line telecommunications company in Tanzania.

ICT is coordinated and governed by the Tanzania Communications Regulatory Authority (TCRA), which is an independent authority for the postal, broadcasting and electronic communications industries. The TCRA is accountable to the Communications and Technology Ministry.

Education

The main feature of Tanzania's education system is the intercultural bilingual orientation, which means children learn both Kiswahili and English. English is the essential language, connecting Tanzania and the rest of the world in technology, commerce and also administration. As part of the curricula, English is taught as a compulsory subject in primary education, while at secondary and tertiary level it is the medium of instruction. Kiswahili enables Tanzania's students to keep in touch with their cultural values and heritage. It's the medium of instruction at primary education while at secondary schools it is taught as a mandatory subject and as an option at tertiary education.

The formal education and training system in Tanzania consists of three levels: basic, secondary and tertiary level. Basic or first level education comprises two years of pre-primary education and seven years of primary and non-formal adult education. Secondary education is divided into four years of junior secondary (ordinary level) and two years of senior secondary (advanced level). Tertiary

education is offered by non-higher and higher education institutions and lasts up to three or more years.

Schooling is compulsory for children ages 7 to 15. Tanzania has made important progress in ensuring universal and free access to basic education. Primary education is free, but families must pay for uniforms, testing fees and school supplies. The adult literacy rate was over 73 percent in 2010. The budget for the education sector has increased over the past ten years.

Governance of education in Tanzania is shared between Tanzania Mainland and Zanzibar. In Tanzania Mainland the education sector is managed and coordinated by the Ministry of Education and Vocational Training (MoEVT), the Ministry of Community Development, Gender and Children, and the Prime Minister's Office for Regional Administration and Local Government, while policy making and monitoring is entrusted to the MoEVT. At tertiary level the coordination and quality control is the responsibility of the Higher Education Accreditation Council.



Republic of Rwanda



capital	Kigali
top3 cities (number of inhabitants)	Kigali (909,000) Butare (89,600) Gitarama (87,613)
population	10.942.950
area [km²]	26,338
official languages	Kinyarwanda (universal Bantu vernacular), French, English
political system	presidential republic, multiparty system (1994)
date of independence	1 July 1962 (from Belgium-administered UN trusteeship)
currency	Rwandan francs (RWF)
exchange rate per 1 US\$	600.3
GDP per capita [current US\$] (Sub-Sahara ranking)	529.71 (30)

Social structure

Rwanda is also known as the "land of a thousand hills," located in the heart of Central and East Africa, on the far western edge of the Rift Valley, bordering on Burundi, the Democratic Republic of Congo, Uganda, Kenya and Tanzania. The country is characterized by a green undulating landscape of hills, gardens, tea plantations and volcanoes. It is home to one third of the world's remaining Mountain Gorilla population, one third of Africa's bird species and several species of primates.

The population consists of not only the people of Rwanda but people from neighboring states, who speak the Kinyarwanda language as a unifying factor. Kinyarwanda is a Bantu language and the primary cultural identifier for Rwandans living outside the country. Less than 10 percent speaks French or English.

The Rwandan culture includes three ethnic groups, the Hutu, Tutsi, and Twa, who have emerged through and shaped by a complex process of immigration and social and economic differentiation for several centuries.

Rwanda counts as one of the safest Sub-Saharan countries, because of its low crime rate.

In 2011 the proportion of the population below the poverty line has declined to 44.9 percent from 56.7 percent in 2006.

Furthermore the nation belongs to the first countries in the world to have a majority of women in parliament with 56 percent parliament in 2010.

Politics

The constitution defines Rwanda as a state characterized by a two-chambers-parliament within a semi-presidential system, the separation of powers, human and civil rights as well as a pluralism of political parties. Although these parties feature control mechanisms and a consensus culture, the pluralism is de facto limited by the principle of national unity. Recent elections have not been completely transparent, neither in 2008 nor in 2010. Opposition candidates were kept from running for several reasons and by different means. The freedom of the press is inhibited. Rwanda has made significant progress fighting corruption improving its anti-corruption policy and enforcement.

Coming to terms with the genocide, the reintegration of Hutu-militia relatives who came back from the DR Congo, the governmental decentralization program, the economic rehabilitation and national poverty reduction are the most important domestic issues. Since 2002, an annual conference takes place involving government and civil representatives in a national dialog.

The foreign policy is shaped by Rwanda's pursuit of stronger regional integration, especially the involvement in the African Union and the East-African Community and the intensification of neighborly relations. The government also puts emphasis on close cooperation with international and potential investors and the active participation in international organizations and UN peace keeping missions.

Economy

Rwanda has the ambition to become a middle income country by 2020. The constant economic success with strong growth rates looks promising. The government intends to massively invest in the transport and energy sector, the modernization of agriculture, the promotion of the manufacturing and the development of the tourism industry. The service sector – including financial, IT, insurance and tourism services – contributes over 50 percent to the GDP. Agriculture accounts for 35 percent and the industry for the remaining 15 percent.

The private sector has a key role in achieving economic goals. Therefore, the government puts great effort into attracting foreign investors, like the support of increased credit to the private sector.

Rwanda mainly imports fuels, construction material, machinery and vehicles. The most important export goods are minerals, coffee, tea and agricultural products. About two-thirds of exports go to the EAC area, about a quarter to other African countries and 14 percent to Europe.

Aside from the EAC, Rwanda pushes the integration of COMESA and the Economic Community of the Great Lakes Countries (CEPGL). Also, regional infrastructural projects in the energy, transport, customs and financial sector gain importance.

Remaining challenges include the high youth unemployment rate, the lack of installed energy and skilled workers, scarcity of land and erosion of land as well as the adaptation to stronger negative effects of climate change.

Technology

The aftermath of the genocide also slowed down the development of the telecommunications sector. The mobile penetration rate is comparatively low. Limited fixed-line infrastructure and high prices restrained Internet and broadband development. However, the roll-out of national fiber-optic backbone networks provided fiber-based international bandwidth and made Rwanda independent on satellites in 2010.

Also in 2010, a Strategic Investment Program prioritized the building core information and communications technology infrastructure for high-speed broadband connectivity.

Rwanda participates in the One Laptop per Child project and also promotes a major e-government program.

Education

Six years of education are free and compulsory for all children from the age of seven. The Rwandan formal educational structure comprises a 6-3-3-4 system: primary school (six years), junior secondary school (three years), senior secondary school (three years) and university level (four years). Most of the primary and secondary schools are run by religious missions, but many receive state subsidies.

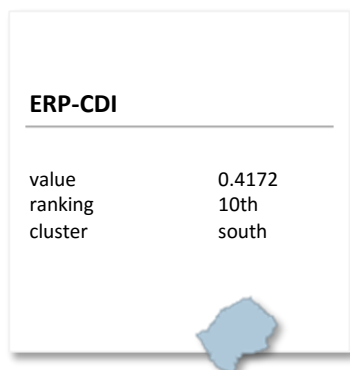
The country has one of the highest primary school enrolment rates in entire Africa. According to statistical data of UNICEF, 94.3 percent of boys and 97.5 percent of girls were enrolled in primary school in 2011. 95.9 percent of all children are in primary school and 75.6 percent of them complete the primary cycle. Rwanda's total literacy rate was 71 percent in 2010.

There are three official languages of instruction: Kinyarwanda in primary schools, and French and English at secondary and tertiary level. Besides, some private schools use English and French from kindergarten to the end of high school.

Over 44,000 students are enrolled in Rwanda's tertiary institutions. The admission to the universities is highly competitive, especially in fields such as medicine, engineering, law, and pharmacy. Rwanda has six public universities. The National University of Rwanda at Butare was founded in 1963 by the government and a Canadian Roman Catholic order. Furthermore, there are other higher institutions such as the African and Mauritian Institute of Statistics and Applied Economics in Kigali.



Kingdom of Lesotho



capital	Maseru
top3 cities (number of inhabitants)	Maseru (220,000) Mafeteng (57,059) Leribe (47,675)
population	2,193,843
area [km²]	30,360
official languages	English, Sesotho
political system	parliamentary constitutional monarchy (2002)
date of independence	4 October 1966 (from the UK)
currency	maloti (LSL)
exchange rate per 1 US\$	7.26
GDP per capita [current US\$] (Sub-Sahara ranking)	1,003.85 (21)

Social structure

Lesotho is a small country completely surrounded by the Republic of South Africa. Although it has abundant water resources – due to its high elevation and accumulated rainfall – the country faces major problems concerning the overall standard of living. Issues of income equality, HIV/AIDS, water resource management, transportation and disaster relief are Lesotho's key development challenges.

The share of the population living below US\$ 1.25 per day fell from 48 percent down to 43 percent between 1995 and 2010. Moreover, provision of social amenities has improved as the majority of the population has uninterrupted access to water sources. Nevertheless, many of the country's people are at risk of multi-dimensional poverty which is closely linked to unemployment and inequality. Especially among the youth, unemployment is widespread. In response, the government initiated the Youth Employment Promotion Project in 2006, whereby training and mentoring for the youth as well as strategic partnerships for youth employment will be provided.

Concerning gender equality, Lesotho has progressed steadily for the past two years. As a result, the share of women in the national parliament increased from 11.7 percent in 2007 to 24.2 percent in 2011. The legal framework for gender equality is provided by the Convention on the Elimination of All Forms of Discrimination against Women, the Married Person Act of 2006 as well as the Sexual Offences Act of 2003.

Politics

Lesotho – called “The Kingdom in the Sky” – is a constitutional monarchy ruled by the present King Letsie III and governed by a two-chamber-system comprising a Senate and a National Assembly. Elections are held at the end of a five year term, using a plurality voting system and a proportional representation system. The dominating political parties have been the Basotho National Party, the Basutoland Congress Party and the Lesotho Congress for Democracy, which won the 1998 elections. Stability was at stake due to the variety of political parties and intense political controversy which led to protests during the last election in 2007. A strategic roadmap for elections signed by the competing parties was expected to pave the way for fair and free elections in the future. On the subject of the management of finances and resources, Lesotho still faces major challenges. In response to that, an Integrated Financial Management System has been extended to all government agencies. Transparency in resource use as well as financial management shall be improved, thus reducing corruption and maladministration.

Economy

Lesotho is a small, landlocked, mountainous country characterized by a small population, a low GNP per capita and a high level of poverty. The economy of Lesotho is primarily based on subsistence agriculture, livestock and remittances from miners, who are employed in South Africa. The economic landscape includes a small manufacturing base depending largely on farm products and small milling, canning, leather and jute industries.

The majority of government revenues are generated by proceeds from the membership in a common customs union with South Africa and from the Lesotho Highlands Water Project which controls, stores and redirects water to South Africa.

The biggest development challenge to the economy of Lesotho is the youth unemployment. Within the youth labor force (15-24 years of age), males had a comparatively higher participation rate than females.

Technology

Lesotho has a poor and severely underdevelopment ICT infrastructure. However, the country has begun to take the necessary steps to promote higher levels of ICT access and usage in its communities and education institutions. The reduction in pricing of Internet services by up to 67 percent makes the benefits of new technologies available not only to citizens and organizations, but also helps businesses to compete in the international market.

The Government of Lesotho has adopted a national ICT policy that makes some references to the education sector. For a few years, the NEPAD e-Schools Demo Project has been a catalyst in focusing on the potential that ICT holds to enhance education in the country.

Education

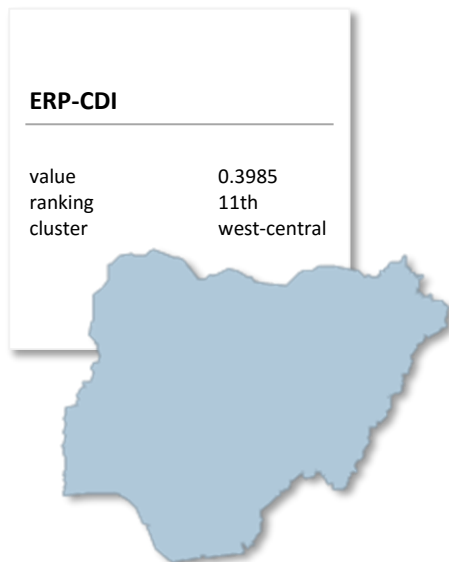
In 2010, the Government of Lesotho approved the Education Act establishing the right to free and compulsory education between the ages of 6 and 13. The evolution of education is a byproduct of the long history of missionary activity in Lesotho. Over 90 percent of secondary schools are church-owned. The official languages of instruction are Sesotho and English. Starting in grade 5 of primary school, English becomes the sole medium of instruction, whereas Sesotho is offered as a subject in its own right.

The educational system of Lesotho is organized in a 7-3-2-4 structure: primary school (seven years), junior secondary school (three years), high school (two years) and university education (four years). Students desiring a more practically oriented schooling can switch to a technical and vocational stream at a technical secondary school for 3 years after completing grade 8.

The three main tertiary education institutions in Lesotho are the National University of Lesotho, the University's International School and the Lesotho Agriculture College. The Ministry of Education and Training regulates the development of education.



Federal Republic of Nigeria



capital	Abuja
top3 cities (number of inhabitants)	Lagos (10.203 Mio.) Kano (3.304 Mio.) Ibadan (2.762 Mio.)
population	162,470,737
area [km²]	910,770
official languages	English
political system	federal republic (1999)
date of independence	1 October 1960 (from United Kingdom)
currency	nairas (NGN)
exchange rate per 1 US\$	154.70
GDP per capita [current US\$] (Sub-Sahara ranking)	1,278.37 (14)

Social structure

A distinctive feature of Nigeria is its complex ethnic, linguistic and religious diversity. Besides the three dominant groups (Hausa/Fulani, Yoruba and Igbo), there are about 400 minor ethnic groups. Christians and Muslims each make up about half of the population.

The government has initiated a number of programs to reduce poverty, like the National Poverty Eradication Program or Microcredit, and established several agencies, like the Small and Medium Enterprises Development Agency. Nevertheless, the number of people who live on less than 1 US\$ per day is more than 60 percent and remains high, due to ill-targeted mechanisms, inconsistent implementation of programs and a lack of transparency and accountability, among other factors. The government strengthened its social safety net program to care for the most basic needs.

The educational background of women has improved and women hold several key government positions, but they still face discrimination in education and employment and often work in inferior positions.

Nigeria is famous for its Nollywood industry – about 1200 low-budget home movies are produced each year for the West African market, reaching millions of people. The movie industry has become an important economic factor.

Politics

Despite some flaws, the last elections in 2011 were considered the fairest since 1999. After the nationally and internationally criticized elections in 2007, the electoral law was reformed. The new head of the National Election Commission enforced a new registration of all voters, more transparency and the use of election observers.

Freedom of speech and expression as well as religious freedom is constitutionally guaranteed, although discrimination is widespread, also against journalists. Tension between the members of different ethnic, religious and social groups regularly provokes local conflicts, in some cases with violent and deadly incidences. The situation is relatively stable right now.

The judiciary is free from direct political influence. However, it lacks sufficient administrative capabilities, has difficulties determining jurisdictional boundaries between its secular state law, Islamic law and customary law, and it suffers from corruption. The government's activities to improve transparency and reduce corruption are publicly supported but often circumvented by the payment of fees and bribes as well as the use of loopholes in the legal system. Recently, the courts have applied harsher bail out conditions making it more difficult to avoid legal proceedings.

The government has undertaken reforms particularly in public financial management and co-ordination with the legislature to improve the quality of public service and efficiency in resource allocation as well as project and program implementation.

Economy

Nigeria has the highest direct foreign investments with over 6 billion US\$ and the second highest GDP within the Sub-Saharan region after South Africa. The economy depends heavily on oil and gas extraction and exports. Especially the gas business is growing. A pipeline to Ghana was built to access the West African market, a Sub-Saharan pipeline through Niger to Algeria is planned to supply Europe.

The development of the non-oil-sector and industries is a government priority. Telecommunications, construction, wholesale and retail trade, hotel and restaurant services, manufacturing and agriculture already drive the robust economic growth. The government heavily invests to improve the inadequate transport, energy and other infrastructures. The tariff barrier regime was simplified by adopting the Common External Tariff system of the Economic Community of West African States.

China is the major importing trading partner, investing and cooperating in manufacturing, telecom, power and transport as well as construction. Half of Nigerian oil is shipped to the USA, making the

country the main target for Nigerian exports. Other trading partners include India, South Africa, Brazil and countries of the European Union, mainly Great Britain, France, Spain and Germany.

About a quarter of people were unemployed in 2011 and unemployment remains high. Youth job creation initiatives intent to help improving the youth unemployment rate.

Technology

As is usual in Africa, almost no one has a fixed broadband subscription, but over a quarter of the population uses the Internet. Bigger company competition and new technologies are now able to deliver wireless broadband access. This counters the impediments to the Internet sector due to the country's unreliable and underdeveloped fixed-line infrastructure. The majority of Nigerians have a cellular mobile subscription. Nigeria is the second largest mobile market after South Africa and demand for fast Internet access also drives the development of the fixed-line sector. The former state owned business Nitel shares the market with a number of private providers.

Education

Recently, the share of education spending has increased in order to fulfill the current government's official policy "to provide universal and equal access to quality basic and secondary education [...] the enabling structures and build capacity for efficient and effective implementation". The educational sector has large deficits, mainly due to low governmental investments and the neglect of past governments. Only about two-thirds of the population can read and write.

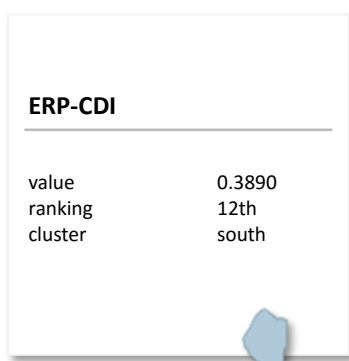
The modern education system is still greatly influenced by Great Britain's rule in colonial times. The language of instruction is usually English. Primary school starts at age 6 and lasts for a minimum of six years. Secondary school is divided into junior and senior secondary school, each lasting for three years. Students are required to study English, mathematics, one science subject and one Nigerian language. Other subjects can be selected based on the student's interests. To enter a university in Nigeria, students must first take two examinations and are tested in English, mathematics and a number of other subjects, depending on their desired major. The entrance requirements are determined by the respective study programs and universities.

Nigeria is the country with the most higher education institutions of all Sub-Saharan countries. The government holds control over most of these institutions. The federal government fully funds first to third generation universities which were established one after another with increasing demand for higher education institutions. Also state governments invested in the establishment of state

universities to serve the growing demand. Furthermore, private sectors are allowed to establish universities according to governmental guidelines.



Kingdom of Swaziland



capital	Mbabane
top3 cities (number of inhabitants)	Manzini (110,537) Mbabane (74,000) Big Bend (10,342)
population	1,067,773
area [km²]	17,200
official languages	English, siSwati
political system	monarchy (1973)
date of independence	6 September 1968 (from the UK)
currency	emalangeni
exchange rate per 1 US\$	7.26
GDP per capita [current US\$] (Sub-Saharan ranking)	3,501.52 (9)

Social Structure

Swaziland, a small landlocked country, is one of the world's few remaining absolute monarchies. The kingdom of Swaziland is quasi homogenous since most people belong to the same tribe. They mainly follow traditional ways of life. 70 percent of the population lives in rural areas and depends on agriculture. Although poverty slightly decreased from 69 percent in 2001 to 63 percent in 2010, most people live on less than USD 1.25 per day.

Most of the country's development challenges result from disparities in access to quality land. A framework for closer donor coordination as well as the further strengthening of development cooperation will help to ensure sustainable long-term progress.

Due to a high population growth rate and occasional droughts, the natural resources as well as the country's ability to provide adequate social services are severely strained. Low job creation and the lack of adequate social protection schemes lead to major problems, such as unemployment, poverty and uneven income distribution.

However, good strides have been made on reaching gender equality, especially regarding the share of women taking part in decision-making processes. Certain gaps remain, though. The SADC Protocol on Gender and Development of 2008 as well as the Citizen Economic Empowerment Bill drafted in 2011 aim to promote gender equality in accessing, owning and utilizing economic resources.

Political Context

Since its independence in 1968, Swaziland has been ruled by a king, currently King Mswati III, who holds supreme executive, legislative and judicial powers. Opposition parties, which have been banned by the previous King Sobhuza II, are still not officially approved.

Continuous political tensions reflect the population's discontent with the current regime and lead to social unrest in major cities, organized by labor unions, teachers and other groups demanding political reforms, such as improved political and economic governance, greater transparency and accountability. As an expression of public discontent, demonstrations have reached a new climax in 2011, addressing the lack of checks and balances in the governance system as well as corrupt political elites. In the light of these developments, the government acknowledges the urgency for reforms concerning the weak institutional structures and the limited capacity to implement previously decided conventions.

The next parliamentary elections scheduled for 2013 will show how the government's efforts will meet the population's demand for a multi-party democracy.

Economy

Despite its middle-income status, Swaziland is currently characterized by a high level of inequality, poverty, food insecurity and unemployment. The lack of jobs and the inadequate social protection have led to a lack of economic prospects and uneven income distribution.

Notwithstanding, the country has excellent farming and ranching land and 80 percent of the population is engaged in subsistence agriculture. Main export commodities are sugarcane, cotton, corn, tobacco and rice as well as citrus fruits, pineapples, sorghum and peanuts. Moreover, coal mining and stone quarrying are important key sectors of the country's economy. Swaziland's mineral resources include asbestos, clay, cassiterite (tin ore), gold, and diamonds. The country's main trading partners are South Africa and Mozambique.

The financial crisis in 2011 was a significant setback for human resource building. It affected not only the access to essential health care and education, it also weakened the labor market leading to layoffs and wage cuts. Due to these developments, the government has fallen behind on the delivery of social services, in particular education. While 2011 was a challenging year for Swaziland, the present offers major opportunities. Appropriate fiscal measures accompanied by significant reforms could put the economy on a path of strong economic growth. Drawing on its strengths – including its strategic location, a relatively diversified production base and a skilled labor force – Swaziland could meet future economic challenges.

Technology

Swaziland's technical infrastructure is characterized by a limited telephone network, which has been substantially improved in recent years. A fiber-optic cable links Swaziland to South Africa and leased line tariffs are relatively low.

The telecommunications sector is dominated by a telecom monopoly operator for fixed services, but private participation in mobile and Internet services are on the rise. Compared to other countries in the region, fixed-line and mobile penetration is relatively high. While Internet usage is growing reasonably fast, the level of penetration is still far below international standards.

In 1999, the Swaziland Computer Education Trust, a non-profit organization, was established and funded by private business sources in order to enhance technical education across the country's state school system. It aims at extending computer literacy and vocational ICT training to every child in secondary and high school. The computers are intended for use across the entire school curriculum with the prospect of future Internet integration in education. The University of Swaziland assumes a prevailing role as one of the major networking institutions in the country.

Education

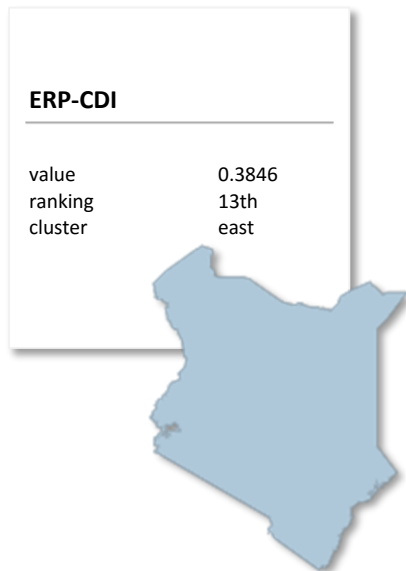
The quality of education and training remains poor since expenditure on education declined due to the 2011 financial crisis. Nevertheless, compared to other Sub-Saharan African countries, Swaziland has one of the highest school enrollment and literacy rates.

Since 2009, the government of Swaziland has offered free primary education for grades 1 to 3. The educational system and training is based on a 7-3-2-system, preceded by early childhood care and development: Primary education comprises seven years, starting at the age of six. Secondary education includes three years of junior secondary and two years of senior secondary.

The post-secondary education level includes tertiary education and vocational education offered by various institutions. The country's higher education system is comparatively new and remains at the very beginning: Since 1982, the University of Swaziland has been the only higher education institution. It comprises three specialized campuses: Kwaluseni, the main campus for most of the faculties, Luyengo Campus for the Faculty of Agriculture, and Mbabane Campus for the Faculty of Nursing.



Republic of Kenya



capital	Nairobi
top3 cities (number of inhabitants)	Nairobi (3.375 Mio.) Mombassa (966,000) Nakuru (259,903)
population	41,609,728
area [km²]	569,140
official languages	English, Kiswahili
political system	republic (2002)
date of independence	12 December 1963 (from the UK)
currency	Kenyan shillings (KES)
exchange rate per 1 US\$	88.81
GDP per capita [current US\$] (Sub-Sahara ranking)	794.76 (22)

Social structure

Kenya is a very young country – almost two-thirds of the population are younger than 20 years. It has been a country of immigration for thousands of years and is now a habitat for more than 40 ethnicities, 50 languages, the Christian majority as well as Muslims and Asian religions like Hindu, Jainism or Sikhism.

About 25 percent of the population lives on less than 1 US\$ per day. In order to mitigate poverty, the government has allocated money to cash transfers for vulnerable groups, to the food subsidy program and initiated a youth employment program.

Kenya has taken large steps towards gender equality. Women and men are guaranteed equal status under the law which was further strengthened by the new constitution. Violence and discrimination against women are punishable. Girls' school enrollment rates rise, although they're still lagging behind boys. The number of women in government has seen a meaningful increase due to the constitutional 30 percent gender representation requirement in all public offices. Governmental legislation and programs have also improved access to resources and employment opportunities for women.

Politics

Kenya's government is well established, but currently in the process of polity change after the peaceful referendum on the new constitution in August 2010. The government is reforming the security and justice sector, implementing the new basic rights catalog and introducing a decentralized district administration. To improve the quality of public administration and governance, new institutions like the Independent Electoral and Boundaries Commission, the Commission on Revenue Allocation as well as the Remuneration Commission have been created. The government undertakes performance contracting. Civil servants must legally be hired across ethnic groups and a minimum of 30 percent gender representation must be met. The office of prime minister will be abolished after the next election. It was introduced following the violent riots after the last election in December 2007 and the formation of the grand coalition in spring 2008.

The riots of 2007/2008 were accompanied by a large number of human rights violations. The friction between different ethnicities continues to provoke offenses, but the situation is relatively stable now. The freedom of speech and press, religion and assembly is constitutionally guaranteed and generally upheld. However there have been episodes of harassments by government officials against journalists after unfavorable news coverage.

Corruption is publicly condemned, but continues to be a problem at all levels of government. The government has recently put new effort into fighting corruption and created the Ethics and Anti-Corruption Commission, giving it an extensive investigated mandate.

The foreign policy puts emphasis on Africa and regional organizations. Kenya has not been involved in any of the regional conflicts and is therefore appreciated as a diplomatic mediator. The country has strong relations to the USA, the former colonial power Great Britain, and the EU. Kenya is very active in the United Nations. The environmental program UNEP and the settlement program UN-HABITAT are located in Nairobi.

Kenya is home to over 2000 non-governmental organizations dealing with educational, health, environmental, human and civil rights as well as political issues.

Economy

Kenya is the biggest economy in the EAC, the East-African Community, an economic cooperation which aspires to become a political union. The GDP is as large as the combined GDP of the other member states (Tanzania, Uganda, Burundi, Rwanda). In 2010, trade between EAC countries was simplified by adopting a common external tariff and the EAC Common Market Protocol which will allow for the free

movement of goods, services, people and capital after national legislation in all of the countries will comply with the protocol. Kenya is also a founding member of the Common Market for Eastern and Southern Africa (COMESA). To accelerate customs proceeding, paper-based administration practices are replaced by an electronic interface system.

Agriculture is the most important sector, producing 22 percent of the GDP. Products like tea, coffee and flowers are main export goods, aside from re-exports of oil-based products. Tourism is the other main pillar of the Kenyan economy. Tourists come mostly from Europe, USA, India and African countries. Building and construction has also been a driver for economic growth for the last few years due to large government investments in infrastructure, an increase in private sector real estate development and demand for housing units. The manufacturing sector is primarily designated to the processing of food, fast-moving consumer goods, motor-vehicle parts, farm implements, small-scale manufacturing of household goods as well as the refinement of crude oil.

About a quarter of exports goes to EAC countries, another to the EU. Exports to the COMESA region make up over one third of total exports. Imports come mainly from India, China, the United Arab Emirates, South Africa, Saudi Arabia and Japan and consist of oil as well as oil-based products, cars, machines and chemicals.

Technology

Recently Kenya ended its dependency on limited and expensive satellite bandwidth. Since 2011, the country has three fiber-optic submarine cables providing better and faster Internet bandwidth as well as dropping prices. Since France Telekom has taken over Telkom Kenya as the majority shareholder, the company has been working on improving their fixed-line infrastructure and re-entered the mobile market which has become increasingly competitive with a large number of operators. Over 60 percent of people already have a mobile cellular subscription. Various competitors like Kenya Data Networks, AccessKenya and Jamii Telecom introduce national and metropolitan fiber backbones and wireless access networks, bringing the new bandwidth and services to people across the country.

Electricity generation has increased by over 20 percent in the first half of 2011, driven by a mix of hydropower, thermal power and geo-thermal power. This potentially counteracts the traditionally low electricity production and the limited access to electricity by the population.

Education

Governmental efforts, like comprehensive plans to improve education and the relatively high public spending on the sector, underline the importance of education as a key for development. Almost nine

out of ten Kenyans are literate and the rate is expected to further elevate. The government wants to increase the enrollment rates on all levels of education, improve the quality of education and reform curricula. New schools are built to provide more space and better learning conditions for the growing number of students in the primary and secondary sector. Public universities are expanded to accommodate more students. Special emphasis is put on enhancing competence in science and technology.

The 8-4-4 system is similar to the education system in the USA. Before entering primary school, about half the students join pre-primary. Primary school starts around age 6 and lasts for eight years. The language of instruction is usually English. It's universal and free, but not compulsory. Students in secondary education have to take Kiswahili, English and mathematics and at least two natural sciences. Other subjects depend on the student's disposition and what the school can offer. After examination in all of the mandatory and elective subjects, the Kenya Certificate of Secondary Examination is awarded in preparation for tertiary education. University admission is based on the performance in the best seven subjects as well as relevant subjects for the degree courses.

Kenya has seven public universities with different campuses and number of privately run universities and research institutions. The enrollment rate at the university level is low despite the establishment of new institutions and buildings. Increasing the number of students entering higher education is a government priority in order to qualify larger parts of the population with demanded skills.

4 Prospect

Cooperation in information and communication technology is a growing, integral component of international development assistance. Especially in African countries, the ICT sector is continuously expanding, hence the demand for skilled personnel increases. In advancing ICT development as well as generating a competitive economy, ERP systems can assume a prevailing role. In consequence, some institutions already implemented ERP systems as a learning medium in tertiary education within the scope of the SAP University Alliances Program.

This promising foundation allows for the introduction of ERP-systems as well as their transnational dissemination in the near future. Therefore, the ERP-CDI was conceived to analyze the development potential of the Sub-Saharan countries. The evaluation of the ERP-CDI indicator – comprising the five societal dimensions social structures, political context, economy, technology and education – facilitates cooperation priorities. In the first step, the most promising countries were identified. In the

second step, they were clustered and visualized as local hot spots on a map. Building upon these hot spots, precise approaches for further proceedings can be devised. In order to provide a clear understanding of the differing circumstances prevailing in the selected countries, individual country profiles have been elaborated.

In summary, it can be stated that there are unequal conditions – not only between the countries but also within a country – which are a challenge for the implementation of the project. While in some African countries such as South Africa, Tanzania or Lesotho the overall standard of living gradually improved, most of them still face issues such as poverty, unemployment and gender inequality.

Concerning the political context, two major aspects can be determined: On the one hand, many African countries appreciate to participate in international development activities. On the other hand, weak political structures of the public administration often hamper the implementation as well as the realization of pioneering projects.

The economic sector exhibits similar findings. A strong economic growth as well as high national and foreign investments characterize the economic landscape of many African countries, whereas the social framework often cannot keep pace with the proceeding economic development.

In the context of international development cooperation, most of the countries in Sub-Saharan Africa regard education as an essential pillar for sustainable development. This is reflected in the fact that education has become increasingly institutionalized in these countries. Due to new political priorities as well as funding from international non-governmental organizations nearly all countries have implemented policies ensuring free universal primary education. Nevertheless, especially the rural areas face major challenges such as widespread rudimentary educational structures. Regarding the tertiary sector, certain countries have a sophisticated private and public university system, cooperating with international universities, e.g. in the USA or Great Britain. This collaboration benefits, in particular, from a comparatively well-established ICT infrastructure in some universities.

Within the last two decades, the availability of telecommunications services has significantly increased across Sub-Saharan Africa. Networks have been expanded, providing access to basic telecommunications services for the majority of Africans, albeit the number of subscribers to fixed-line networks, relative to the size of the population, remains static. Although more and more Africans are accessing the Internet via mobile phone, online use in Sub-Saharan Africa still lags far behind compared to other parts of the world.

Despite the progress in recent years, further steps have to be taken – such as closing the gender gap, the introduction of uniform and quality standards of education as well as accelerating the development of the technological infrastructure.

Concerning the advancement of the project, which conclusions can be drawn from the study? The three identified hot spots are the basis of a road map, according to which the project will be rolled out. Starting with these key areas, possible project partners and institutions can be acquired, thus building up an international network. It is envisaged to promote a cross-border partnership between institutions of higher education in Sub-Saharan Africa. On the one hand, the successful implementation of the project will lead to a growing number of students being trained in ICT-skills, especially in the planning of corporate resources. On the other hand, the cooperation with African universities will promote the development and realization of adequate curricula adapted to the demands of the African market through joint local research. Furthermore, the collaboration between the Otto-von-Guericke University and the industrial partner SAP University Alliances, supported by the public partner DEG, will be an important cornerstone of success of the international development cooperation.

I Data

Index

Annex 1: ERP-CDI value and ranking..... I

Annex 2: ERP-CDI Visuals II

Annex 3: ERP-CDI Data and Normalization V

Annex 4: Higher Education Institutions XI

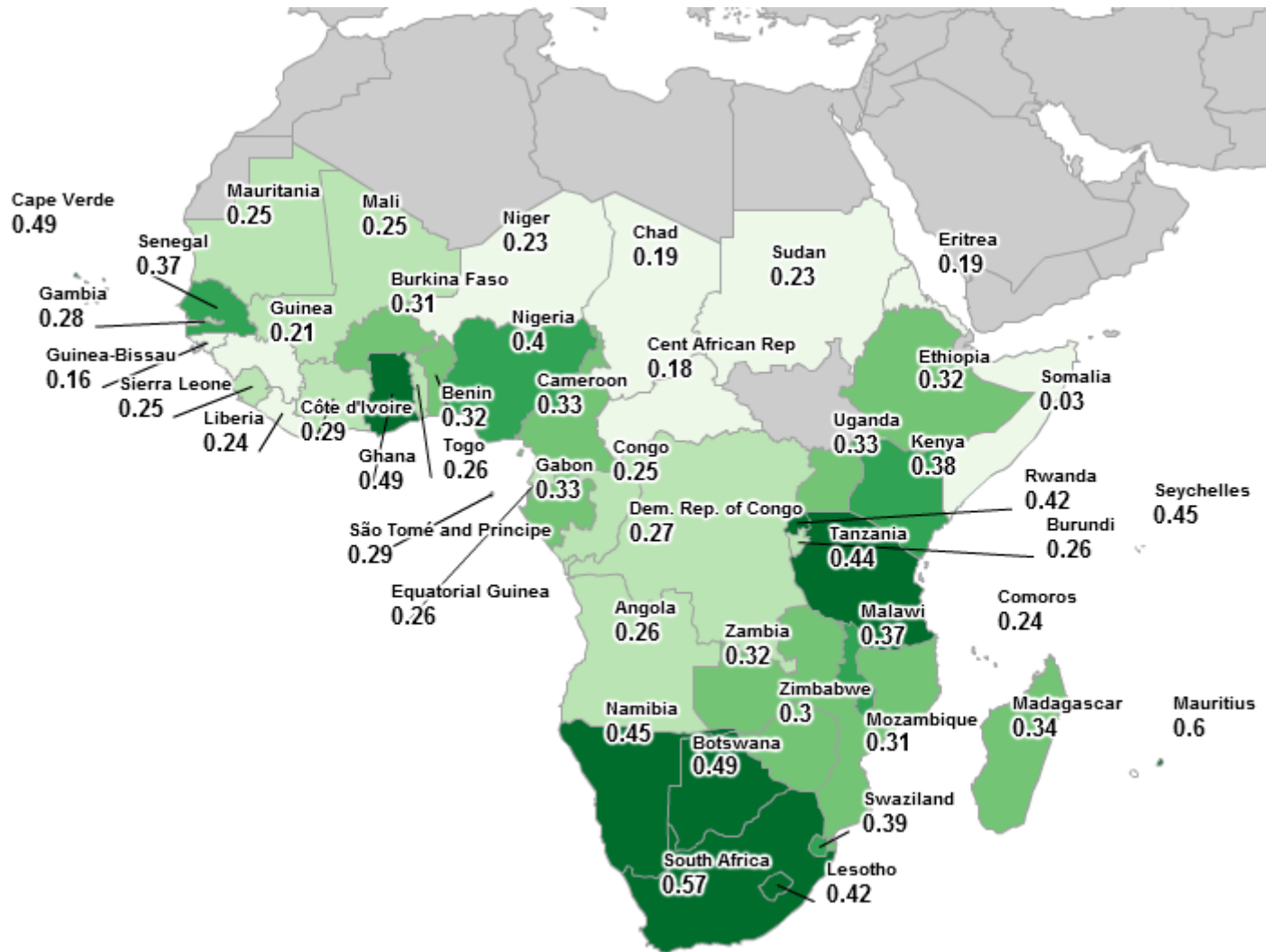
Annex 1: ERP-CDI value and ranking

Country Name	ERP-CDI	ERP-CDI ranking
Mauritius	0,6035	1
South Africa	0,5686	2
Botswana	0,4889	3
Ghana	0,4876	4
Cape Verde	0,4869	5
Namibia	0,4508	6
Seychelles	0,4491	7
Tanzania	0,4419	8
Rwanda	0,4200	9
Lesotho	0,4172	10
Nigeria	0,3985	11
Swaziland	0,3890	12
Kenya	0,3846	13
Malawi	0,3719	14
Senegal	0,3709	15
Madagascar	0,3355	16
Gabon	0,3337	17
Cameroon	0,3311	18
Uganda	0,3309	19
Benin	0,3226	20
Zambia	0,3219	21
Ethiopia	0,3205	22
Burkina Faso	0,3104	23
Mozambique	0,3061	24
Zimbabwe	0,2972	25
Cote d'Ivoire	0,2935	26
Sao Tome and Principe	0,2912	27
Gambia, The	0,2786	28
Congo, Dem. Rep.	0,2727	29
Angola	0,2640	30
Burundi	0,2626	31
Togo	0,2616	32
Equatorial Guinea	0,2560	33
Mauritania	0,2534	34
Congo, Rep.	0,2493	35
Mali	0,2467	36
Sierra Leone	0,2459	37
Liberia	0,2380	38
Comoros	0,2352	39
Niger	0,2298	40
Sudan	0,2285	41
Guinea	0,2105	42
Chad	0,1854	43
Eritrea	0,1850	44
Central African Republic	0,1831	45
Guinea-Bissau	0,1619	46
Somalia	0,0338	47
South Sudan*		

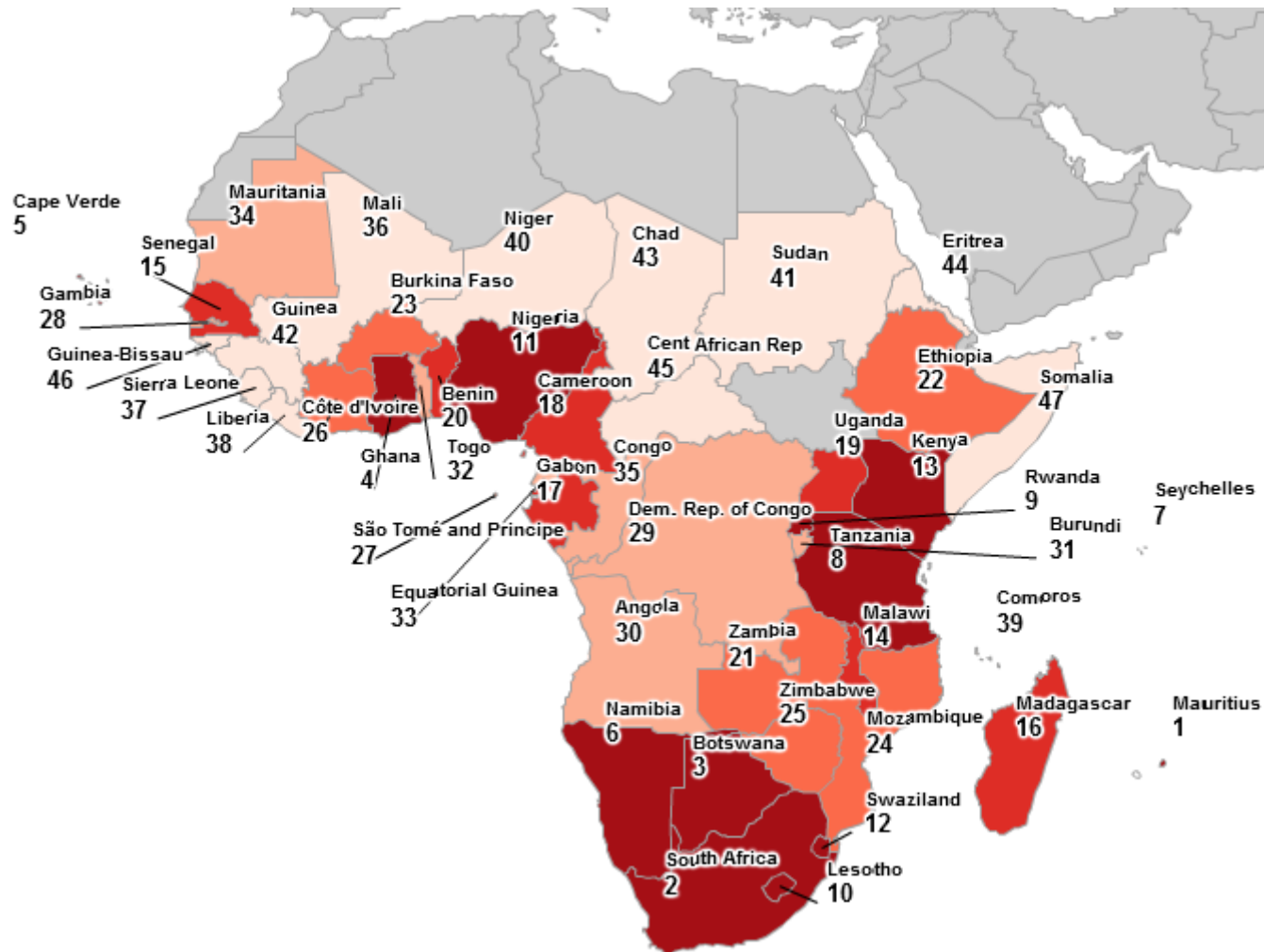
*no data available: state formation in 2011

Annex 2: ERP-CDI Visuals

ERP-CDI value



ERP-CDI ranking



Annex 3: ERP-CDI Data and Normalization

sector	social structure															
sub-sector	terms of living								gender equality							
indicator	urban population (% of total)				labor participation rate, total (% of total population ages 15+)				labor force gender balance (%)				literacy gender balance (%)			
Country Name	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm
Angola	58.50	2010	0.6802	0.6802	69.70	2010	0.7805	0.7805	4.09	2010	0.5000	0.5000	25.27	2009	0.0000	0.0000
Benin	42.00	2010	0.4884	0.4884	72.60	2010	0.8130	0.8130	2.47	2010	0.7500	0.7500	25.12	2009	0.0000	0.0000
Botswana	61.10	2010	0.7105	0.7105	76.60	2010	0.8578	0.8578	3.66	2010	0.5000	0.5000	0.60	2009	1.0000	1.0000
Burkina Faso	20.40	2010	0.2372	0.2372	83.80	2010	0.9384	0.9384	2.44	2010	0.7500	0.7500	15.10	2007	0.2500	0.2500
Burundi	11.00	2010	0.1279	0.1279	82.80	2010	0.9272	0.9272	2.11	2010	0.7500	0.7500	11.70	2009	0.5000	0.5000
Cameroon	58.40	2010	0.6791	0.6791	70.50	2010	0.7895	0.7895	4.34	2010	0.5000	0.5000	15.93	2007	0.2500	0.2500
Cape Verde	61.10	2010	0.7105	0.7105	66.40	2010	0.7436	0.7436	11.58	2010	0.2500	0.2500	9.82	2009	0.7500	0.7500
Central African Republic	38.90	2010	0.4523	0.4523	78.70	2010	0.8813	0.8813	2.93	2010	0.7500	0.7500	26.98	2009	0.0000	0.0000
Chad	27.60	2010	0.3209	0.3209	72.20	2010	0.8085	0.8085	4.74	2010	0.5000	0.5000	21.40	2009	0.0000	0.0000
Comoros	28.20	2010	0.3279	0.3279	57.50	2010	0.6439	0.6439	19.79	2010	0.0000	0.0000	11.04	2009	0.5000	0.5000
Congo, Dem. Rep.	35.20	2010	0.4093	0.4093	71.30	2010	0.7984	0.7984	0.15	2010	1.0000	1.0000	24.63	2009	0.0000	0.0000
Congo, Rep.	62.10	2010	0.7221	0.7221	70.50	2010	0.7895	0.7895	1.45	2010	0.7500	0.7500				
Cote d'Ivoire	50.10	2010	0.5826	0.5826	66.80	2010	0.7480	0.7480	12.61	2010	0.2500	0.2500	19.38	2009	0.2500	0.2500
Equatorial Guinea	39.70	2010	0.4616	0.4616	86.70	2010	0.9709	0.9709	5.30	2010	0.5000	0.5000	7.25	2009	0.7500	0.7500
Eritrea	21.60	2010	0.2512	0.2512	84.60	2010	0.9474	0.9474	1.41	2010	0.7500	0.7500	21.84	2009	0.0000	0.0000
Ethiopia	17.60	2010	0.2047	0.2047	84.00	2010	0.9406	0.9406	2.83	2010	0.7500	0.7500	23.96	2008	0.0000	0.0000
Gabon	86.00	2010	1.0000	1.0000	60.50	2010	0.6775	0.6775	3.70	2010	0.5000	0.5000	7.33	2009	0.7500	0.7500
Gambia, The	58.10	2010	0.6756	0.6756	77.60	2010	0.8690	0.8690	2.06	2010	0.7500	0.7500	21.77	2009	0.0000	0.0000
Ghana	51.50	2010	0.5988	0.5988	69.20	2010	0.7749	0.7749	2.36	2010	0.7500	0.7500	12.42	2009	0.5000	0.5000
Guinea	35.40	2010	0.4116	0.4116	71.80	2010	0.8040	0.8040	4.79	2010	0.5000	0.5000	22.69	2009	0.0000	0.0000
Guinea-Bissau	30.00	2010	0.3488	0.3488	72.90	2010	0.8163	0.8163	2.73	2010	0.7500	0.7500	28.88	2009	0.0000	0.0000
Kenya	22.20	2010	0.2581	0.2581	66.30	2010	0.7424	0.7424	3.55	2010	0.5000	0.5000	6.96	2009	0.7500	0.7500
Lesotho	26.90	2010	0.3128	0.3128	65.80	2010	0.7368	0.7368	4.00	2010	0.5000	0.5000	12.43	2009	0.5000	0.5000
Liberia	61.50	2010	0.7151	0.7151	60.90	2010	0.6820	0.6820	2.30	2010	0.7500	0.7500	9.22	2009	0.7500	0.7500
Madagascar	30.20	2010	0.3512	0.3512	86.10	2010	0.9642	0.9642	1.06	2010	0.7500	0.7500	5.78	2008	0.7500	0.7500
Malawi	19.80	2010	0.2302	0.2302	83.10	2010	0.9306	0.9306	1.53	2010	0.7500	0.7500	13.63	2009	0.5000	0.5000
Mali	33.30	2010	0.3872	0.3872	52.90	2010	0.5924	0.5924	14.52	2010	0.2500	0.2500	16.67	2006	0.2500	0.2500
Mauritania	41.40	2010	0.4814	0.4814	53.70	2010	0.6013	0.6013	23.47	2010	0.0000	0.0000	14.19	2009	0.5000	0.5000
Mauritius	42.60	2010	0.4953	0.4953	59.50	2010	0.6663	0.6663	12.35	2010	0.2500	0.2500	5.35	2009	0.7500	0.7500
Mozambique	38.40	2010	0.4465	0.4465	84.70	2010	0.9485	0.9485	3.56	2010	0.5000	0.5000	28.67	2009	0.0000	0.0000
Namibia	38.00	2010	0.4419	0.4419	64.00	2010	0.7167	0.7167	3.67	2010	0.5000	0.5000	0.78	2009	1.0000	1.0000
Niger	16.70	2010	0.1942	0.1942	64.60	2010	0.7234	0.7234	18.80	2010	0.0000	0.0000	27.84	2005	0.0000	0.0000
Nigeria	49.80	2010	0.5791	0.5791	55.50	2010	0.6215	0.6215	7.16	2010	0.2500	0.2500	22.15	2009	0.0000	0.0000
Rwanda	18.90	2010	0.2198	0.2198	85.80	2010	0.9608	0.9608	1.78	2010	0.7500	0.7500	8.17	2009	0.7500	0.7500
Sao Tome and Principe	62.20	2010	0.7233	0.7233	59.40	2010	0.6652	0.6652	12.80	2010	0.2500	0.2500	9.69	2009	0.7500	0.7500
Senegal	42.90	2010	0.4988	0.4988	76.90	2010	0.8611	0.8611	6.10	2010	0.5000	0.5000	23.14	2009	0.0000	0.0000
Seychelles	55.30	2010	0.6430	0.6430									0.85	2008	1.0000	1.0000
Sierra Leone	38.40	2010	0.4465	0.4465	67.60	2010	0.7570	0.7570	0.72	2010	1.0000	1.0000	22.62	2009	0.0000	0.0000
Somalia	37.40	2010	0.4349	0.4349	56.90	2010	0.6372	0.6372	16.37	2010	0.0000	0.0000				
South Africa	61.70	2010	0.7174	0.7174	52.00	2010	0.5823	0.5823	7.22	2010	0.2500	0.2500	3.67	2007	1.0000	1.0000
South Sudan																
Sudan	45.20	2010	0.5256	0.5256	53.60	2010	0.6002	0.6002	21.27	2010	0.0000	0.0000				
Swaziland	25.50	2010	0.2965	0.2965	56.60	2010	0.6338	0.6338	10.34	2010	0.2500	0.2500	1.59	2009	1.0000	1.0000
Tanzania	26.40	2010	0.3070	0.3070	89.30	2010	1.0000	1.0000	0.16	2010	1.0000	1.0000	12.09	2009	0.5000	0.5000
Togo	43.40	2010	0.5047	0.5047	80.80	2010	0.9048	0.9048	0.47	2010	1.0000	1.0000	25.89	2006	0.0000	0.0000
Uganda	13.30	2010	0.1547	0.1547	77.90	2010	0.8723	0.8723	0.73	2010	1.0000	1.0000	18.04	2010	0.2500	0.2500
Zambia	35.70	2010	0.4151	0.4151	79.50	2010	0.8903	0.8903	3.88	2010	0.5000	0.5000	19.26	2009	0.2500	0.2500
Zimbabwe	38.30	2010	0.4453	0.4453	86.10	2010	0.9642	0.9642	0.66	2010	1.0000	1.0000	5.31	2009	0.7500	0.7500
best value*	86.00	max	Gabon	1	89.30	max	Tanzania	1	0.15	min	Rwanda	1	0.60	min	Botswana	1

* best value of all listed countries; max/min determines whether a high or low value is best; name of country with best value; indicator weight in ERP-CDI structure

sector	politics																			
sub-sector	state reliability								effective governance											
indicator	political stability and absence of violence (ranking)				rule of law (ranking)				control of corruption (ranking)				quality of public service (ranking)				ease of doing business (ranking)			
Country Name	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm
Angola	36.79	2010	0.4699	0.4699	9.00	2010	0.1203	0.1203	3.83	2010	0.0479	0.0958	12.44	2010	0.1646	0.3291	17.60	2011	0.4251	0.8502
Benin	56.13	2010	0.7169	0.7169	27.96	2010	0.3734	0.3734	25.84	2010	0.3234	0.6467	35.41	2010	0.4684	0.9367	17.80	2011	0.4300	0.8599
Botswana	78.30	2010	1.0000	1.0000	67.77	2010	0.9051	0.9051	79.90	2010	1.0000	2.0000	67.46	2010	0.8924	1.7848	35.40	2011	0.8551	1.7101
Burkina Faso	40.57	2010	0.5181	0.5181	48.34	2010	0.6456	0.6456	44.02	2010	0.5509	1.1018	33.01	2010	0.4367	0.8734	23.20	2011	0.5604	1.1208
Burundi	7.55	2010	0.0964	0.0964	9.95	2010	0.1329	0.1329	12.44	2010	0.1557	0.3114	12.92	2010	0.1709	0.3418	16.80	2011	0.4058	0.8116
Cameroon	26.89	2010	0.3434	0.3434	15.17	2010	0.2025	0.2025	16.75	2010	0.2096	0.4192	18.66	2010	0.2468	0.4937	21.10	2011	0.5097	1.0193
Cape Verde	76.42	2010	0.9759	0.9759	63.98	2010	0.8544	0.8544	74.64	2010	0.9341	1.8683	53.59	2010	0.7089	1.4177	29.80	2011	0.7198	1.4396
Central African Republic	3.30	2010	0.0422	0.0422	6.64	2010	0.0886	0.0886	23.92	2010	0.2994	0.5988	5.26	2010	0.0696	0.1392	12.40	2011	0.2995	0.5990
Chad	8.02	2010	0.1024	0.1024	3.79	2010	0.0506	0.0506	5.26	2010	0.0659	0.1317	4.31	2010	0.0570	0.1139	12.90	2011	0.3116	0.6232
Comoros	30.66	2010	0.3916	0.3916	13.74	2010	0.1835	0.1835	26.32	2010	0.3293	0.6587	0.96	2010	0.0127	0.0253	22.30	2011	0.5386	1.0773
Congo, Dem. Rep.	2.83	2010	0.0361	0.0361	2.37	2010	0.0316	0.0316	2.87	2010	0.0359	0.0719	1.44	2010	0.0190	0.0380	13.70	2011	0.3309	0.6618
Congo, Rep.	35.38	2010	0.4518	0.4518	12.32	2010	0.1646	0.1646	11.48	2010	0.1437	0.2874	8.61	2010	0.1139	0.2278	13.00	2011	0.3140	0.6280
Cote d'Ivoire	7.08	2010	0.0904	0.0904	9.48	2010	0.1266	0.1266	9.57	2010	0.1198	0.2395	7.18	2010	0.0949	0.1899	18.60	2011	0.4493	0.8986
Equatorial Guinea	53.77	2010	0.6867	0.6867	8.53	2010	0.1139	0.1139	1.44	2010	0.0180	0.0359	1.91	2010	0.0253	0.0506	23.60	2011	0.5700	1.1401
Eritrea	19.81	2010	0.2530	0.2530	8.06	2010	0.1076	0.1076	39.23	2010	0.4910	0.9820	6.22	2010	0.0823	0.1646	14.60	2011	0.3527	0.7053
Ethiopia	5.19	2010	0.0663	0.0663	27.49	2010	0.3671	0.3671	28.23	2010	0.3533	0.7066	42.58	2010	0.5633	1.1266	30.20	2011	0.7295	1.4589
Gabon	53.30	2010	0.6807	0.6807	35.55	2010	0.4747	0.4747	24.40	2010	0.3054	0.6108	20.10	2010	0.2658	0.5316	21.30	2011	0.5145	1.0290
Gambia, The	48.58	2010	0.6205	0.6205	36.02	2010	0.4810	0.4810	34.93	2010	0.4371	0.8743	29.67	2010	0.3924	0.7848	25.60	2011	0.5217	1.0435
Ghana	47.64	2010	0.6084	0.6084	54.03	2010	0.7215	0.7215	60.29	2010	0.7545	1.5090	55.50	2010	0.7342	1.4684	31.50	2011	0.8575	1.7150
Guinea	4.72	2010	0.0602	0.0602	2.84	2010	0.0380	0.0380	8.13	2010	0.1018	0.2036	11.48	2010	0.1519	0.3038	13.70	2011	0.3309	0.6618
Guinea-Bissau	23.58	2010	0.3012	0.3012	5.69	2010	0.0759	0.0759	14.35	2010	0.1796	0.3593	13.40	2010	0.1772	0.3544	17.00	2011	0.4106	0.8213
Kenya	13.68	2010	0.1747	0.1747	16.59	2010	0.2215	0.2215	18.66	2010	0.2335	0.4671	35.89	2010	0.4747	0.9494	27.80	2011	0.6715	1.3430
Lesotho	63.21	2010	0.8072	0.8072	46.45	2010	0.6203	0.6203	62.68	2010	0.7844	1.5689	42.11	2010	0.5570	1.1139	21.30	2011	0.5145	1.0290
Liberia	29.72	2010	0.3795	0.3795	17.06	2010	0.2278	0.2278	36.36	2010	0.4551	0.9102	8.13	2010	0.1076	0.2152	21.40	2011	0.5169	1.0338
Madagascar	15.09	2010	0.1928	0.1928	23.70	2010	0.3165	0.3165	49.76	2010	0.6228	1.2455	22.97	2010	0.3038	0.6076	21.30	2011	0.5145	1.0290
Malawi	49.53	2010	0.6325	0.6325	50.71	2010	0.6772	0.6772	42.11	2010	0.5269	1.0539	41.15	2010	0.5443	1.0886	21.40	2011	0.5169	1.0338
Mali	34.91	2010	0.4458	0.4458	40.28	2010	0.5380	0.5380	30.14	2010	0.3772	0.7545	19.14	2010	0.2532	0.5063	24.50	2011	0.5918	1.1836
Mauritania	12.26	2010	0.1566	0.1566	22.27	2010	0.2975	0.2975	29.19	2010	0.3653	0.7305	17.22	2010	0.2278	0.4557	21.60	2011	0.5217	1.0435
Mauritius	65.57	2010	0.8373	0.8373	74.88	2010	1.0000	1.0000	73.21	2010	0.9162	1.8323	75.60	2010	1.0000	2.0000	41.40	2011	1.0000	2.0000
Mozambique	57.08	2010	0.7289	0.7289	36.97	2010	0.4937	0.4937	42.58	2010	0.5329	1.0659	38.76	2010	0.5127	1.0253	22.20	2011	0.5362	1.0725
Namibia	71.70	2010	0.9157	0.9157	61.61	2010	0.8228	0.8228	64.11	2010	0.8024	1.6048	59.33	2010	0.7848	1.5696	32.80	2011	0.7923	1.5845
Niger	14.62	2010	0.1867	0.1867	33.18	2010	0.4430	0.4430	31.10	2010	0.3892	0.7784	27.75	2010	0.3671	0.7342	18.30	2011	0.4420	0.8841
Nigeria	3.77	2010	0.0482	0.0482	10.90	2010	0.1456	0.1456	15.79	2010	0.1976	0.3952	10.53	2010	0.1392	0.2785	23.70	2011	0.5725	1.1449
Rwanda	41.51	2010	0.5301	0.5301	45.97	2010	0.6139	0.6139	70.81	2010	0.8862	1.7725	54.07	2010	0.7152	1.4304	36.10	2011	0.8720	1.7440
Sao Tome and Principe	52.36	2010	0.6687	0.6687	29.86	2010	0.3987	0.3987	43.54	2010	0.5449	1.0898	28.71	2010	0.3797	0.7595	18.20	2011	0.4396	0.8792
Senegal	33.02	2010	0.4217	0.4217	41.71	2010	0.5570	0.5570	29.67	2010	0.3713	0.7425	37.32	2010	0.4937	0.9873	19.30	2011	0.4662	0.9324
Seychelles	75.00	2010	0.9578	0.9578	55.92	2010	0.7468	0.7468	65.07	2010	0.8144	1.6287	62.20	2010	0.8228	1.6456	29.50	2011	0.7126	1.4251
Sierra Leone	37.26	2010	0.4759	0.4759	18.01	2010	0.2405	0.2405	25.36	2010	0.3174	0.6347	11.00	2010	0.1456	0.2911	21.80	2011	0.5266	1.0531
Somalia	0.00	2010	0.0000	0.0000	0.00	2010	0.0000	0.0000	0.00	2010	0.0000	0.0000	0.00	2010	0.0000	0.0000				
South Africa	44.34	2010	0.5663	0.5663	57.82	2010	0.7722	0.7722	60.77	2010	0.7605	1.5210	65.07	2010	0.8608	1.7215	36.70	2011	0.8865	1.7729
South Sudan																				
Sudan	0.94	2010	0.0120	0.0120	6.16	2010	0.0823	0.0823	4.31	2010	0.0539	0.1078	6.70	2010	0.0886	0.1772	23.00	2011	0.5556	1.1111
Swaziland	42.92	2010	0.5482	0.5482	37.91	2010	0.5063	0.5063	52.63	2010	0.6587	1.3174	36.36	2010	0.4810	0.9620	25.70	2011	0.6208	1.2415
Tanzania	45.75	2010	0.5843	0.5843	36.49	2010	0.4873	0.4873	37.32	2010	0.4671	0.9341	37.80	2010	0.5000	1.0000	27.00	2011	0.6522	1.3043
Togo	38.21	2010	0.4880	0.4880	18.96	2010	0.2532	0.2532	17.70	2010	0.2216	0.4431	5.74	2010	0.0759	0.1519	19.80	2011	0.4783	0.9565
Uganda	15.57	2010	0.1988	0.1988	42.18	2010	0.5633	0.5633	20.57	2010	0.2575	0.5150	34.45	2010	0.4557	0.9114	26.30	2011	0.6353	1.2705
Zambia	63.68	2010	0.8133	0.8133	38.39	2010	0.5127	0.5127	33.49	2010	0.4192	0.8383	23.44	2010	0.3101	0.6203	30.00	2011	0.7246	1.4493
Zimbabwe	13.21	2010	0.1687	0.1687	0.95	2010	0.0127	0.0127	2.39	2010	0.0299	0.0599	3.83	2010	0.0506	0.1013	18.80	2011	0.4541	0.9082
best value*	78.30	max	Botswana	1	74.88	max	Mauritius	1	79.90	max	Botswana	2	75.60	max	Mauritius	2	41.40	max	Mauritius	2

* best value of all listed countries; max/min determines whether a high or low value is best; name of country with best value; indicator weight in ERP-CDI structure

sector	economy																				
sub-sector	economic performance								economic development								educational sector				
indicator	GDP (current US\$)				GDP per capita (current US\$)				GDP per capita growth (annual %), average				foreign direct investments, net inflows (BoP, current US\$)				public spending on education, total (% of GDP)				
Country Name	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	
Angola	84,937,012,042.88	2010	0.2334	0.2334	4,451.16	2010	0.2225	0.2225	10.35	2005-2010	1.0000	1.0000	-3,227,211,182.45	2010	-0.5336	-1.0671	2.65	2006	0.2017	0.6052	
Benin	6,633,055,845.52	2010	0.0182	0.0182	749.50	2010	0.0375	0.0375	0.86	2005-2010	0.0829	0.0829	110,930,000.00	2010	0.0183	0.0367	4.51	2009	0.3442	1.0325	
Botswana	14,858,673,700.29	2010	0.0408	0.0408	7,403.42	2010	0.3700	0.3700	1.42	2005-2010	0.1375	0.1375	264,954,426.91	2010	0.0438	0.0876	7.83	2009	0.5966	1.7899	
Burkina Faso	8,820,312,673.51	2010	0.0242	0.0242	535.60	2010	0.0268	0.0268	2.46	2005-2010	0.2373	0.2373	37,127,520.92	2010	0.0061	0.0123	4.59	2007	0.3501	1.0502	
Burundi	1,610,544,922.06	2010	0.0044	0.0044	192.14	2010	0.0096	0.0096	0.62	2005-2010	0.0596	0.0596	780,825.76	2010	0.0001	0.0003	9.24	2010	0.7048	2.1144	
Cameroon	22,480,348,401.09	2010	0.0618	0.0618	1,147.02	2010	0.0573	0.0573	0.61	2005-2010	0.0584	0.0584	-51,206.67	2010	-0.0001	-0.0002	3.48	2010	0.2654	0.7963	
Cape Verde	1,648,093,063.02	2010	0.0045	0.0045	3,322.77	2010	0.1661	0.1661	5.67	2005-2010	0.5477	0.5477	111,703,556.77	2010	0.0185	0.0369	5.62	2010	0.4286	1.2859	
Central African Republic	2,013,014,939.11	2010	0.0055	0.0055	457.40	2010	0.0229	0.0229	0.99	2005-2010	0.0957	0.0957	72,035,752.62	2010	0.0119	0.0238	1.19	2010	0.0906	0.2718	
Chad	7,587,673,160.68	2010	0.0209	0.0209	675.84	2010	0.0338	0.0338	0.45	2005-2010	0.0432	0.0432	781,366,889.61	2010	0.1292	0.2584	2.78	2010	0.2123	0.6368	
Comoros	541,097,513.04	2010	0.0015	0.0015	736.19	2010	0.0368	0.0368	-0.88	2005-2010	-0.0853	-0.0853	9,391,765.97	2010	0.0016	0.0031	7.61	2008	0.5801	1.7402	
Congo, Dem. Rep.	13,144,743,452.55	2010	0.0361	0.0361	199.27	2010	0.0100	0.0100	2.75	2005-2010	0.2652	0.2652	2,939,300,000.00	2010	0.4860	0.9719					
Congo, Rep.	12,007,880,067.38	2010	0.0330	0.0330	2,970.04	2010	0.1484	0.1484	2.91	2005-2010	0.2814	0.2814	2,815,957,838.79	2010	0.4656	0.9311	6.22	2010	0.4743	1.4229	
Cote d'Ivoire	22,780,280,529.89	2010	0.0626	0.0626	1,154.13	2010	0.0577	0.0577	0.31	2005-2010	0.0304	0.0304	417,933,000.00	2010	0.0691	0.1382	4.60	2008	0.3509	1.0528	
Equatorial Guinea	14,006,302,933.21	2010	0.0385	0.0385	20,009.00	2010	1.0000	1.0000	5.19	2005-2010	0.5008	0.5008	695,026,126.59	2010	0.1149	0.2298					
Eritrea	2,117,008,130.08	2010	0.0058	0.0058	402.93	2010	0.0201	0.0201	-3.33	2005-2010	-0.3214	-0.3214	55,600,000.00	2010	0.0092	0.0184	2.13	2006	0.1622	0.4865	
Ethiopia	29,717,009,195.63	2010	0.0817	0.0817	358.25	2010	0.0179	0.0179	8.19	2005-2010	0.7908	0.7908	288,271,568.25	2010	0.0477	0.0953	4.69	2010	0.3574	1.0721	
Gabon	13,137,183,781.24	2010	0.0361	0.0361	8,729.03	2010	0.4363	0.4363	0.82	2005-2010	0.0790	0.0790	170,389,956.18	2010	0.0282	0.0563					
Gambia, The	806,523,947.75	2010	0.0022	0.0022	466.47	2010	0.0233	0.0233	0.86	2005-2010	0.0831	0.0831	37,366,208.26	2010	0.0062	0.0124	4.99	2010	0.3801	1.1403	
Ghana	32,309,445,183.40	2010	0.0888	0.0888	1,324.59	2010	0.0662	0.0662	3.96	2005-2010	0.3823	0.3823	2,527,350,000.00	2010	0.4178	0.8357	5.52	2010	0.4207	1.2620	
Guinea	4,510,589,866.06	2010	0.0124	0.0124	451.87	2010	0.0226	0.0226	3.35	2005-2010	0.0338	0.0338	101,330,000.00	2010	0.0168	0.0335	2.44	2008	0.1859	0.5577	
Guinea-Bissau	878,517,652.02	2010	0.0024	0.0024	579.88	2010	0.0290	0.0290	1.14	2005-2010	0.1102	0.1102	8,848,735.71	2010	0.0015	0.0029					
Kenya	32,198,151,217.22	2010	0.0885	0.0885	794.76	2010	0.0397	0.0397	2.16	2005-2010	0.2082	0.2082	185,793,189.89	2010	0.0307	0.0614	6.67	2010	0.5084	1.5253	
Lesotho	2,179,350,966.53	2010	0.0060	0.0060	1,003.85	2010	0.0502	0.0502	3.25	2005-2010	0.3140	0.3140	117,047,679.10	2010	0.0194	0.0387	13.12	2008	1.0000	3.0000	
Liberia	986,201,593.74	2010	0.0027	0.0027	246.92	2010	0.0123	0.0123	2.17	2005-2010	0.2092	0.2092	452,870,863.71	2010	0.0749	0.1497	2.77	2008	0.2114	0.6343	
Madagascar	8,720,543,553.67	2010	0.0240	0.0240	421.00	2010	0.0210	0.0210	0.33	2005-2010	0.0319	0.0319	860,385,317.65	2010	0.1422	0.2845	3.20	2009	0.2440	0.7321	
Malawi	5,054,150,505.87	2010	0.0139	0.0139	339.18	2010	0.0170	0.0170	3.45	2005-2010	0.3334	0.3334	140,000,000.00	2010	0.0231	0.0463	5.72	2011	0.4360	1.3079	
Mali	9,251,388,616.88	2010	0.0254	0.0254	601.91	2010	0.0301	0.0301	1.76	2005-2010	0.1697	0.1697	147,643,147.46	2010	0.0244	0.0488	4.47	2010	0.3406	1.0219	
Mauritania	3,613,898,829.37	2010	0.0099	0.0099	1,044.48	2010	0.0522	0.0522	3.45	2005-2010	0.3334	0.3334	13,630,000.00	2010	0.0023	0.0045	4.33	2010	0.3305	0.9914	
Mauritius	9,723,857,670.65	2010	0.0267	0.0267	7,590.83	2010	0.3794	0.3794	3.31	2005-2010	0.3196	0.3196	431,046,226.21	2010	0.0713	0.1425	3.10	2009	0.2365	0.7096	
Mozambique	9,586,185,528.38	2010	0.0263	0.0263	409.84	2010	0.0205	0.0205	4.92	2005-2010	0.4748	0.4748	789,018,866.38	2010	0.1304	0.2609	5.01	2006	0.3817	1.1452	
Namibia	12,170,331,921.87	2010	0.0334	0.0334	5,330.85	2010	0.2664	0.2664	1.99	2005-2010	0.1925	0.1925	795,856,616.07	2010	0.1316	0.2632	8.07	2010	0.6154	1.8461	
Niger	5,548,814,097.97	2010	0.0152	0.0152	357.71	2010	0.0179	0.0179	1.35	2005-2010	0.1307	0.1307	946,872,630.70	2010	0.1565	0.3131	3.85	2010	0.2934	0.8801	
Nigeria	202,522,959,166.14	2010	0.5565	0.5565	1,278.37	2010	0.0639	0.0639	4.00	2005-2010	0.3861	0.3861	6,048,560,295.20	2010	1.0000	2.0000					
Rwanda	5,627,667,377.43	2010	0.0155	0.0155	529.71	2010	0.0265	0.0265	4.88	2005-2010	0.4715	0.4715	42,332,000.00	2010	0.0070	0.0140	4.67	2011	0.3558	1.0674	
Sao Tome and Principe	196,806,609.57	2010	0.0005	0.0005	1,192.77	2010	0.0596	0.0596	3.82	2005-2010	0.3684	0.3684	24,644,600.00	2010	0.0041	0.0081					
Senegal	12,855,297,513.21	2010	0.0353	0.0353	1,033.88	2010	0.0517	0.0517	1.07	2005-2010	0.1032	0.1032	237,194,664.81	2010	0.0392	0.0784	5.63	2010	0.4295	1.2886	
Seychelles	936,609,214.45	2010	0.0026	0.0026	10,765.62	2010	0.5380	0.5380	4.27	2005-2010	0.4121	0.4121	167,307,290.61	2010	0.0277	0.0553	5.01	2006	0.3820	1.1459	
Sierra Leone	1,905,015,045.14	2010	0.0052	0.0052	324.70	2010	0.0162	0.0162	2.81	2005-2010	0.2716	0.2716	86,590,238.69	2010	0.0143	0.0286	4.34	2009	0.3309	0.9927	
Somalia													112,000,000.00	2010	0.0185	0.0370					
South Africa	363,910,425,627.97	2010	1.0000	1.0000	7,279.52	2010	0.3638	0.3638	2.35	2005-2010	0.2270	0.2270	1,224,280,433.34	2010	0.2024	0.4048	5.99	2010	0.4566	1.3698	
South Sudan																					
Sudan	62,045,783,132.53	2010	0.1705	0.1705	1,424.64	2010	0.0712	0.0712	4.53	2005-2010	0.4380	0.4380	2,063,730,997.66	2010	0.3412	0.6824					
Swaziland	3,697,606,785.27	2010	0.0102	0.0102	3,501.52	2010	0.1750	0.1750	1.82	2005-2010	0.1759	0.1759	135,660,413.69	2010	0.0224	0.0449	7.43	2010	0.5662	1.6987	
Tanzania	22,915,004,424.74	2010	0.0630	0.0630	523.80	2010	0.0262	0.0262	3.96	2005-2010	0.3822	0.3822	433,441,913.02	2010	0.0717	0.1433	6.18	2010	0.4713	1.4138	
Togo	3,153,400,897.32	2010	0.0087	0.0087	523.13	2010	0.0261	0.0261	0.53	2005-2010	0.0514	0.0514	41,057,614.71	2010	0.0068	0.0136	4.45	2010	0.3393	1.0180	
Uganda	17,010,765,766.70	2010	0.0467	0.0467	508.94	2010	0.0254	0.0254	4.34	2005-2010	0.4195	0.4195	817,178,709.92	2010	0.1351	0.2702	3.18	2009	0.2421	0.7263	
Zambia	16,192,857,209.29	2010	0.0445	0.0445	1,252.64	2010	0.0626	0.0626	3.72	2005-2010	0.3597	0.3597	1,041,400,000.00	2010	0.1722	0.3443	1.35	2008	0.1026	0.3077	
Zimbabwe	7,475,995,911.41	2010	0.0205	0.0205	594.70	2010	0.0297	0.0297	-2.57	2005-2010	-0.2486	-0.2486	105,400,000.00	2010	0.0174	0.0349	2.49	2010	0.1896	0.5689	
best value*	363,910,425,627.97	max	South Africa	1	20,009.00	max	Equatorial Guinea	1	10.35	max	Angola	1	6,048,560,295.20	max	Nigeria	2	13.12	max	Lesotho	3	

* best value of all listed countries; max/min determines whether a high or low value is best; name of country with best value; indicator weight in ERP-CDI structure

sector	technology																				
sub-sector	electric supply								connectivity												
indicator	electricity production (kWh/capita)				access to electricity (% of population)				mobile cellular subscriptions (per 100 people)				fixed broadband internet subscribers (per 100 people)				internet users (per 100 people)				
Country Name	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	
Angola	224.84	2009	0.0449	0.0449	26.20	2009	0.2636	0.2636	46.69	2010	0.3435	0.3435	0.10	2010	0.0144	0.0144	10.00	2010	0.2439	0.4878	
Benin	14.76	2009	0.0030	0.0030	24.80	2009	0.2495	0.2495	79.94	2010	0.5882	0.5882	0.04	2010	0.0056	0.0056	3.13	2010	0.0763	0.1527	
Botswana	224.06	2009	0.0448	0.0448	45.40	2009	0.4567	0.4567	117.76	2010	0.8665	0.8665	0.60	2010	0.0822	0.0822	6.00	2010	0.1464	0.2927	
Burkina Faso					14.60	2009	0.1469	0.1469	34.66	2010	0.2550	0.2550	0.09	2010	0.0119	0.0119	1.40	2010	0.0341	0.0683	
Burundi									13.72	2010	0.1010	0.1010	0.00	2010	0.0003	0.0003	2.10	2010	0.0512	0.1024	
Cameroon	299.40	2009	0.0598	0.0598	48.70	2009	0.4899	0.4899	44.07	2010	0.3242	0.3242	0.01	2010	0.0007	0.0007	4.00	2010	0.0976	0.1951	
Cape Verde									74.97	2010	0.5516	0.5516	3.22	2010	0.4437	0.4437	30.00	2010	0.7318	1.4635	
Central African Republic									22.25	2010	0.1637	0.1637	0.00	2008	0.0000	0.0000	2.30	2010	0.0561	0.1122	
Chad									23.83	2010	0.1753	0.1753	0.00	2010	0.0002	0.0002	1.70	2010	0.0415	0.0829	
Comoros									22.49	2010	0.1655	0.1655	0.02	2010	0.0028	0.0028	5.10	2010	0.1244	0.2488	
Congo, Dem. Rep.	121.95	2009	0.0244	0.0244	11.10	2009	0.1117	0.1117	17.92	2010	0.1318	0.1318	0.01	2010	0.0018	0.0018	0.72	2010	0.0176	0.0351	
Congo, Rep.	130.92	2009	0.0262	0.0262	37.10	2009	0.3732	0.3732	93.96	2010	0.6913	0.6913	0.00	2010	0.0004	0.0004	5.00	2010	0.1220	0.2439	
Cote d'Ivoire	304.60	2009	0.0609	0.0609	47.30	2009	0.4759	0.4759	76.13	2010	0.5602	0.5602	0.04	2010	0.0055	0.0055	2.60	2010	0.0634	0.1268	
Equatorial Guinea									57.01	2010	0.4195	0.4195	0.17	2010	0.0233	0.0233	6.00	2010	0.1464	0.2927	
Eritrea	57.87	2009	0.0116	0.0116	32.00	2009	0.3219	0.3219	3.53	2010	0.0259	0.0259	0.00	2010	0.0003	0.0003	5.40	2010	0.1317	0.2634	
Ethiopia	50.57	2009	0.0101	0.0101	17.00	2009	0.1710	0.1710	8.26	2010	0.0608	0.0608	0.00	2010	0.0007	0.0007	0.75	2010	0.0183	0.0366	
Gabon	1,127.57	2009	0.2253	0.2253	36.70	2009	0.3692	0.3692	106.94	2010	0.7869	0.7869	0.27	2010	0.0374	0.0374	7.23	2010	0.1764	0.3527	
Gambia, The									85.53	2010	0.6293	0.6293	0.02	2010	0.0028	0.0028	9.20	2010	0.2244	0.4488	
Ghana	376.00	2009	0.0751	0.0751	60.50	2009	0.6087	0.6087	71.49	2010	0.5260	0.5260	0.21	2010	0.0283	0.0283	9.55	2010	0.2329	0.4659	
Guinea									40.07	2010	0.2949	0.2949	0.01	2010	0.0007	0.0007	1.00	2010	0.0244	0.0488	
Guinea-Bissau									39.21	2010	0.2885	0.2885	0.00	2008	0.0000	0.0000	2.45	2010	0.0598	0.1195	
Kenya	174.22	2009	0.0348	0.0348	16.10	2009	0.1620	0.1620	61.63	2010	0.4535	0.4535	0.01	2010	0.0014	0.0014	25.90	2010	0.6318	1.2635	
Lesotho					16.00	2009	0.1610	0.1610	45.48	2010	0.3346	0.3346	0.02	2010	0.0025	0.0025	3.86	2010	0.0942	0.1883	
Liberia									39.34	2010	0.2895	0.2895	0.00	2010	0.0006	0.0006	7.00	2010	0.1707	0.3415	
Madagascar					19.00	2009	0.1911	0.1911	37.23	2010	0.2739	0.2739	0.03	2010	0.0036	0.0036	1.70	2010	0.0415	0.0829	
Malawi					9.00	2009	0.0905	0.0905	20.38	2010	0.1500	0.1500	0.03	2010	0.0047	0.0047	2.26	2010	0.0551	0.1103	
Mali									48.41	2010	0.3562	0.3562	0.02	2010	0.0021	0.0021	2.70	2010	0.0659	0.1317	
Mauritania									79.34	2010	0.5838	0.5838	0.19	2010	0.0264	0.0264	3.00	2010	0.0732	0.1464	
Mauritius					99.40	2009	1.0000	1.0000	91.67	2010	0.6745	0.6745	6.10	2010	0.8404	0.8404	28.73	2010	0.7009	1.4018	
Mozambique	742.08	2009	0.1483	0.1483	11.70	2009	0.1177	0.1177	30.88	2010	0.2272	0.2272	0.06	2010	0.0086	0.0086	4.17	2010	0.1017	0.2034	
Namibia	776.96	2009	0.1553	0.1553	34.00	2009	0.3421	0.3421	67.21	2010	0.4945	0.4945	0.42	2010	0.0582	0.0582	6.50	2010	0.1585	0.3171	
Niger									24.53	2010	0.1805	0.1805	0.02	2010	0.0033	0.0033	0.83	2010	0.0202	0.0405	
Nigeria	128.02	2009	0.0256	0.0256	50.60	2009	0.5091	0.5091	55.10	2010	0.4054	0.4054	0.06	2010	0.0086	0.0086	28.43	2010	0.6935	1.3869	
Rwanda									33.40	2010	0.2458	0.2458	0.02	2010	0.0034	0.0034	13.00	2010	0.3171	0.6342	
Sao Tome and Principe									61.97	2010	0.4560	0.4560	0.35	2010	0.0485	0.0485	18.75	2010	0.4574	0.9147	
Senegal	236.06	2009	0.0472	0.0472	42.00	2009	0.4225	0.4225	67.11	2010	0.4937	0.4937	0.63	2010	0.0872	0.0872	16.00	2010	0.3903	0.7806	
Seychelles									135.91	2010	1.0000	1.0000	7.26	2010	1.0000	1.0000	41.00	2010	1.0000	2.0000	
Sierra Leone									34.09	2010	0.2508	0.2508	0.00	2007	0.0000	0.0000	0.26	2009	0.0063	0.0127	
Somalia									6.95	2010	0.0511	0.0511	0.00	2008	0.0000	0.0000	1.16	2009	0.0283	0.0566	
South Africa	5,004.34	2009	1.0000	1.0000	75.00	2009	0.7545	0.7545	100.48	2010	0.7393	0.7393	1.48	2010	0.2042	0.2042	12.33	2010	0.3009	0.6017	
South Sudan																					
Sudan	204.79	2009	0.0409	0.0409	35.90	2009	0.3612	0.3612	40.54	2010	0.2983	0.2983	0.38	2010	0.0521	0.0521	10.16	2008	0.2478	0.4956	
Swaziland									61.78	2010	0.4545	0.4545	0.14	2010	0.0189	0.0189	9.01	2010	0.2198	0.4396	
Tanzania	106.33	2009	0.0212	0.0212	13.90	2009	0.1398	0.1398	46.80	2010	0.3443	0.3443	0.01	2010	0.0010	0.0010	11.00	2010	0.2683	0.5366	
Togo	21.35	2009	0.0043	0.0043	20.00	2009	0.2012	0.2012	40.69	2010	0.2994	0.2994	0.06	2010	0.0088	0.0088	5.38	2010	0.1312	0.2625	
Uganda					9.00	2009	0.0905	0.0905	38.38	2010	0.2824	0.2824	0.16	2010	0.0226	0.0226	12.50	2010	0.3049	0.6098	
Zambia	810.14	2009	0.1619	0.1619	18.80	2009	0.1891	0.1891	41.62	2010	0.3062	0.3062	0.08	2010	0.0108	0.0108	10.13	2010	0.2470	0.4940	
Zimbabwe	631.55	2009	0.1262	0.1262	41.50	2009	0.4175	0.4175	61.25	2010	0.4507	0.4507	0.26	2010	0.0362	0.0362	11.50	2010	0.2805	0.5610	
best value*	5,004.34	max	South Africa	1	99.40	max	Mauritius	1	135.91	max	Seychelles	1	7.26	max	Seychelles	1	41.00	max	Seychelles	2	

* best value of all listed countries; max/min determines whether a high or low value is best; name of country with best value; indicator weight in ERP-CDI structure

sector	education															
sub-sector	higher education system															
indicator	literacy rate, adult total (% of people ages 15 and above)				school enrollment, tertiary (% gross)				expenditure per student, tertiary (% of GDP per capita)				higher education institutions			
Country Name	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm	value	year	norm	weighted norm
Angola	69.96	2009	0.7496	1.4992	3.71	2010	0.1492	0.4476	80.43	2006	0.0415	0.0830	16.00	2005	0.5000	1.5000
Benin	41.65	2009	0.4463	0.8926	10.62	2009	0.4270	1.2809	145.11	2006	0.0749	0.1498	17.00	2005	0.5000	1.5000
Botswana	84.08	2009	0.9009	1.8018	7.44	2006	0.2991	0.8972	256.32	2007	0.1323	0.2646	3.00	2005	0.0000	0.0000
Burkina Faso	28.73	2007	0.3078	0.6157	3.86	2011	0.1553	0.4659	314.19	2007	0.1622	0.3243	16.00	2005	0.5000	1.5000
Burundi	66.57	2009	0.7133	1.4266	3.25	2010	0.1306	0.3918	477.44	2010	0.2464	0.4928	6.00	2005	0.2500	0.7500
Cameroon	70.68	2007	0.7573	1.5147	11.48	2010	0.4616	1.3849	28.00	2010	0.0145	0.0289	37.00	2005	0.7500	2.2500
Cape Verde	84.80	2009	0.9087	1.8173	17.83	2010	0.7171	2.1514	46.45	2009	0.0240	0.0479	4.00	2005	0.0000	0.0000
Central African Republic	55.23	2009	0.5918	1.1836	2.57	2010	0.1034	0.3101	95.97	2010	0.0495	0.0991	8.00	2005	0.2500	0.7500
Chad	33.61	2009	0.3601	0.7203	2.17	2010	0.0872	0.2616	279.06	2010	0.1440	0.2880	16.00	2005	0.5000	1.5000
Comoros	74.15	2009	0.7945	1.5891	7.92	2010	0.3185	0.9554								
Congo, Dem. Rep.	66.99	2009	0.7178	1.4356	6.19	2009	0.2491	0.7473					99.00	2005	1.0000	3.0000
Congo, Rep.					5.51	2010	0.2216	0.6647	134.15	2010	0.0692	0.1385	3.00	2005	0.0000	0.0000
Cote d'Ivoire	55.26	2009	0.5921	1.1842	8.87	2007	0.3566	1.0698	110.32	2007	0.0569	0.1139	25.00	2005	0.7500	2.2500
Equatorial Guinea	93.33	2009	1.0000	2.0000												
Eritrea	66.58	2009	0.7134	1.4268	1.99	2010	0.0802	0.2405					1.00	2005	0.0000	0.0000
Ethiopia	29.82	2008	0.3195	0.6390	5.46	2010	0.2196	0.6589	31.02	2010	0.0160	0.0320	20.00	2005	0.7500	2.2500
Gabon	87.71	2009	0.9399	1.8797									10.00	2005	0.5000	1.5000
Gambia, The	46.50	2009	0.4982	0.9964	4.12	2008	0.1656	0.4968	94.39	2008	0.0487	0.0974	3.00	2005	0.0000	0.0000
Ghana	66.62	2009	0.7138	1.4276	12.14	2011	0.4882	1.4647	171.71	2010	0.0886	0.1772	18.00	2005	0.5000	1.5000
Guinea	39.46	2009	0.4228	0.8456	9.46	2008	0.3803	1.1409	100.02	2008	0.0516	0.1032	10.00	2005	0.5000	1.5000
Guinea-Bissau	52.20	2009	0.5593	1.1186	2.72	2006	0.1095	0.3284					3.00	2005	0.0000	0.0000
Kenya	87.01	2009	0.9323	1.8645	4.03	2009	0.1619	0.4858					41.00	2005	0.7500	2.2500
Lesotho	89.66	2009	0.9607	1.9214	3.52	2006	0.1415	0.4245	1,344.37	2006	0.6938	1.3877	2.00	2005	0.0000	0.0000
Liberia	59.05	2009	0.6328	1.2655									2.00	2005	0.0000	0.0000
Madagascar	64.48	2008	0.6909	1.3818	3.69	2010	0.1485	0.4456	144.79	2009	0.0747	0.1494	38.00	2005	0.7500	2.2500
Malawi	73.69	2009	0.7896	1.5792	0.72	2010	0.0290	0.0869	1,937.61	2010	1.0000	2.0000	8.00	2005	0.2500	0.7500
Mali	26.18	2006	0.2805	0.5610	6.10	2011	0.2453	0.7359	135.33	2009	0.0698	0.1397	5.00	2005	0.2500	0.7500
Mauritania	57.45	2009	0.6156	1.2312	4.36	2010	0.1753	0.5258	193.88	2010	0.1001	0.2001	8.00	2005	0.2500	0.7500
Mauritius	87.90	2009	0.9418	1.8836	24.86	2008	1.0000	3.0000	16.12	2008	0.0083	0.0166	10.00	2005	0.5000	1.5000
Mozambique	55.06	2009	0.5900	1.1800	1.46	2005	0.0587	0.1762					9.00	2005	0.2500	0.7500
Namibia	88.51	2009	0.9483	1.8967	8.96	2008	0.3602	1.0806	121.30	2006	0.0626	0.1252	4.00	2005	0.0000	0.0000
Niger	28.67	2005	0.3072	0.6144	1.51	2011	0.0606	0.1817	438.81	2010	0.2265	0.4529	12.00	2005	0.5000	1.5000
Nigeria	60.82	2009	0.6516	1.3033	10.26	2005	0.4126	1.2378					169.00	2005	1.0000	3.0000
Rwanda	70.67	2009	0.7572	1.5144	5.49	2010	0.2209	0.6626	186.75	2010	0.0964	0.1928	15.00	2005	0.5000	1.5000
Sao Tome and Principe	88.78	2009	0.9512	1.9025	4.48	2010	0.1800	0.5401								
Senegal	49.70	2009	0.5325	1.0650	7.92	2010	0.3185	0.9554	186.87	2010	0.0964	0.1929	27.00	2005	0.7500	2.2500
Seychelles	91.84	2008	0.9840	1.9680									1.00	2005	0.0000	0.0000
Sierra Leone	40.92	2009	0.4385	0.8770									11.00	2005	0.5000	1.5000
Somalia													2.00	2005	0.0000	0.0000
South Africa	88.72	2007	0.9506	1.9012									134.00	2005	1.0000	3.0000
South Sudan																
Sudan													59.00	2005	1.0000	3.0000
Swaziland	86.93	2009	0.9314	1.8629	4.43	2006	0.1780	0.5340	321.93	2006	0.1661	0.3323	11.00	2005	0.5000	1.5000
Tanzania	72.90	2009	0.7811	1.5623	2.11	2010	0.0848	0.2544	873.26	2010	0.4507	0.9014	73.00	2005	1.0000	3.0000
Togo	56.89	2006	0.6096	1.2191	5.88	2007	0.2365	0.7096	137.91	2007	0.0712	0.1424	7.00	2005	0.2500	0.7500
Uganda	73.21	2010	0.7845	1.5689	4.19	2009	0.1684	0.5053	104.31	2009	0.0538	0.1077	19.00	2005	0.5000	1.5000
Zambia	70.88	2009	0.7595	1.5190									14.00	2005	0.5000	1.5000
Zimbabwe	91.86	2009	0.9843	1.9685	6.19	2010	0.2489	0.7466	75.40	2010	0.0389	0.0778	14.00	2005	0.5000	1.5000
best value*	93.33	max	Equatorial Guinea	2	24.86	max	Mauritius	3	1,937.61	max	Malawi	2	169	max	Nigeria	3

Annex 4: Higher Education Institutions



Republic of South Africa: higher education institutions

University of KwaZulu-Natal (Westville)

Durban, South Africa

Website: <http://www.ukzn.ac.za>

B.G. Alexander College of Nursing

Johannesburg, South Africa

Edendale Nursing College

Pietermaritzburg, South Africa

Website: <http://www.kznhealth.gov.za>

University of Fort Hare

Alice, South Africa

Website: <http://www.ufh.ac.za>

Bonalesedi Nursing College

Luipaardsvlei, South Africa

Cape Institute for Agricultural Training:**Elsenburg**

Elsenburg, South Africa

Website: <http://www.elsenburg.com>

University of KwaZulu-Natal (Edgewood)

Ashwood, South Africa

Website: <http://www.ukzn.ac.za/>

Carinus Nursing College

Groote Schuur, South Africa

Excelsius Nursing College

Klerksdrop, South Africa

Nelson Mandela Metropolitan University (Missionvale)

Port Elizabeth, South Africa

Website: <http://www.nmmu.ac.za>

Cedara College of Agriculture

Hilton, South Africa

Website: <http://agriculture.kzntl.gov.za>

Fort Cox Agricultural College

King William's Town, South Africa

Website: <http://www.nda.agric.za>

University of Pretoria

Pretoria, South Africa

Website: <http://www.up.ac.za>

Ciskei College of Nursing

Cambridge, South Africa

Frere Nursing College

East London, South Africa

University of South Africa

Pretoria, South Africa

Website: <http://www.unisa.ac.za>

Potchefstroom College of Agriculture

Potchefstroom, South Africa

Ga-Rankuwa College

Pretoria, South Africa

University of Venda

Thohoyandou, South Africa

Website: <http://www.univen.ac.za>

Coronation College of Nursing

Newclare, South Africa

Gazankulu Nursing College

Giyani, South Africa

Ann Latsky College of Nursing

Auckland Park, South Africa

Website: <http://www.brabys.co.za>

Eastern College of Nursing, Charlotte Searle Campus

Port Elizabeth, South Africa

Glen Agricultural College

Glen, South Africa

Chris Hani Baragwanath Nursing College

Bertsham, South Africa

Website: <http://www.sanc.co.za>

Eastern Cape College of Nursing, Sharley Cribb Campus

Port Elizabeth, South Africa

Gold Fields Nursing College

Carletonville, South Africa

Website: <http://www.gfacademy.co.za>

Groothoek College of Nursing Sovenga, South Africa	Nursing College of the Free State (Northern Free State) Bloemfontein, South Africa	Global School of Business Craighall/Bordeaux, South Africa Website: http://www.globalschool.co.za
Henrietta Stockdale Nursing College Kimberley, South Africa	Otto Du Plessis Nursing College Tygerberg, South Africa	South African College of Applied Psychology Kenilworth, South Africa Website: http://www.sacap.edu.za
Kangwane College of Nursing Kabokweni, South Africa	Owen Sithole Agricultural College Empangeni, South Africa Website: http://agriculture.kzntl.gov.za	Boston Business College and City Campus Johannesburg, South Africa Website: http://www.boston.co.za
Taung College of Agriculture Taung, South Africa	Qwa-Qwa Nursing College Witsieshoek, South Africa	Rhodes University Grahamstown, South Africa Website: http://www.ru.ac.za
Lebone College of Nursing Pretoria, South Africa	Sarleh Dollie Nursing College Tygerberg, South Africa	University of Cape Town Cape Town, South Africa Website: http://www.uct.ac.za
Lowveld Agricultural College Nelspruit, South Africa	S.G. Lourens College of Nursing Pretoria, South Africa	University of the Free State Bloemfontein, South Africa Website: http://www.uovs.ac.za
Madzivhandila Agricultural College Thohoyandou, South Africa	Tompi Seleka Agricultural College Marble Hall, South Africa	University of the Witwatersrand Wits, South Africa Website: http://web.wits.ac.za
Mangaung Nursing College Bloemfontein, South Africa	Tsolo Agricultural College Tsolo, South Africa	Ekhuruleni West College Germiston, South Africa Website: http://www.ewc.edu.za
Natal College of Nursing Pietermaritzburg, South Africa	Venda Nursing College Shayandima, South Africa	Midrand Graduate Institute Midrand, South Africa Website: http://www.mgi.ac.za
Ngwelezana Nursing College Empangeni, South Africa	George Whitefield College Muizenberg, South Africa Website: http://www.gwc.ac.za	Bond University (Sandton) Sandton, South Africa Website: http://www.bond.edu.au
Nico Malan Nursing College Surwell, South Africa	Cranefield College of Project and Programme Management Lynnwood Ridge, South Africa Website: http://www.cranefield.ac.za	Monash South Africa Roodepoort, South Africa Website: http://www.monash.ac.za

<p>University of the Western Cape Bellville, South Africa Website: http://www.uwc.ac.za</p>	<p>Lyceum College Braamfontein, South Africa Website: http://www.lyceum.co.za</p>	<p>College of Modern Montessori Linbro Park, South Africa Website: http://montessoriint.com</p>
<p>University of Zululand Kwa-Dlangezwa, South Africa Website: http://www.uzulu.ac.za</p>	<p>Management College of Southern Africa Durban, South Africa Website: http://www.mancosa.co.za</p>	<p>Contemporary Music College Pretoria, South Africa Website: http://cmc.s5.com</p>
<p>Mangosuthu Technikon Jacobs, South Africa Website: http://www.mantec.ac.za</p>	<p>Technical College of South Africa (TECHNISA) Pinegowrie, South Africa Website: http://www.technisa.co.za</p>	<p>Gauteng School of Management and Training Center Braamfontein, South Africa Website: http://www.gsmtc.co.za</p>
<p>Vaal University of Technology Vanderbijlpark, South Africa Website: http://www.vut.ac.za</p>	<p>Promat Colleges Waterkloof, South Africa</p>	<p>Grootfontein Agricultural College Middelburg, South Africa Website: http://gadi.agric.za</p>
<p>Business Management Training College of South Africa Braynston, South Africa Website: http://www.businesscollege.co.za</p>	<p>South African Theological Seminary Rivonia, South Africa Website: http://www.sats.edu.za</p>	<p>Kaizen Business Education Centre Edenvale, South Africa Website: http://www.kaizen.co.za</p>
<p>5th Dimension College of Visual Arts Braamfontein, South Africa</p>	<p>Theological Education by Extension College Turffontein, South Africa Website: http://www.tee.co.za</p>	<p>Nkangala Further Education and Training College Witbank, South Africa</p>
<p>Allenby In-Home Power Learning Halfway House, South Africa</p>	<p>Academy of English in Cape Town Cape Town, South Africa Website: http://www.aoect.com</p>	<p>National College of Photography Pretoria, South Africa Website: http://www.photocollege.co.za</p>
<p>Damelin Education Group Auckland Park, South Africa Website: http://www.damelin.co.za</p>	<p>Baptist Theological College Randburg, South Africa Website: http://www.btc.co.za</p>	<p>South African College of Herbal Medicine and Health (KZN Campus) KwaZulu-Natal, South Africa Website: http://www.herbalcollege.co.za</p>
<p>Executive Education Johannesburg, South Africa Website: http://www.executiveeducation.co.za</p>	<p>Boston House College Cape Town, South Africa Website: http://www.bostonhousecollege.com</p>	<p>Coastal KZN College Amanzimoti , South Africa Website: http://www.coastalkzn.co.za</p>
<p>Home Study College Cape Town, South Africa</p>	<p>Boston Language College Cape Town, South Africa Website: http://www.bostonlanguagecollege.com</p>	<p>International Academy of Health and Skin Care Cape Town, South Africa Website: http://www.internationalacademy.co.za</p>
<p>Institute of People Management Ferndale, South Africa Website: http://www.ipm.co.za</p>	<p>Campus International Hotel School Midrand, South Africa Website: http://www.gauteng.com</p>	<p>South African School of Paralegal Studies Lynnwoodridge, South Africa Website: http://www.paralegalstudies.co.za</p>

Tlamoha College Springs, South Africa Website: http://www.gauteng.com	Cape Peninsula University of Technology Bellville, South Africa Website: http://www.cput.ac.za	Nelson Mandela Metropolitan University (York Street) George, South Africa Website: http://www.nmmu.ac.za
Western Province Technical College Howards Place, South Africa	University of Johannesburg Auckland Park, South Africa Website: http://www.uj.ac.za	Walter Sisulu University (Mthatha) Unitra, South Africa Website: http://www.wsu.ac.za
Bantori Business College Braamfontein, South Africa	University of Limpopo (Turfloop Campus) Sovenga, South Africa Website: http://www.ul.ac.za	Walter Sisulu University (Butterworth) Butterworth, South Africa Website: http://www.wsu.ac.za
Access Business Academy South Africa	Central University of Technology, Free State Bloemfontein, South Africa Website: http://www.cut.ac.za	Walter Sisulu University (Buffalo City) East London, South Africa Website: http://www.wsu.ac.za
Milpark Business School Johannesburg, South Africa Website: http://www.milpark.co.za	Council on Higher Education (CHE) Pretoria, South Africa Website: http://www.che.org.za	Walter Sisulu University (Queenstown) East London, South Africa Website: http://www.wsu.ac.za
Durban University of Technology Durban, South Africa Website: http://www.dut.ac.za	University of KwaZulu-Natal (Nelson R. Mandela School of Medicine) Durban, South Africa Website: http://www.ukzn.ac.za	Stellenbosch University Matieland, South Africa Website: http://www.sun.ac.za
AAA School of Advertising Cape Town, South Africa Website: http://www.aaaschool.co.za	University of KwaZulu-Natal (Pietermaritzburg) Pietermaritzburg, South Africa Website: http://www.ukzn.ac.za	Da Vinci Institute for Technology Management Rivonia, South Africa Website: http://www.davinci.ac.za
North-West University Potchefstroom, South Africa Website: http://www.nwu.ac.za	Nelson Mandela Metropolitan University (South Summerstrand) Port Elizabeth, South Africa Website: http://www.nmmu.ac.za	Greenside Design Centre, College of Design Greenside, South Africa Website: http://www.designcenter.co.za
University of KwaZulu-Natal (Howard College) Durban, South Africa Website: http://www.ukzn.ac.za	Nelson Mandela Metropolitan University (Bird Street) Port Elizabeth, South Africa Website: http://www.nmmu.ac.za	IMM Graduate School of Marketing Auckland Park, South Africa Website: http://www.imm.co.za
Nelson Mandela Metropolitan University (2nd Avenue) Port Elizabeth, South Africa Website: http://www.nmmu.ac.za	Nelson Mandela Metropolitan University (North Summerstrand) Port Elizabeth, South Africa Website: http://www.nmmu.ac.za	Independent Institute of Education (IIE) Randburg, South Africa Website: http://www.iie.edu.za
Tshwane University of Technology Pretoria, South Africa Website: http://www.tut.ac.za	Nelson Mandela Metropolitan University (Saasveld) George, South Africa Website: http://www.nmmu.ac.za	North-West University (Mafikeng Campus) Mmabatho, South Africa Website: http://www.nwu.ac.za

North-West University (Vaal Triangle Campus)

Vanderbijlpark, South Africa

Website: <http://www.nwu.ac.za>

University of Limpopo (Medunsa Campus)

Medunsa, South Africa

Website: <http://www.ul.ac.za>

Regenesys School of Public Management

Gallo Manor, South Africa

Website: <http://www.regenesys.co.za>

Regenesys Business School

Gallo Manor, South Africa

Website: <http://www.regenesys.co.za>

Saint Augustine College of South Africa

Linden, South Africa

Website: <http://www.staugustine.ac.za>

School of Motion Picture Medium and Live Performance

Melville, South Africa

Website: <http://www.filmdramaschool.co.za>

Gauteng School of Management and Training Center

Johannesburg, South Africa

Website: <http://www.gsmtc.co.za>

South African College of Herbal Medicine and Health

Bryanston, South Africa

Website: <http://www.herbalcollege.co.za>



Republic of Botswana: higher education institutions

University of Botswana

Gaborone, Botswana

Website: <http://www.ub.bw>

Botswana College of Agriculture

Gaborone, Botswana

Website: <http://www.bca.bw>

Botswana Accountancy College

Gaborone, Botswana

Website: <http://www.info.bw>



Republic of Ghana: higher education institutions

Noguchi Memorial Institute for Medical Research

Accra, Ghana

Website: <http://www.noguchimedres.org>

Institute of Statistical, Social, and Economic Research

Legon, Ghana

Website: <http://www.isser.org>

University of Cape Coast

Cape Coast, Ghana

Website: <http://www.ucc.edu.gh>

University of Education, Winneba

Winneba, Ghana

Website: <http://www.uew.edu.gh>

Kwame Nkrumah University of Science and Technology

Kumasi, Ghana

Website: <http://www.knust.edu.gh>

Ghana Institute of Management and Public Administration

Accra, Ghana

Website: <http://gimpa.edu.gh>

Ashesi University College

Accra, Ghana

Website: <http://www.ashesi.org>

Institute of Adult Education

Accra, Ghana

Central University College

Accra, Ghana

Website: <http://www.centraluniversity.org>

Institute of African Studies

Accra, Ghana

Website: <http://www.ug.edu.gh>

University of Ghana

Accra, Ghana

Website: <http://www.ug.edu.gh>

Regional Institute for Population Studies

Accra, Ghana

UN Institutes for Natural Resources in Africa

Accra, Ghana

University for Development Studies

Tamale, Ghana

Website: <http://www.ghanauniversities.com>

Valley View University

Accra, Ghana

Website: <http://www.tagnet.org>

University of Mines and Technology, Tarkwa

Tarkwa, Ghana

Website: <http://umat.edu.gh>

Wisconsin International University Ghana

Legon, Ghana

Website: <http://www.wiu-usa.edu>

Methodist University College Ghana

Accra, Ghana

Website: <http://www.mucg.edu.gh>



Republic of Namibia: higher education institutions

University of Namibia

Windhoek, Namibia

Website: <http://www.unam.na>

Polytechnic of Namibia

Windhoek, Namibia

Website: <http://www.polytechnic.edu.na>

University of Namibia-Neudamm and Ogongo Campuses

Namibia

Website: <http://www.unam.na>



United Republic of Tanzania: higher education institutions

Open University of Tanzania

Dar es Salaam, Tanzania
Website: <http://www.openuniversity.ac.tz>

Institute of Information Technology

Dar es Salaam, Tanzania
Website: <http://www.iit-tz.com>

Mtwara Technical Teacher's College

Mtwara, Tanzania

College of African Wildlife Management

Moshi, Tanzania
Website: <http://www.mwekawildlife.org>

Mbeya Technical College

Mbeya, Tanzania

Mtwara Teacher's College

Tanzania

College of Business Education

Dar es Salaam, Tanzania

Monduli Teachers College

Arusha, Tanzania
Website: <http://www.mondulitc.com>

Morogoro Teacher's College

Morogoro, Tanzania

Mkwawa University College of Education - Iringa (MUCE)

Iringa, Tanzania
Website: <http://muce.ac.tz>

Arusha Technical College

Tanzania

Mhonda Teacher's College

Turiani, Tanzania

Co-Operative College

Moshi, Tanzania

Institute of Adult Education

Dar es Salaam, Tanzania

Ilonga Teacher's College

Kilosa, Tanzania

Dar Es Salaam Institute of Technology

Dar es Salaam, Tanzania
Website: <http://www.dit.ac.tz>

Rwegarulia Water Resources Institute

Dar es Salaam, Tanzania

Kintangali Teacher's College

Newala, Lindi, Tanzania

Eastern and Southern African Management Institute

Arusha, Tanzania
Website: <http://www.esami-africa.org>

Institute of Production Innovation

Dar es Salaam, Tanzania

Bunda Teacher's College

Bunda, Mara, Tanzania

Kivukoni Academy of Social Sciences

Dar es Salaam, Tanzania

Murutunguru Teacher's College

Tanzania

Tukuyu Teacher's College

Tukuyu, Tanzania

St. Augustine University of Tanzania (SAUT)

Mwanza, Tanzania
Website: <http://www.saut.ac.tz>

Butimba Teacher's College

Mwanza, Tanzania

Singachini Teacher's College

Kibosho, Tanzania

Marangu Teacher's College Moshi, Tanzania	Nachingwea Teacher's College Nachingwea, Tanzania	The Dar es Salaam Institute of Technology Dar es Salaam, Tanzania Website: http://www.dit.ac.tz
Mandaka Teacher's College Moshi, Tanzania	Sumve Teacher's College Mwanza, Tanzania	Institute of Development Management Morogoro, Tanzania
Kabanga Teacher's College Kasulu, Tanzania	International Medical and Technological University (IMTU) Dar es Salaam, Tanzania Website: http://www.imtu.edu	Institute of Finance Management (IFM) Dar es Salaam, Tanzania Website: http://www.ifm.ac.tz
Ifunda Teacher's College Ifunda, Tanzania	Zanzibar University Zanzibar, Tanzania Website: http://www.zanvarsity.ac.tz	National Institute of Transport Dar es Salaam, Tanzania
Krelure Teacher's College Tanzania	Tumaini University Moshi, Tanzania Website: http://www.elct.org	National Social Welfare Training Institute Dar es Salaam, Tanzania Website: http://www.socialworkinstitute.ac.tz
Mpuguso Teacher's College Mpwapwa, Tanzania	University of Bukoba (UOB) Bukoba, Tanzania Website: http://uobtz.tripod.com	Dar es Salaam School of Accountancy Dar es Salaam, Tanzania
Bustani Teacher's College Kondoa, Tanzania	Ardhi University Dar es Salaam, Tanzania Website: http://www.aru.ac.tz	Institute of Community Development Tengeru (ICDT) Arusha, Tanzania
Korogwe Teacher's College Korogwe, Tanzania	Iringa University College Iringa, Tanzania Website: http://www.tumaini.ac.tz	Institute of Accountancy Arusha (IAA) Arusha, Tanzania Website: http://www.iaa.ac.tz
Tabora Teacher's College Tabora, Tanzania	Makumira University College Arusha, Tanzania Website: http://www.makumira.ac.tz	Kasulu Teacher's College Kasulu, Tanzania
Kinampanda Teacher's College Kinampanda, Tanzania	Waldorf College DSM Campus Dar es Salaam, Tanzania	Ndala Teacher's College Tabora, Tanzania
Sumbawanga Teacher's College Sumbawanga, Tanzania	College of Education, Zanzibar Zanzibar, Tanzania Website: http://universitycollegeofeducationzanzibar.coursehost.com	National Institute for Medical Research Dar es Salaam, Tanzania Website: http://www.nimr.or.tz

Tropical Development and Research Institute (TDRI)

Tanzania

Website: <http://www.nri.org/homepage.html>

Institute of Rural Development Planning (IRDP)

Dodoma, Tanzania

Website: <http://www.irdp.ac.tz>

Animal Disease Research Institute

Dar es Salaam, Tanzania

Mount Meru University

Arusha, Tanzania

Website: <http://www.mmu.ac.tz>

Tanzania Industrial Research and Development Organization

Dar es Salaam, Tanzania

Website: <http://www.sdnf.undp.org>

Dar Es Salaam University College of Education (DUCE)

Dar es Salaam, Tanzania

Website: <http://duce.ac.tz>

Vikindu Teacher's College

Tanzania

Hubert Kairuki Memorial University

Dar es Salaam, Tanzania

Website: <http://www.hkmu.ac.tz>

Kilimanjaro Christian Medical College (KCMC)

Moshi, Tanzania

Website: <http://www.kcmc.ac.tz>

Muhimbili University of Health and Allied Sciences (MUHAS)

Dar es Salaam, Tanzania

Website: <http://www.muhas.ac.tz>

Sokoine University of Agriculture

Morogoro, Tanzania

Website: <http://www.suanet.ac.tz>

University of Dar Es Salaam (UDSM)

Dar es Salaam, Tanzania

Website: <http://www.udsm.ac.tz>

Mzumbe University

Mzumbe, Tanzania

Website: <http://www.mzumbe.ac.tz>



Republic of Rwanda: higher education institutions

Institut Africain Et Mauricien De Statistiques Et D'Economie Appliquee
Kigali, Rwanda

Kigali Institute of Science and Technology
Kigali, Rwanda
Website: <http://www.kist.ac.rw/>

Adventist University of Central Africa
Kigali, Rwanda
Website: <http://www.auca.ac.rw/index.php?stud>

Kigali Health Institute
Kigali, Rwanda
Website: <http://www.khi.ac.rw/>

National University of Rwanda
Butare, Rwanda
Website: <http://www.nur.ac.rw/>

Kigali Institute of Education
Kigali, Rwanda
Website: <http://www.kie.ac.rw/>

Kigali Independent University
Kigali, Rwanda
Website: <http://www.ulk.ac.rw/>

Kabgayi Catholic University
Gitarama, Rwanda
Website: <http://uck.ac.rw/index.php>

Advanced Institute of Agriculture and Cattle Breeding
Rwanda

Kibungo University of Agriculture, Technology, and Education
Kibungo, Rwanda

Saint Fidele Institute (Advanced School of Management and Information Systems)
Gisenyi, Rwanda

Kigali Lay Adventist University
Kigali, Rwanda
Website: <http://www.unilak.ac.rw/>

Advanced Catholic Institute of Applied Pedagogy
Rwanda

Ruhengeri Higher Education Institute
Ruhengeri, Rwanda
Website: <http://www.ines.ac.rw/>

Advanced Institute of Public Finances
Kigali, Rwanda



Kingdom of Lesotho: higher education institutions

National University of Lesotho
Maseru, Lesotho
Website: <http://www.nul.ls>

African Methodist Episcopal University
Monrovia, Lesotho



Federal Republic of Nigeria: higher education institutions

University of Agriculture, Abeokuta
Abeokuta, Nigeria
Website: <http://www.unaab.edu.ng>

Imo State University
Owerri, Nigeria

University of Nigeria-Enugu Campus
Enugu, Nigeria

Abia State University
Uturu, Nigeria
Website: <http://www.absuportal.com>

Ladoke Akintola University of Technology
Ogbomoso, Nigeria
Website: <http://www.lautech.edu.ng>

Ogun State University
Ago-Iwoye, Nigeria

University of Abuja
Abuja, Nigeria
Website: <http://www.unibujaportal.com>

Lagos State University
Ojo, Nigeria
Website: <http://www.lasunigeria.org>

University of Port Harcourt
Port Harcourt, Nigeria
Website: <http://www.uniport.edu.ng>

Federal University of Technology, Akure
Akure, Nigeria
Website: <http://www.futa.edu.ng>

University of Lagos
Lagos, Nigeria
Website: <http://www.unilag.edu.ng>

Usmanu Danfodiyo University, Sokoto
Sokoto, Nigeria
Website: <http://www.udusok.edu.ng>

Kano State University of Technology, Wudil
Kano, Nigeria

University of Maiduguri
Maiduguri, Nigeria
Website: <https://unimaidportal.net>

Federal University of Agriculture, Umudike
Umuahia, Nigeria

Benue State University
Makurdi, Nigeria

University of Agriculture, Makurdi
Makurdi, Nigeria
Website: <http://uam.mycportal.com>

University of Uyo
Uyo, Nigeria
Website: <http://www.uniuyo.edu.ng>

University of Calabar
Calabar, Nigeria
Website: <http://www.unical.edu.ng>

Federal University of Technology, Minna
Minna, Nigeria
Website: <http://www.futminna.org>

Federal University of Technology Yola
Yola, Nigeria
Website: <http://www.futy.edu.ng>

Delta State University
Abraka, Nigeria
Website: <http://www.delsunigeria.net>

University of Nigeria
Nsukka, Nigeria
Website: <http://www.unn.edu.ng>

College of Arts, Science, and Technology
Oko, Nigeria

Enugu State University of Science and Technology
Enugu, Nigeria
Website: <http://www.esut.edu.ng>

Nnamdi Azikiwe University
Awka, Nigeria
Website: <http://www.unizik.eduportal.org>

Federal Polytechnic Nekede
Owerri, Nigeria

Kano Institute of Higher Education
Kano, Nigeria

Alvan Ikoku College of Education
Owerri, Nigeria

College of Education
Agbor, Nigeria

Lagos State College of Science and Technology
Ikeja, Nigeria

College of Education
Yola, Nigeria

College of Education
Benin City, Nigeria

Murtala C.A.S. Technology
Makurdi, Nigeria

College of Education
Jalingo, Nigeria

College of Education
Azare, Nigeria

Yaba College of Technology
Yaba, Nigeria
Website: <http://www.yabatech.edu.ng>

College of Education
Calabar, Nigeria

Federal College of Education
Nsugbe, Nigeria

College of Education
Ankpa, Nigeria

Umar-Ibn El-Kanemi College of Science and Technology
Bama, Nigeria

Federal College of Education
Umunze, Nigeria

St. Andrew's College of Education
Oyo, Nigeria

College of Education
Gashua, Nigeria

Federal College of Education
Omoke, Nigeria

College of Education
Ila-Orangun, Nigeria

College of Education
Waka Biu, Nigeria

Federal College of Education
Gombe, Nigeria

College of Education
Ilesha, Nigeria

Kashim-Ibrahim College of Education
Maiduguri, Nigeria

Our Savior Institute of Science, Agriculture, and Technology
Enugu, Nigeria

College of Education
Ikere, Nigeria

College of Education
Kat-Ala, Nigeria

Petroleum Training Institute
Effurun, Nigeria

Jigawa State College of Education
Gumel, Nigeria

College of Education
Warri, Nigeria

Benue State University
Oturkop, Nigeria

College of Education
Gidan-Waya, Nigeria

Akwa Ibom State College of Education
Etinam, Nigeria

National Open University of Nigeria
Lagos, Nigeria
Website: <http://www.nou.edu.ng>

School of Military Engineering
Makurdi, Nigeria

University of Benin
Benin City, Nigeria
Website: <http://www.uniben.edu>

Akanu Ibiam Federal Polytechnic, Unmana
Afikpo, Nigeria

University of Awka
Awka, Nigeria

Ambrose Alli University
Ekpoma, Nigeria
Website: <http://www.aauekpoma.edu.ng>

Benue Polytechnic Ugbokolo
Otukpo, Nigeria

Federal College of Education, Osiele
Osiele-Abeokuta, Nigeria

Ebonyi State University
Abakaliki, Nigeria
Website: <http://www.ebsuportal.com>

Calabar Polytechnic
Calabar, Nigeria

Anambra State College of Education
Nsugbe, Nigeria

Michael Okpara University of Agriculture, Umudike
Umuahia, Nigeria
Website: <http://michaelokparaunivesi.tripod.com>

College of Education, Oju
Otukpe, Nigeria

College of Education, Oto Ijanikin
Lagos, Nigeria

Obafemi Awolowo University
Ile-Ife, Nigeria
Website: <http://www.oauife.edu.ng>

College of Education, Port Harcourt
Port Harcourt, Nigeria

College of Education, Arungu
Lafiaji, Nigeria

University of Jos
Jos, Nigeria
Website: <http://www.unijos.edu.ng>

College of Education, Sokoto
Sokoto, Nigeria

Abubakar Tafawa Balewa University
Bauchi, Nigeria
Website: <http://www.atbunet.org>

University of Ado-Ekiti
Ado-Ekiti, Nigeria
Website: <http://www.unadportal.com>

Federal College of Education
Abeokuta, Nigeria

Bayero University
Kano, Nigeria
Website: <http://www.kanoonline.com/buk>

Olabisi Onabanjo University
Ago-Iwoye, Nigeria
Website: <http://www.oou-ng.com>

Federal College of Education
Oyo, Nigeria

Edo State University
Ekpoma, Nigeria

Adajemi College of Education
Ondo, Nigeria

Federal College of Education
Gasau, Nigeria

University of Ibadan
Ibadan, Nigeria
Website: <http://www.ui.edu.ng>

Adamwa State Polytechnic
Yola, Nigeria

Federal College of Education
Potishkun, Nigeria

University of Ilorin
Ilorin, Nigeria
Website: <http://www.unilorin.edu.ng>

Akam Ibiam Federal Polytechnic
Afikpo, Nigeria

Federal College of Education
Bichi, Nigeria

Federal College of Education, Akoka
Yaba, Nigeria

Federal Polytechnic
Ado-Ekiti, Nigeria

Federal Polytechnic
Bauchi, Nigeria

Federal College of Education, Amufu
Eha, Nigeria

Federal Polytechnic
Bida, Nigeria

Federal Polytechnic Auchi
Auchi, Nigeria

Federal College of Education, Asaba
Asaba, Nigeria

Federal Polytechnic
Iloro, Nigeria

Federal Polytechnic, Oko
Aguata, Nigeria

Federal College of Education, Kano
Kano, Nigeria

Federal Polytechnic
Kaura Namoda, Nigeria

Federal University of Technology, Owerri
Owerri, Nigeria
Website: <http://www.futoeduportal.com>

Federal College of Education, Katsina
Katsina, Nigeria

Federal Polytechnic
Nassarawa, Nigeria

Hassan Usman Katsina Polytechnic
Katsina, Nigeria

Federal College of Education, Kontangara
Kontangara, Nigeria

Federal Polytechnic
Unwani Afikpo, Nigeria

The Polytechnic, Ibadan
Ibadan, Nigeria
Website: <http://www.polyibadan.org>

Federal College of Education, Obudu
Obudu, Nigeria

Federal Polytechnic
Mulsu, Nigeria

Institute of Management and Technology
Enugu, Nigeria

Federal College of Education, Okene
Okene, Nigeria

Federal Polytechnic
Nassarawa, Nigeria

Isa Kaita, College of Technical Education
Dutsinma, Nigeria

Federal College of Education, Pankshin
Pankshin, Nigeria

Federal Polytechnic
Aguata, Nigeria

Kaduna Polytechnic
Kaduna, Nigeria
Website: <http://www.kadpoly.com>

Federal College of Education, Yola
Yola, Nigeria

Federal Polytechnic
Offa, Nigeria

Kano State College of Education
Kombotso, Nigeria

Federal College of Education, Zaria
Zaria, Nigeria

Federal Polytechnic
Mubi, Nigeria

Kano State Polytechnic
Kano, Nigeria

Katsina Polytechnic
Katsina, Nigeria

The Polytechnic, Ibadan
Ibadan, Nigeria

Igbinedion University, Okada
Benin City, Nigeria
Website: <http://www.igbinedionuniversity.edu.ng>

Kebbi State College of Education
Arungun, Nigeria

Ramat Polytechnic
Maiduguri, Nigeria

Pan African University
Lagos, Nigeria
Website: <http://www.pau.edu.ng>

Kwara State Polytechnic
Ilorin, Nigeria
Website: <http://www.kwarapolyportal.com>

Rivers State Polytechnic
Bori, Nigeria

Adamawa State University
Mubi, Nigeria

Lagos State College of Primary Education, Noforija
Epe, Nigeria

Rivers State University of Science and Technology
Port Harcourt, Nigeria
Website: <http://www.rsust.edu.ng>

Akwa Ibom State University of Technology
Uyo, Nigeria
Website: <http://www.akutech.net>

Lagos State Polytechnic
Isolo, Nigeria

Sokoto State Polytechnic
Birnin Kebbi, Nigeria

Federal Polytechnic, Damaturu
Damaturu, Nigeria
Website: <http://www.polydamaturuportal.com>

Nigerian Defense Academy
Kaduna, Nigeria
Website: <http://www.nigerianarmy.net>

Tai-Solarin College of Education
Ijebu Ode, Nigeria

Nasarawa State University
Keffi, Nigeria
Website: <http://www.nsukonline.com>

Ogun State Polytechnic
Abeokuta, Nigeria

The Polytechnic
Ogwashi-Uku, Nigeria

Bells University of Technology
Ota, Nigeria
Website: <http://www.bellsuniversity.org>

Ondo State Polytechnic
Owo, Nigeria

West Africa Theological Seminary
Lagos, Nigeria
Website: <http://www.watsonline.org>

Benson Idahosa University
Benin City, Nigeria
Website: <http://www.idahosauniversity.com>

Ozoro Polytechnic
Ozoro, Nigeria

Adekunle Ajasin University
Akungba-Akoko, Nigeria
Website: <http://www.ajasin.edu.ng>

Covenant University
Ota, Nigeria
Website: <http://www.covenantuniversity.com>

Plateau State Polytechnic

Jos, Nigeria

Ahmadu Bello University

Zaria, Nigeria

Website: <http://www.abu.edu.ng>

Lead City University

Ibadan, Nigeria

Website: <http://www.lcu.edu.ng>

Federal Polytechnic Birnin Kebbi

Birnin Kebbi, Nigeria

Website: <http://mybkpoly.com>

Babcock University

Ikeja, Nigeria

Website: <http://www.babcockuni.edu.ng>

Madonna University

Okija, Nigeria

Website: <http://madonnauniversityportal.com>

The Catholic Institute of West Africa in Port Harcourt

Port Harcourt, Nigeria

Website: <http://www.fiuc.org>

University of Industry

Yaba, Nigeria

Website: <http://www.cetepcity-university.com>

University of Mkar

Mkar, Nigeria

Website: <http://unimkar.edu.ng>



Kingdom of Swaziland: higher education institutions

William Pitcher Teacher Training College
Manzini, Swaziland

Nazarene Teacher Training College
Manzini, Swaziland

Institute of Development Management
Mbabane, Swaziland
Website: <http://www.idmbls.com>

Institute of Health Sciences
Mbabane, Swaziland
Website: <http://www.uniswa.sz>

Mananga Agricultural Management Centre
Mhlume, Swaziland

Mlatatini Development Centre
Mlatatini, Swaziland

Nazarene Nursing College
Manzini, Swaziland

Swaziland College of Technology
Mbabane, Swaziland

Ngwane Training College
Nhlangano, Swaziland

University of Swaziland
Kwaluseni, Swaziland
Website: <http://www.uniswa.sz>



Republic of Kenya: higher education institutions

Egerton University
Njoro, Kenya
Website: <http://www.egerton.ac.ke>

University of Eastern Africa, Baraton
Eldoret, Kenya
Website: <http://www.ueab.ac.ke>

Futurecom
Nairobi, Kenya

Rift Valley Academy
Kijabe, Kenya
Website: <http://www.rva.org>

Jomo Kenyatta University of Agriculture and Technology
Nairobi, Kenya
Website: <http://www.jkuat.ac.ke>

Kenyatta University
Nairobi, Kenya
Website: <http://www.ku.ac.ke>

Hekima College, Jesuit School of Theology
Nairobi, Kenya

Moi University
Eldoret, Kenya
Website: <http://www.mu.ac.ke>

Maseno University
Maseno, Kenya
Website: <http://www.maseno.ac.ke>

Marist International Centre
Nairobi, Kenya

University of Nairobi
Nairobi, Kenya
Website: <http://www.uonbi.ac.ke>

Catholic University of Eastern Africa
Nairobi, Kenya
Website: <http://www.cuea.edu>

Africa Nazarene University (ANU)
Nairobi, Kenya
Website: <http://www.anu.ac.ke>

Blessed Bakanja College, AMECEA College
Nairobi, Kenya

Nairobi Evangelical Graduate School of Theology
Nairobi, Kenya
Website: <http://www.negst.edu>

Australian University Studies Institute
Nairobi, Kenya
Website: <http://www.ausied.com>

Kenya School of Law
Nairobi, Kenya

Strathmore University
Nairobi, Kenya
Website: <http://www.strathmore.edu>

Kenya Methodist University
Meru, Kenya
Website: <http://www.kemu.ac.ke>

Computer Pride, LTD
Nairobi, Kenya

United States International University
Nairobi, Kenya
Website: <http://www.usiu.ac.ke>

Kabarak University
Nakuru, Kenya
Website: <http://www.kabarak.ac.ke>

Dataland College/Premier College
Kenya

International Centre of Insect Physiology and Ecology
Nairobi, Kenya
Website: <http://www.icipe.org>

Al-Furqan Institute
Nairobi, Kenya

Daystar University
Nairobi, Kenya
Website: <http://www.daystar.ac.ke>

College of Insurance
Nairobi, Kenya

Kenya College of Accountancy
Nairobi, Kenya
Website: <http://www.kca.ac.ke>

Masinde Muliro University of Science and Technology
Kakamega, Kenya
Website: <http://www.wust.ac.ke>

Kenya College of Communications Technology
Nairobi, Kenya
Website: <http://www.kcct.ac.ke>

Kiriri Women's University of Science and Technology
Nairobi, Kenya
Website: <http://www.kwust.ac.ke>

Kenya Institute of Management
Nairobi, Kenya
Website: <http://www.kim.ac.ke>

Scott Theological College
Machakos, Kenya
Website: <http://www.scott.ac.ke>

Kindergarten Teachers Training College
Nairobi, Kenya

Maharishi University of Management
Kenya

Maryknoll Institute of African Studies (MIAS)
Nairobi, Kenya
Website: <http://www.mias.edu>

Micromate Computer Systems
Nairobi, Kenya

Rongo Technical Institute
Rongo, Kenya

Tangaza College, Theological Centre for Religious (TCR)

Nairobi, Kenya

Website: <http://www.tangaza.org>

The Kenya Institute of Social Work and Community Development

Training Institute

Nairobi, Kenya

Website: <http://www.kiswcd.com>

The Mombasa Polytechnic

Mombasa, Kenya

Website: <http://www.mombasapoly.ac.ke>

II Tables

Table 1: ERP-CDI value and ranking..... 13

III Illustrations

Figure 1: Project Partners.....	1
Figure 2: ERP-CDI System	12
Figure 3: African Clusters.....	14

IV Bibliography

Indicators

Access to electricity:

<http://databank.worldbank.org/ddp/home.do?Step=3&id=4>

last access 2012.07.03

Control of corruption:

<http://info.worldbank.org/governance/wgi/pdf/wgidataset.xls>

last access 2012.06.28

Ease of doing business (raw data):

<http://www.doingbusiness.org/rankings>

last access 2012.07.13

Electricity production per capita

→ electricity production (raw data):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.09.06

→ population (raw data):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=series>

last access 2012.07.20

Expenditure per student, tertiary:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx#>

last access 2012.07.2012

Fixed broadband Internet subscribers:

<http://databank.worldbank.org/data/Views/VariableSelection/SelectVariables.aspx?source=World Development Indicators and Global Development Finance#>

last access 2012.07.02

Foreign direct investments, net inflows:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

GDP:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

GDP per capita:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

GDP per capita growth:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

Higher education institutions:

<http://africa.isp.msu.edu/AUP/>

last access 2012.09.03

Internet users:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.09.06

Labor force gender balance → Labor force, female (raw data):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.06

Labor participation rate, total:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.25

Literacy gender balance → Literacy rate, female (raw data) and Literacy rate, male (raw data):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.09.06

Literacy rate, adult, total:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.25

Mobile cellular subscriptions:

<http://databank.worldbank.org/ddp/home.do?Step=3&id=4>

last access 2012.07.03

Political stability and absence of violence:

<http://info.worldbank.org/governance/wgi/pdf/wgidataset.xls>

last access 2012.06.28

Public spending on education, total:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

Quality of public service (renamed, originally Government effectiveness) :

<http://info.worldbank.org/governance/wgi/pdf/wgidataset.xls>

last access 2012.06.28

Rule of law:

<http://info.worldbank.org/governance/wgi/pdf/wgidataset.xls>

last access 2012.06.28

School enrollment, tertiary:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.25

Urban population:

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.25

Info-boxes

Capital:

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09

Top3 cities (2009):

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09

<http://www.geonames.org/countries/>

last access 2012.08.09

Population (2011):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=series>

last access 2012.07.20

Area (2010):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=series>

last access 2012.09.21

Official languages:

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09

Political system:

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09 and

<http://www.systemicpeace.org/polity/polity06.htm>

last access 2012.08.09

Date of independence:

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09

Currency:

<https://www.cia.gov/library/publications/the-world-factbook/>

last access 2012.08.09

Exchange rate per 1 US\$ (2011):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=series>

last access 2012.09.21

GDP per capita, current US\$ (2010):

<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx>

last access 2012.07.05

Country profiles

African Development Bank: Central Africa

<http://www.afdb.org/en/countries/central-africa/>

last access 2012.08.01

African Development Bank: Republic of Ghana. Country Strategy Paper 2012-2016

<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Ghana%20-%20CSP%202012%20-%202016.pdf>

last access 2012.08.16

African Development Bank: Republic of South Africa. Results-based Country Strategy Paper, 2008-2012. Mid-Term Review and Update,

http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/South%20Africa%20Country%20Strategy%20Paper%202008-2010%20Mid%20Term%20Review%20and%20Update____05.pdf

last access 2012.08.01

African Economic Outlook: Botswana

<http://www.africaneconomicoutlook.org/en/countries/southern-africa/botswana/>

last access 2012.09.25

African Economic Outlook: Ghana

<http://www.africaneconomicoutlook.org/en/countries/west-africa/ghana/>

last access 2012.08.13

African Economic Outlook: Kenya

<http://www.africaneconomicoutlook.org/en/countries/east-africa/kenya/>

last access 2012.08.19

African Economic Outlook: Lesotho

<http://www.africaneconomicoutlook.org/en/countries/southern-africa/lesotho/>

last access 2012.08.21

African Economic Outlook: Namibia

<http://www.africaneconomicoutlook.org/en/countries/southern-africa/namibia/>

last access 2012.08.01

African Economic Outlook: Nigeria

<http://www.africaneconomicoutlook.org/en/countries/west-africa/nigeria/>

last access 2012.07.31

African Economic Outlook: Rwanda

<http://www.africaneconomicoutlook.org/en/countries/east-africa/rwanda/>

last access 2013.02.14

African Economic Outlook: South Africa

<http://www.africaneconomicoutlook.org/en/countries/southern-africa/south-africa/>

last access 2012.08.01

African Economic Outlook: Swaziland

<http://www.africaneconomicoutlook.org/en/countries/southern-africa/swaziland/>

last access 2012.09.26

African Economic Outlook: Tanzania

<http://www.africaneconomicoutlook.org/en/countries/east-africa/tanzania/>

last access 2012.08.10

AISI-Connect National ICT Profile: Swaziland

http://banners.noticiasdot.com/termometro/boletines/docs/consultoras/aisi/2000/aisi_swaziland.pdf

last access 2012.09.26

Auswärtiges Amt: Kenia

<http://www.auswaertiges-amt.de/DE/Laenderinformationen/00-SiHi/KeniaSicherheit.html>

last access 2012.08.19

Auswärtiges Amt: Namibia

<http://www.auswaertiges-amt.de/DE/Laenderinformationen/00-SiHi/NamibiaSicherheit.html>

last access 2012.08.07

Auswärtiges Amt: Nigeria

<http://www.auswaertiges-amt.de/DE/Laenderinformationen/00-SiHi/NigeriaSicherheit.html>

last access 2012.07.27

Auswärtiges Amt: Rwanda

<http://www.auswaertiges-amt.de/DE/Laenderinformationen/00-SiHi/RuandaSicherheit.html>

last access 2013.02.14

BBC News Africa: Ghana Profile

<http://www.bbc.co.uk/news/world-africa-13433790>

last access 2012.08.15

Botswana Export Development and Investment Authority: ICT Sector

http://www.bedia.co.bw/article.php?id_mnu=58

last access 2012.09.025

Bertelsmann Transformation Index 2012: Nigeria Country Report

<http://www.bti-project.de/laendergutachten/wca/nga/2012/>

last access 2012.07.27

Brand South Africa: Economy Overview
<http://www.southafrica.info/business/economy/econoverview.htm>
last access 2012.08.01

Brand South Africa: Education
<http://www.southafrica.info/about/education/>
last access 2012.08.01

BuddeComm: Kenya – Key Statistics, Regulatory and Fixed-Line Telecoms Overview
<https://www.budde.com.au/Research/Kenya-Key-Statistics-Regulatory-and-Fixed-Line-Telecoms-Overviews.html?r=51>
last access 2012.08.11

BuddeComm: Rwanda-Key Statistics, Regulatory and Fixed-Line Telecoms Overview
<https://www.budde.com.au/Research/Rwanda-Telecoms-Mobile-Broadband-and-Forecasts.html>
last access 2013.02.14

Central Intelligence Agency, The World Fact Book: South Africa
<https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html>
last access 2012.08.01

Central Intelligence Agency, The World Fact Book: Ghana
<https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html>
last access 2012.08.15

Department Government Communication and Information System, Republic of South Africa: About SA
<http://www.info.gov.za/aboutsa/index.htm>
last access 2012.08.01

Department Government Communication and Information System, Republic of South Africa: Economy
<http://www.info.gov.za/aboutsa/economy.htm>
last access 2012.08.01

Department Government Communication and Information System, Republic of South Africa: Education
<http://www.info.gov.za/aboutsa/education.htm>
last access 2012.08.01

Department Government Communication and Information System, Republic of South Africa: South Africa Yearbook 2010/2011
<http://www.gcis.gov.za/content/resourcecentre/sa-info/yearbook2010-11>
last access 2012.08.01

Encyclopedia of the Nations: Lesotho - Education

<http://www.nationsencyclopedia.com/Africa/Lesotho-EDUCATION.html#ixzz24GgOG07b>

last access 2012.08.22

Encyclopedia of the Nations: Rwanda – Education

<http://www.nationsencyclopedia.com/Africa/Rwanda-EDUCATION.html#ixzz2KmlppOSv>

last access 2012.02.13

Federal Ministry of Education, Federal Republic of Nigeria: Basic and Secondary Education

<http://www.fme.gov.ng/index.php/departments/basic-and-secondary-education>

last access 2012.07.31

Fischer, Gereon, Friedrich Ebert Stiftung Windhoek: The Namibian Educational System

<http://www.fesnam.org/pdf/2010/TheNamibianEducationalSystem.pdf>

last access 2012.08.08

Freedom House, Freedom in the World 2011: Kenya

<http://www.freedomhouse.org/report/freedom-world/2012/kenya>

last access 2012.08.20

Freedom House, Freedom in the World 2011: Namibia

<http://www.freedomhouse.org/report/freedom-world/2012/namibia>

last access 2012.08.09

Freedom House, Freedom in the World 2011: Nigeria

<http://www.freedomhouse.org/report/freedom-world/2011/nigeria>

last access 2012.07.27

Freedom House, Freedom in the world 2012: Rwanda

<http://www.freedomhouse.org/report/freedom-world/2012/rwanda>

last access 2013.02.14

Infodev: Survey of ICT and Education in Africa (Volume 2)

<http://www.infodev.org/en/Publication.354.html>

last access 2012.09.24

Infoplease, Encyclopedia: Ghana, country, Africa, Economy

<http://www.infoplease.com/ce6/world/A0858406.html#ixzz23bW8LOKq>

last access 2012.08.15

Infoplease, Encyclopedia: Swaziland, Economy
<http://www.infoplease.com/ce6/world/A0861381.html#ixzz27ZCAQyK0>
last access 2012.09.26

International Education Association of South Africa: University Profiles
<http://www.ieasa.studysa.org/profiles.html>
last access 2012.08.01

Internet World Stats, Usage and Population Statistics: Nigeria
<http://www.internetworldstats.com/af/ng.htm>
last access 2012.08.02

IST Africa: ICT Background South Africa
<http://ist-africa.org/home/default.asp?page=doc-by-id&docid=3577>
last access 2012.08.01

Maps of World.com: Lesotho Education
<http://www.mapsofworld.com/lesotho/education/>
last access 2012.08.22

Ministry of Communications, Government of Ghana: The ICT Sector in Ghana
<http://www.ghana.gov.gh/index.php/governance/ministries/326-ministry-of-communications>
last access 2012.08.16

Research ICT Africa Network: Namibia
<http://www.researchictafrica.net/countries.php?cid=15>
last access 2012.08.07

The United Republic of Tanzania: Education
<http://www.tanzania.go.tz/educationf.html>
last access 2012.08.08

TANServe: Tanzania Economy
http://www.tanserve.com/facts/index_files/economy.htm
last access 2012.08.09

The World Bank: Data
<http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=series>
last access 2012.09.21

The World Bank: Ghana, Country Brief

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/GHANAEXTN/0,,menuPK:351962~pagePK:141132~piPK:141107~theSitePK:351952,00.html>

last access 2012.08.14

The World Bank: Lesotho Country Brief

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/LESOTHOEXTN/0,,menuPK:356039~pagePK:141132~piPK:141107~theSitePK:356029,00.html>

last access 2012.08.21

The World Bank: South Africa Overview

<http://www.worldbank.org/en/country/southafrica/overview>

last access 2012.08.01

The World Bank: Tanzania Country Brief

<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/TANZANIAEXTN/0,,menuPK:287345~pagePK:141132~piPK:141107~theSitePK:258799,00.html>

last access 2012.08.10

UNESCO: Country Programming Document 2011–2015 United Republic of Tanzania

<http://unesdoc.unesco.org/images/0021/002136/213676e.pdf>

last access 2012.08.08

UNICEF: Education Rwanda

<http://www.unicef.org/rwanda/education.html>

last access 2012.02.13

United States Diplomatic Mission to Nigeria: Nigeria – Education Profile

http://nigeria.usembassy.gov/nigeria_education_profile.html

last access 2012.07.31

United States Diplomatic Mission to Rwanda: Rwanda-Education Profile

http://rwanda.usembassy.gov/rwanda_system_of_education.html

last access 2012.02.13

Wosyanju, Chris: The System of Education in Kenya

<http://international.iupui.edu/kenya/resources/Education-in-Kenya.pdf>

last access 2012.08.11