AFRICA'S YOUTH: JOBS OR MIGRATION?

Demography, economic prospects and mobility

MO IBRAHIM FOUNDATION



In 2017, migrants represented only 3.4% of the global population, a marginal increase from 2.9% in 1990

There were 36.3 million African migrants in 2017, amounting to 2.9% of Africa's population

African migrations represented around 14% of the global migrant population, much less than Asia's and Europe's shares (41% and 24%) in 2017

In 2017, the top ten migration flows from Africa accounted for less than the single migration flow from Mexico to the US

Africa itself hosts a growing part of the global migrant population (+67% since 2000)

Rwanda is the third most welcoming country to migrants at world level. Egypt is the least accepting on the continent

More than 70% of sub-Saharan African migrants move within the continent

South Africa receives the largest share of African migrants, followed by Côte d'Ivoire and Uganda

In 2017, the EU hosted 9 million African migrants, 5 million from North Africa and 4 million from sub-Saharan Africa. France receives the largest share of African migrants (10.5%), more than any African country

Almost 80% of potential African migrants are driven by the hope for better economic or social prospects

Contemporary African migrants are mostly young, educated and roughly count as many women as men

Migrants spend approximately 85% of their incomes in their destination country

Remittances represented 3.5% of Africa's 2018 GDP, and more than the net 2017 ODA

The estimated contribution of migrants to local GDPs is estimated at 19% in Côte d'Ivoire, 13% in Rwanda, and 9% in South Africa

Insecurity is not the major factor for African migrations: in 2017, refugees accounted for only around 20% of African migrants

Almost 90% of African refugees stay within the continent

The total number of African refugees in 2017 (7.4 million) was just slightly above the number of Syrian refugees

Italy, Germany and France altogether host less than 4% of African refugees

Around 60% of Africa's population is currently less than 25 years old, and more than 1/4 is aged between 15-34

Between 2019 and 2100, Africa's youth is expected to grow by 181.4%, while Europe's will shrink by 21.4% and Asia's by 27.7%

By 2100, Africa's youth population could be equivalent to twice Europe's entire population and around ½ of the world's youth will be from Africa

Africa's youth are better educated, healthier and more connected than previous generations, but are still lagging far behind other regions

Only 1/2 of those who would qualify for lower secondary education in sub-Saharan Africa are enrolled

In Africa, there is a weak link between higher education levels and better job prospects

The average match between education and the skills needed by businesses is worse in Africa than in the rest of world

Almost 16 million young Africans are currently facing unemployment. Youth unemployment is generally higher in urban

In South Africa, the second largest GDP on the continent, 55% of young people are jobless

Hardly any (1%) 15-24 year olds in sub-Saharan Africa participate in vocational education programmes

More than 40.0% of young Africans consider their current living situation to be very or fairly bad

Unemployment is considered by far the most important problem by African youth

In Egypt, Ghana, Morocco, Nigeria and South Africa at least 75% of the youth think that their governments do not care about their needs

The gap between the median age of Africa's population and that of its executive leaders is about 45 years

AFRICA'S YOUTH: JOBS OR MIGRATION?

Demography, economic prospects and mobility

2019 IBRAHIM FORUM REPORT

African migrations: repositioning the debate

Spotlight - Intra-continental migrations: positive impacts for both origin and destination countries?

Section 02

Africa's first challenge: the youth bulge stuck in 'waithood'

262627

32

32 34

35

39

I. MULTIPLE DEFINITIONS AND PATCHY DATA	8	I. A GROWING YOUTH MAJORITY
1. No common definition	8	1. The world's youngest continent
2. No robust data	9	2. Africa's biggest resource?
Spotlight - Public opinions: diverse and sometimes overly emotional in destination countries	10	II. MORE EDUCATION BUT LESS JOBS: A WORRYING DISCONNECT
II. MIGRATIONS ARE A KEY DYNAMIC OF HUMAN HISTORY AND HAVE SHAPED MOST NATIONS	12	III. WEAK ECONOMIC PROSPECTS: UNEMPLOYMENT OR INFORMAL JOBS
III. AFRICAN MIGRATIONS REPRESENT AROUND 14.0% OF THE GLOBAL MIGRANT POPULATION	14	Almost 16.0 million young Africans are facing unemployment
1. Africa is not a continent of massive exodus	14	2. Living standards: a negative outlook
 More than half of African migrants originate from nine countries Africa itself hosts a growing part of the global 	15	IV. YOUTH AND POLITICS: A BROKEN RELATIONSHIP?
migrant population	15	Spotlight - Africa on the verge of losing
Spotlight - Who are the African migrants?	16	its youth?
IV. MORE THAN HALF OF THE AFRICAN MIGRANTS MOVE WITHIN THE CONTINENT	17	
Around 70.0% of sub-Saharan African migrants stay within the continent	17	
Only about a fourth of African migrants go to Europe	18	
V. ALMOST 80.0% OF AFRICAN MIGRATIONS ARE ECONOMICALLY OR SOCIALLY DRIVEN	19	
Hope for better economic and social prospects mainly drives African migrations	20	
2. Insecurity is not the major factor: refugees account for only around 20.0% of African migrants	21	

22

21st century jobs market: what prospects for Africa?

Section 04

The way up rather than the way out: managing and strengthening mobility

I. JOBLESS GROWTH AND PREMATURE			
DEINDUSTRIALISATION			
1. A decade of lost opportunities	42		
2. Premature deindustrialisation?	43		
II. THE 4TH INDUSTRIAL REVOLUTION: JOB-KILLER OR JOB-CREATOR?	45		
1. The 4 th Industrial Revolution: potential impacts	45		
The 'gig economy': a game-changer for the nature of work	46		
Spotlight - The 4 th Industrial Revolution: better living standards to mitigate some migration incentives?	47		
III. AGRICULTURE: FROM MEETING NEEDS TO			
CREATING WEALTH	48		
1. A growing dependence on food imports	48		
2. Agriculture is a key employer	48		
Agriculture can be a great beneficiary of new technologies	49		

1. 5	STRENGTHENING GEOGRAPHICAL MOBILITY	52
1.	Risks of unmanaged migrations: a growing business for criminal networks	52
2.	International and African migration frameworks: dual responses	52
3.	Mobility within countries: the dominant pattern	55
4.	Mobility within the continent: growing openness, but still insufficient intra-continental infrastructure	55
5.	Mobility from the continent: restricted	62
II.	MAXIMISING AFRICA'S HUMAN CAPITAL	64
	otlight - The African Continental Free Trade Area: eal opportunity	64
1.	Africa's current skills gap	65
2.	Educational mobility and diploma portability	69
3.	Professional mobility and skills portability	73
Ш	LEAVING NO ONE BEHIND: THE EXTRA MILE	74
1.	The digital divide: 66.0% of African citizens are still offline	74
2.	Social safety nets: almost non existent	76
3.	Missing identity: no country in Africa with a complete birth registration system	76
	otlight - The elephant in the room: what about mily planning?	78
Gl	ossary	82
Ac	ronyms	84
Re	ferences	85
No	otes	98
Pr	oject team	99



African migrations: repositioning the debate

I. I	MULTIPLE DEFINITIONS AND PATCHY DATA	8
1.	No common definition	8
2.	No robust data	9
•	Incomplete and poorly presented migration data often lead to misperceptions about the scale of migrations and its effects	g
•	The need for better data and the potential of big data	10
-	ootlight - Public opinions: diverse and sometimes verly emotional in destination countries	10
	MIGRATIONS ARE A KEY DYNAMIC OF HUMAN ISTORY AND HAVE SHAPED MOST NATIONS	12
	. AFRICAN MIGRATIONS REPRESENT AROUND 1.0% OF THE GLOBAL MIGRANT POPULATION	14
1.	Africa is not a continent of massive exodus	14
2.	More than half of African migrants originate from nine countries	15
3.	Africa itself hosts a growing part of the global migrant population	15
Sp	ootlight - Who are the African migrants?	16
	. MORE THAN HALF OF THE AFRICAN MIGRANTS OVE WITHIN THE CONTINENT	17
1.	Around 70.0% of sub-Saharan African migrants stay within the continent	17
2.	Only about a fourth of African migrants go to Europe	18
	ALMOST 80.0% OF AFRICAN MIGRATIONS ARE	19
1.	Hope for better economic and social prospects mainly drives African migrations	20
2.	Insecurity is not the major factor: refugees account for only around 20.0% of African migrants	21
	ootlight - Intra-continental migrations: positive apacts for both origin and destination countries?	22

African migrations: repositioning the debate

I. MULTIPLE DEFINITIONS AND PATCHY DATA

1. No common definition

While migration has risen to the top of many countries' political and media agendas, the difficulty to classify migrants and the paucity of migration data remain key issues.

According to the International Organization for Migration (IOM), migration is the movement of a person or a group of persons, either across an international border or within a state. It varies in length, composition, motivations and legal situation. It includes refugees, displaced persons, economic migrants and persons moving for other purposes, including family reunification.

A migrant is any person who is moving or has moved across an international border or within a state away from their habitual place of residence, regardless of (a) legal status; (b) whether the movement is voluntary or involuntary; (c) the causes of movement; (d) the length of the stay.

Refugees: a legal status

As per the 1951 United Nations (UN) Convention and Protocol Relating to the Status of Refugees, a refugee is a person who, owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinions, is outside the country of their nationality and is unable or unwilling to avail themselves of the protection of that country.

The 1969 Organisation of African Unity (OAU) Convention Governing the Specific Aspects of Refugee Problems in Africa defines a refugee as any person compelled to leave their country owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of their country of origin or nationality.

However, for the purposes of this report the concept of migration will encompass migrants and refugees.

Categories of migration

- Emigration The act of departing or exiting from one's country of nationality/citizenship with a view to settling in another.
- Immigration A process by which non-nationals/non-citizens move into a country for the purpose of settlement.

Legal situation **Motivation Destination Duration** Regular migration **Voluntary migration** Internal migration **Short-term migration** Movement of people Voluntary movement of people Movement of people within Movement of people for through recognised, within/outside their country the country of origin/ a period of between three authorised channels. of residence for the purpose residence to establish a and 12 months, except cases of employment/economic new residence, temporary for purposes of recreation, reasons/family reunion. or permanent. holidays, personal visits, business, medical treatment. Irregular migration **Forced migration** International migration Long-term migration Movement of people for a Movement of people Movement of people coerced Movement of people across by threats to life and livelihood. period of at least 12 months. outside regulatory norms an international frontier, from of sending, transit and due to natural or man-made a country of origin/residence destination countries. causes. Forced migrants are to establish a new residence frequently refugees or Internally in another country, temporary Displaced Persons (IDPs). or permanent. International migration can be intraregional or interregional, and intracontinental or intercontinental. Source: IOM (2019), IOM (2011)

Assignment to a specific category often proves difficult:

- Migration status can change, for example someone might enter a country on a valid visa but overstay and become an irregular migrant.
- Migrations are 'mixed', composed of a multiplicity of factors, legal statuses, vulnerabilities and agencies. For example, not all those forced to move are without willpower during their journey, and not all those who started their migration journey voluntarily necessarily maintain their agency until reaching their destination.

2. No robust data

Incomplete and poorly presented migration data often lead to misperceptions about the scale of migrations and its effects

Various data sources provide information about migrations. Traditional sources such as statistical and administrative data are currently insufficient to build a comprehensive analysis of migration.

Statistical sources include censuses, household surveys and labour force surveys. While providing detailed information on international migrant stocks that can be compared across countries, statistical data are collected infrequently and at a high cost. Moreover, censuses

or household and labour surveys generally do not include enough questions on migration to allow for a comprehensive analysis.

Administrative sources include visa processes, residence and work permits, administrative registers and border data collection systems. Though timely, data collected through these sources are seldom comprehensive. Additionally, each country has its own administrative processes, migration definitions and entry requirements, making the data not comparable across countries.

Limits of migration data

Not collected

Accurate, comprehensive and updated data on migration depend on strong statistical capacity and on the existence of vital statistics, which may be limited. In addition, migration is still a low priority topic for many national statistical offices.

Every year, the World Bank assesses the capacity of the statistical system in 149 countries. In 2018, only a few African countries, Egypt, Senegal and South Africa, were highly ranked. 33 were placed in the lower half of the rankings table, including six which were among the world's bottom ten scoring countries: Central African Republic (CAR), Comoros, Eritrea, Gabon, Libya and Somalia.

While the best data on migration come from censuses, these are infrequent and very costly. According to the UN Population Division, for 17.0% of African countries the most recent data available from censuses refer to years prior to 2005.

Scattered across various sources

When existent, data can also be scattered across different sources (countries or organisations), limiting comprehensive analysis.

The IOM Migration Data Portal attempts to aggregate and harmonise different data sources in the same platform. It aims to serve as a unique access point to timely, comprehensive migration statistics and reliable information about migration globally. The Portal contains data at country, sub-regional and regional level as well as on topics such as migration stock, vulnerabilities, integration, employment and migrant acceptance.

Incomplete/ not disaggregated

The migration topics which are more broadly covered are migrant stocks, remittances, human trafficking, students and international migration conventions. Fewer or no data is collected on migration flows, missing migrants, motives for migration, migrant integration, smuggling, return migration, impact of migration policies and programmes, well-being of migrants (including health), skills of migrants and irregular migration.

The largest migration data gaps in Africa are on what migrants do, how long they stay, and their qualifications.

Data are seldom disaggregated. From the 30 African countries with a census in the UN Statistics database, 25 included a question on the country of birth and 26 on citizenship, but only seven on the year or period of arrival.

Not comparable between countries

Differences in definitions, data collection methods and policy settings between countries make it difficult to establish a harmonised and comparable approach to global migrant stocks, flows and characteristics.

Differences in statistical capacity among countries can also account for the non-comparability of data.

The need for better data and the potential of big data

The formal inclusion of the topic of migration in the UN 2030 Agenda for Sustainable Development (2015), as well as the adoption of the UN Global Compact for Safe, Orderly and Regular Migration (GCM) and the UN Global Compact for Refugees (both December 2018), have heightened the need for reliable, timely and internationally comparable definitions and data. The joint effect of growing demand for more and better migration data on the one hand and widening technological progress on the other have prompted the international statistics community to strengthen the traditional sources of migration data, and to look for alternatives to enhance collection and analysis.

Innovative data sources such as big data are generated automatically through mobile phones, social media, internet platforms and applications, as well as via digital sensors and meters. These are usually managed at transnational level by tech giants such as Google, Facebook, NASA and GSM. Big data could present an opportunity to complement traditional data sources in Africa and to leapfrog migration data availability and analysis. With 444.0 million estimated mobile phone subscribers (44.0% of the population) in sub-Saharan Africa and a total of 453.3 million internet users and 177.0 million Facebook subscribers in Africa in 2017, big data could prove a timelier, more frequent and less costly data source which also entails a broader coverage.



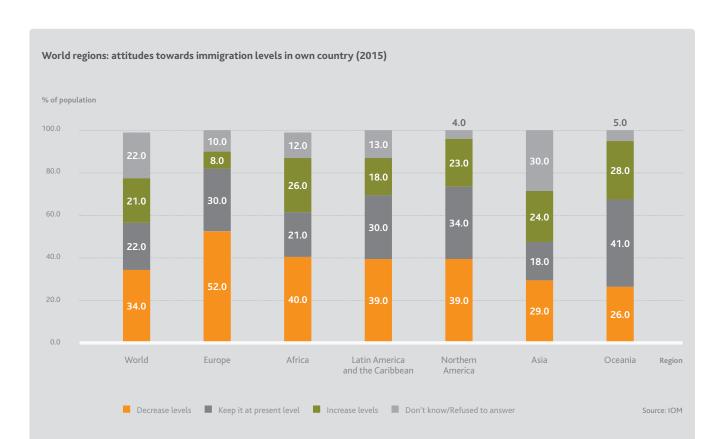
SPOTLIGHT

Public opinions: diverse and sometimes overly emotional in destination countries

Particularly in hosting countries, perspectives on migration are often overly emotional and based on misperceptions:

- The number of migrants is often overestimated by three to four times.
- The perceived recent hike in migration numbers is contradicted by the data. Since 1990, the percentage of migrants increased only marginally from 2.9% of the global population to 3.4% in 2017. Previous waves of migration, for instance the European expansion to Africa (18th-19th centuries), have been vastly greater.
- Migration is not only directed at high-income countries.
 More than ½ of African migrants stay within Africa.
- Forced migrants do not constitute the largest group of African migrants. African refugees fleeing persecution, conflict or generalised violence, environmental degradation or natural disasters constitute about 20.0% of all migrants.
- Migrants are not a burden on services, but more often a valuable and sought-after resource. For example, in many high-income countries, migrants constitute a considerable portion of the health-care workforce.
- Migrants do have a positive impact on the economy and finance of hosting countries. According to the International

- Monetary Fund (IMF), each 1.0% increase in the share of migrants in the adult population of advanced economies can increase the Gross Domestic Product (GDP) per capita by up to 2.0% in the long term.
- Migrants and refugees do not spread infectious diseases and have, on average, lower mortality rates than local populations in high-income countries.
- The world is more positive than negative towards immigrants. Across almost all regions people are more likely to want the immigration level in their country to either remain the same or even increase. Only in Europe do more than ½ of the respondents consider migration a threat to national security, socio-economic welfare and cultural identity and want immigration levels to decrease.



In Africa, migrations are viewed as a potential source for development, if well-managed. The facilitation of free movement of people within the continent is a priority of *Agenda 2063*. According to the *Migrant Acceptance Index*, Africa displays migrant acceptance levels above the global average. Of the ten most accepting countries in the world, five are African: Rwanda (3rd), Sierra Leone (4th), Mali (5th), Nigeria (8th) and Burkina Faso (9th). However, important variations appear within the continent.

Attitudes are most positive in West Africa, where the majority of the population (60.0%) would like to see the same or even increased immigration levels. The percentage of the population wanting to see immigration levels increased in this region (33.0%) is the highest in the world.

The lowest levels of acceptance are found in North Africa, where only 32.0% of the people would like to see immigration levels increased or to be kept the same. Egypt is the least accepting country in Africa.

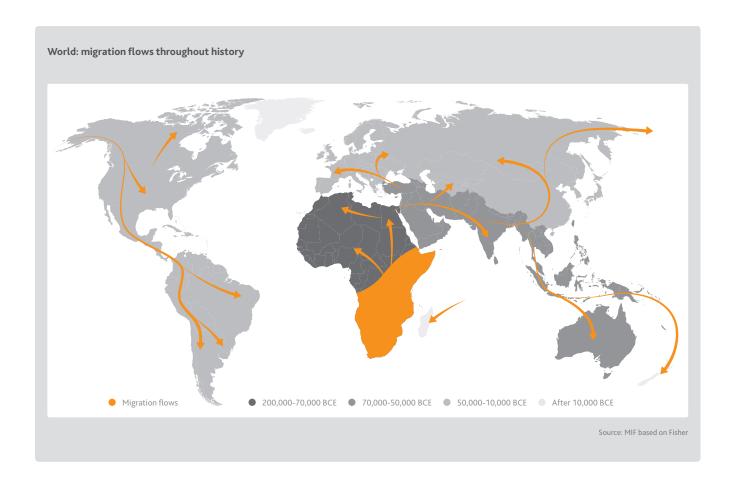
Despite displaying one of the highest human densities in Africa (518.6 persons/km²), Rwanda is the most welcoming country on the continent and third at world level. When asked for the *World Values Survey* about having immigrants and foreign workers as neighbours, only 5.4% of Rwandese responded they would not like to.

II. MIGRATIONS ARE A KEY DYNAMIC OF HUMAN HISTORY AND HAVE SHAPED MOST NATIONS

Throughout the past 200 thousand years, humans have migrated, seeking natural resources, better social, cultural and economic conditions or escaping wars, persecution or ethnic tensions.

Migrations have influenced human history and the shape and wealth of many nations.

Migration began in the Rift Valley in Africa, from where *Homo sapiens* spread initially within Africa about 100 thousand years ago and then into Eurasia and other regions about 70 thousand years ago, likely due to a depletion of resources. Most people in Eurasia and the Americas today descend from these early migrants.



Since then, there have been several waves of migration:

Ancient world

Migrations were at the core of Greek and Roman expansions, while outside Europe significant movements were also associated with the Mesopotamian, Inca, Indus, and Zhou empires. Other large early migrations include the expansion of Islam, the migration of the Vikings and the Mongols and the Crusades to the Holy Land.

Modern era (15th-18th century)

Apart from the slave trade from the beginning of the 18th century, when about 12.0 million African slaves crossed the Atlantic, the predominant flows in this period were the European expansions and resettlements to Africa and Asia.

First Industrial Revolution (19th century)

The first Industrial Revolution transformed migration patterns globally. Expanding factories attracted massive numbers of workers and the development of transport infrastructures enabled farreaching movements of people and goods. During the Great Atlantic Migration (1840-1980s), about 37.0 million Europeans entered the United States (US).

First and Second World War (20th century)

While the two World Wars (1914-1918 and 1939-1945) generated mostly forced migrations, booming economies after the Second World War (WWII) in Europe, Northern America and Australia attracted labour migration. WWII caused more than 90.0 million

displaced persons in China, 31.0 million in Europe and 13.0 million in Japan, as well as 7.0–8.0 million people deported by Germany, and 9.0–10.0 million Germans expelled from Eastern Europe into Germany by the Soviet Union. During the following economic boom (1950-1970), between 7.0 and 10.0 million left Italy, Spain, Greece and Portugal to work abroad, of which $\frac{1}{2}$ went to North-Western European countries.

End of colonial era, post-Cold War and Rwandan genocide (20th century)

In this period, independence wars and the Cold War also created significant migration flows:

- European returnees from African colonies (1940-1975): around 7.0 million people returned to the United Kingdom (UK), France, Belgium, the Netherlands and Portugal following the independence of African countries;
- Partition of India and Pakistan (1947): about 14.0 million Indians and Pakistanis displaced;
- Algerian independence (1960): 1.2 million Algerians displaced to Morocco and Tunisia;
- Bangladesh independence (1971): 10.0 million Bengalis displaced from East Pakistan to India;

- Breakup of the Soviet Union (1991): Russia received about 11.8 million people while 5.3 million left the country between 1991 and 2015;
- Breakup of Yugoslavia (1994-1995): 2.5 million Muslims and Croats from Bosnia and Herzegovina displaced to Germany and other neighbouring countries, and within Bosnia and Herzegovina;
- Rwandan genocide (1994): 3.5 million Rwandese displaced internally or to Zaire (Democratic Republic of Congo), Tanzania, Burundi and Uganda.

Violence in the 21st century

In the most recent decades, the movement of asylum-seekers, refugees and irregular migrants has been significant in Asia, Africa and Latin America:

- Civil conflict in Colombia (1960s-2015): around 6.0 million persons internally displaced;
- Civil conflict in Darfur (2003-present): 3.0 million Darfuris displaced;
- Civil war in Syria (2011-present): more than 12.0 million Syrians displaced internally and to Turkey, Lebanon, Jordan and Western Europe;
- Civil war in South Sudan (2013-present): more than 2.0 million displaced.

Current global migrations

Since 1990, the number of international migrants has expanded by almost 70.0%, from 153.0 million people to 258.0 million in 2017. However, even if from 2010 to 2015 the annual migration growth rate has reached 2.4%, outpacing the annual world population growth rate of 1.2%, migrants still remain a small part of the total world population. In 1990 global migrants represented 2.9% of the world population and, in 2017, 3.4%.

Top ten bilateral migration corridors in the world, 2017 (million people)

To the US:

• from Mexico: 12.7

• from China: 2.4

To Russia:

from Ukraine: 3.3

from Kazakhstan: 2.6

To Ukraine:

• from Russia: 3.3

To the UAE:

from India: 3.3
 (equivalent to 35.2%
 of receiving country's total population)

To Turkey:

• from Syria: 3.3

To Kazakhstan:

• from Russia: 2.4

To Hong Kong:

from China: 2.3

 (equivalent to 31.8%
 of receiving country's total population)

To India

• from Bangladesh: 3.1

Top ten bilateral migration corridors from Africa, 2017 (million people)

Within the continent:

- 1.3 from Burkina Faso to Côte d'Ivoire
- 0.9 from South Sudan to Uganda
- 0.6 from Zimbabwe to South Africa
- 0.6 from Sudan to South Sudan
- 0.5 from Côte d'Ivoire to Burkina Faso

Outside the continent:

- 1.5 from Algeria to France
- 0.9 from Morocco to France
- 0.9 from Egypt to Saudi Arabia
- 0.9 from Egypt to the UAE
- 0.7 from Morocco to Spain

Source: UNDESA (2017a)

III. AFRICAN MIGRATIONS REPRESENT AROUND 14.0% OF THE GLOBAL MIGRANT POPULATION

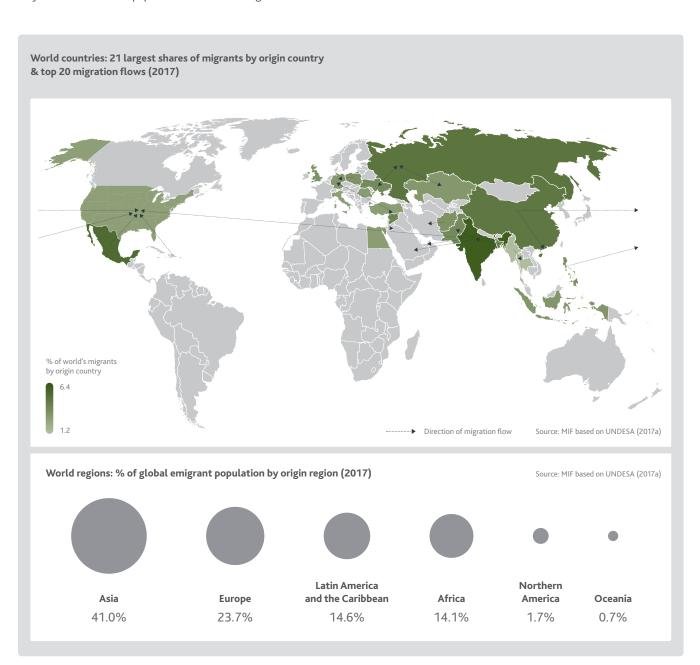
1. Africa is not a continent of massive exodus

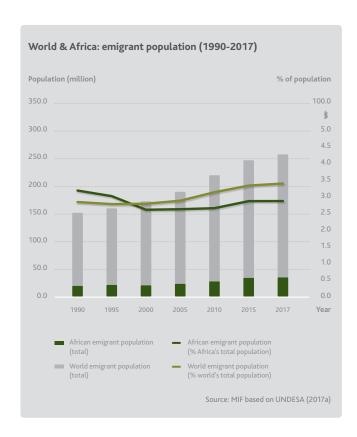
In 2017, more than 50.0% of the world's migrants originated from just 21 countries. The ten countries with the greatest shares of migrants leaving were India (6.4% of the world's migrants), Mexico (5.0%), Russia (4.1%), China (3.9%), Bangladesh (2.9%), Syria (2.7%), Pakistan (2.3%), Ukraine (2.3%), Philippines (2.2%) and the UK (1.9%). The African country with the largest share of migrants leaving was Egypt, only the 19th largest in the world.

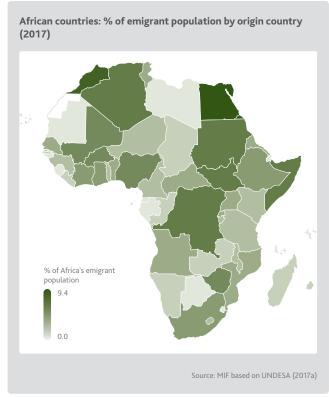
In fact, 36.3 million migrants left African countries, representing only 0.5% of the world's population and contributing to 14.1%

of the world's total migrant population, much less than Asia's and Europe's shares (41.0% and 23.7%, respectively).

Linked to the continent's demographic growth rate, the total number of migrants from Africa has increased by almost 80.0% since 1990, more than the global migrant population. However, at the same time, the proportion of migrants over the continent's total population has decreased from 3.2% in 1990 to only 2.9% in 2017.







2. More than half of African migrants originate from nine countries

More than $\frac{1}{2}$ of African migrants originate from nine countries only: Egypt (9.4%), Morocco (8.0%), Somalia (5.5%), Sudan (5.4%), Algeria (4.9%), South Sudan (4.8%), Democratic Republic of Congo (DRC) (4.6%), Burkina Faso (4.1%) and Nigeria (3.5%). East Africa, followed by North Africa and West Africa, are the regions from where most migrants originate, accounting for 27.1%, 25.8% and 24.1% of Africa's migrants respectively.

However, these regions show contrasted dynamics. For example, of the almost 10.0 million migrants from East Africa, the largest part is composed of refugees, but of the almost 9.0 million migrants from West Africa, the largest part is composed of labour migrants, seasonal, temporary or permanent.

The African countries with the largest proportion of people leaving are Cabo Verde, São Tomé & Príncipe (STP) and Seychelles, where about 40.0% of the population have migrated, followed by CAR, Lesotho, Comoros, South Sudan, Somalia, Mauritius and Eritrea (between 15.6% and 12.0% of the population).

Western Sahara was the origin of around 195.0 thousand migrants in 2017, representing 0.5% of all African-born migrants. These are more than the migrants leaving Sierra Leone (0.4%), Libya (0.4%) or Mauritania (0.3%). The share of migrants leaving Western Sahara represents 35.0% of its population. The vast majority (99.8%) of Western Saharan migrants stay in Africa, of which 85.1% go to Algeria.

3. Africa itself hosts a growing part of the global migrant population

In 2017, Africa hosted 9.6% of the world migrant stock (24.7 million), less than Asia (30.9%), Europe (30.2%) and Northern America (22.4%). However, it has become a growing destination continent for African and international migrants, being the region with the highest increase in the number of received migrants since 2000: +66.6%.

Top ten non-African origins of migrants in Africa (2017)	Total migrants	% of total migrants residing in Africa
Palestinian Territories	452,091	2.1
France	253,464	1.2
Syria	210,052	1.0
UK	163,471	0.8
Portugal	147,245	0.7
Germany	126,018	0.6
India	103,992	0.5
Iraq	90,368	0.4
China	61,761	0.3
Italy	58,629	0.3



Who are the African migrants?

Contemporary African migrations are primarily composed of young people. 60.0% of irregular African migrants are estimated to be under 35 years old. Moreover, 27.5% of all migrants hosted in Africa, the majority of which originate from the continent, are between 15-29 years old.

Almost $\frac{1}{2}$ of the African migrants, the majority of which are in Africa, are female (46.1%), contrary to common perceptions that African migrations are male-dominated.

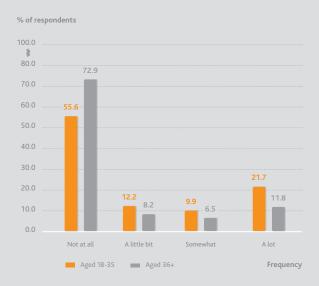
In regards to education, levels are higher for people who take concrete steps to migrate. More than $\frac{1}{2}$ of those who prepare their departure have completed secondary or tertiary education.

According to Afrobarometer survey data from 34 African countries, a large majority of Africa's population (63.4%) have not considered migrating, and only 17.2% have seriously considered it. In Madagascar (86.5%), Tanzania (85.8%), Mali (79.8%) and Namibia (76.9%) more than ¾ of the population have not considered moving at all. On the contrary, in Cabo Verde (37.1%), São Tomé & Príncipe (35.3%), Sierra Leone (34.8%), Togo (29.7%), Malawi (29.4%), Gambia (29.3%), Liberia (28.5%) and Sudan (27.5%) more than ¼ of the population has considered a lot moving to another country.

These results are different when looking at youth. Almost $\frac{1}{3}$ (31.5%) of young Africans have thought somewhat or a lot about moving to another country, almost twice as many as those older than 35.

Of those who have considered migrating, more than ½ (59.7%)

African countries: considered moving to another country (2016/2018)



Source: MIF based on Afrobarometer

have not made any plans or preparations yet. Only 9.0% of Africans considering migration are making actual preparations to move, such as getting a visa. These percentages are highest in Mali, where 22.3% of people considering migration are effectively planning it, in Niger (18.9%) and in Lesotho (16.9%).

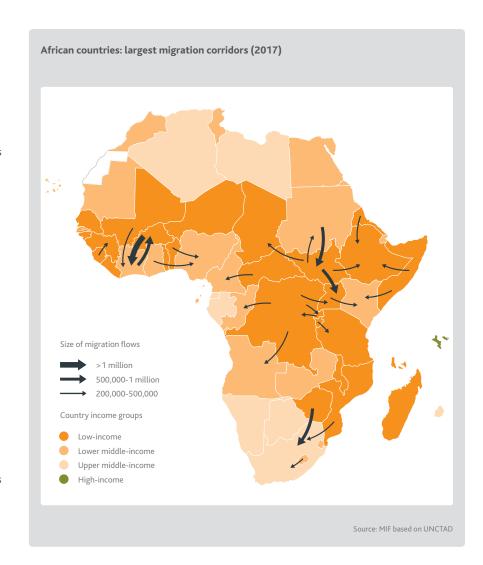
IV. MORE THAN HALF OF THE AFRICAN MIGRANTS MOVE WITHIN THE CONTINENT

1. Around 70.0% of sub-Saharan African migrants stay within the continent

In 2017, 53.4% of African migrants did not leave the continent, while 25.7% travelled to Europe and 12.2% to Asia. While the overwhelming majority (almost 90.0%) of North African migrants moved to Europe or Asia, 70.3% of sub-Saharan African migrants moved within the continent.

Within the African continent, African migrants travelled mostly to or within East Africa (18.5% of African migrants) and West Africa (16.7%), while only 8.2% travelled to or within Central Africa, and 6.7% to or within Southern Africa. The lowest percentage (3.3%) travelled to or within North Africa.

In 2017, the five main internal migration corridors were from Burkina Faso to Côte d'Ivoire (1.3 million), from South Sudan to Uganda (0.9 million), from Zimbabwe to South Africa (0.6 million), from Sudan to South Sudan (0.6 million) and from Côte d'Ivoire to Burkina Faso (0.5 million). Migration corridors in West and Southern Africa are mainly economic as they connect migrants to jobs in farming and informal trade. East Africa also has several smaller economic corridors with migrants moving around the East African Community (EAC) countries, largely due to relaxed labour laws for migrants from EAC countries. However, several of the migration corridors ending in East Africa have also developed due to conflict or political instability in countries like South Sudan or Somalia.



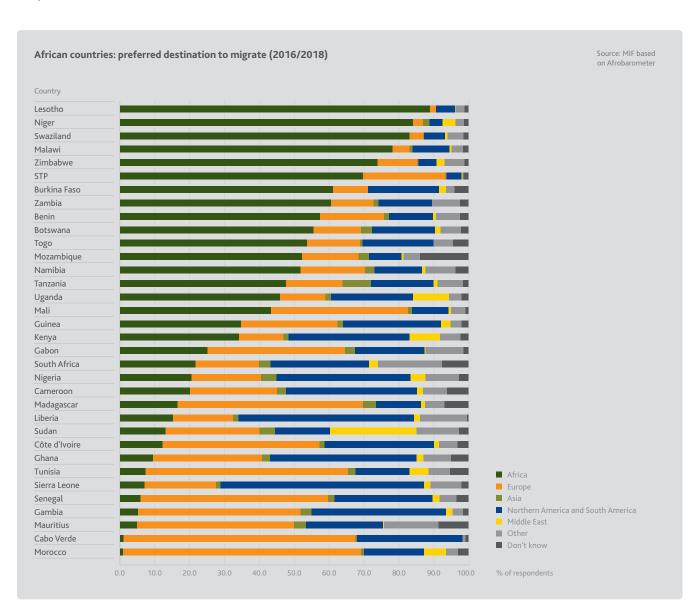
South Africa was the country receiving the largest share of African migrants (6.1%), followed by Côte d'Ivoire (5.8%) and Uganda (4.4%). While South Africa was the preferred destination for most migrants from the continent, xenophobic violence has become a constant threat to the lives and livelihoods of many migrants. In recent years, there has been an escalation of xenophobic movements with anti-immigrant protests and foreign nationals being attacked, displaced and having their shops looted. According to the *Migrant Acceptance Index*, South Africa is the third most hostile country in Africa for migrants after Egypt and Tanzania.

2. Only about a fourth of African migrants go to Europe

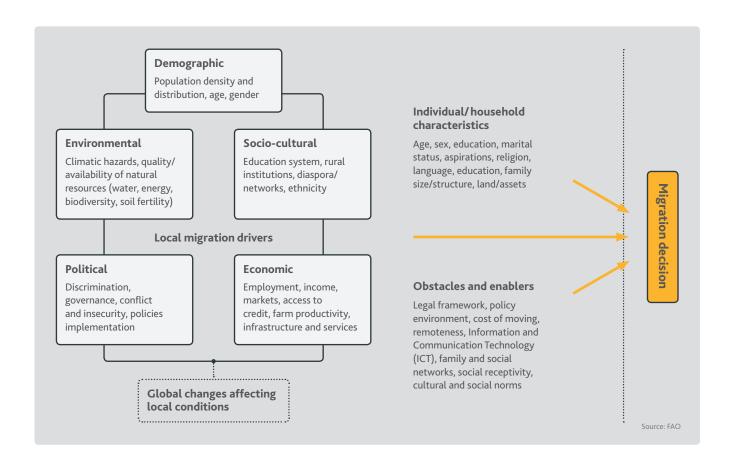
Outside the continent, Europe hosts the largest share of African migrants: 25.7% of all African migrants. In 2017, the European Union (EU) hosted 9.1 million African migrants, of which 5.1 million were from North Africa and 4.0 million from sub-Saharan Africa. France receives the largest share of African migrants (10.5%), more than any African country.

Asia is the second largest overseas host continent, hosting 4.4 million African migrants. The vast majority of these are temporary workers from Egypt and East Africa, living in the Gulf States and in Jordan, with very limited rights.

However, if given the choice more people would move overseas than within Africa. When asked to which country or region they would be most likely to go if migrating, 34.8% of Africans from 34 countries surveyed said they would move within the continent, while 48.4% would move to Europe or Northern America.



V. ALMOST 80.0% OF AFRICAN MIGRATIONS ARE ECONOMICALLY OR SOCIALLY DRIVEN



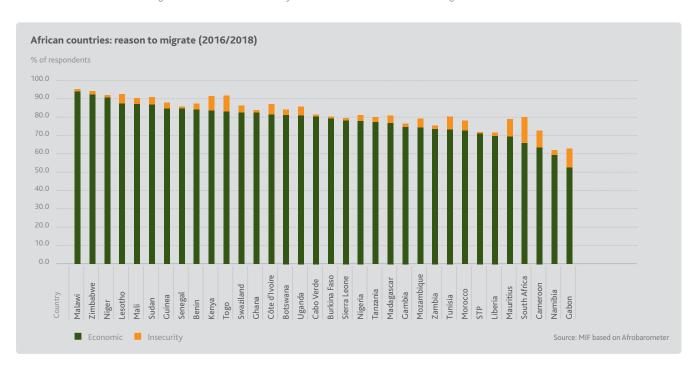
Migration can be driven by many factors:

- GDP differentials: the hope of moving into a country with a higher GDP is a driver of migration;
- Higher GDP per capita: contrary to perceptions, higher GDP per capita tends to result in higher migration levels, since the act of migrating requires financial resources. This is particularly true for extra-continental migrations;
- Diasporas: diasporas in destination countries shape migratory flows.
 The size of diasporas in destination countries is a good indicator of the destinations that citizens of specific African countries are likely to migrate to;
- Population growth rates: countries with the highest population growths are often the poorest and with the highest number of dependants, impairing the possibilities of migration;
- Urbanisation: countries at more advanced stages of urbanisation tend to be richer, hence send more migrants abroad. This is particularly true for North Africa;
- Physical distance: distance and lack of transport infrastructures often determine migration destinations. In Africa, migrants who remain on the continent tend to move to neighbouring countries.

1. Hope for better economic and social prospects mainly drives African migrations

Among the 36.3 million migrants originating from Africa, almost 80.0% are estimated to migrate voluntarily.* According to Afrobarometer surveys from 34 countries, the large majority of Africans who would consider migrating, would do so for economic reasons: finding a job or better work opportunities (44.0%), fleeing economic hardship (22.0%), poverty or destitution (7.0%), better business prospects (4.6%) or lower taxes at destination (0.4%). The five largest shares of people wanting to migrate for economic motives are found in Malawi (93.7%), Zimbabwe (92.1%), Niger (90.4%), Lesotho (87.4%) and Mali (87.2%). High levels of unemployment are also among the drivers of youth migration.

* These estimations were calculated using UNDESA and UNHCR data and may underestimate the total number of forced migrants.



Education is only one among many socio-economic factors that contribute to a better life. When asked by Afrobarometer about the primary motivation to consider migration, only 5.8% of Africans responded pursuing an education.

Across low-income settings, highly educated people are more likely to migrate due to a combination of better financial resources, greater aspirations, and lack of appropriate employment in their home environment.

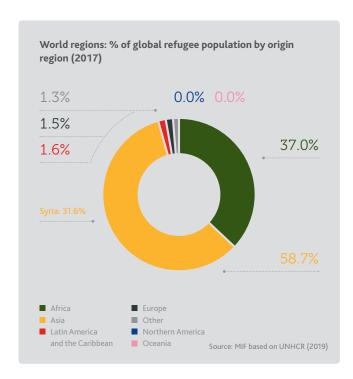
Pressure on people from family, friends and communities to migrate and provide remittances also drives the decision to move, creating a culture of migration. Cultures of migration appear to be affecting young people who are increasingly expected to migrate internationally during their lives.

2. Insecurity is not the major factor: refugees account for only around 20.0% of African migrants

By the end of 2017, 19.9 million people - 7.7% of the world's migrants - had been forcibly displaced into foreign countries as a result of persecution, conflict or generalised violence, environmental degradation or natural disasters.

More than 34 of the world's refugees in 2017 came from eight countries, of which five are African: Syria (6.3 million), Afghanistan (2.6 million), South Sudan (2.4 million), Myanmar (1.2 million), Somalia (1.0 million), Sudan (0.7 million), DRC (0.6 million) and CAR (0.5 million).

Refugees originating from Africa amounted to 7.4 million people in 2017, representing only 20.3% of African migrants. While this represents an increase of 166.3% in the number of African refugees compared to 2008, the total number of African refugees was just slightly above the number of Syrian refugees.



Almost ¾ of Africa's refugees originated from East Africa (73.4%), with South Sudan (33.1%), Somalia (13.4%) and Sudan (9.4%) being the three main origin countries on the continent.

In 2017, almost 90.0% of African refugees fled to another African country (87.3%), the majority having fled to or within East Africa (59.8%). Three countries, Uganda, Sudan and Ethiopia, hosted almost $\frac{1}{2}$ of all African refugees.

Yemen was by far the largest non-African host to African refugees, having taken in 3.6% of African refugees, 97.1% of them being Somali. Then came three European countries, which together hosted less than 4.0% of all African refugees: Italy (1.4%), Germany (1.3%) and France (1.1%).

Africa also hosted non-African refugees, mainly fleeing Syria (2.1% of the total refugee population on the continent) and the Palestinian Territories (1.2%). The large majority of registered Syrian refugees fled to Egypt, which received 88.7% of Syrian refugees in Africa.

In addition to the 7.4 million African refugees in 2017, 14.0 million persons were displaced internally as a result of conflict and persecution, and 2.6 million more as a result of natural disasters, creating further challenging situations in terms of settlement, safety, access to basic services and respect of human rights. The DRC (4.5 million), Sudan (2.1 million) and South Sudan (2.0 million) were among the ten countries in the world with the largest number of IDPs.



Intra-continental migrations: positive impacts for both origin and destination countries?

Gains for countries of destination

A positive impact on structural transformation and GDP

By allowing the reallocation of resources from lower to higher productivity activities, both between and within sectors, migrations foster economic structural transformation and generate a potential contribution to GDP per capita in Africa that is expected to reach \$3.2 thousand in 2030. The estimated contribution of migrations to GDP is at 19.0% in Côte d'Ivoire, 13.0% in Rwanda and 9.0% in South Africa.

Improved labour productivity

A larger share of working-age people enables higher productivity, especially in sectors that experience relatively high migration rates (agriculture, manufacturing, mining, construction and services). High-skilled migrants engaged in skill-intensive sectors can play an important role in fostering innovation, enabling entrepreneurship and stimulating job growth, as well as skills transfers and technology flows.

Filling labour gaps

Migration often addresses labour gaps in destination countries or fills occupations neglected by locals. In Rwanda, the policy to attract migration from EAC partner states has increased its labour supply in sectors with shortages, while contributing to the development of education, engineering, finance, hospitality and financial services through the exchange of skills.

Higher levels of consumption and a larger tax base

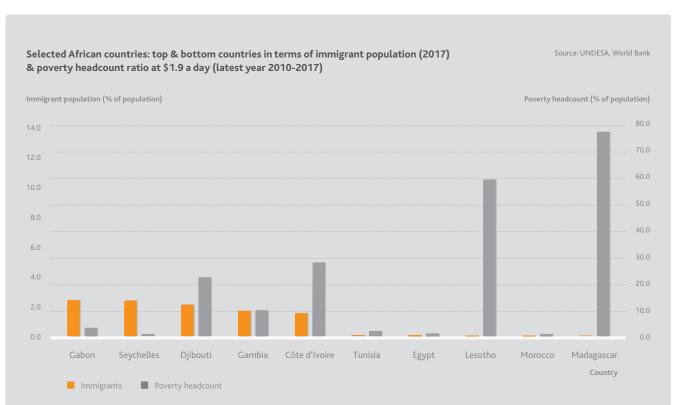
Migrations also contribute to destination countries' development through consumption, with migrants spending approximately 85.0% of their incomes in their destination country. Also, migrants typically pay significantly more taxes than they receive in benefits, in part because they are usually educated elsewhere and go back to their origin country before retirement.

No evident strain on poverty levels and public services

There is no evidence that higher migration flows result in higher poverty levels: there is no significant distinction in poverty levels between countries receiving large and small shares of migrants.

Government expenditure on education is on average higher in destination countries than in origin countries. However, the performance of education services does not seem to be linked to the number of migrants hosted: the correlation between the total migrant stock in African destination countries and their performance in the *Ibrahim Index of African Governance* (IIAG) sub-category *Education* is weak (r=-0.2)

In addition, there seems to be no connection between changes in health expenditures and immigration over time, which suggests that immigration does not put a strain on public health expenditures.



Note: for these calculations, the five top and bottom countries in terms of immigrant population (% of population) with at least one entry for poverty headcount were selected. In terms of poverty headcount, the latest year available was selected.

Gains for countries of origin

Remittances

Remittances represented 3.5% of Africa's total GDP in 2018, having risen from almost \$11.0 billion in 2000 to \$82.4 billion. In 2016, they accounted for more than ½ of private capital flows to Africa and in 2017 they were higher than the net Official Development Assistance (ODA) and official aid received (\$52.8 billion). In addition, remittances are a more stable source of external finance for the continent. In 2018, Egypt (\$25.7 billion) and Nigeria (\$25.1 billion) received more than 60.0% of the total remittance inflows to Africa. In Comoros and Gambia, inflowing remittances were equivalent to about 20.0% of the countries' respective GDPs. Remittances are also usually the most direct link between migration and development, allowing increased spending on food, education and health but also on productive investments such as agriculture.

A trade booster

There is evidence that countries tend to trade with and invest more in countries from which they have received migrants. Diaspora networks in destination countries are likely to boost demand for goods produced at home, such as specific food items. Given the assumption that migrants have a higher income in destination countries, the amount of exports from sending countries increases.

The impact of migrations at grassroots level

In the rural village of Kala in central Mali, the economy relies on the steady flow of migrants' remittances. Migrations to African countries or overseas, as well as seasonal migration to Bamako, are common among youth, with much of their earnings supporting families back home, especially in years of bad harvest, and investing in farming.

The village chief says "our young have scattered to the four winds. We're not getting good harvests anymore, so we need the cash they bring to pay taxes and buy food. Take migration away, and how would we survive?"



Africa's first challenge: the youth bulge stuck in 'waithood'

l. <i>i</i>	A GROWING YOUTH MAJORITY	26
1.	The world's youngest continent	26
•	Around 60.0% of Africa's population is under the age of 25	26
•	By 2100, Africa's youth population could be equivalent to twice Europe's entire population	27
2.	Africa's biggest resource?	27
•	Youth in better health and better educated	27
•	Lower dependency ratio: a potential demographic dividend	28
•	But Africa's youth development is still lagging behind other regions'	29
II.	MORE EDUCATION BUT LESS JOBS:	
	WORRYING DISCONNECT	30
•	Deteriorating education prospects	30
•	Higher education: still below global rates	30
•	A widening mismatch between education and employers' needs	31
•	A crucial lack of vocational education programmes and internships	32
	. WEAK ECONOMIC PROSPECTS: NEMPLOYMENT OR INFORMAL JOBS	32
1.	Almost 16.0 million young Africans are facing unemployment	32
•	The first job hurdle is the steepest	32
•	Informal jobs: the default rather than the exception	33
•	Self-employment: reality far from aspirations	34
2.	Living standards: a negative outlook	34
•	More than 40.0% of young Africans consider their current living situation to be very bad	
	or fairly bad	34
•	Young Africans lack financial independence	35
	. YOUTH AND POLITICS: A BROKEN	35
	Youth feels neglected by policy-makers	35
•	Political institutions and representatives:	
	a wide gap	36
° Sn	Political apathy or political exclusion?	38 39
JP	ouigni - Anna on the verge of tosing its vould?	22

Africa's first challenge: the youth bulge stuck in 'waithood'

I. A GROWING YOUTH MAJORITY

The difficulty of defining youth

There is no universally agreed definition of youth. It is a stage in life which can vary across time, between or within societies, and is marked by different cultures, traditions or socio-economic conditions.

Youth is not a homogeneous group nor does it have a defined age bracket. In general, youth is a social construct, describing a period during which a person transitions from childhood into adulthood. This transition includes different aspects such as becoming physically or emotionally mature, living on one's own or being financially independent. The length of the transition phase depends on the cultural, socio-economic and political context.

As the concept of youth is fluid, there is little consistency among countries and organisations about their age-based definitions of youth. For example, the United Nations (UN) defines youth as persons between the age of 15 and 24. The International Labour Organization (ILO) usually also applies the same age bracket for its statistics. However, for its *Schoolto-Work Transition Surveys* (SWTS), the ILO applies the wider measurement of 15 to 29 years to better capture the realities of such transitions. The African Union (AU) considers youth to encompass a larger segment of the population, considering everyone between the age of 15 and 35. Definitions by different African countries vary too. For example, Kenya defines everyone aged between 15 and 30 as youth while Nigeria uses an age frame of 18 to 35 and South Africa of 14 to 35.

1. The world's youngest continent

Around 60.0% of Africa's population is under the age of 25

Almost 60.0% of Africa's population in 2019 is under the age of 25, making Africa the world's youngest continent. According to the UN's demographic projections, the median age in Africa is going to be 19.8 in 2020. On the continent, Mauritius is expected to have the highest median age, 37.4, and Niger is expected to have the lowest, 15.1.

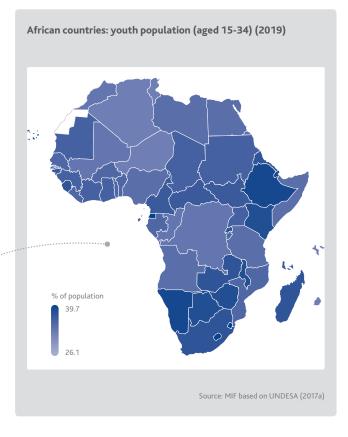
In 2019, more than 1/3 of the population is aged between 15-34.

Population aged 15-34 in 2019 (%)

Africa: 33.9 Europe: 23.6

Change in population aged 15-34 (%)

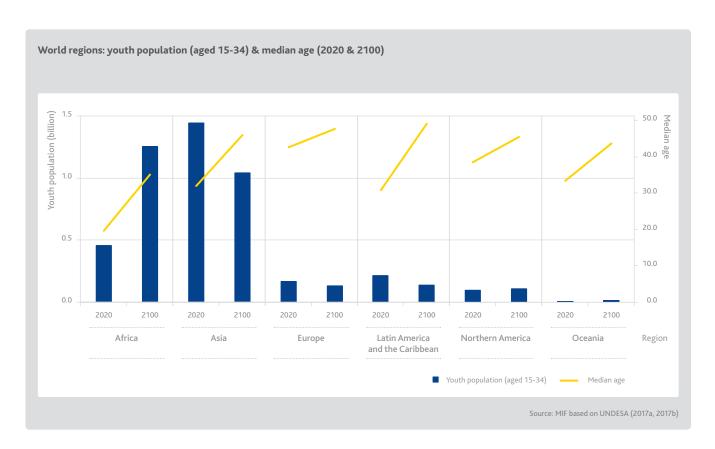
(2019-2100): **Africa: +181.4 Europe: -21.4**



By 2100, Africa's youth population could be equivalent to twice Europe's entire population

Africa is the world region where the youth population is expected to continue growing the most. Between 2019 and 2100, Africa's youth population is expected to increase from 447.1 million to 1.3 billion people. This is an expected growth of 181.4%. Meanwhile the youth population in Europe is expected to shrink by 21.4% and in Asia by 27.7%.

As a result, by 2100, Africa's youth population will be twice the expected total population of Europe (653.3 million). Almost ½ of the world's youth are expected to be from Africa (46.3%).



2. Africa's biggest resource?

The AU's African Youth Charter claims that Africa's youth is the continent's biggest resource and, if harnessed, Africa's growing youth population offers enormous potential for the continent. Improvements in health and education on the continent put Africa's youth in a more advantaged position than the generations before, offering them better conditions for advancing human capital. The AU's Agenda 2063 states that the creativity, energy and innovation of young Africans is going to drive political, social, cultural and economic transformation on the continent.

Youth in better health and better educated

The 2018 *Ibrahim Index of African Governance* (IIAG) shows that the best performances and the largest improvements between 2008 and

2017 have been achieved in the category *Human Development*.

The health situation especially has seen large improvements since 2008: young people today are healthier than any generation before and the generations to come should benefit from improved health standards. In terms of education, *Primary School Completion* as well as *Secondary Education Enrolment* and *Tertiary Education Enrolment* have improved between 2008 and 2017. Although still scoring comparatively low, the increasing enrolment in tertiary education shows that ever more young Africans are pursuing higher education.

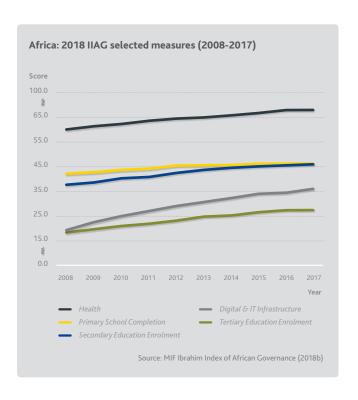
In addition, African youth are also increasingly benefitting from improvements in *Digital & IT Infrastructure*, having better access to computers, mobile phones and the internet. 15-24 year olds in Africa are 2.3 times more likely to use the internet compared to the African population as a whole, in contrast to 1.3 times in Europe.

Improvements in Information Technology (IT) and digital infrastructure will allow ever more young Africans to grow up using technology, which will prepare them for future jobs. As they become globally connected, this raises their expectations and exposes them to different realities, new opportunities and ideas which can bring innovation and motivation for change.

Lower dependency ratio: a potential demographic dividend

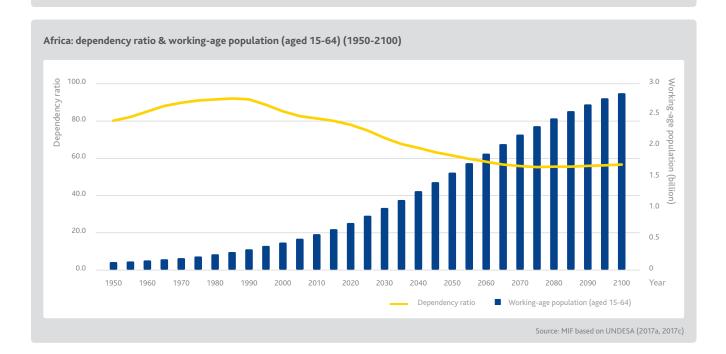
In 2020, Africa is still expected to have the highest dependency ratio in the world with 78.0 dependants (children aged 0-14 and people 65 or older) per 100.0 working-age people (aged 15-64). This is mainly due to the large population of children under 14 (40.2% of the total population in 2020).

However, the projected growth of Africa's youth and labour force means that by 2060 Africa is expected to have the lowest dependency ratio in the world (58.1 dependent people per 100.0 working-age people), which could potentially trigger a demographic dividend and its subsequent economic and social benefits.



The demographic dividend

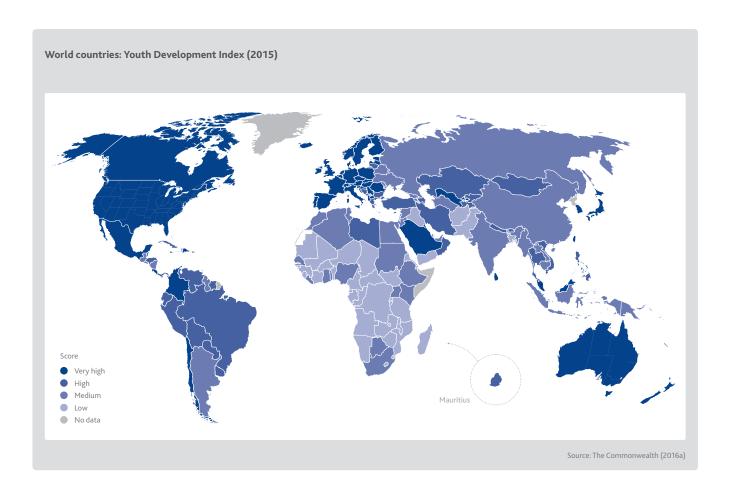
The demographic dividend refers to the economic surplus generated by a decline in birth rates, a decline in the number of young dependants and an increase in the proportion of working-age adults. The projected larger workforce can lead to a boost in economic productivity, savings and investments. Africa could expect its annual Gross Domestic Product (GDP) per capita to grow by up to ½ a percentage point by 2030 if enough jobs for youth are created.



But Africa's youth development is still lagging behind other regions'

The Youth Development Index (YDI) produced by The Commonwealth measures multi-dimensional progress on youth development in 183 countries, providing a comparison for the status and well-being of young people. It encompasses five domains: Civic Participation, Education, Employment and Opportunity, Health and Wellbeing as well as Political Participation. According to the 2016 YDI, Africa scores well below the global average.

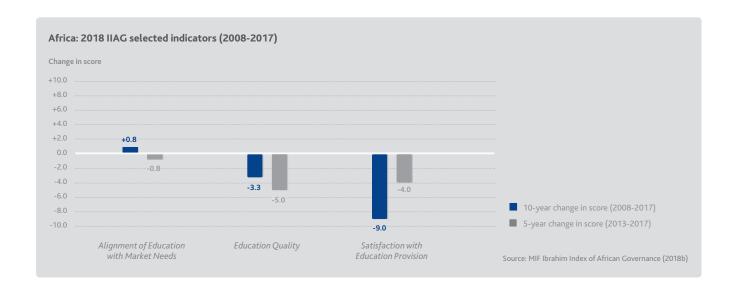
While the global average YDI score is 0.616 (out of 1.000), the African average is 0.478. Mauritius is the highest scoring African country (0.657, ranking 69th globally). Of the 20 lowest scoring countries worldwide, 19 are in sub-Saharan Africa with Central African Republic (CAR) being the lowest scoring country (0.308) globally.



II. MORE EDUCATION BUT LESS JOBS: A WORRYING DISCONNECT

Deteriorating education prospects

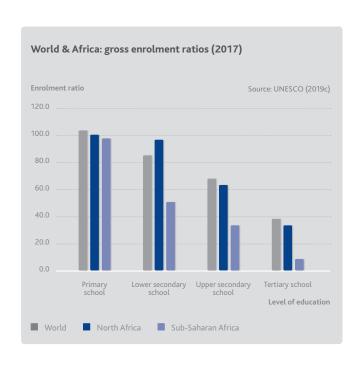
According to the 2018 IIAG, ½ of the continent (27 countries) registered a deterioration in their score for the sub-category *Education* between 2013 and 2017, meaning that for over ½ of Africa's citizens (51.5%) education outcomes have been worsening. The average continental decline in *Education* between 2013 and 2017 was driven by the African average decline in the indicators *Satisfaction with Education Provision* and *Education Quality*, and is further worsened by a downturn in *Alignment of Education with Market Needs* between 2013 and 2017.



Higher education: still below global rates

The 2018 IIAG shows an African average improvement in the indicators Secondary Education Enrolment and Tertiary Education Enrolment between 2008 and 2017. However, data from the United Nations Educational, Scientific and Cultural Organization (UNESCO) shows that it is still behind global rates. Only around ½ of those who would qualify for lower secondary education in sub-Saharan Africa are actually enrolled and at tertiary level the enrolment ratio is even below 10.0%. However, across the continent there are substantial variations, with North African countries exhibiting enrolment ratios close to or even higher than world averages. Besides this, the completion rates in African countries are lower at higher levels of education.

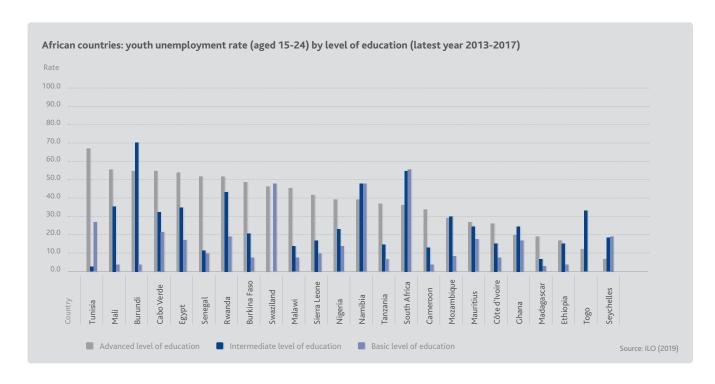
For young women in sub-Saharan Africa, access to higher education is even more difficult than for their male peers. For every 100.0 young men enrolled at upper secondary level and tertiary level, only 84.5 and 72.1 women are enrolled respectively.



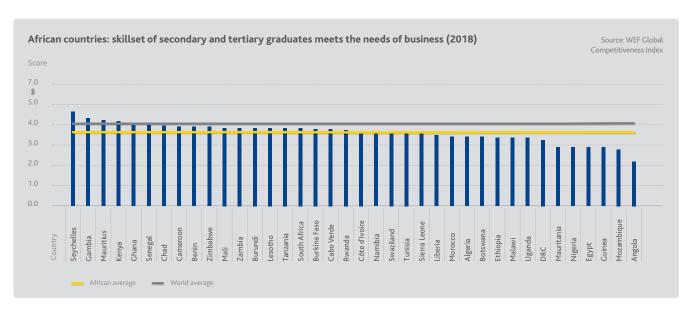
A widening mismatch between education and employers' needs

In Africa, higher level education does not appear to offer better job prospects.

Across the continent, unemployment rates among 15-24 year olds with advanced level education are higher than for those with basic education apart from in four countries: Namibia, Seychelles, South Africa and Swaziland. In Mali, more than ½ (55.6%) of the 15-24 year olds with advanced education are without a job, compared to 3.3% of those with basic education.



Data from the World Economic Forum's (WEF) *Global Competitiveness Index 4.0* show that, on average, secondary and tertiary graduates in African countries meet the needs of businesses in their countries to a lesser extent than graduates in other parts of the world (average of 3.6 out of 7.0 compared to 4.1 globally). Of the 38 African countries assessed, only six are included in the upper half of the global rankings table of 140 countries. Only Gambia, Kenya, Mauritius and Seychelles score above the world average.



A crucial lack of vocational education programmes and internships

Young Africans, especially in sub-Saharan African countries, have limited access to programmes that prepare them for the school to work transition. According to UNESCO data, only 1.1% of 15-24 year olds in sub-Saharan Africa participated in a vocational education programme in 2017. Additionally, according to data for nine African countries* from the ILO SWTS (conducted between 2013 and 2015), only 16.9% of young people (aged 15-29) have completed an internship with an employer as part of their education. At the time of the survey, only 10.0% were receiving training or had received training on their jobs within the last 12 months**.

III. WEAK ECONOMIC PROSPECTS: UNEMPLOYMENT OR INFORMAL JOBS

1. Almost 16.0 million young Africans are facing unemployment

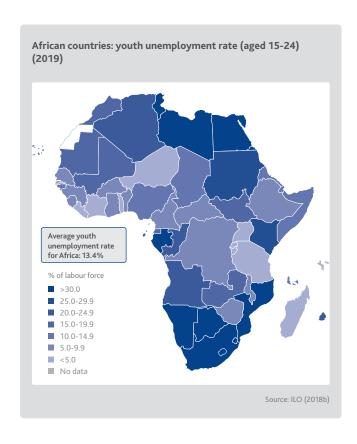
15.7 million young people in Africa, around 13.4% of the total labour force of 15-24 year olds, are facing unemployment in 2019. This rate is more than twice the unemployment rate of those aged 25+ (6.1%), underlining that unemployment on the continent is hitting the younger generation. Young women are more severely affected, with a rate of 14.7% compared to 12.3% for young men.

This average continental rate disguises more serious situations in some countries. In 2019, Swaziland has the highest youth unemployment rate, 56.0%. In South Africa, the economy with the second highest GDP on the continent, 54.5% of young people are jobless, amounting to 1.4 million South Africans between 15-24 years. In Libya, Mozambique and Namibia, youth unemployment rates are above 40.0%. The lowest youth unemployment rates are found in Niger (0.6%), Rwanda (2.3%), Togo and Burundi (both 2.8%).

For 16 of the 19 African countries with data between 2013 and 2017, youth unemployment is higher in urban than in rural areas. In only three countries, Rwanda, Sierra Leone and South Africa, unemployment among young people is more prevalent in rural than in urban areas. In some countries, the urban-rural divide for unemployment is quite striking. In Mozambique, the urban youth unemployment rate is 21.3% while it is 1.9% in rural areas. This runs counter to the perception of many young Africans that migrating to urban areas will offer more job opportunities.

The first job hurdle is the steepest

On the one hand, ILO's SWTS of 15-29 year olds from 11 African countries*** show that for non-working youth, unemployment is the consequence of a lack of jobs, with 32.2% of the unemployed respondents stating that the main obstacle to finding a job has been the lack of jobs. Besides this, 7.0% of the unemployed respondents consider wages or working conditions in existing

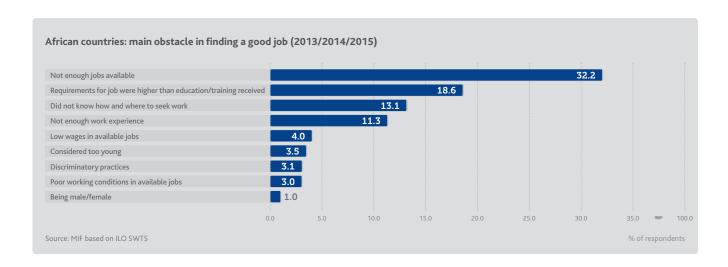


jobs insufficient. On the other hand, the surveys also show that there is a lack of preparation for the transition from education to employment. For 29.9% of unemployed respondents, the requirements for jobs were either too high or they did not have enough work experience and 13.1% answered that they did not know how and where to look for a job.

^{*} Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tunisia, Uganda, Zambia

^{**} Based on data for ten countries: Benin, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda, Zambia

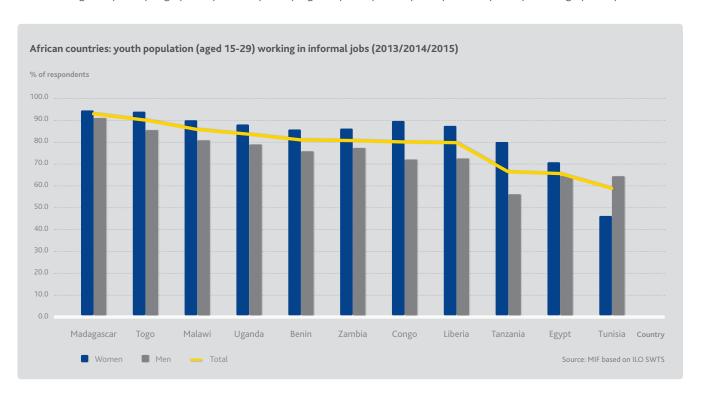
^{***} Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda, Zambia



Informal jobs: the default rather than the exception

In many countries where the informal sector is an important part of the economy, unemployment rates often do not reflect the realities of the labour market. Due to a lack of formal jobs and social safety nets, many young Africans have to find an alternative in the informal sector in order to 'get by', getting trapped in a precarious employment status which contributes to a delayed transition to adulthood ('waithood').

The age-specific data from ILO's SWTS on some aspects of informal work*, available for 11 African countries**, show that in every country more than ½ of the employed young people surveyed are working in informal jobs. In seven of these countries, this percentage rises above 80.0%: Madagascar (92.8%), Togo (90.0%), Malawi (85.4%), Uganda (83.5%), Benin (81.0%), Zambia (80.7%) and Congo (80.3%).



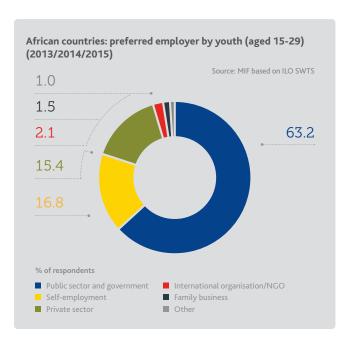
^{*} For the purpose of this section, informal work has been operationalised as working in a non-registered enterprise with less than five workers or as an unpaid family worker.

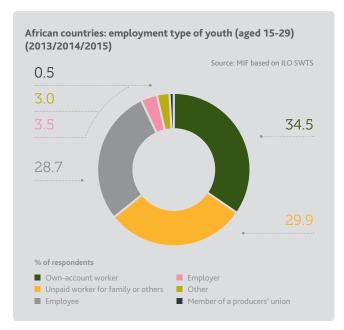
^{**} Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda, Zambia

Self-employment: reality far from aspirations

ILO's SWTS in 11 countries* show that the vast majority (63.2%) of those still in training or without a job would prefer to work in the public sector or in government. Being self-employed is the second most popular option (16.8%) and working for the private sector is the third preferred one (15.4%). The least popular option is working in the family business.

However, these aspirations of employment differ from reality in the surveyed countries. More than ½ of the 15-29 year olds surveyed that have a job are own-account workers and roughly the same number are also doing unpaid work for family or others. The latter is the least popular employment option. Data from ILO's SWTS for ten countries** show that 41.9% of those surveyed who are self-employed*** name limited financial resources as the main problem they are facing, indicating a discrepancy between the expressed career aspirations of a stable and secure job and the labour market reality.

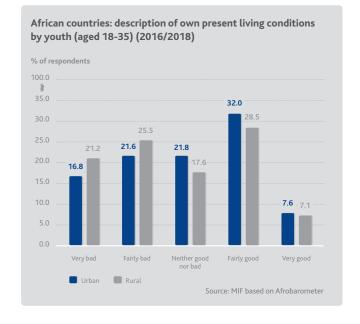




2. Living standards: a negative outlook

More than 40.0% of young Africans consider their current living situation to be very bad or fairly bad

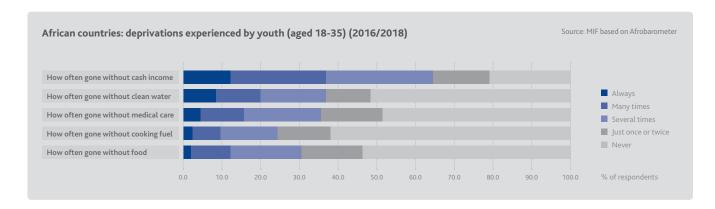
According to Afrobarometer surveys, many young Africans aged 18-35 (42.8%) consider their living situation to be very bad or fairly bad. Those living in rural areas generally describe their living conditions as worse than the urban youth: 46.7% of rural youth say their living conditions are very bad or fairly bad, while only 38.3% of urban youth feel the same.



^{*} Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda, Zambia ** Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda *** Self-employment according to the surveys includes the following employment types: employer, own-account worker and in some countries member of a producer's union

Young Africans lack financial independence

Lack of income is the most prevalent form of deprivation facing young Africans, with 37.0% of Afrobarometer respondents aged 18-35 having been without a cash income at least many times. Many young Africans lack financial independence. According to World Bank data, less than ½ of young sub-Saharan Africans (aged 15-24) have received wages in the past year (19.1%) and only 26.4% have their own account at a financial institution. Only 40.7% of them could generate funds in case of an emergency. Of those who could generate funds, 37.7% would still rely on family and friends and 27.9% would generate funds by working.

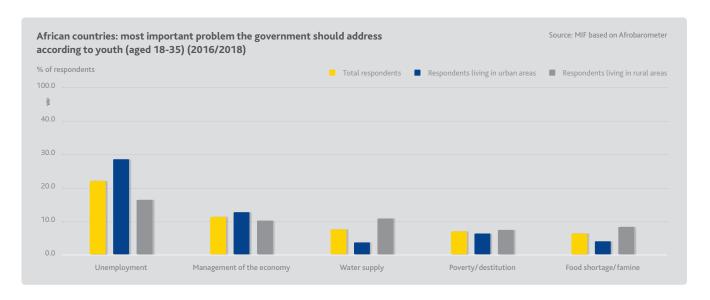


IV. YOUTH AND POLITICS: A BROKEN RELATIONSHIP?

Youth feels neglected by policy-makers

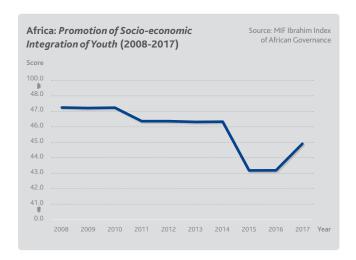
Afrobarometer surveys in 34 countries show that young Africans (aged 18-35) consider the following five areas to be the most important problems that need to be addressed by their governments: unemployment, management of the economy, water supply, poverty/ destitution and food shortage. They are in general not satisfied with how the government is handling these areas, with more than $\frac{1}{2}$ of all young people thinking that their government is doing a very bad or fairly bad job at addressing each of these issues.

Unemployment is considered by far the most important problem for African youth. This is more prevalent in urban areas, with 28.6% of the urban youth compared to 16.5% of rural youth saying it is the most important problem that the government should address. Job creation also receives the worst performance rating, with almost $\frac{3}{4}$ of respondents (71.8%) aged 18-35 considering their government is doing a very bad or fairly bad job in that area.

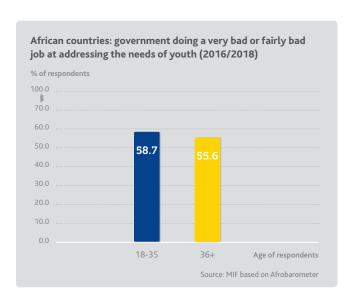


Based on ILO's survey data for eight African countries*, 94.6% of 15-29 year olds without employment have not received any help from an employment office. Moreover, young South Africans, for example, spend around \$85.0 a month on job searching. Almost $\frac{1}{2}$ the money is spent on transport (\$41.0) and the remaining include internet access, printing, application fees, agents' fees and bribes.

African governments' focus on youth in socio-economic policies and strategies is declining. According to the 2018 IIAG, the African average score for the indicator *Promotion of Socio-economic Integration of Youth* has deteriorated by -2.3 points between 2008 and 2017.



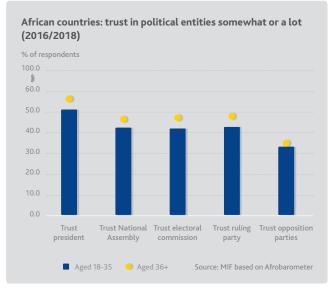
About 60.0% of Africans, and especially youth, think that their governments are doing a very bad or a fairly bad job at addressing the needs of the youth. This is also confirmed by findings from the 2017 *Youth Wellbeing Index*: in five out of the seven African countries (Egypt, Ghana, Morocco, Nigeria, South Africa) featured in the survey presentations, at least 75.0% of the youth think that their governments do not care about their needs.



Political institutions and representatives: a wide gap

Almost $\frac{1}{2}$ of Africa's population (47.8%) eligible to vote is under the age of 35, which makes them the youngest electorate in the world. In comparison, only 23.5% of European voters and 35.0% of Asian voters are younger than 35**.

In general, young Africans have less trust in political institutions and entities than those over 35. Those aged 18-35 have the lowest levels of trust in opposition parties followed by electoral commissions.



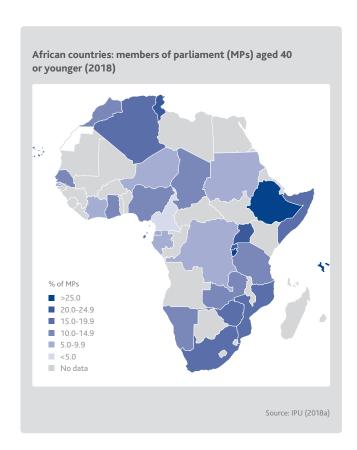
Representation of Africa's youth is lacking in formal political institutions despite the fact that the vast majority of African countries has a national authority which is responsible for youth, such as a ministry, a department or an office.

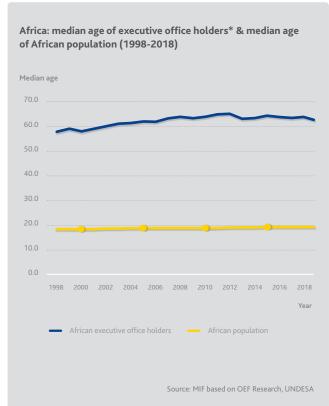
For the 29 African countries with data, the average percentage of Members of Parliament (MPs) aged 40 or under is 15.2%. For 44 European countries, with a much older population, the equivalent average percentage of MPs aged 40 or under is 20.8%. Cameroon has the oldest parliament on the continent with only 3.9% of MPs aged 40 or under while Ethiopia and Seychelles have the youngest parliaments with more than ½ of MPs aged 40 or under.

Out of 25 countries worldwide with political youth quotas, ten are African: Angola, Egypt, Gabon, Kenya, Morocco, Mozambique, Rwanda, Senegal, Tunisia and Uganda. The only four countries worldwide to have reserved seats for youth in parliament rather than having party-level quotas are Kenya, Morocco, Rwanda and Uganda.

^{*} Congo, Egypt, Madagascar, Malawi, Tanzania, Togo, Tunisia, Uganda

^{**} Due to the structure of the UNDESA variable Annual Population by Age Groups - Both Sexes from its World Population Prospects: The 2017 revision, the electorate is calculated as the population aged 20 and older.





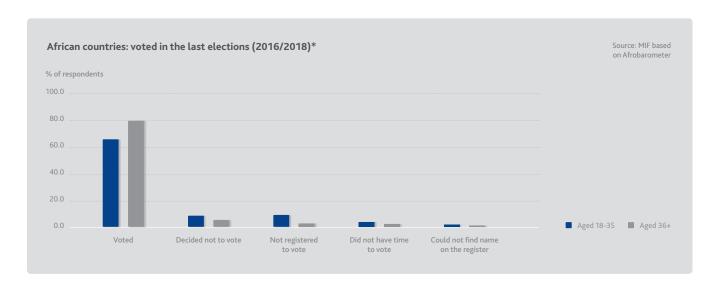
At the highest political level, youth are represented by ageing leaders. On a continent where the latest recorded median age was 19.4 (2015), the median age of executive office holders was 64.5, a gap of 45.1 years. In 2018, the median age of African leaders remained similar at 64.0 years. In contrast, the median age of leaders of member states of the Organisation for Economic Co-operation and Development (OECD) was 54.0 with a median population age of 42.0, a gap of only 12.0 years.

At the end of 2018, 15 African executive office holders had been in power for more than ten years, with an average of 24.4 years in office.

^{*} If there was a change in leadership in one year, only the age of the outgoing leader was taken. Somalia was not included in the source dataset from 1991 to 2012. South Sudan is included from 2011 onwards. Median age of leaders is therefore calculated from 52 countries between 1998-2011, 53 countries in 2012 (including South Sudan) and 54 countries 2013-2018 (including Somalia and South Sudan).

Political apathy or political exclusion?

According to Afrobarometer surveys, the percentage of respondents who voted in their country's last election is 14.0 percentage points lower for young Africans (aged 18-35) than for those older than 35. If the most often stated reason for not voting was not being registered to vote (9.6%), 9.0% said they deliberately decided not to vote.



Afrobarometer surveys show that young Africans are not necessarily uninterested in participating politically but they do not have, nor seem to know how to have access to different modes of participation. Only 21.8% of young Africans have ever joined others to request government action when they were dissatisfied with its performance. Even if 23.6% would never take any such action, more than ½ of young Africans (53.8%) would do so if they had the chance.

Results from the 2018 IIAG show that, on average, the civil and human rights situation has worsened in Africa (2008-2017). Although the indicator *Political Participation* has improved on average between 2008 and 2017, it declined between 2013 and 2017. The indicators *Absence of Government Violence Against Civilians, Civil Society Participation, Freedom of Association & Assembly* and *Freedom of Expression* have on average all declined between 2008 and 2017 with the deterioration rate worsening between 2013 and 2017.

The Global Youth Development Index argues that Information and Communications Technology (ICT) can potentially increase youth's civic and political participation. A survey among young people (aged 15-34) in Ghana, Kenya, Nigeria, South Africa and Uganda in 2017 finds that 3/3 of those surveyed are posting about politics on social media. Yet, one of the main challenges is government control over these technologies with the frequency and duration of internet shutdowns in Africa steadily increasing. Internet restrictions come in different forms, such as total shutdowns, restrictions on certain websites or intentionally slowing down the speed of an internet connection. In 2018, there were 21 internet shutdowns on the continent, eight more than in 2017. By January 2019, there had already been internet shutdowns in five countries: Cameroon, Democratic Republic of Congo (DRC), Gabon, Sudan and Zimbabwe. Eight other African countries have also implemented connectivity restrictions between 2017 and 2018. For example, Uganda introduced a tax on social media in 2018 where using platforms like Twitter, Facebook or Whatsapp costs \$0.05 a day.

^{*} Respondents who were too young to vote at the time of their country's last election were excluded from the calculation.



Africa on the verge of losing its youth?

Africa at a tipping point...

Extract from the introduction to the 2017 Ibrahim Forum Report Africa at a Tipping Point

"(...) Today, 60% of Africa's population is under 25 years of age (...). Their drive, ambition and potential provide the continent with an extraordinary asset.

But today, too many of them feel devoid of economic prospects and robbed of any say on their own future.

The commodity cycle of the past decade may have supercharged many African GDPs, but it created almost no jobs. Young people may have spent more years in school but too few have been equipped with the skills the economy needs. The more educated

they are, the less likely they seem to become able to find employment on their own continent. (...)

The lack of economic opportunity mixed with (...) political disenfranchisement may become a "toxic brew". The 1000% increase in terrorist attacks in Africa over a decade and the rising number of those risking their lives to cross the Mediterranean show where frustration, anger and despair can lead. (...)

If the energies and ambitions of Africa's youth continue to be wasted, they could become serious destabilising forces, threatening not only just future progress, but rolling back the gains of recent years. (...)"

Africa at risk of losing its youth

To external migration?

According to research from Gallup, Africa is at risk of losing its human capital if all people who wish to leave the continent were to do so. 40 out of the 42 African countries with data would experience large losses in their youth population. For example, Sierra Leone would lose 78.0% of its youth population, Liberia 70.0% and Nigeria 57.0%.

To extremism?

Case study research on several violent extremist groups in Africa has shown that many members are young when they are recruited

Interviews with 543 former members of different extremist groups in Africa conducted by the United Nations Development Programme (UNDP) show that 53.0% of the interviewees were between 17 and 26 years old when they joined the group.

Research by the Institute for Security Studies (ISS) on radicalisation in Somalia with 88 former Al-Shabaab members reveals that 70.0% were under the age of 25 when becoming part of the group.

While the reasons for joining are complex and vary between contexts, there are recurring patterns. In most cases, while unemployment and poverty are not direct causes for young people to become radicalised, they make them vulnerable to

radicalisation. UNDP finds that while 51.0% named religion as a reason for joining extremist groups, economic factors play an underlying key role. Employment was the most frequently cited need by the time of recruitment.

Interviews by the ISS in Somalia show that 27.0% of respondents joined Al-Shabaab for economic reasons, regarding the group as an employer, that can provide them with an income between \$150.0 and \$500.0 a month.

Research by Mercy Corps in Nigeria shows that many youths became affiliated with Boko Haram for business opportunities and economic progress as the group offered loans to youth who used the money for small, informal businesses. The inability to repay these loans led to forced recruitment.

Additionally, joining an extremist group is seen as a rebellion against the status quo. The idea of 'being part of something bigger' and the 'sense of belonging' are important recruitment factors.

This is linked to weak governance and service provision and the lack of opportunities, especially for young people, to engage politically and to express grievances or demand change. Violent groups are then seen as an opposition to government and a way to change the political system.



Section 03

21st century jobs market: what prospects for Africa?

I. JOBLESS GROWTH AND PREMATURE DEINDUSTRIALISATION	42
1. A decade of lost opportunities	42
2. Premature deindustrialisation?	43
II. THE 4TH INDUSTRIAL REVOLUTION: JOB-KILLER OR JOB-CREATOR?	45
1. The 4 th Industrial Revolution: potential impacts	45
The 'gig economy': a game-changer for the nature of work	46
Spotlight - The 4 th Industrial Revolution: better living standards to mitigate some migration incentives?	47
III. AGRICULTURE: FROM MEETING NEEDS TO CREATING WEALTH	48
1. A growing dependence on food imports	48
2. Agriculture is a key employer	48
Agriculture can be a great beneficiary of new technologies	49

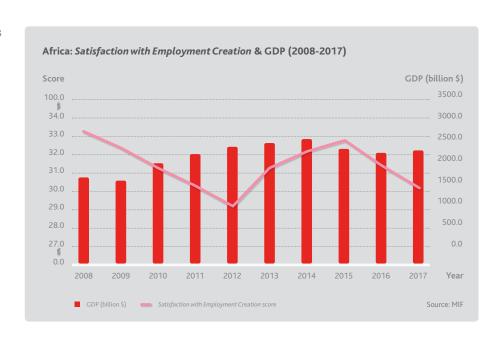
21st century jobs market: what prospects for Africa?

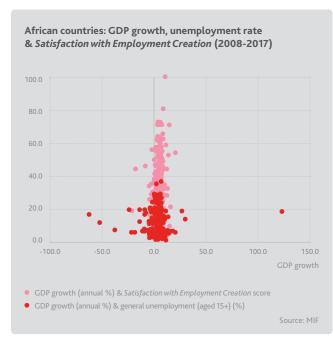
I. JOBLESS GROWTH AND PREMATURE DEINDUSTRIALISATION

1. A decade of lost opportunities

Despite strong macroeconomic growth during the period 2008-2017, the 2018 *Ibrahim Index of African Governance* (IIAG) report shows that this did not translate into progress in *Sustainable Economic Opportunity* on the African continent.

The indicator Satisfaction with Employment Creation, which assesses the extent to which the public is satisfied with how the government is handling job creation, has also strongly decreased between 2008 and 2017: -3.1 points on average.



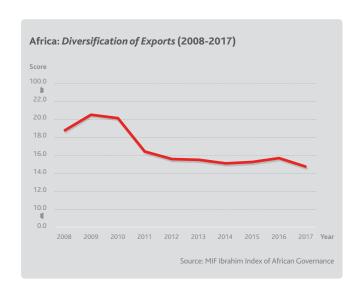


Africa's economic growth has not boosted employment. Between 2000 and 2014, employment expanded by less than 1.8% a year, far below the nearly 3.0% annual growth of the labour force. By 2030, it is expected that 30.0 million youth will be entering the African labour market each year.

It is estimated however that only 4.0% of new entrants between 2010 and 2020 have been able to find waged work in industry, and 21.0% in waged services. In sub-Saharan Africa alone, while 18.0 million jobs need to be created annually to absorb new entries in the labour market, only 3.0 million formal jobs are currently being created.

Even though patterns of growth and job creation on the continent are complex and vary between regions, according to the *Africa's Development Dynamics 2018* report, produced jointly by the African Union (AU) and the Organisation for Economic Co-operation and Development (OECD), "the continental trend is one of resilient but jobless growth".

Growth in Gross Domestic Product (GDP) over the last decade has been mainly commodity-led. African countries have failed to take advantage of the boom in raw commodity prices to diversify their economies. IIAG's *Diversification of Exports* indicator deteriorated by -4.0 points between 2008 and 2017 and is, on average, the lowest scoring of all 102 IIAG indicators in 2017.



2. Premature deindustrialisation?

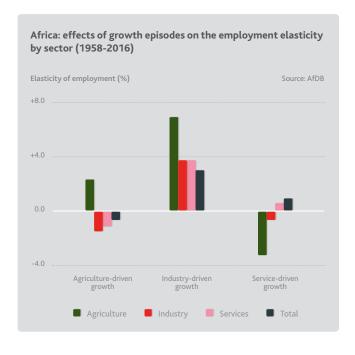
Structural transformation usually consists of the reallocation of capital from low-to high-productivity sectors, for example from agriculture to industry/manufacturing. A sample of 20 African countries, accounting for about 80.0% of the continent's GDP, shows that, in the period 1958-2016, industry-driven growth had stronger effects than any other sector on the elasticity of employment to growth, which is a measure of the percentage change in employment associated with a 1.0 percentage point change in economic growth.

However, there are signs that Africa is already experiencing a premature deindustrialisation. According to the 2019 *African Economic Outlook* (AEO), the reallocation of labour has mainly tilted towards services, constraining the growth potential of the manufacturing sector.

Industry's shares of employment and value added to GDP have grown very slowly. Since the mid-1980s, growth in the value added of industry has stalled at around 20.0%. For 25 countries, accounting for 41.6% of Africa's GDP and 33.0% of its population, the GDP share of the manufacturing sector has even decreased between 2008 and 2017.

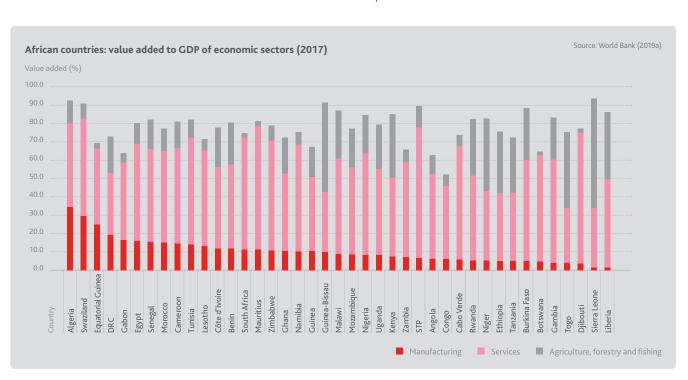
In 2017, according to the World Bank, sub-Saharan Africa's average value added to GDP of the manufacturing sector was the lowest at global level. It amounted to 10.1%, compared to 14.8% in South Asia, 14.2% in Middle East and North Africa, 14.0% in Europe and Central Asia, and 13.1% in Latin America and the Caribbean.

For all the 41 African countries with data on the value added to GDP of both the manufacturing and services sectors, the value added of the former was smaller than that of the latter.



The sub-Saharan African average value added to GDP of the services sector was the second lowest globally: 52.2%, compared to 64.4% in Europe and Central Asia, 60.8% in Latin America and the Caribbean, 52.7% in Middle East and North Africa and 49.7% in South Asia.

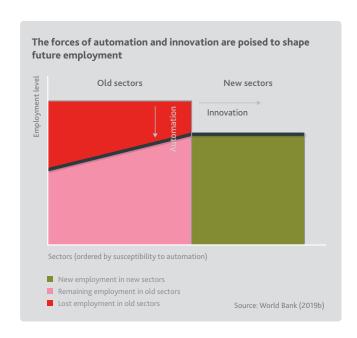
In contrast, the sub-Saharan African average value added to GDP of the agricultural, forestry and fishing sector was the second highest: 15.8%, compared to 16.0% in South Asia, 5.6% in Middle East and North Africa, 4.7% in Latin America and the Caribbean and 1.9% in Europe and Central Asia.



Even though the growth of employment in emerging economies has been supported by decreasing costs of transportation and connectivity, robust global connections need to be established quickly in African countries for them to enter global value chains. Otherwise, industrialisation may no longer manifest in Africa nor be the pathway to create jobs.

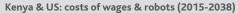
In this sense, Africa's window for a labour-intensive industrialisation is closing much faster than previously expected. On the one hand, the number of people employed per unit of manufacturing output is declining due to the fast spread of technology. On the other hand, Asian and other exporters have penetrated domestic markets in sub-Saharan African countries, making it hard for them to build productive manufacturing sectors.

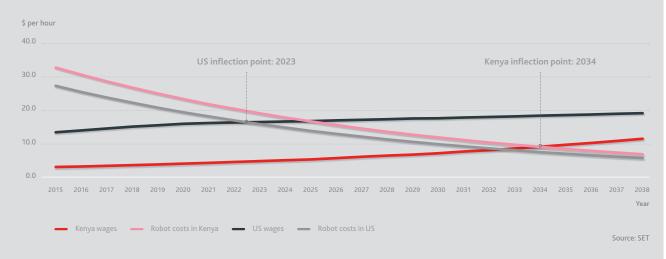
In Africa, as elsewhere, the future of work will depend on the battle between automation and innovation. While automation leads to a decline in employment in old sectors, innovation makes new sectors or tasks possible.



Africa's short window of opportunity for a labour-intensive industrialisation

In the case of furniture manufacturing, empirical evidence suggests that while in the United States (US) robots may become cheaper than labour in 2023, this inflection point is expected to be a decade later for Kenya, in 2034. This means that the window of opportunity for Kenya is roughly 10 years longer than in the US. For Ethiopia, the inflection point will be between 2038 and 2042. However, African countries could reach these inflection points later if local wages fall in an attempt to remain internationally competitive.





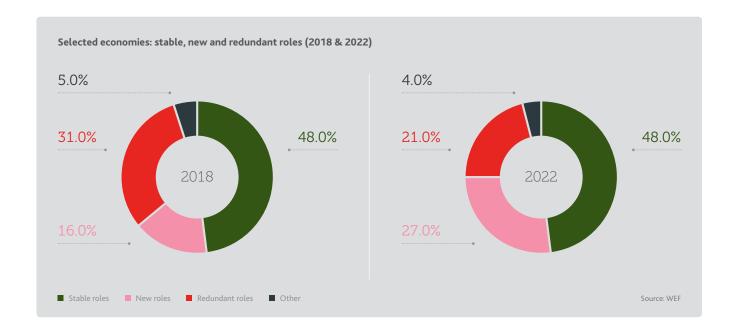
II. THE 4TH INDUSTRIAL REVOLUTION: JOB-KILLER OR JOB-CREATOR?

1. The 4th Industrial Revolution: potential impacts

In previous industrial revolutions, machines replaced workers in many tasks, but on balance technology has created many more jobs than it has destroyed.

- Late 18th century 1st Industrial Revolution: driven by steam and water energy, with mechanisation radically transforming manufacturing processes.
- Late 19th century 2nd Industrial Revolution: driven by electricity and assembly lines, leading to mass production.
- 1970s 3rd Industrial Revolution: driven by progress in Information and Communication Technologies (ICTs), powering automation.

Currently, fears of robot-induced joblessness permeate discussions about the 4IR and the future of work. The number of robots functioning worldwide is rising quickly. In 2019, it is estimated that 1.4 million new industrial robots are going to be in operation, raising the total to 2.6 million globally. Only about ½ of today's core jobs are expected to remain stable in the period 2018-2022.



According to the World Trade Organization (WTO), there are at least four pathways through which automation can create jobs:

- via complementing the labour input and boosting productivity;
- via reducing costs of production and prices, increasing product demand and generating higher profits;
- · via creating jobs in the industries producing the new machinery;
- via creating jobs in other sectors due to spill over effects.

When the productivity effect of automation - reduced production costs, boosted output exports and demand for labour - dominates

the labour-substitution effect, the number of jobs created will outgrow the number of jobs destroyed. Instead of being displaced or substituted by new technologies, workers can be absorbed in different sectors or switched to robot-complementary tasks. According to *The Future of Jobs Report 2018*, produced by the World Economic Forum (WEF) drawing on surveys of companies from 12 industry clusters in 20 economies, representing over 15.0 million workers in total, it is estimated that by 2022 growth in emerging professions will increase their share of employment from 16.0% to 27.0% across all industries.

However, for most African countries, the growing digitalisation of production is likely to induce three main risks:

- the spread of robotics could drive a re-shoring of manufacturing activities to advanced economies, which could render redundant the continent's pre-eminent model of industrialisation, based on low-cost labour in assembly-type manufacturing, and turn global value chains upside down;
- the falling costs of capital and growing digitalisation in developed countries could exert a downward pressure on wages in less
- automated countries as a strategy to remain competitive. Due to robot densification in more automated sectors indirectly exerting a downward pressure on wages in traditional sectors, it may still not be economically feasible to deploy robots in traditional sectors in developing countries;
- the still limited digital abilities of African countries could cause their exclusion from new global value chains in which the manufacturing of goods is expected to be increasingly based on a digital thread.

A to Z Textile Mills Ltd: new technologies induce net job creation

In A to Z, a Tanzanian factory producing light manufacturing goods, the introduction of modern laser fabric-cutting machines displaced workers hired for cutting, but increased output and jobs in 'stitching', a relatively higher-skilled task. According to the firm's own estimates, around 300 extra jobs were created. The productivity effect is not only the increase of output from new technology but also the creation of more jobs for skilled labour.

2. The 'gig economy': a game-changer for the nature of work

Technology is disrupting how people work and introduces fluidity in work location. The rising 'gig economy' hires independent workers for short-term engagements, often via online work platforms, paying them for each transaction or 'gig' they complete. On-demand services encompass a long list of activities ranging from delivering groceries and offering driving services to more sophisticated tasks such as accounting and editing.

For example, Asuqu in Nigeria connects creatives and other experts with businesses across Africa, Tutorama in Egypt connects students with local private tutors, and Crew Pencil in South Africa connects producers and crews in the film industry. The size of the 'gig economy' is hard to estimate. The best available global level estimate is that currently less than 0.5% of the active labour force takes part in the 'gig economy', with less than 0.3% in developing countries.

Changes in the nature of work are more noticeable in advanced economies where access and use of technology are widespread and labour markets are characterised by higher levels of formal employment.

As digitalisation lowers the barriers to entry, competition increases, which can also force wages downwards and increase the number of people engaged in informal and unregulated work.

The stable '9 to 5' way of working is already far from reality in low-income countries, where only a small fraction of workers have access to formal jobs. Overall, McKinsey estimates that 63.0% of Africa's total labour force takes part, at least to a certain extent, in some form of self-employment.

For low-skilled workers, flexible work has the potential to unlock significant economic benefits such as increasing labour force participation, providing opportunities for the unemployed, boosting productivity and supporting worker wellbeing.

Working from home could also help African cities combat traffic congestion. For example, Cape Town plans to introduce flexi-hours as well as a work-from-home option to curb the city's rush-hour gridlock.



The 4th Industrial Revolution: better living standards to mitigate some migration incentives?

As well as its potential for job creation, the 4IR could improve living standards and thus mitigate some migration incentives.

Healthcare

A number of smartphone apps and innovative services are already able to diagnose a variety of diseases, contribute to prevention and make healthcare more efficient.

SMS For Life has transformed supply chains for malaria drugs and other medications. Initially launched in 2009 in Tanzania, it has since then been rolled out in more than ten thousand public health facilities in Cameroon, Democratic Republic of Congo (DRC), Ghana and Kenya. Using simple and affordable technologies, the system enables the reporting of the stock levels of essential medicines in health facilities, as well as timely and quality disease surveillance data.

mTRAC allows Uganda's public health system to keep track of medication inventory across the country by using mobile phones.

South Africa's government-run **MomConnect** and **NurseConnect** constitute digital platforms to provide health advice and information, as well as to register pregnancies in the country's public health system.

Patients or community health workers are connected directly to doctors and specialists via phone by the **Novartis Foundation** in Ghana and **Babyl** in Rwanda.

The Vanderbilt-Zambia Network for Innovation in Global Health Technologies 3D-prints fully-functioning molecular biology and chemistry labs, which are used for malaria testing in Zambia

In 2014, Liberia piloted the first **robot that disinfects rooms** and kills the Ebola virus in a hospital in Monrovia.

In Johannesburg's Helen Joseph Hospital, South Africa's busiest HIV clinic, a **robotic pharmacy system** has reduced prescription errors and cut patients' waiting times from over 4 hours to under 20 minutes.

Education

ICTs can expand access to high-quality educational content, including textbooks, video material and remote instruction, at a much lower cost than in the past.

Eneza Education is a comprehensive virtual tutor with 4.9 million registered users in three African countries. It provides them with digital access to quizzes and educational tools, tracking their progress.

Startups like **Mwabu** and **Xander** offer digital, customisable curricula and learning tools for teachers and students.

• Financial services

Through M-Pesa, a mobile phone banking app, today more than 95.0% of households in Kenya use mobile money. Besides making financial transactions, services have extended to mobile credit, insurance, cross-border remittances, bill payments, airtime top-ups, and savings.

Blockchain, a digital ledger of economic transactions that records not just financial transactions but virtually everything of value, also holds great promise to guarantee the financial inclusion of everyone on the African continent.

Electricity

The potential for decentralised off-grid and microgrid energy solutions, harnessing solar, wind and geothermal technologies is huge. Off-grid systems are less affected by unreliable supply and can also contribute to a more decentralised access to education and health.

In Sierra Leone, an off-grid market of 6.0 million people, **Easy Solar** is making clean energy affordable by offering solar-powered devices on a 'rent-to-own' financing structure, enabled by embedded Pay-As-You-Go technology. As a last mile distributor, **Easy Solar** reaches customers underserved by the grid through an extensive network of community-based agents.

III. AGRICULTURE: FROM MEETING NEEDS TO CREATING WEALTH

The 2011 Ibrahim Forum report, *African Agriculture: From Meeting Needs to Creating Wealth*, already highlighted the potential of a continent which hosts the largest share of uncultivated arable land in the world (79.0%), at a time marked by growing global food demand and shrinking global agricultural supply.

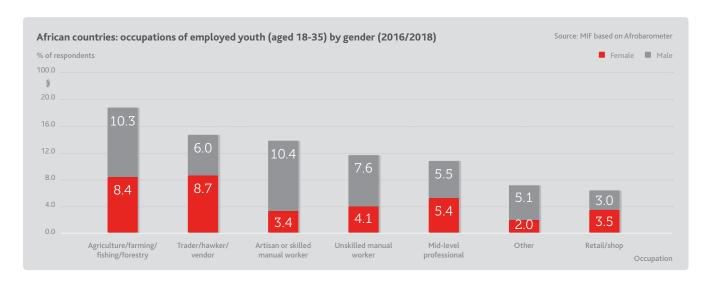
1. A growing dependence on food imports

At continental level, agriculture constitutes around 12.0% of imports by value and around 9.0-10.0% of exports. Dependence on food imports is growing. Eight African countries fill 90.0% of their demand with imports (Botswana, Cabo Verde, Djibouti, Gambia, Lesotho, Mauritania, Seychelles and Somalia). Increased food demand and

changing consumption habits are leading to rapidly rising net food imports, expected to grow from \$35.0 billion in 2015 to over \$110.0 billion by 2025. This could be offset by increased African production, which is fundamental on a continent that remains the most foodinsecure region in the world.

2. Agriculture is a key employer

Currently, the farming sector accounts for up to 60.0% of African jobs and roughly ⅓ of the continent's GDP. According to Afrobarometer survey data from 34 African countries, agriculture employs 18.7% of working young Africans (aged 18-35), and is the biggest job-generating sector for young people.



Agriculture is expected to remain the main pool of employment opportunities for sub-Saharan African youth in the foreseeable future. According to the *Millennial Viewpoints Survey*, 26.0% of young Africans are interested in a job in agriculture. Despite this, for the majority, agriculture is often seen as outdated, unprofitable and hard work. Low productivity still dominates African agricultural sectors, which account for 30.0% and 20.0% of the value added to GDP of Africa's 27 low- and 18 lower-middle-income countries.

Continental initiatives to boost Africa's agricultural sector

Grow Africa: Founded jointly in 2011 by the AU, the New Partnership for Africa's Development (NEPAD) and the WEF, the Grow Africa partnership aims at facilitating collaboration between governments, international and domestic agriculture companies and smallholder farmers in order to decrease the risk and cost of investing in agriculture and to improve the speed of return to all stakeholders. It also helps setting up value chain specific multi-stakeholder partnerships at country level and engages locally through these companies.

Feed Africa: One of the African Development Bank (AfDB)'s High 5s (five priority areas defined by the AfDB's president to accompany the Bank's 2013-2022 strategy), Feed Africa aims at playing a key role in catalysing agricultural transformation on the continent. The overall goal is to make Africa a net food exporter by 2025. Transforming an initial set of agricultural value chains will require approximately \$280.0-340.0 billion in investments over the next decade, creating new markets worth \$55.0-65.0 billion per year by 2025.

3. Agriculture can be a great beneficiary of new technologies

Harnessing new technologies could allow the sector to become a part of the 'high-tech' economy, making it more attractive to young people, paving the way for greater specialisation in the division of labour in agriculture and moving progressively away from mere subsistence farming. Many simple technologies could solve some of the main challenges currently faced by African farmers: access to markets, access to updated technologies and research, knowledge of commodity prices, early warning systems on weather and pests, etc...

Agriculture and new technologies: from local farmers to the global market

2Kuze: Developed at the Mastercard Lab for Financial Inclusion in Nairobi with a grant from the Bill & Melinda Gates Foundation, 2Kuze is a mobile platform that connects smallholder farmers with buyers and banks via text messages to facilitate payments and help supply align with market demand, increasing farmers' income while reducing consumer prices.

Wefarm: A digital network that allows farmers to ask each other questions and gain access to crowd-sourced information via text messages. Over 1.4 million farmers are registered on the service, making it the world's largest farmer-to-farmer digital network.

Gro Intelligence: a big data and artificial intelligence company aiming at driving efficiency across farms locally to improve yields and production by uncovering information and trends that send signals to the market. Founded in 2014 by Ethiopian Sara Menke and with a team of more than 60 people in Nairobi and New York, the company is funded by TPG Growth and Data Collective.



Section 04

The way up rather
than the way out:
managing and
strengthening mobility

strengthening mok	sility	 Lifelong learning: a needed investment 	67
strengtherming mor	Jility	2. Educational mobility and diploma portability	69
		 Only 22.0% of African students studying abroad choose an African destination 	69
_		 Ghana, Morocco and South Africa are the top African destinations for African students, while most of their students abroad are overseas 	70
I. STRENGTHENING GEOGRAPHICAL MOBILITY	52	China has become the second most popular	
1. Risks of unmanaged migrations: a growing		destination for African students, after France	70
business for criminal networks	52	 Low standards, lack of adequate facilities and 	
International and African migration frameworks: dual responses	52	weak diploma recognition, are driving students outside the continent	71
In most developed countries, migration policies		The key challenge: getting the students back	73
focus on border control and asylum policies	53	3. Professional mobility and skills portability	73
 Africa's migration policies mainly focus on advancing mobility 	53	 Limited professional mobility within the continent remains a key issue 	73
• The 2018 Global Compact for Safe, Orderly and Regular Migration vs the Common African Position	:	Avoiding brain drain: quotas and visa limitations	74
a substantial divide	54	III. LEAVING NO ONE BEHIND: THE EXTRA MILE	74
3. Mobility within countries: the dominant pattern	55	1. The digital divide: 66.0% of African citizens are	
4. Mobility within the continent: growing openness,		still offline	74
but still insufficient intra-continental infrastructure	55	2. Social safety nets: almost non existent	76
		3. Missing identity: no country in Africa with	
Visas and passports: slow improvement	55	a complete birth registration system	76
 Intra-continental transport infrastructure: still sparse and patchy 	58	 Migrants: documentation is often their most urgent requirement 	76
 Ground transport: roads and railways 	61	Spotlight - The elephant in the room: what about	
Air transport	61	family planning?	78
5. Mobility from the continent: restricted	62		

II. MAXIMISING AFRICA'S HUMAN CAPITAL

• The 4th Industrial Revolution: disruption

a real opportunity

1. Africa's current skills gap

in skills demand

Spotlight - The African Continental Free Trade Area:

64

64

65

66

The way up rather than the way out: managing and strengthening mobility

I. STRENGTHENING GEOGRAPHICAL MOBILITY

1. Risks of unmanaged migrations: a growing business for criminal networks

Over the last decade, irregular migrations have been on the rise in Africa, often leading to a securitisation of migration by transit and destination countries.

There is no systematic data collection on the number or the flows of irregular migrants, although some estimates exist. Irregular migration via sea is the best documented mode of irregular migration.

Growing opportunities for trafficking and smuggling networks

At least 2.5 million migrants were smuggled worldwide in 2016, according to the *Global Study on Smuggling of Migrants* by the United Nations Office on Drugs and Crime (UNODC). This generated an income for smugglers of up to \$7.0 billion, equivalent to the amount spent by the United States (US) or European Union (EU) countries on global humanitarian aid in 2016.

According to the United Nations High Commissioner for Refugees (UNHCR), between January 2017 and December 2018, at least 75.9 thousand migrants from Africa arrived in Europe via the Mediterranean. According to the International Organization for Migration (IOM) there have been 3,142 known fatalities on the route during the same period. However, these numbers are most certainly underestimated.

Growing vulnerability of migrants

Heightened restrictions on crossing borders and reduced legal channels out of and within the continent have led migrants to use increasingly precarious routes, which render them progressively more vulnerable to smugglers and traffickers, and to human rights abuses.

In border areas, increased restrictions on movement are believed to serve as an opportunity for corruption and rent-seeking, undermining the efficacy of migration policies and creating growing opportunities for trafficking and smuggling networks. The slave markets in Libya are an early sign of

larger criminal networks likely to expand further, as a consequence of EU and African Union (AU) containment policies. Additionally, insecurity and abuses at the hand of state agents are likely to increase.

The routes and the smuggling industries are usually not controlled by one single person or group and the dynamics of the networks differ across regions:

- Along the migration route from the Horn of Africa to North Africa, around four to five organised transnational criminal groups are operating. For example, in Eastern Sudan the route is dominated by a group of Bedouin camel pastoralists called the *Rashaida*. However, the market is also highly fragmented, with thousands of low-level actors providing local smuggling services.
- Along the route from the Horn of Africa to
 Southern Africa, there appear to be no large transnational
 smuggling organisations. Networks tend to be loose and
 informally organised with many opportunistic individual
 smugglers who interact with each other on a flexible basis.
 In some countries, organised criminal networks may get involved.
- The migration route from West to North Africa is dominated by the Tuareg and Toubou ethnic groups. The networks in Libya are structured in strictly hierarchical criminal organisations, although an increasing fragmentation in the market has appeared with trafficking gangs taking advantage of the fragile political situation in Libya.

Widening legal pathways to movement could limit the profitability of smuggling networks, thus reducing the economic costs and physical insecurity for migrants.

2. International and African migration frameworks: dual responses

Migration is a key element of the United Nations (UN) SDGs

Sustainable Development Goal (SDG) 10 (Reduced Inequalities) - target 10.7 - calls for an "orderly, safe and regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies". Other targets also directly speak to migration, such as those included in SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 16 (Peace, Justice and Strong Institutions) and SDG 17 (Partnerships for the Goals).

In February 2019, the High-level Debate on International Migration and Development was convened by the UN General

Assembly and identified three key aspects of migration:

- the need to focus on youth when addressing migration;
- · the importance of disaggregated migration data;
- the need for enhanced and effective partnerships between origin, transit and destination countries and between stakeholders.

The High-level Debate will inform the High-level Forum on Sustainable Development, which will review the Goals and targets relevant to migration of the 2030 Agenda. Nine of the ten SDG migration-related targets will be reviewed by the July 2019 session of the High-level Forum.

In most developed countries, migration policies focus on border control and asylum policies

The post-World Wars era saw significant progress in establishing international norms, rules, procedures and institutions in migration governance. In recent decades, there have been substantial efforts to improve the global governance of migration, building on the norms and institutions developed over the last century.

However, these remain mostly focused on forced or illegal migrations. The 1951 Convention Relating to the Status of Refugees and its 1967 Protocol, the 2000 Protocol to Prevent, Suppress, and Punish Trafficking in Persons Especially Women and Children and the 2000 Convention against Transnational Organized Crime established the cornerstones of laws and norms with regards to refugees, human trafficking and smuggling, showing global awareness for these areas.

Meanwhile, global convergence and cooperation on laws and norms for voluntary migrations remain limited. To regulate international movements related to labour and services, states have primarily adopted bilateral and multilateral agreements at regional and subregional level. When conventions exist at the global level, they are not widely ratified. The 1990 *Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families*, for example, has been ratified by only 54 countries, of which 24 are African.

Africa and western countries have dual narratives on migration, the former focusing on its positive impacts for development and the latter on its security and stability consequences. This has led to contrasting policy responses.

In most western countries, inter-regional migration policies are entrenched within tighter border control and more restrictive immigration and asylum policies. According to the *African Common Position on Migration and Development* (2006) "the emphasis on addressing illegal or irregular migration has been only on security considerations, rather than on broad development frameworks".

Africa's migration policies mainly focus on advancing mobility

Africa is one of the first regions to have developed a legal regime on migration. In a response to the large numbers of African refugees fleeing conflicts resulting from anti-colonial struggles, the 1969 Organisation of Africa Unity (OAU) Convention Governing the Specific Aspects of Refugee Problems in Africa was the first regional refugee convention in the world.

Africa's migration policy has mainly focused on advancing mobility. Agenda 2063 establishes as one of its priorities the facilitation of free movement of people within the continent. The centrality of mobility was marked as early as 1991 by the *Treaty Establishing the African Economic Community* (AEC), where free movement of persons and capital is one of the key areas. The treaty is the first framework to focus on the free movement of people, goods, capital and services to enhance regional integration and development in all African countries.

In 2006, the AU adopted its two primary frameworks on migration, the *Migration Policy Framework for Africa* (MPFA) and the *African Common Position on Migration and Development*. The MPFA emphasises that well-managed migration has the potential to yield significant benefits to origin and destination countries and the African Common Position reflects Africa's broader consensus on issues of migration and development, human resources and brain drain, labour migration, remittances, children and youth, gender and regional initiatives.

In 2015, the Joint Labour Migration Programme for Africa (JLMP), an AU-led initiative supported by the International Labour Organization (ILO), the IOM and the United Nations Economic Commission for Africa (UNECA), was launched to strengthen the effective governance and regulation of labour migration and mobility on the continent. The JLMP is the first international initiative focusing on supporting effective implementation of human mobility rules as key to development and integration.

In 2016, the African Union Commission (AUC) conducted an evaluation of the 2006 MPFA leading to a revised strategic framework to guide member states and Regional Economic Communities (RECs) in the management of migration. The resulting AU *Migration Policy Framework Plan of Action* (2018 – 2030) outlines activities to be undertaken by the AUC to facilitate the coherent management of migration on the continent.

The 2018 Global Compact for Safe, Orderly and Regular Migration vs the Common African Position: a substantial divide

Prepared under UN auspices, the *Global Compact for Safe, Orderly and Regular Migration* (GCM) is the first intergovernmental agreement intended to cover all dimensions of international migration in a holistic and comprehensive manner. It was adopted in December 2018 in Marrakech, Morocco.

To underpin the negotiations, AU member states defined a *Common African Position* (CAP) *on the Global Compact for Safe, Orderly and Regular Migration* in January 2018. The CAP is based on the conviction that human mobility and free movement of all persons within the continent constitute one of the pillars of the *Integrated Africa* envisioned in *Agenda 2063*.

Although non-legally binding, the GCM recognises that only a cooperative approach will optimise the overall benefits of migration, while addressing its risks and challenges for individuals and communities in countries of origin, transit and destination.

The GCM comprises 23 objectives for safe, orderly and regular migration at local, national, regional and global levels. In general, it aims at:

- mitigating the adverse drivers and structural factors that hinder people from building and maintaining sustainable livelihoods in their countries of origin;
- reducing the risks and vulnerabilities migrants face at different stages of migration;
- addressing the legitimate concerns of states and communities, while recognising that societies are undergoing demographic, economic, social and environmental changes at different scales that may have implications for and result from migration;
- creating conducive conditions that enable all migrants to enrich societies through their human, economic and social capacities.

Although the GCM is an important milestone, there is room for improvement. Four issues are worth noting:

- · the use of vague non-enforceable language;
- the views of actual migrants are lacking;
- issues related to the supply of migration are over-emphasised and issues related to demand are under-emphasised;
- the 'grey' space between voluntary and forced migration is not adequately addressed.

Both the CAP and the GCM recognise that migration is poorly managed, both call for comprehensive efforts to improve its management to maximise benefits, and both are non-binding. However, there are three main differences:

- the CAP identifies foreign intervention and terrorism as key causes of instability and irregular migration. These two drivers are not addressed in the GCM;
- the GCM includes national sovereignty as a guiding principle, and border management as one of its core objectives. The CAP, conversely, points out that too much focus on security and border control creates irregular migration;
- while the GCM commits to providing pathways for regular migration that reflect labour market realities, the CAP states that selective recruiting approaches targeting African talents threaten African development prospects. It further singles out brain drain as problematic and stresses the need to retain skilled workers in Africa as key to achieving the SDGs.

Selected GCM objectives:

- Collect and utilise accurate and disaggregated data as a basis for evidence-based policies
- Provide accurate and timely information at all stages of migration
- Ensure that all migrants have proof of legal identity and adequate documentation
- Enhance availability and flexibility of pathways for regular migration
- Facilitate fair and ethical recruitment and safeguard conditions that ensure decent work
- · Address and reduce vulnerabilities in migration
- Prevent, combat and eradicate trafficking in persons in the context of international migration

- Enhance consular protection, assistance and cooperation throughout the migration cycle
- Empower migrants and societies to realise full inclusion and social cohesion
- Eliminate all forms of discrimination and promote evidence-based public discourse to shape perceptions of migration
- Invest in skills development and facilitate mutual recognition of skills, qualifications and competences
- Create conditions for migrants and diasporas to fully contribute to sustainable development in all countries
- Establish mechanisms for the portability of social security entitlements and earned benefits

3. Mobility within countries: the dominant pattern

Internal mobility is the dominant pattern of contemporary economic migrations on the continent, with cities being among the principal destinations of African migrants.

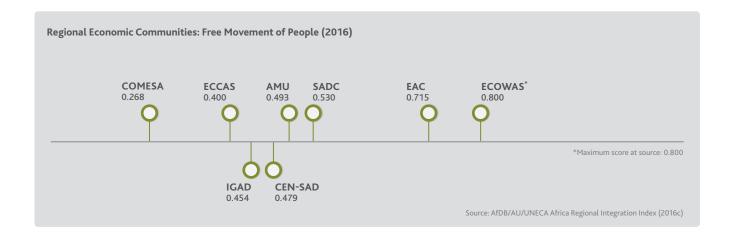
Internal African migrants leaving their households in search of a better job mostly originate from rural areas and see urban zones as their preferred destinations. Although concrete numbers on rural-urban migration are difficult to obtain, 50.0% to 80.0% of rural households in sub-Saharan Africa have at least one migrant member. Among the five countries with data, between 59.0% and 70.0% of rural migrants are between 15 and 34 years old. These rural migrants are driven by urban-rural socioeconomic disparities, as well as environmental deterioration hitting the agricultural sector.

However, cities have limited capacity to provide basic services. Rural-to-urban migrants too often settle in slums lacking housing, sanitation, healthcare facilities and education opportunities. For example, 43.0% of Accra's population is estimated to live in slums. This in turn triggers further migration movements.

4. Mobility within the continent: growing openness, but insufficient intra-continental infrastructure

Visas and passports: slow improvement

The most accessible and welcoming RECs are the Economic Community of West African States (ECOWAS) and the East African Community (EAC). According to the 2016 Africa Regional Integration Index (ARII), ECOWAS is the best performer in the Free Movement of People dimension. Due to the implementation of the Free Movement of Persons Protocol, all ECOWAS citizens can travel to other member states without any visa restrictions. The second-best performing REC is EAC, where nationals from 80.0% of member states do not need a visa. Meanwhile, in the Common Market for Eastern and Southern Africa (COMESA), the lowest scoring regional bloc, 44.0% of the members need to apply for a visa before travelling and 30.0% can obtain it on arrival.



Institutional frameworks on free movement: unequal progress

At AU level

The 2018 Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment has been signed by 32 countries, but only Rwanda has ratified it. More than ½ (51.7%) of the African population is not covered by the agreement. The Protocol establishes three specific rights: the right of entry (with the launch of an African passport), the right of residence and the right of establishment. The African passport will grant visa-free entry to all 55 member states, which means it would open up access to 44 member states with current more restrictive visa regimes (11 are already visa-free or visa on arrival).

At RECs level

All eight RECs have treaties which include provisions related to the free movement of people and capital, the right of residence and the right of establishment. ECOWAS, the Southern African Development Community (SADC) and COMESA have implemented migration frameworks, while the Intergovernmental Authority on Development (IGAD) is in the process of developing one. EAC covers the free movement of people in its Common Market Protocol. The Economic Community of Central African States (ECCAS), the Arab Maghreb Union (AMU) and the Community of Sahel-Saharan States (CEN-SAD) have provisions for free movement of people in their respective founding treaties. ECOWAS is the only REC with all members having ratified the ECOWAS *Protocol Relating to the Free Movement of Persons, Residence and Establishment*.

COMESA: There are two primary legal instruments – the *Protocol on the Gradual Relaxation* and *Eventual Elimination of Visa Requirements* (1984) and the *Protocol on Free Movement of Persons, Labour, Services, the Right of Establishment and Residence* (1998, adopted in 2001). While the latter is only ratified by Burundi, eight member states (out of 21) are currently giving visas on arrival to citizens of other COMESA countries. Mauritius, Rwanda and Seychelles are visa-free for all COMESA citizens, while Zambia has issued a circular granting visa-free entry for all COMESA citizens on official business.

ECOWAS: The Protocol on the Free Movement of Persons, Residence and Establishment (1979) is established in three phases: 1- visa-free entry, 2-right of residency, 3-right of establishment in another member state. The first and second phases have been fully implemented through an ECOWAS residence card or permit. The third phase is under implementation in most member states. An ECOWAS passport is issued by four (out

of 15) ECOWAS members, Benin, Ghana, Togo and Senegal, to facilitate intra-regional travel for member state's citizens for periods of a maximum of 90 days. Despite these measures, 57.7% of the ECOWAS population still consider it very difficult or difficult to cross borders, according to Afrobarometer surveys (2014/2015).

SADC: A draft Protocol on the Free Movement of Persons was introduced in 1996, then replaced by the Protocol on the Facilitation of Movement of Persons in 1997, which was further revised and adopted in 2005. It ensures visa-free entry to citizens from other member states for a maximum of 90 days. The Protocol is still not operational as only four countries (out of 16) have ratified it. However, it makes provision for member states to conclude bilateral agreements for visa exemptions. Most member states have exempted each other from visa requirements: Comoros and Madagascar (visa on arrival for all), Mauritius, Mozambique, Tanzania, Zambia and Zimbabwe (a mix between visa-free entry and visa on arrival) and Seychelles (that eliminated any visa requirement). Authorisation to reside in the territory of a member state can be obtained by applying for a permit from the authorities of the concerned country.

EAC: The *Treaty for East African Cooperation* between Kenya, Uganda and Tanzania (1967) ensured the free movement of persons between these three countries as one key cooperation element. Moreover, measures to achieve the free movement of persons, labour and services, and the right of residence and establishment are featured in the *Treaty Establishing EAC* (1999). The *Protocol on the Establishment of the EAC Common Market* (2009) states the right for people to move across borders, the adoption of integrated border management, the removal of restrictions on movement of labour and services and the right of residence and establishment. It was implemented in July 2010.

IGAD: Free movement of people is not harmonised at regional level and is only done on a bilateral basis.

AMU: Algeria and Tunisia are the only countries that allow citizens of all other member states to freely access their territory.

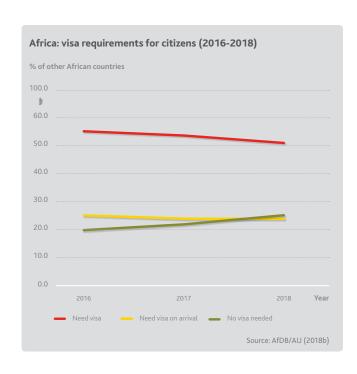
According to the 2018 African Visa Openness Index, only 11 African countries offered liberal access (visa-free or visa on arrival) to all African citizens. African citizens still needed visas to travel to more than $\frac{1}{2}$ (51.0%) of other African countries.

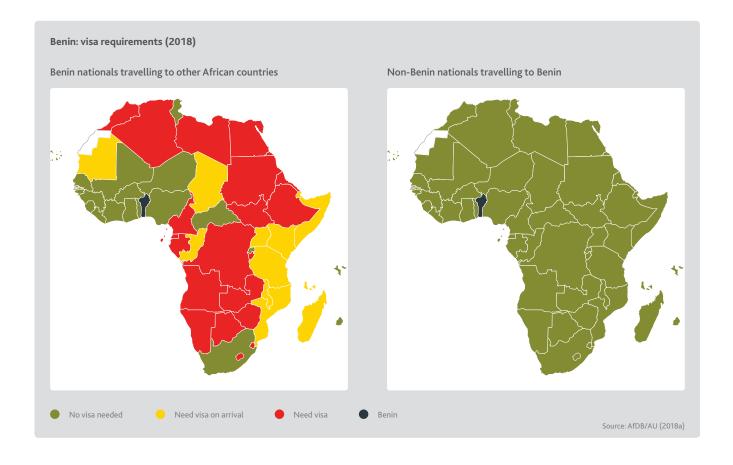
However, progress is speeding up, with 37 African countries having improved their visa openness score since 2017. In 2018, African citizens did not need a visa to travel to 25.0% of other African countries and could get visas on arrival in 24.0%. This trend seems set to continue, as momentum gathers across regional blocs and across the continent as a whole, in line with the AU Free Movement Protocol.

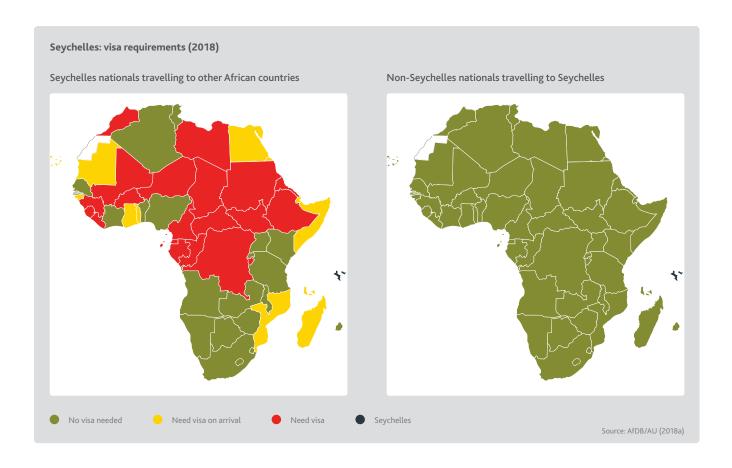
Ethiopia announced in 2018 the decision to liberalise visas for all African travelers and Namibia liberalised its visa policy framework in October 2017, with all Africans being issued visas on arrival. Benin, Ghana, Nigeria and Zimbabwe have also all taken steps towards liberalising their visa regimes for African citizens. Rwanda expressed its commitment to abolish visas for all Africans, with no date confirmed. In January 2018, EAC started issuing an East African e-Passport to boost free movement of people across the region.

The largest number of open countries is found in East Africa (eight countries in the top 20 countries out of the 54 covered by the *African Visa Openness Index*) and West Africa (seven countries in the top 20). Only one country in North Africa is in the top 20 (Mauritania) and none from Central Africa. Equatorial Guinea is the worst performing

country with all African visitors needing a visa, while Benin and Seychelles are the most accessible/welcoming countries.



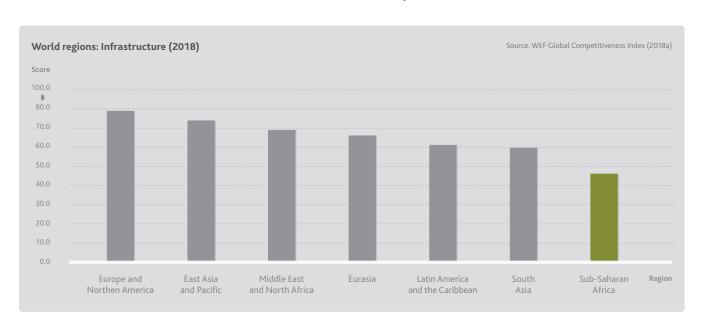




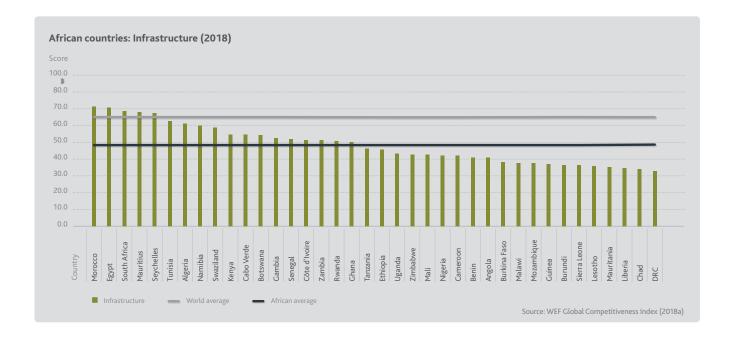
Intra-continental transport infrastructure: still sparse and patchy

Visas are not the sole impediment to free movement across the continent. The lack of proper internal transport infrastructure is also a key element that needs to be addressed.

According to the 2018 World Economic Forum's (WEF) *Global Competitiveness Index*, sub-Saharan Africa is the lowest scoring world region in the Infrastructure pillar, which captures the quality and extension of transport infrastructure (road, rail, water and air) and utility infrastructure.

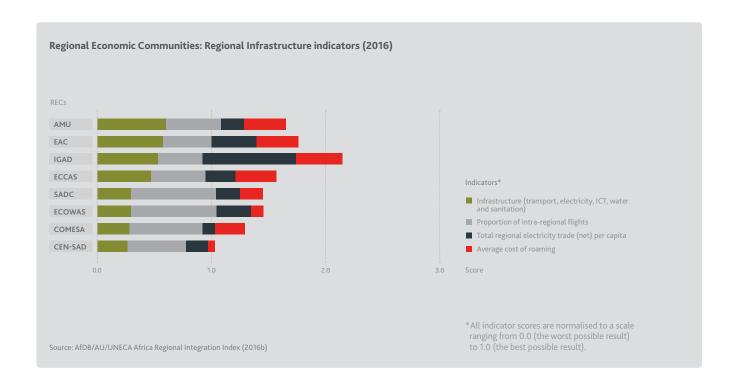


From the 38 African countries with data in the Infrastructure pillar, only five score above the world average: Egypt, Mauritius, Morocco, Seychelles and South Africa.



The Regional Infrastructure dimension of the 2016 ARII measures infrastructure (electricity, ICT, sanitation, transport and water) as well as electricity trade, intra-regional flights and roaming costs. IGAD is the best performing REC in this dimension while CEN-SAD

is the lowest scoring. In the infrastructure variable, AMU is the most developed, followed by EAC and by IGAD, while CEN-SAD is the worst performing. With regards to intra-regional flights, ECOWAS and SADC are leading, followed by COMESA.

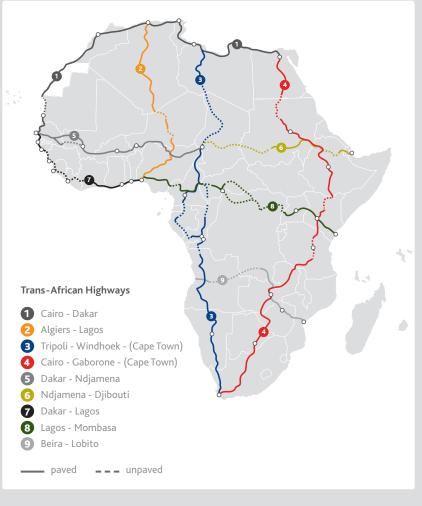


According to the 2018 African Development Bank's (AfDB) African Infrastructure Development Index, which measures transport, electricity, Information and Communications Technology (ICT) and water and sanitation, the top scoring countries are Egypt, Libya and Seychelles, while the bottom three are Niger, Somalia and South Sudan. All countries have improved since 2003, with Ethiopia showing the biggest progress, though still being among the ten worst performers.

Agenda 2063: a critical role for infrastructure

Agenda 2063 stresses the critical role of reliable infrastructure in boosting intra-African trade, diversifying economic production and stimulating employment by generating business opportunities. Infrastructure is also crucial for facilitating the free movement of persons. Among the results expected for an Integrated Africa by 2023, feature four key commitments:

- the establishment of free movement of goods, services and capital and visa at entry point for any African citizen travelling to any AU member state;
- the completion of the Trans-African
 Highways, a network of good quality
 roads between all capitals of the continent;
- the creation of the African Integrated High Speed Railway Network that will connect all African capitals and commercial centres on the continent;
- the opening of African skies to all African airlines with the establishment of the Single African Air Transport Market (SAATM).



Source: UNECA

The One Belt, One Road initiative: what impact for African infrastructure?

Initiated in 2013, China's *One Belt, One Road* (OBOR) initiative aims to strengthen infrastructure, trade, and investment between China and some 65 other countries worldwide that account collectively for over 30.0% of the global Gross Domestic Product (GDP), 62.0% of the world population, and 75.0% of known energy reserves.

The OBOR comprises two physical routes, with numerous side-corridors along the way: the land-based *Silk Road Economic Belt* and the ocean-going *Maritime Silk Road*. Both run through Asia, Europe and Africa. The hotspots of China's engagement in Africa within the scope of OBOR are Djibouti, Egypt and Ethiopia, the latter two members of the Asian Infrastructure

& Investment Bank (AIIB), as well as Angola, Tanzania and Zambia. No other country invests more in the development of Egypt's Suez Canal Corridor than China. Madagascar, South Africa and Sudan are prospective members of AIIB.

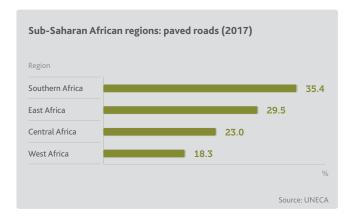
Projects include:

- the first fully electrified cross-border railway line on the continent, linking Addis Ababa (Ethiopia) to Djibouti;
- · the 845 km Mombasa to Nairobi railway line (Kenya);
- · the Maputo bridge (Mozambique);
- · the Tipaza Cherchell Ring Expressway Project (Algeria).

Ground transport: roads and railways

Roads remain the main mode of transport within the continent, carrying at least 80.0% of goods and 90.0% of people. However, the density of national roads in Africa, on average 204.0 km per 1,000.0 km², of which only $\frac{1}{4}$ are paved, lags far behind the world average of 944.0 km per 1,000.0 km², of which more than $\frac{1}{2}$ are paved. The lack of infrastructure means that transportation costs are 50.0 to 175.0% higher than in other parts of the globe.

With an area of about 30.3 million km², Africa is the world region with the smallest number of railway lines. With the exception of South Africa and North Africa, African railways lag far behind other regions of the world and are below international standards.



Air transport

According to the World Bank, the number of air carriers' takeoffs registered in sub-Saharan Africa is still very low compared
to the rest of the world. In 2017, the number of registered carrier
departures from Africa was less than 3.0% of the 35.8 million
departures at world level. Nevertheless, the number of departures has
doubled on the continent since 2000 (from 0.5 million to 1.0 million
in 2017), while the number of passengers carried increased by almost
164.0%, from 31.6 million to 83.4 million.

The lack of competition contributes to relatively high prices: air travel within Africa is considerably more expensive per mile flown than is intercontinental travel, especially on routes of less than 2,000 nautical miles. Moreover, aircraft landing charges are generally high by international standards and the price of aviation fuel in Africa is nearly more than twice that of the global average of \$1.3 per US gallon.

The lack of direct flights between African countries holds back economic integration and makes journeys much longer for passengers. In 2018, only five countries had direct flights connecting to 20 or more other African countries: Ethiopia (connected to 30 countries), Kenya (28), Morocco (27), South Africa (25) and Nigeria (20).

The Single African Air Transport Market: open skies for jobs and trade?

Launched in 2018, SAATM is a flagship project of the AU's *Agenda 2063* aiming to create a single unified air transport market and to liberalise civil aviation on the continent.

By February 2019, 28 member states had committed to SAATM: Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, Central African Republic (CAR), Chad, Congo, Côte d'Ivoire, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Mali, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, South Africa, Swaziland, Togo and Zimbabwe.

Air transport can open and connect markets, facilitating trade and enabling African firms to link into global supply chains. It plays a particular role in just-in-time global manufacturing production, in the speedy delivery of fresh produce from agricultural communities to appropriate markets, and in creating opportunities for new jobs at airports, navigation services providers, travel agencies and airlines. SAATM will also pave the way to reduce departure fees from Africa.

A study commissioned by the International Air Transport Association (IATA) estimates that if just 12 of Africa's bigger economies opened their skies to one another, fares would fall by more than 1/3 and traffic between them would soar by 81.0%, to roughly 11.0 million passengers. For these 12 countries more than 155.0 thousand new jobs would be created, and \$1.3 billion would be added to GDP. Ticket prices would go down by as much as 35.0% and trade would grow by \$430.0 million.

Jobs and GDP impact for the 12 countries

Source: IATA

Country	Additional Employment	Additional GDP (\$ million)
Algeria	11,100	123.6
Angola	15,300	137.1
Egypt	11,300	114.2
Ethiopia	14,800	59.8
Ghana	9,500	46.8
Kenya	15,900	76.9
Namibia	10,600	94.2
Nigeria	17,400	128.2
Senegal	8,000	40.5
South Africa	14,500	283.9
Tunisia	8,100	113.7
Uganda	18,600	77.6

5. Mobility from the continent: restricted

Passports in history

In ancient times, passports and visas were practically equivalent. During the medieval Islamic Caliphate, receipt for paid taxes served as a passport, called *bara'a*. In the United Kingdom (UK), the earliest surviving reference to a 'safe conduct' document appears in an Act of Parliament dated 1414. At that time, documents could be issued by the King to anyone, no matter if the requestors were English or not. From 1540, the granting of travelling papers became the business of the Privy Council and by this point the term 'passport' was being used.

Due to a rapid expansion of railway infrastructure and wealth in Europe in the mid-19th century, large increases in the volume

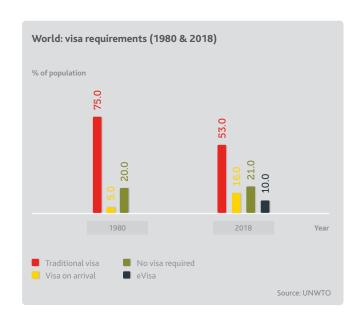
of international travel led to a breakdown of the passport system, as it could not match the rapid increase in travellers. In 1861, France abolished passports and many European countries followed suit. By 1914, passport requirements had been eliminated practically everywhere in Europe.

However, the passport returned during the First World War due to renewed concerns over international security and to control the emigration of people with required skills. In 1920, the League of Nations held the Paris Conference on Passports & Customs Formalities and Through Tickets. Passport guidelines and a general booklet design resulted from the conference.

While in 1980 75.0% of the world's population needed a traditional visa to visit other countries, that number dropped to 53.0% by 2018. Moreover, bilateral traditional visa restrictions decreased from 57.0% in 2008 to 22.0% in 2018.

According to the *Passport Index*, African passports are among the weakest in the world, permitting, on average, the least visa-free entrance to other countries. With the second largest population in the world, Africa is still the region with the lowest average visa-free score, affecting the ease of access of 1.3 billion people to other countries.

All African countries score below the world average, with the exception of Mauritius and Seychelles, the latter being the highest ranked African country. Its citizens can travel on a liberal visa to a total of 135 countries (103 visa-free and 32 visa on arrival) and are required a visa for 63 countries. Somalia receives the fifth lowest score globally as its citizens can only travel on a liberal visa to 38 countries (9 visa-free and 29 visa on arrival) and are required a traditional visa for 160.





II. MAXIMISING AFRICA'S HUMAN CAPITAL



The African Continental Free Trade Area: a real opportunity

The African Continental Free Trade Area (AfCFTA) is a trade agreement between all AU member states. It has the potential to become the largest regional agreement in terms of participating countries once all members have adhered. It aims at creating a single continental market for goods and services as well as a customs union with free movement of capital and persons, in accordance with the Agenda 2063.

The agreement was signed in Kigali in March 2018 by 44 member states. With the additional signature of Burundi, Lesotho, Namibia, Sierra Leone and South Africa (July 2018) and Botswana, Guinea-Bissau and Zambia (February 2019), 52 countries are now part of the agreement. Only Benin, Eritrea and Nigeria, the largest African economy, have not yet signed. These last three countries contribute to 18.6% of Africa's GDP and 16.5% of its population. For the agreement to enter into force, 22 countries have to deposit the instruments of ratification. By February 2019, 15 countries had deposited the instruments, while 19 had ratified the agreement.

The AfCFTA aims to remove barriers to intracontinental trade and investment, thus accelerating industrialisation and economic diversification. The AfCFTA is therefore expected to enable countries to break into new African markets. Expanded markets and unobstructed factor movements - labour, goods, services, capital and persons - should promote economic diversification, structural transformation, technological development and human capital improvement.

The full implementation of the AfCFTA would eliminate all tariffs, likely to generate welfare gains estimated at around \$16.1 billion, even after deducting tariff revenue losses. GDP is expected to grow by 1.0% and total employment by 1.2%. Intra-African trade is expected to grow by 33.0% and Africa's total trade deficit to be cut in $\frac{1}{2}$.

By 2030, more than 40.0% of Africans will belong to the middle or upper class, with discretionary income, and will demand more goods and services. If successfully implemented, the AfCFTA could generate a combined consumer and business spending of \$6.7 trillion by 2030, accelerate industrial development, expand economic diversification, and facilitate quality job creation — including for youth, women, and small and medium-sized enterprises (SMEs).

To strengthen African businesses' competitiveness in the context of the AfCFTA, the priority is to invest in human capital in two concrete ways:

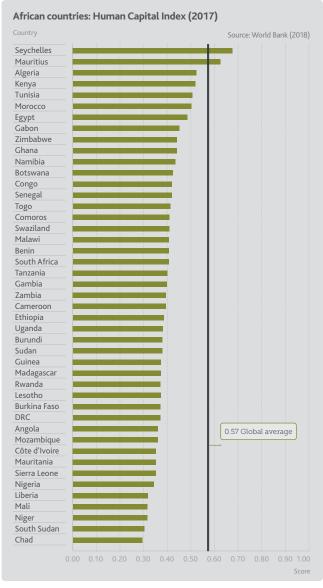
- training the workforce in future-ready skills, including
 in industries such as tourism, ICT, and agri-processing.
 Africans must be equipped with the skills needed to engage
 in skill-intensive manufacturing industries such as apparel
 and machinery. Between 1998 and 2015, service exports
 expanded significantly more than merchandise exports, and
 tourism is some countries' largest export activity, so training
 should be adjusted to the future of work in these sectors.
 The ICT sector can be harnessed to maximise human capital,
 to create a market within Africa for high-skilled and highpaying jobs, and to positively affect the development of
 manufacturing, agriculture, infrastructure, and many other sectors;
- policies that favour the migration of high-skilled workers across the continent. Other priorities include developing appropriate infrastructure, creating jobs, diversifying industries, investing in technology, facilitating access to finance and lowering the cost of doing business.

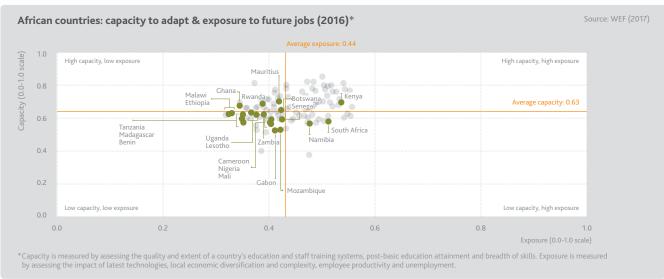
1. Africa's current skills gap

The World Bank's Human Capital Index (HCI) presented in the 2019 World Development Report (WDR) attempts to measure the lost productivity of the next generation of workers as a consequence of neglecting investments in human capital, in particular in health and high-quality education. The World Bank estimates that in countries with the lowest levels of investment in human capital today, the future workforce will only be ½ to ½ as productive as it could be.

For the 157 countries with data in 2017, the average HCI score is 0.57 (out of 1.00) and the best scoring countries are Singapore (0.88), South Korea (0.84) and Japan (0.84). For the 45 African countries with data, the average is considerably lower (0.41). Only two African countries obtain a score higher than the world average: Seychelles and Mauritius (0.68 and 0.63, respectively). In addition, the five worst performing countries globally are African: Chad (0.29), South Sudan (0.30), Niger (0.32), Mali (0.32) and Liberia (0.32).

According to an earlier HCI from WEF (2016), Africa's capacity to adapt to the requirements of the future labour market relative to the region's exposure to future trends leaves very little room for complacency. Even though some African countries are still relatively less exposed to labour market disruptions driven by new technologies, this is likely to change rapidly. Urgent and concerted actions aimed at closing the continent's skills gap are needed.





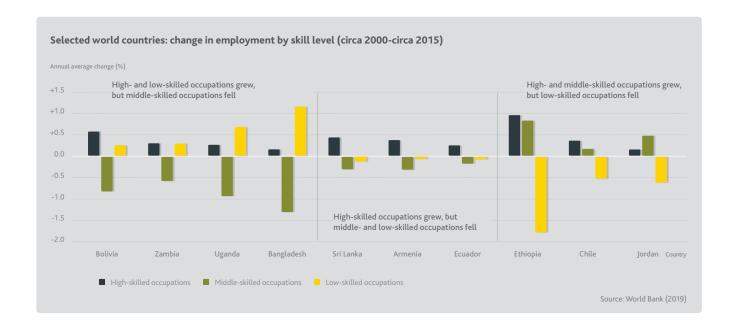
The 4th Industrial Revolution: disruption in skills demand

In earlier Industrial Revolutions technology both replaced skilled workers (e.g. artisans in textile factories were replaced by power looms) and complemented low-skilled workers (e.g. the steam engine). The 4^{th} Industrial Revolution (4IR) technologies however replace low-skilled workers, while complementing high-skilled workers. Exponential technologies are changing the skills demand by replacing old jobs with new jobs and by changing the skills profile of existing jobs. The demand for skills will therefore be strongly disrupted in three ways:

- A rise in the demand for skills that cannot be easily replaced by robots, namely nonroutine cognitive and socio-behavioural skills. Since 2001, the share of employment in jobs that extensively use nonroutine cognitive and socio-behavioural skills has increased from 19.0% to 23.0% in emerging economies and from 33.0% to 41.0% in advanced economies. Tasks such as designing, producing art, conducting research, managing teams, nursing, and cleaning are proving hard to be automated.
- A fall in demand for routine job-specific skills. Codifiable routine tasks are the most likely to be replaced by machines. These can be cognitive such as processing payrolls or bookkeeping, or physical such as operating welding machines or assembling goods.

An increase in payoffs to combinations of different skill types.
 The changing nature of work results in a premium for skill sets that increase the adaptability of workers. For employers in Benin, Liberia, Malawi and Zambia, teamwork, communication and problem-solving skills are the most important set of skills after technical skills.

In developing countries, evidence shows that while the demand for high-skilled workers is increasing, the change in demand for low- and middle-skilled jobs varies. This variation can be explained by the competing forces of automation and globalisation. The latter exports the low- and middle-skilled jobs of developed countries to some developing countries. Depending on their rate of technology adoption, in some developing countries middle-skilled jobs are increasing, but in others they are declining. Innovation has the greatest impact on low- and middle-skilled workers, either because they are more susceptible to automation, or because their skills are not complementary with technology. The key question is whether workers displaced by automation will have the required skills for new jobs created by innovation. This means that sustained commitment and resources are required to update and upgrade current skills.



Lifelong learning: a needed investment

For the African workforce to be future-ready, lifelong learning is fundamental. According to the WDR 2019, significant and sustained levels of investment will have to be made on three main fronts:

1. Early childhood learning

Investments in quality early childhood programmes make sense economically for several reasons:

- learning is a cumulative process and such programmes produce skills that are fundamental for a child's future;
- they improve parents' labour force participation, especially among mothers;
- they increase equity. There is evidence to show that for children exposed to poverty and other adverse circumstances, quality early childhood programmes can increase adult competence, reduce violent behaviour and social inhibition, and pave the way for growth in the following generation.

Nevertheless, poor-quality childhood development programmes are associated with disappointing results in children's language development, cognitive skills and sociability.

Returns on investments made in early childhood are the highest of those made over the life span. According to the World Bank, every additional dollar spent on quality early childhood education is estimated to yield a return of \$6.0-\$17.0. Because the brain architecture is being formed from prenatal period to age five, it is in this time that the brain's ability to learn from experience is at its peak. Early quality investments in nutrition, health, social protection and education provide strong foundations for the future acquisition of the cognitive and socio-behavioural skills demanded by the changing nature of work, launching children on higher learning trajectories.

2. Tertiary education

The technologically-driven changing nature of work is making tertiary education more attractive in three ways:

- the wage premiums of tertiary graduates are enhanced by the increasing demand for higher-order general cognitive skills that are transferable across jobs;
- tertiary education, with its diverse course offerings and flexible delivery models such as online learning and open universities, increases the demand for lifelong learning. Skills acquisition is ongoing and workers will be increasingly expected to be able to recycle and have multiple careers over their lifetime;
- in the changing world of work, tertiary education particularly university - can also serve as a platform for innovation.

Even though the relative returns on general and vocational education can be altered in unpredictable ways, technology appears to depreciate narrow job-specific skills compared with general skills, making certain vocational degrees obsolete. However, the 'bridging' arrangements that allow vocational graduates in Democratic Republic of Congo (DRC) and Tanzania to continue to university exemplify the flexibility between the general and technical tracks which appears to be an imperative for the changing nature of work. Similarly, many programmes offered by universities already have a vocational orientation, particularly in science, engineering and technology.

3. Adult learning outside the workplace

Adult learning programmes, which include programmes on adult literacy, skills training for wage employment, and entrepreneurship, aim to provide workers who are not in school or in jobs with new or updated skills. Despite offering great promise for the upskilling and reskilling of the workforce in the wake of the 4IR, bad design often renders adult learning programmes ineffective. Adult learning could be improved in three ways: more systematic diagnoses of adult-specific constraints; pedagogies customised to the adult brain; and flexible delivery models compatible with adult lifestyles.

Success may also be conditional on addressing multiple constraints simultaneously (e.g. coupling training with cash assistance or with skills certificates/referral letters). In Cameroon, 54.0 thousand people who took part in a programme that combined training with financial assistance found employment. In Uganda, workers with more certifiable, transferable skills also have higher employment rates, higher earnings, and are more mobile within the labour market. The inclusion of soft skills or socio-behavioural skills in training design also appears to hold promise. In Togo, informal business owners who were taught 'personal initiative' – a mix of self-starting behaviour, innovation, and goal-setting - saw the profits of their firms boosted by 30.0% two years after the completion of the programme.

Policies addressing skills imbalances in South Africa

South Africa's current *Human Resource Development Strategy* (HRDSA), launched in 2010, aims at improving the foundations of human development, the supply of high-quality skills, employer participation in lifelong learning, and at supporting employment growth through industrial policies, innovation, research and development.

The National Skills Development Strategy, a component of the HRDSA, focuses on eight goals:

- Setting up a credible institutional mechanism for skills planning;
- 2. Extending access to occupationally-directed programmes;
- Promoting the growth of a public Further Education and Training college system that is responsive to sectoral, local, regional and national skills needs and priorities;
- 4. Addressing the low level of youth and adult language and numeracy skills to enable additional training;

- 5. Encouraging better use of workplace-based skills development;
- Providing support to co-operatives, small enterprises, as well as worker-initiated, non-governmental organisation (NGO) and community training initiatives;
- Strengthening public sector capacity for improved service delivery and supporting the construction of a developmental state;
- 8. Building career and vocational guidance.

Released in 2010, South Africa's New Growth Path aims at creating decent work, reducing inequality and defeating poverty. Strategies have been developed to achieve these goals in areas such as skills, green economy and youth employment. The National Skills Accord, a partnership between organised labour, business representatives, the community constituency and the government, aims at improving access to training opportunities. Similarly, a Basic Education and Partnerships with Schools Accord was developed to address quality gaps in basic education.

The Skills Initiative for Africa

Several African countries run Technical and Vocational Education and Training (TVET) programmes. Nonetheless, due to shortages of qualified teachers and didactical equipment, and the non-involvement of the private sector, young people are often not trained to meet workplace demands. One of the biggest challenges is the fact that a regional framework is still missing.

The Skills Initiative for Africa (2017-2020), operated by the AUC and supported by the German government, aims at providing a platform for the development of a continental vocational training strategy, based on the exchange of national best

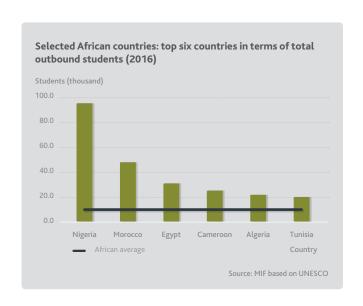
practices. At country level, through a competitive application process, a funding facility provides grants to innovative practical skills development programmes, conducted in close cooperation with the private sector. The first calls have been opened in 2019 for Cameroon and Tunisia, with Ethiopia, Kenya, Nigeria, South Africa and Togo to follow.

By helping to improve the economic and social prospects of young people on the African continent, the initiative is addressing some of the causes of economic migration.

2. Educational mobility and diploma portability

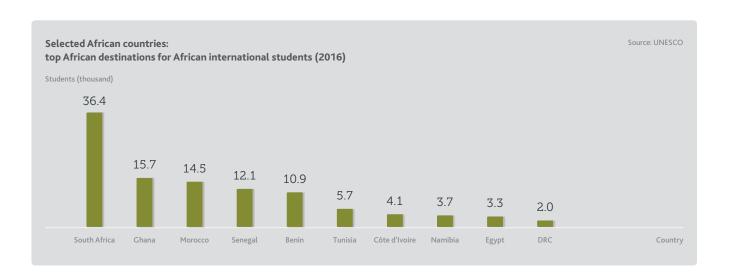
Only 22.0% of African students studying abroad choose an African destination

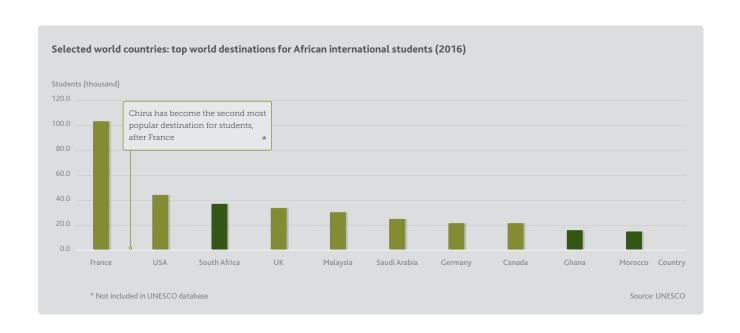
Between 2000 and 2016, the number of young Africans leaving their home country to study abroad has almost doubled from 256.3 thousand to 526.5 thousand. In 2016, Nigeria was the African country sending the largest number of students abroad (95.7 thousand students abroad) and the 5th in the world, followed by Morocco (47.9, 21st), Egypt (31.1, 38th), Cameroon (25.1, 46th), Algeria (21.9, 51st) and Tunisia (20.1, 54th).



In 2016, only 21.9% of African students leaving their home country to study chose an African destination, the top preferential countries being, in order, South Africa, Ghana, Morocco, Senegal and Benin. African students' choices are driven by proximity as well

as language and cultural ties. West African students tend to go to Cameroon, Ghana, Nigeria and Senegal. East African students tend to go to Kenya, Rwanda, Tanzania and Uganda, and Southern African students to South Africa.





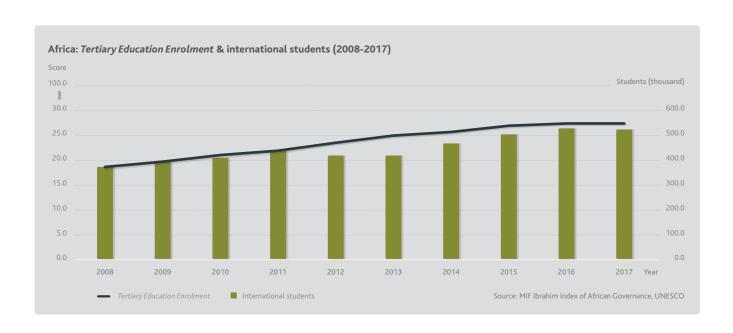
Ghana, Morocco and South Africa are the top African destinations for African students, while most of their students abroad are overseas

Figures show that Ghana, Morocco and South Africa are the three African countries that receive the most foreign African students. In these countries, however, the majority of students abroad are outside of the continent. In 2016, outgoing South African students went in larger numbers to the US, the UK, Australia, India and Canada, in order, and ten other non-African countries before their first African destination, Namibia. Outgoing Ghanaian students went in larger numbers to the US, the UK, Canada and Ukraine, before South Africa, their 5th destination, and Morocco, their 18th destination. Moroccans went in larger numbers to France, Ukraine, Italy, Spain and the US and two more countries before Senegal, their first African destination.

China has become the second most popular destination for African students, after France

Almost 80.0% of outgoing African students decide to leave the continent. Language and visa facilities are key factors when choosing their preferred destination. For example, students from Lusophone countries tend to go to Portugal, also due to existing grants and scholarships, facilitated by visas and a cooperation agreement between Portugal and PALOP countries (Portuguese-speaking African countries). Students from Arabic countries tend to go to Arabic speaking countries or France and Belgium.

China is expanding its role as a destination country for African students. According to the Michigan State University, in less than 15 years African students in China have grown 26-fold – from just under 2.0 thousand in 2003 to almost 50.0 thousand in 2015. China surpassed the UK and US numbers in 2014 and has become the second most popular destination for African students studying abroad, after France.



Low standards, lack of adequate facilities and weak diploma recognition are driving students outside the continent

The number of African students leaving their home country to complete their studies grows almost parallel to the number of students enrolled in tertiary education.

Study mobility is mainly driven by lower standards of education and a lack of adequate facilities in countries of origin. The African continent has around 2.5 thousand post-secondary educational institutions, equivalent to around one per about 470.7 thousand people. In the EU, the number of people per university is around 153.8 thousand.

Many different systems of education coexist in Africa, rooted in different national or colonial legacies. This results in a lack of mutual recognition of different forms of certification, limiting students'

mobility across Africa. Further impediments include low funding for graduate programmes, poor resources, academics' brain drain and prohibitive education costs. African universities' lack of formal structure to support internationalisation still prevents them from positioning themselves as global players. Only South Africa plays an important role in attracting international capital by receiving international scholars and students, particularly from the south of the continent.

Initiatives for educational mobility

AU: Agenda 2063 aims at establishing an Education
Accreditation Agency by 2023 and a common educational
system, allowing young Africans to have the choice to study
at any university and work anywhere on the continent. One
of the flagship programmes of Agenda 2063 also includes an
African Virtual and E-University, which will increase access to
tertiary and continuing education on the continent by reaching
large numbers of students and professionals in multiple sites
simultaneously. It will also develop relevant and high-quality
Open, Distance and eLearning (ODeL) resources to guarantee
access from anywhere in the world, anytime. The agreement
between the 380-member Association of African Universities
and Africa's largest online platform, eLearnAfrica, will allow
approximately 10.0 million African students to access higher
education through online courses offered by member institutions.

The Intra Africa Mobility Scheme (IAMS) aims at improving the skills and competences of students and staff through enhanced mobility between countries. Strengthening cooperation between African Higher Education Institutions (HEIs) will increase access to quality education and will encourage and enable African students to undertake postgraduate studies within the continent. Furthermore, mobility of staff (academic and administrative) will enhance the international cooperation capacity of HEIs in Africa. Since its launch, 1,255 Africans (722 Master students, 346 Doctoral candidates and 187 staff) from 43 member states have benefited from this scheme. In 2017, the IAMS encompassed seven different projects with 34 partner institutions.

SADC: the Education and Training Protocol (1997) requires all members to allot at least 5.0% of their admissions to students from other SADC countries. In South Africa, all SADC students are considered as home students in terms of fees and accommodation and are subsidised by the South African government. Another goal is to facilitate credit transfer. As a result, out of the 91.7 thousand SADC students in mobility in 2016, 36.6% chose another SADC country to study (the large majority South Africa).

ECOWAS: the *Nnamdi Azikiwe Academic Mobility Scheme* promotes academic mobility of students and teachers in the region, including diaspora. The scheme has two programmes – the *Fellowship Programme for Masters and PhD* and the *Academic Staff Exchange*. So far, the programme has mobilised 84 staff and 3 universities, while 75 students were provided with scholarships in 2018.

Africa-EU: the 4th Africa-EU Partnership Summit, held in 2014, agreed on the implementation of a joint strategy prioritising, amongst others, higher education and exchange programmes between the two continents and within Africa. This covers namely:

- the Erasmus+ programme and the Marie Skłodowska-Curie
 Actions: top quality mobility of African and European
 students, scholars, researchers and staff through a balanced
 mix of actions centred on individuals, institutions and higher
 education systems;
- the Nyerere Mobility Programme: around 500 scholarships for postgraduate studies and mobility of 70 academic and administrative staff within Africa, promoting student retention and increasing the competitiveness and attractiveness of the institutions themselves;
- the development of centres of excellence in Africa through the Pan-African University;
- the expansion of the African Higher Education Harmonisation and Tuning pilot initiative with the aim of enhancing the relevance and quality of curricula, introducing outcomebased teaching and learning, increasing from 60 to 120 the number of participating universities across the continent and the number of disciplines and levels addressed;
- boosting the AU Higher Education Harmonization and Quality
 Assurance and Accreditation initiatives: quality practices
 in universities, implementation of the continental framework
 for quality assurance and accreditation, increasing aligned
 partnerships and internationalisation of higher education.

Erasmus programme: besides these initiatives, since 2015, the Erasmus programme extended academic mobility and cooperation projects to countries outside the EU, including bilateral partnerships with African institutions. So far, 770 projects were approved, allowing the mobility of 5.4 thousand students and 4.3 thousand staff to the EU, while 1.3 thousand students and 3.1 thousand staff travelled from the EU to Africa. The Erasmus Mundus Joint Master's Degrees programme allows students from around the world to study in at least two different European countries and awards full-degree scholarships covering tuition, travel, and a living allowance. Between 2014 and 2017, 62 African institutions were involved. South Africa, Morocco, Tunisia and Egypt are the countries with the highest rate of participation and Stellenbosch University (South Africa), the University Cheikh Anta Diop (Senegal) and the University of the Witwatersrand (South Africa) are the top participating institutions.

The key challenge: getting the students back

The high number of African students leaving the continent to study abroad remains a key issue. These students enjoy other opportunities in the countries where they study, making it a challenge to get this human capital back and to foster educational mobility within Africa. According to the *Global Talent Competitiveness Index*, Rwanda is the best scoring of all surveyed low-income countries in the categories assessing capacity to enable, grow and retain talent.

The nature of visa policies can help mitigating brain drain. China for example does not provide visas to international students after they complete their education, making it more likely for them to return home, unlike other countries such as France, the US or the UK.

3. Professional mobility and skills portability

Limited professional mobility within the continent remains a key issue

Free movement of labour is included in only a few sub-regional agreements. Those are often not ratified nor effectively implemented.

Limited or weak frameworks for recognition and compatibility of skills, educational and experience qualifications across national borders remain a key issue for the continent. This hinders the ability of migrants to enter and effectively engage in continental labour markets. It fuels brain drain in the case of intra-continental migration of skilled Africans and may even contribute to de-skilling.

Frameworks for professional mobility

Measures to harmonise skills, competencies and qualifications, implemented in EAC, ECOWAS and SADC allow high-skilled migrants to take advantage of economic opportunities in regional labour markets, and advance the agenda for a continent-wide *African Qualifications Framework*. COMESA and IGAD have developed agreements on mobility that await adoption and implementation by member states.

ECOWAS: the Convention on Recognition and Equivalence of Degrees, Diplomas, Certificates and other Qualifications in Member States (2013) aims at increasing students', teachers', and skilled workers' mobility. It commits member states to recognise the validity or equivalence of degrees and certificates with the same academic value and to provide training and education that complies with international standards, while taking into account the regional context. The Youth Employment Action Plan for 2013-2018 also encourages youth participation in regional integration and intra-regional mobility.

EAC: the Common Market Protocol aims to promote freedom of mobility for persons, goods and services among the member states. It compels them to treat all EAC workers, irrespective of their country of origin, in a uniform manner. Workers have the right to social security benefits and can be accompanied by spouse and children.

Member states have committed to open up to the following ILO categories of workers: in Burundi to professionals; in Kenya to managers, professionals, technicians and associate professionals, and craft and related trades workers; in Rwanda to professionals and technicians and associate professionals; in Tanzania to professionals and technicians and associate professionals; in Uganda to managers, professionals and craft and related trades workers. However, only high-skilled

professionals are considered, while the recognition of lower level qualifications remains limited.

Labour shortages in Information Technology (IT), engineering, finance, hospitality and management in some regional markets in Eastern Africa have fuelled high-skilled migration. Rwanda is a major destination for migrants from Kenya, especially in its growing IT sector. Demand in financial services and other skill-intensive sectors in Uganda and Tanzania has also fuelled mobility from Kenya. EAC members tend to migrate to other EAC countries. For example, in Uganda 72.9% of migrants are originally from another country in the community.

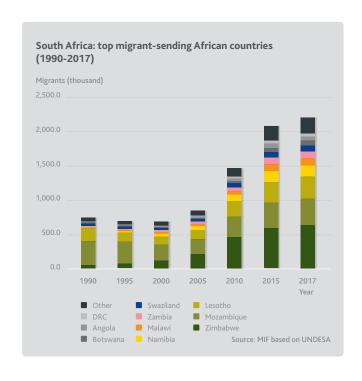
SADC: the Regional Indicative Strategic Plan 2005-2010 and the Protocol on Education and Training (signed in 1997, entered into force in 2000) identify the development and harmonisation of qualification and accreditation systems as key for addressing the lack of comparable standards and qualifications across the region. The Protocol on Employment and Labour and the Labour Migration Policy Framework (2014) both aim to promote migration and development, improve migration governance and protect the rights of migrant workers and their dependants. The Labour Migration Action Plan (2016-2019) serves to guide governance of labour migration activities, to harmonise labour migration policies and legal frameworks, to improve mechanisms for remittance transfers and to strengthen access to pension and social protection across member states. The SADC Qualifications Framework (revised in 2017) covers higher education, technical and vocational education training, and provides a mechanism for comparability and recognition of qualifications within the region. It also coordinates qualifications, promotes the transfer of credits within and among member states, and creates SADC regional standards for qualifications and credit transfers.

In South Africa, labour shortages in finance have fuelled high-skilled migration from other SADC member states like Zimbabwe, and from other African countries like Kenya, Nigeria and Uganda. South Africa has historically granted work permits aimed at attracting high-skilled professionals from SADC member states to address labour shortages and has adopted a policy to raise immigration levels of high-skilled workers with the *Critical Skills Work Visa*, which are issued in accordance with the 'critical skills list', a list of occupations in high demand. Moreover, bilateral labour agreements between South Africa and SADC member states facilitate the mobility of miners and construction workers. Lesotho, Mozambique, Swaziland and Zimbabwe supply much of the labour force in the construction sector in South Africa.

Avoiding brain drain: quotas and visa limitations

Restrictive immigration policies and limitations on work permits and visas, quotas or procedural obstacles are used by some countries to protect their national labour force.

Quotas can exist by number of workers. For example, no more than 10.0% of a company's workforce in Gabon can consist of foreign workers, and South Africa has a quota for its 'network and support professionals' sector.



A survey of several multinational businesses operating in 17 African countries shows that there are concerns that either quotas are unnecessarily prohibitive, or that they are not applied consistently. Indeed, for many businesses in Africa, it is often easier to employ a skilled non-African expatriate than a skilled African expatriate. For instance, in DRC, the number of different visas required (entry, exit, working establishment) is considered burdensome. In Nigeria, the eligibility criteria for a visa for a skilled worker are considered too demanding, focusing on formal education levels rather than on experience gained through work.

III. LEAVING NO ONE BEHIND: THE EXTRA MILE

Strengthening geographical and professional mobility, as well as updating skills and equipping the workforce for the 4IR, are key to make the most and retain human capital on the continent. However, these changes would need to be accompanied by dedicated public policies ensuring that no one is left behind.

1. The digital divide: 66.0% of African citizens are still offline

For the 4IR to effectively foster economic and social progress and boost job opportunities, the new technologies will need to become both accessible and affordable.

According to the 2018 Ibrahim Index of African Governance (IIAG), the continental average score for all digital and ICT-related measures has increased between 2008 and 2017, with the largest improvements in the indicators Household with Internet Access and Mobile Phone Subscribers.

However, about 66.0% of African citizens are still offline. The global digital divide as well as within countries on the rural-urban dimension, results in inequalities both in physical access to ICTs and in the resources and skills needed to harness such technology effectively. For instance, in Kenya, while overall digitalisation has increased, there is still a 40.0 to 50.0% difference between the percentage of firms having access to computers and internet and the percentage of firms making use of it (for instance, having a website or buying and selling online).

Young Africans are well connected, with around 80.0% owning their own mobile phone, and 77.0% using their phone every day. The percentage of young people with internet access on their mobile phones is 23.5 percentage points higher when compared with the respondents aged 36 or older. Young Africans use the internet more often than those older than 35. 71.8% of everyday internet users are under the age of 36.

Of the 52 African countries for which the International

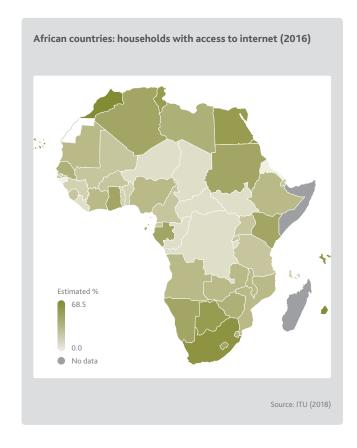
Telecommunications Union (ITU) has data on internet access at home in 2016, the five countries with the largest estimated proportion of households with access to internet were Morocco (68.5%), Mauritius (63.3%), South Africa (55.9%), Seychelles (55.2%) and Cabo Verde (48.8%). Meanwhile, the five countries with the smallest estimated proportion of households with access to internet were Liberia (3.0%), DRC (2.8%), Congo (2.7%), Guinea-Bissau (2.2%) and Eritrea (1.9%).

Two key factors are mainly responsible for the global digital divide: the higher cost of capital and the lower digital readiness in terms of infrastructure, skills and customs and logistics.

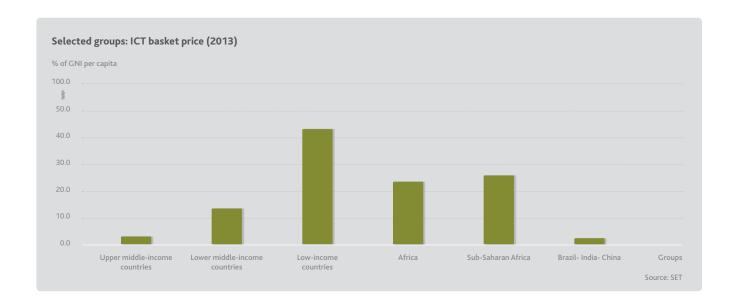
In 2013, the ICT basket price for sub-Saharan African countries was about 26.0% of Gross National Income (GNI), compared to 2.4% of GNI in Brazil, China and India. At country level, the African countries with the most expensive ICT basket were Gabon, Namibia, Swaziland and Zambia. Those with the cheapest ICT basket were Ethiopia, Tunisia and Uganda.

African countries also face a slower diffusion of ICT and automation equipment, due to poorer 'systems infrastructure' and lower technological capabilities. This is linked to a variety of challenges that African countries are still grappling with: inadequate access to energy and to a reliable power supply, poorer logistics and infrastructure, lower ability to adapt and maintain hardware equipment and software, and lower positive externalities from joining a network.

Of the 47 African countries covered by ITU's *ICT Development Index* (IDI) in 2017, the five highest scoring were Mauritius (5.88 out of 10.00), Seychelles (5.03), South Africa (4.96), Cabo Verde (4.92) and Tunisia (4.82). Despite being the best performing African country, Mauritius only ranked 72nd globally. The five lowest scoring African countries were Burundi (1.48), Guinea-Bissau (1.48), Chad (1.27), CAR (1.04) and Eritrea (0.96).



If the cost of capital does not decrease, African countries will not be able to finance investment into newer technologies, keeping their levels of digitalisation low and widening the gap with the rest of the world. This will have dramatic consequences in terms of job loss, rising income inequality and concentration of power and wealth in the global North.



2. Social safety nets: almost non existent

Social protection refers to "all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks and enhance the social status and rights of the marginalised with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups".

In developing economies, where informal work arrangements are preeminent, social welfare systems built on stable employment are rare. Around 80.0% of the labour force do not participate in any traditional social insurance or related protections.

A common societal belief in former generations in Africa was that children were the pension of their parents, leading to many families having several children to increase the chances of being cared for. Traditionally, the family has been at the core of social protection on the continent. The currently increasing mobility of people, be it rural-urban or intra-continental, is changing societal structures, leaving elderly and vulnerable generations without support.

The Africa Social Protection Strategy 2012-22 emphasises the importance of safety nets to reduce chronic poverty and to limit the impact of shocks on poor and vulnerable households. New models, such as a pension scheme for informal workers in Ghana, are emerging, targeting the needs of an increasing elderly population – expected, according to UN estimates, to triple to 161.0 million by 2050 in sub-Saharan Africa. This could also help tackle old-age poverty, currently accelerating at an alarming rate.

The global interoperability between systems will be crucial to ensure effective delivery of benefits and protections in a context where the international labour market is increasingly integrated and online business models transcend the geographical boundaries of nation states. This will only be possible if the collaboration between states on both publicly-provided and commercial solutions is enhanced.

3. Missing identity: no country in Africa with a complete birth registration system

Civil Registration and Vital Statistics (CRVS) systems - recording and documenting vital events in a person's life (live births, adoptions, legitimations and recognitions, deaths, marriages, divorces, separations and annulments) - are fundamental to guaranteeing legal identity, human rights and access to public services.

Data for 28 countries (2013-2018) show that no country in Africa has a complete civil registration system for births. Completeness of birth registration ranges from as low as 12.0% in Chad to 90.0% or more in only six countries (Cabo Verde, Congo, Egypt, Mauritius, São Tomé

& Príncipe, South Africa). Data for 15 countries (2013-2018) show that no country in Africa has a complete civil registration for deaths, ranging from less than 3.5% in Niger to more than 90.0% in Egypt and Mauritius.

Inclusion in CRVS systems is particularly challenging for remote and rural residents, nomadic populations, temporary and/or illegal migrants, forcibly displaced, stateless persons, homeless and other vulnerable groups.

Migrants: documentation is often their most urgent requirement

Migrants are most likely not to register and document their births and other vital events. This makes them vulnerable to human rights violations, to statelessness and associated protection risks.

In a survey conducted by UNHCR and IOM in 2013 in Niger and Togo, 60.0% of migrants mentioned documentation as the most urgent requirement, rather than food or health care. More than ½ of these migrants lacked any sort of travel document, which for many of them have been confiscated by the police in the various countries of transit. Many refugees lack birth certificates, marriage and divorce certificates and death certificates. While the majority of refugees in camps have been registered on an individual basis, refugees outside of camp environments are difficult to identify and capture in registration activities. Moreover, some refugees may not register because they are unaware that they should, and others may be reluctant to do so because they are sceptical of the integrity of the registration process or lack confidence in protection measures. Individuals in irregular migration flows may also choose not to apply for asylum due to fear of declaring themselves to the authorities.

Birth registration does not always grant nationality but it is important to prevent statelessness because it establishes a legal record of where a child was born and who the parents are. Displaced persons run the risk of losing their connection with their country of origin as well as facing difficulties acquiring documentation, which may result in statelessness, in particular for subsequent generations.

According to the United Nations International Children's Emergency Fund (UNICEF), 41.0% of the sub-Saharan African population of children under five years of age have never been registered. Children of migrants born abroad are most at risk if they cannot acquire the nationality of their parents' country of origin and if residing in countries that provide no right to nationality based on birth in the country nor the possibility of naturalisation even if the person remains resident there until the age of majority.

The exact number of stateless people globally is unknown. In sub-Saharan Africa, UNHCR reported at least over 715.0 thousand stateless persons in 2016.

Best practices

Côte d'Ivoire carried out a profiling exercise of Internally Displaced Persons (IDPs) in 2014. This provided an example of how gathering data to inform national action can help resolve displacement. A special procedure in place from 2014 to 2016 allowed 23.8 thousand individuals to apply for Ivorian nationality by declaration.

Cameroon and Sudan are the two African countries out of seven in the world to have included refugees in their national poverty surveys in 2015.

In June 2017, in Kenya, a circular was issued to register births and issue birth certificates for school children. Head teachers were required to make birth certificate applications on behalf of their pupils.

Ethiopia launched a civil registration process for refugees in October 2017. All refugees in the country will be able to register their vital life events, including birth, death, marriage and divorce, directly with national authorities and free of charge. As a result, more than 70.0 thousand refugee children born in Ethiopia over the last decade who have not had their births registered will soon be issued with birth certificates. Civil registration offices have also been established in each of the 26 refugee camps, as well as in seven locations with a high concentration of refugees.



800 000 0

400 000 0

Population (thousand)

GDP (billion \$)

The elephant in the room: what about family planning?

However impressive, Africa's economic growth is running behind its demographic growth

Between 2019 and 2050, of the 2.1 billion people that are projected to join the global population, more than $\frac{1}{2}$ will be African (1.2 billion). The already large African population is the fastest growing in the world and is continuing to grow with a projected average annual growth of 2.5% during the period 2015-2020.

In 2019, the whole continent's GDP in current billion dollars is estimated to be smaller than that of the UK (\$2506.7 billion and \$2809.9 billion, respectively). Meanwhile, Africa's total population is nearly 20.0 times bigger. This imbalance between the size of the continent's population and its economy is unlikely to be reverted by the projected GDP growth, however impressive.

3000

0

Source: IMF, UNDESA



Of the countries with the ten highest fertility rates globally, nine are in Africa and sub-Saharan Africa's fertility rate doubles the world's one

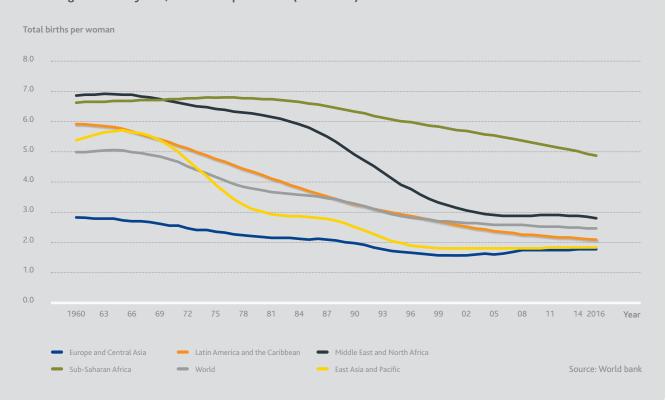
Country	Fertility rate, total births per woman (2016)
Niger	7.2
Somalia	6.3
DRC	6.1
Mali	6.1
Chad	5.9
Burundi	5.7
Angola	5.7
Uganda	5.6
Nigeria	5.5
Timor-Leste	5.5

Region	Fertility rate, total births per woman (2016)
Sub-Saharan Africa	4.8
Middle East and North Africa	2.8
Latin America and the Caribbean	2.1
East Asia and Pacific	1.8
Europe and Central Asia	1.8
World	2.4

African countries

Source: World Bank

World regions: fertility rate, total births per woman (1960-2016)





Glossary	82
Acronyms	84
References	85
Notes	98
Project team	99

GLOSSARY

Additive manufacturing (industrial 3D-printing): the use of laser printers to produce objects by printing very thin layers of material onto one another.

Big data: an evolving term that describes a large volume of structured, semi-structured and unstructured data that has the potential to be mined for information and used in machine learning projects and other advanced analytics applications. Big data is often characterised by the 3Vs: the extreme volume of data, the wide variety of data types and the velocity at which the data must be processed.

Brain drain/brain gain: net cost of human capital flight for the sending country, as opposed to brain gain, the benefit of human capital flight for the recipient country.

Civil registration: system by which a government records the vital events (births, deaths and marriages) of its citizens and residents.

Commodity: basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Demographic dividend: the economic surplus generated by a decline in birth rates, a decline in the number of young dependants and an increase in the proportion of working-age adults (15-64). This process enabled several East Asian nations to reach high levels of prosperity from the early 1960s to the 1990s

Dependency ratio: measure of the number of dependants aged zero to 14 and 65 or older, compared with the total population aged 15 to 64.

Digital divide: economic and social inequality with regards to access, use and impact of information and communication technologies.

Digitalisation: digital transformation of the economy, achieved through an interaction of digital technologies such as cloud computing, artificial intelligence, Internet of Things etc. with physical ICT infrastructure. This can lead to significant advancements, such as the development of smart machines, smart platforms and digital products. The digital economy is supported by an enabling environment comprising digital skills; policies and regulations that encourage development of ICT, innovation, digital business models etc.; and digital accelerators such as public-private partnerships and behavioural and cultural aspects of the economy.

Diploma portability: possibility to have your diploma and qualifications officially recognised in other countries in order to be able to get employed in the same field of work.

Elasticity of employment to growth: a measure of the percentage change in employment associated with a 1.0 percentage point change in economic growth. This indicates the ability of an economy to generate employment for its population as per cent of its growth (development) process.

eVisa: process of obtaining a visa electronically before departure from an official online platform.

Gig economy: way of working that is based on people having temporary jobs or doing separate pieces of work, each paid separately, rather than working for an employer.

Global value chains: international fragmentation of the steps that firms and workers do to bring a product/good or service from its concept to its end use. This includes activities such as design, production, marketing, distribution and support to the final consumer. A global value chain can be divided among multiple firms and geographic spaces.

Gross Domestic Product (GDP): the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Gross National Income (GNI): sum of a nation's gross domestic product (GDP) and the net income it receives from overseas.

High-skilled: this category includes managers, professionals and technicians and associate professionals.

Human capital: intangible asset or quality not listed on a company's balance sheet. It can be classified as the economic value of a worker's experience and skills. This includes assets like education, training, intelligence, skills, health, and other things employers value such as loyalty and punctuality.

ICT price basket: composite affordability measure based on three subbaskets – fixed telephone, mobile cellular and fixed broadband internet services – and computed as a percentage of average Gross National Income (GNI) per capita.

Industrial Internet: the connection of the machines in manufacturing through information and communications technology, also described as cyber-physical production systems (CPPS). Hence, the Industrial Internet consists of machines at various stages of the manufacturing supply chain communicating with one another.

Informal sector: comprised by all economic activities by workers or economic units that are -in law or practice- not covered or sufficiently covered by formal arrangements. It includes the following sub-categories of workers: paid employees in 'informal jobs', i.e. jobs without a social security entitlement, paid annual leave or paid sick leave; paid employees in an unregistered enterprise with size classification below five employees; own-account workers in an unregistered enterprise with size classification below five employees; employers in an unregistered enterprise with size classification below five employees; and contributing family workers. Informal work encompasses both workers in the informal (unregistered) sector and paid employees holding informal jobs in the formal sector.

Labour force: the total number of people who are eligible to work (including employed and unemployed people) (of a country, the world, etc).

Lifelong learning: the provision or use of both formal and informal learning opportunities throughout people's lives in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfilment.

Low-skilled: this category includes elementary occupations, which consist of simple and routine tasks mainly requiring the use of hand-held tools and often some physical effort.

Middle-skilled: this category includes clerical support workers, service and sales workers, skilled agricultural, forestry and fishery workers, craft and related trades workers and plant and machine operators and assemblers.

Migration flows: total number of migrants entering and leaving (inflow and outflow) a country over the course of a specific period.

Migration stock: total number of migrants present in a given country/ region at a particular point of time.

Official Development Assistance (ODA): government aid designed to promote the economic development and welfare of developing countries. Aid may be provided bilaterally, from donor to recipient, or channelled through a multilateral development agency such as the United Nations or the World Bank. Aid includes grants, 'soft loans' and the provision of technical assistance.

Ratification: the act of signing or giving formal consent to a treaty, contract or agreement, making it officially valid. Most agreements provide for the instrument of ratification to be deposited within the depository authority specified in the treaty, to formalise the completion of the ratification process.

Remittances: the money or goods that migrants send back to families and friends in origin countries. They are often the most direct and well-known link between migration and development.

Social safety nets: programmes aimed at compensating for the social risks of the market economic system, such as unemployment or poverty, and alleviating handicaps such as old age, illness or disability. Forms of compensation can be cash and conditional transfers, subsidies, waivers, food programmes, educational or empowerment initiatives. Social safety nets can be funded by tax, redistribution, pay-as-you-go, investment funds, etc. The structure of the welfare regime can be public, private or a combination of both. In countries that do not provide comprehensive, state-funded welfare systems, social safety nets can refer to those arrangements that are functionally equivalent to formal compensation for social risks. They may also comprise family, clan or village structures, if these structures can provide viable compensation on a broad scale for risks.

Structural transformation: the transition of an economy from low productivity and labour-intensive economic activities to higher productivity and skill-intensive activities. It is also characterised by the movement of the workforce from labour-intensive activities to skill-intensive ones.

Tariffs: tax imposed on imported goods and services.

Traditional visa/ visa required: a visa that needs to be obtained before departure from an embassy, an honorary consulate or another official representative.

Value added to GDP of an industry or sector: net output of a sector after adding up all outputs and subtracting intermediate inputs, expressed as a share of an economy's total net outputs.

Visa free: there is no visa request process needed either before departure or on arrival. Entry procedures still need to be complied with, which includes filling out entry forms and receiving an entry stamp. This is referred in the text as liberal visa.

Visa on arrival: process of obtaining a visa on arrival in the country. This includes filling out any visa forms, paying the visa fee if applicable and receiving a visa in a travel document. This is referred in the text as liberal visa.

Visa: an endorsement (through a certificate or stamp in a travel document) showing that a visitor is allowed to enter the country for a specific length of time and for specific activities.

Vital statistics: the total process of (a) collecting information by civil registration or enumeration on the frequency of occurrence of specified and defined vital events, as well as relevant characteristics of the events themselves and of the person or persons concerned, and (b) compiling, processing, analysing, evaluating, presenting and disseminating these data in statistical form. The vital events of interest are: live births, adoptions, legitimations, recognitions; deaths and foetal deaths; and marriages, divorces, separations and annulments of marriage.

Vocational training: field of training focused on helping individuals develop the skills necessary for employment. Vocational training may include general job skills training but is usually directed towards learning the skills necessary for a specific job or vocation. Unlike general academic instruction, vocational training is usually limited to teaching the processes and knowledge required to perform on the job.

ACRONYMS

NEPAD

New Partnership for Africa's Development

4IR	4 th Industrial Revolution	NGO	Non-Governmental Organisation
AEC	African Economic Community	OAU	Organisation of African Unity
AEO	African Economic Outlook	OBOR	One Belt One Road Initiative
AfCFTA	African Continental Free Trade Area	ODA	Official Development Assistance
AfDB	African Development Bank	ODeL	Open, Distance and eLearning
AIIB	Asian Infrastructure & Investment Bank	OECD	Organisation for Economic Co-operation and Development
AMU	Arab Maghreb Union	OEF	One Earth Future
ARII	Africa Regional Integration Index	PALOP	Países Africanos de Língua Oficial Portuguesa
AU	African Union	REC	Regional Economic Community
AUC	African Union Commission	SAATM	Single African Air Transport Market
CAP	Common African Position	SADC	Southern African Development Community
CAR	Central African Republic	SDG	Sustainable Development Goal
CEN-SAD	Community of Sahel-Saharan States	SET	Supporting Economic Transformation
COMESA	Common Market for Eastern and Southern Africa	SME	Small and Medium-sized Enterprise
CRVS	Civil Registration and Vital Statistics	STP	São Tomé & Príncipe
DRC	Democratic Republic of Congo	SWTS	School-to-Work Transition Survey
EAC	East African Community	TVET	Technical and Vocational Education and Training
ECCAS	Economic Community of Central African States	UAE	United Arab Emirates
ECOWAS	Economic Community of West African States	UK	United Kingdom
EU	European Union	UN	United Nations
FAO	Food and Agriculture Organization of the United Nations	UNCTAD	United Nations Conference on Trade and Development
GCM	Global Compact for Safe, Orderly and Regular Migration	UNDESA	United Nations Department of Economic and Social Affairs
GDP	Gross Domestic Product	UNDP	United Nations Development Programme
GNI	Gross National Income	UNECA	United Nations Economic Commission for Africa
HCI	Human Capital Index	UNESCO	United Nations Educational, Scientific and Cultural
HEI	Higher Education Institution		Organization
HRDSA	Human Resource Development Strategy	UNHCR	United Nations High Commissioner for Refugees
IAMS	Intra Africa Mobility Scheme	UNICEF	United Nations International Children's Emergency Fund
IATA	International Air Transport Association	UNODC	United Nations Office on Drugs and Crime
ICT	Information and Communications Technology	UNWTO	United Nations World Tourism Organization
IDI	ICT Development Index	US	United States
IDP	Internally Displaced Person	WDR	World Development Report
IIAG	Ibrahim Index of African Governance	WEF	World Economic Forum
IGAD	Intergovernmental Authority on Development	WTO	World Trade Organization
ILO	International Labour Organization	WWII	Second World War
IMF	International Monetary Fund	YDI	Youth Development Index
IOM	International Organization for Migration		
IPU	Inter-Parliamentary Union		
ISS	Institute for Security Studies		
IT	Information Technology		
ITU	International Telecommunications Union		
JLMP	Joint Labour Migration Programme for Africa		
MIF	Mo Ibrahim Foundation		
MP	Member of Parliament		
MPFA	Migration Policy Framework		

REFERENCES

1. AFRICAN MIGRATIONS: REPOSITIONING THE DEBATE

I. Multiple definitions and patchy data

Adepoju, A. (2019). Talking Migration Data: Migration Data in West Africa: How much do we know?. http://mif.media/fr-2019-migrationdata. Accessed 4 March 2019.

GSM Association (GSMA) (2018). The Mobile Economy Sub-Saharan Africa 2018. https://www.gsma.com/r/mobileeconomy/sub-saharan-africa/. Accessed 4 March 2019.

International Organization for Migration (IOM) Global Migration Data Analysis Centre (2019a). Big data, Migration and Human Mobility. https://migrationdataportal.org/themes/big-data. Accessed 4 March 2019.

International Organization for Migration (IOM) Global Migration Data Analysis Centre (2019b). Migration Data Sources. https://migrationdataportal.org/themes/migration-data-sources. Accessed 4 March 2019.

International Organization for Migration (IOM) Global Migration Data Analysis Centre (2019c). Welcome to the Migration Data Portal. https://migrationdataportal.org/about. Accessed 4 March 2019.

International Organization for Migration, (IOM) (2011). International Migration Law, Glossary on Migration.

http://mif.media/fr-2019-iom-glossary. Accessed 4 March 2019.

International Organization for Migration (IOM) (2018). World Migration Report 2018. http://mif.media/fr-2019-iom-report. Accessed 13 March 2019.

International Organization for Migration (IOM) (2019). Key Migration Terms. https://www.iom.int/key-migration-terms. Accessed 4 March 2019.

Internet World Stats (2018). Internet Users Statistics for Africa. https://www.internetworldstats.com/stats1.htm. Accessed 4 March 2019.

Koser, K. (2016). International Migration: A Very Short Introduction. Oxford, United Kingdom: Oxford University Press.

Laczko, F., International Organization for Migration Global Migration Data Analysis Centre (2016). Improving Data on International Migration and Development: Towards a Global Action Plan? http://mif.media/fr-2019-gmdac. Accessed 4 March 2019.

Mixed Migration Centre (MMC) (2018a). Mixed Migration Review 2018. http://mif.media/fr-2019-mixedmigration. Accessed 4 March 2019.

Mixed Migration Centre (MMC) (2018b). MMC's Understanding and Use of the Term Mixed Migration. http://mif.media/fr-2019-mmc-terms. Accessed 4 March 2019.

United Nations Economic and Social Affairs (UNDESA) (2017). Handbook on Measuring International Migration through Population Censuses. http://mif.media/fr-2019-unstats-handbook. Accessed 4 March 2019.

United Nations Department of Economic and Social Affairs, (UNDESA) (1998). Recommendations on Statistics of International Migration, Revision 1. http://mif.media/fr-2019-unstats-sim. Accessed 4 March 2019.

World Bank (WB) (2019). World Development Indicators (WDI) dataset. Variable used: Statistical Capacity score (Overall average). http://mif.media/fr-2019-wdi. Accessed 22 February 2019.

Spotlight - Public opinions: diverse and sometimes overly emotional in destination countries

Abubakar, I., Aldridge, R. W., Devakumar, D., Orcutt, M., Burns, R., Barreto, M. L. (2018). The UCL–Lancet Commission on Migration and Health: the health of a world on the move. The Lancet, 392. http://mif.media/fr-2019-lancet. Accessed 4 March 2019.

African Union (AU) (2015). Agenda 2063: The Africa We Want. http://mif.media/fr-2019-2063. Accessed 4 March 2019.

Esipova, N., Fleming, J., Ray, J. (2017). New Index Shows Least-, Most-Accepting Countries for Migrants. http://mif.media/fr-2019-gallup. Accessed 4 March 2019.

International Organization for Migration (IOM) (2015). How the World Views Migration. https://publications.iom.int/system/files/how_the_world_gallup.pdf. Accessed 4 March 2019.

Jaumotte, F., Koloskova, K., Saxena, S. (2016). Migrants Bring Economic Benefits for Advanced Economies. http://mif.media/fr-2019-imf. Accessed 4 March 2019.

Knoll, A., de Weijer, F. (2016). Understanding African and European perspectives on migration: Towards a better partnership for regional migration governance? http://mif.media/fr-2019-ecdpm. Accessed 4 March 2019.

Open Society Foundations, African Centre for Migration & Society, University of the Witwatersrand, Hall, S. (2018). Free and Safe Movement in East Africa – Research to promote people's safe and unencumbered movement across international borders. http://mif.media/fr-2019-osiea. Accessed 8 March 2019.

Silberner, J. (2018). Report: Facts About Migrants Don't Always Match What The Headlines Say. http://mif.media/fr-2019-npr. Accessed 4 March 2019.

The New York Times (2018). Migrants Are on the Rise Around the World, and Myths About Them Are Shaping Attitudes. http://mif.media/fr-2019-nyt. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017a). International Migrant Stock: the 2017 Revision. Variable used: By destination and origin.

http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017b). International Migrant Stock: the 2017 Revision. Variable used: Total international migrant stock.

http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017c). World Population Prospects: The 2017 Revision. Variable used: Total Population – Both Sexes. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United Nations High Commissioner for Refugees (UNHCR) (2019). Population Statistics. http://popstats.unhcr.org/en/persons_of_concern. Accessed 17 January 2019.

World Bank (WB) (2019). World Development Indicators (WDI) dataset. Variable used: Population density (people per sq. km of land area). http://mif.media/fr-2019-wdi. Accessed 22 February 2019.

World Health Organization (WHO) (2019). 10 things to know about the health of refugees and migrants. http://mif.media/fr-2019-who. Accessed 18 February 2019.

World Values Survey (2014). World Values Survey 2010-2014. Variable used: Would not like to have as neighbours: Immigrants/foreign workers. http://www.worldvaluessurvey.org/WVSOnline.jsp. Accessed 18 February 2019.

II. Migrations are a key dynamic of human history and have shaped most nations

Denisenko, M., Chudinovskikh, O. (2017). Russia: A Migration System with Soviet Roots. http://mif.media/fr-2019-soviet. Accessed 4 March 2019.

Encyclopaedia Britannica (2019). Human Migration. https://www.britannica.com/topic/human-migration. Accessed 4 March 2019.

Fisher, M. H. (2014). Migration: A World History. Oxford, United Kingdom: Oxford University Press.

Khan Academy (2019). Homo sapiens and early human migration. http://mif.media/fr-2019-ka. Accessed 4 March 2019.

Koser, K. (2016). International Migration: A Very Short Introduction. Oxford, United Kingdom: Oxford University Press.

Okolski, M. (2012). European Immigrations, Trends, Structures and Policy Implications. Amsterdam, Netherlands: Amsterdam University Press.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017a). International Migrant Stock: the 2017 Revision. Variable used: By destination and origin. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017b) International Migrant Stock: the 2017 Revision. Variable used: Total international migrant stock. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017c). World Population Prospects: The 2017 Revision. Variable used: Total Population – Both Sexes. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United to End Genocide (2016). Sudan Backgrounder. http://endgenocide.org/conflict-areas/sudan-backgrounder/. Accessed 4 March 2019.

Van Mol, C., de Valk, H. (2016). Migration and Immigrants in Europe: A Historical and Demographic Perspective. In: Integration Processes and Policies in Europe: Contexts, Levels and Actors. Cham: Springer International Publishing. http://mif.media/fr-2019-doi. Accessed 4 March 2019.

Washington Post (2015). A visual guide to 75 years of major refugee crises around the world. https://www.washingtonpost.com/graphics/world/historical-migrant-crisis/. Accessed 4 March 2019.

III. African migrations represent around 14.0% of the global migrant population

Natale, F., Migali, S., Munz, R. (2018). Many more to come? Migration from and within Africa. http://mif.media/fr-2019-europa. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017a). International Migrant Stock: the 2017 Revision. Variable used: By destination and origin. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017b). International Migrant Stock: the 2017 Revision. Variable used: Total international migrant stock.

http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017c). World Population Prospects: The 2017 Revision. Variable used: Total Population – Both Sexes. https://population.un.org/wpp/Download/Standard/Population. Accessed 5 February 2019.

Spotlight - Who are the African migrants?

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variables used: Q68A; Q68B. Received upon request. Accessed 25 January 2019.

United Nations (UN) Africa Renewal. (2018). Africa: Migration Can Be a Catalyst for Economic Growth. http://mif.media/fr-2019-growth. Accessed 4 March 2019.

Natale, F., Migali, S., Munz, R. (2018). Many more to come? Migration from and within Africa. http://mif.media/fr-2019-europa. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017). International Migrant Stock: the 2017 Revision. Variable used: By age and sex. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

IV. More than half of the African migrants move within the continent

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variable used: Q69. Received upon request. Accessed 25 January 2019.

Brookings (2018). Figures of the week: Internal migration in Africa. http://mif.media/fr-2019-brookings. Accessed 4 March 2019.

Natale, F., Migali, S., Munz, R. (2018). Many more to come? Migration from and within Africa. http://mif.media/fr-2019-europa. Accessed 4 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Economic Development in Africa, Report 2018 – Migration for Structural Transformation. http://mif.media/fr-2019-unctad. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017). International Migrant Stock: the 2017 Revision. Variable used: By destination and origin. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

V. Almost 80.0% of African migrations are economically or socially driven

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variable used: Q70. Received upon request. Accessed 25 January 2019.

Browne, E. (2017). Evidence on education as a driver for migration. K4D - Knowledge, evidence and learning for development. http://mif.media/fr-2019-browne. Accessed 4 March 2019.

Food and Agriculture Organization (FAO), Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) (2017). Rural Africa in motion: dynamics and drivers of migration South of the Sahara. http://mif.media/fr-2019-relief. Accessed 13 March 2019.

Internal Displacement Monitoring Centre (IDMC) (2018). Global Internal Displacement Database. http://www.internal-displacement.org/database/displacement-data. Accessed 4 March 2019.

International Organization for Migration (IOM) (2018). World Migration Report 2018. http://mif.media/fr-2019-iom-report. Accessed 13 March 2019.

Natale, F., Migali, S., Munz, R. (2018). Many more to come? Migration from and within Africa. http://mif.media/fr-2019-europa. Accessed 4 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Economic Development in Africa, Report 2018 – Migration for Structural Transformation. http://mif.media/fr-2019-unctad. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017). International Migrant Stock: the 2017 Revision.

Variable used: By destination and origin. http://mif.media/fr-2019-desa.

Accessed 16 January 2019.

United Nations High Commissioner for Refugees (UNHCR) (2018). Global Trends - Forced Displacement in 2017. http://mif.media/fr-2019-unhcr. Accessed 4 March 2019.

United Nations High Commissioner for Refugees (UNHCR) (2019). Population Statistics. http://popstats.unhcr.org/en/persons_of_concern. Accessed 17 January 2019.

Spotlight - Intra-continental migrations: positive impacts for both origin and destination countries?

African Union (2006). The Migration Policy Framework for Africa. http://mif.media/fr-2019-fasngo. Accessed 4 March 2019.

International Organization for Migration (IOM) (2019). Global Migration Data Analysis Centre. Migration Data Portal – Remittances. https://migrationdataportal.org/themes/big-data. Accessed 4 March 2019.

Laczko, F., International Organization for Migration Global Migration Data Analysis Centre (2016). Improving Data on International Migration and Development: Towards a Global Action Plan? http://mif.media/fr-2019-gmdac. Accessed 4 March 2019.

Mo Ibrahim Foundation (MIF) (2018). 2018 Ibrahim Index of African Governance (IIAG). Variable used: Education. http://mo.ibrahim.foundation/iiag/downloads/. Accessed 21 November 2019.

Organisation for Economic Cooperation and Development (OECD) (2018). Query Wizard for International Development Statistics. http://mif.media/fr-2019-oecd. Accessed 4 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Economic Development in Africa, Report 2018 – Migration for Structural Transformation. http://mif.media/fr-2019-unctad. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017). International Migrant Stock: the 2017 Revision. Variable used: Total international migrant stock. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

Toulmin, C. (2019 forthcoming). Migration, land and livelihoods. Oxford, United Kingdom: Oxford University Press.

World Bank (WB) (2018a). Migration and Remittances Data. Variable used: Annual Remittances Data (Inflows). http://mif.media/fr-2019-worldbank. Accessed 21 February 2019.

World Bank (WB) (2019). World Development Indicators (WDI) dataset. Variable used: Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population). http://mif.media/fr-2019-wdi. Accessed 22 February 2019.

2. AFRICA'S FIRST CHALLENGE: THE YOUTH BULGE STUCK IN 'WAITHOOD'

I. A growing youth majority

African Union (AU) (2011). African Youth Decade 2009-2018 – Plan of Action. http://mif.media/fr-2019-osaa. Accessed 18 February 2019.

African Union (AU) (2015). Agenda 2063: the Africa We Want. http://mif.media/fr-2019-2063. Accessed 8 March 2019.

African Union Commission (AUC) (2006). African Youth Charter. http://mif.media/fr-2019-charter. Accessed 8 March 2019.

Commonwealth Secretariat (2016a). Global Youth Development Index and Report 2016. http://mif.media/fr-2019-cwealth.
Accessed 13 March 2019.

Commonwealth Secretariat (2016b). Global Youth Development Index. Variable used: YDI Overall Score 2015.

http://mif.media/fr-2019-cwealth. Accessed 16 November 2018.

Financial Times (FT) (2017). Failure to address Africa's rising population is not an option. http://mif.media/fr-2019-ft. Accessed 8 March 2019.

Honwana, A. M. (2012). The Time of Youth: Work, Social Change, and Politics in Africa. Boulder, CO USA: Kumarian Press. http://mif.media/fr-2019-rienner. Accessed 18 February 2019.

Institute for Security Studies (ISS) (2018). Getting to Africa's Demographic Dividend. https://www.ssrn.com/abstract=3254117.

Accessed 8 March 2019.

International Labour Organization (ILO) (2017). Global Employment Trends for Youth 2017 – Paths to a better working future. http://mif.media/fr-2019-ilo. Accessed 18 February 2019.

International Labour Organization (ILO) (2018). Guide on Measuring Decent Jobs for Youth – Concepts and definitions of employment indicators relevant to young people. http://mif.media/fr-2019-wcms. Accessed 18 February 2019.

International Telecommunication Union (ITU) (2013). Measuring the Information Society: 2013. http://mif.media/fr-2019-mis. Accessed 18 February 2019.

Mo Ibrahim Foundation (MIF) (2018a). 2018 Ibrahim Index of African Governance (IIAG) Report. http://mif.media/2018-iiag-report. Accessed 18 February 2019.

Mo Ibrahim Foundation (MIF) (2018b). 2018 Ibrahim Index of African Governance (IIAG). Variables used: Digital & IT Infrastructure; Health; Primary School Completion; Secondary Education Enrolment; Tertiary Education Enrolment. http://mo.ibrahim.foundation/iiag/downloads/. Accessed 21 November 2018.

United Nations Department for Economic and Social Affairs (UNDESA) (2017a). World Population Prospects: The 2017 Revision. Variable used: Annual Population by Age Groups - Both Sexes. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United Nations Department for Economic and Social Affairs (UNDESA) (2017b). World Population Prospects: The 2017 Revision. Variable used: Median Age of Population. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United Nations Department for Economic and Social Affairs (UNDESA) (2017c). World Population Prospects: The 2017 Revision. Variable used: Total Dependency Ratio 1. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United Nations Department of Economic and Social Affairs (UNDESA). (2019). Frequently asked questions – What does the UN mean by 'youth' and how does this definition differ from that given to children? . https://www.un.org/development/desa/youth/what-we-do/faq.html. Accessed 18 February 2019.

United Nations Economic Commission for Africa (UNECA) (2017). Africa's Youth and Prospects for Inclusive Development – Regional Situation Analysis Report. http://mif.media/fr-2019-ohchr. Accessed 18 February 2019.

World Bank (WB) (2018). The Human Capital Project. http://mif.media/fr-2019-wbhcp. Accessed 18 February 2019.

II. More education but less jobs: a worrying disconnect

International Labour Organization (ILO) (2015). School-To-Work-Transition-Surveys. Countries: Benin, Congo, Madagascar, Uganda. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2014). School-To-Work-Transition-Surveys. Countries: Egypt, Liberia, Malawi, Togo, Zambia. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2013). School-To-Work-Transition-Surveys. Countries: Tanzania, Tunisia. Received upon request. Accessed 11 January 2019.

International Labour Organization (ILO) (2019). ILO Stats. Variable used: Unemployment rate by sex, age and education (%). https://www.ilo.org/ilostat. Accessed 10 December 2018.

Mo Ibrahim Foundation (MIF) (2018a). 2018 Ibrahim Index of African Governance (IIAG) Report. http://mif.media/2018-iiag-report. Accessed 18 February 2019.

Mo Ibrahim Foundation (MIF) (2018b). 2018 Ibrahim Index of African Governance (IIAG). Variables used: Alignment of Education with Market Needs; Education Quality; Satisfaction with Education Provision. http://mo.ibrahim.foundation/iiag/downloads/. Accessed 21 November 2018.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2019a). Sustainable Development Goal 4 (Full Dataset). Variable used: Proportion of 15-24 year-olds Enrolled in Vocational Education, both sexes (%). http://data.uis.unesco.org/. Accessed 12 December 2018.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2017a). Calculation method: Gross Enrolment Ratio. http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio. Accessed 4 March 2019.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2019b). Education (Full Dataset). Variables used: Completion Rate Primary, Both Sexes (%); Completion Rate Lower Secondary, Both Sexes (%); Completion Rate Upper Secondary, Both Sexes (%). http://data.uis.unesco.org/. Accessed 7 March 2019.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2019c). Education (Full Dataset). Variables used: Gross Enrolment Ratio Primary, Both Sexes (%); Gross Enrolment Ratio Lower Secondary, Both Sexes (%); Gross Enrolment Ratio Upper Secondary, Both Sexes (%); Gross Enrolment Ratio Tertiary, Both Sexes (%). http://data.uis.unesco.org/. Accessed 7 March 2019.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2019d). Education (Full Dataset). Variables used: Gross Enrolment Ratio, Upper Secondary, Gender Parity Index (GPI); Gross Enrolment Ratio, Tertiary, Gender Parity Index (GPI). http://data.uis.unesco.org/. Accessed 7 March 2019.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2017b). Interpretation: Completion Rate. http://uis.unesco.org/en/glossary-term/completion-rate. Accessed 4 March 2019.

World Economic Forum (WEF) (2018). The Global Competitiveness Index 4.0. Variable used: Skillset of Graduates. https://wef.ch/2OVsxrX. Accessed 11 December 2018

III. Weak economic prospects: unemployment or informal jobs

African Development Bank (AfDB) (2018). Jobs for Youth in Africa. http://mif.media/fr-2019-afdb. Accessed 4 March 2019.

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variables used: Q1; Q4B; Q8A; Q8B; Q8C; Q8D; Q8E; URBRUR. Received upon request. Accessed 25 January 2019.

Honwana, A. M. (2012). The Time of Youth: Work, Social Change, and Politics in Africa. Boulder, CO USA: Kumarian Press. http://mif.media/fr-2019-rienner. Accessed 18 February 2019.

International Labour Organization (ILO) (n.a.). KILM 8. Employment in the Informal Sector. http://mif.media/fr-2019-ilo-informal. Accessed 4 March 2019.

International Labour Organization (ILO) (2015). School-To-Work-Transition-Surveys. Countries: Benin, Congo, Madagascar, Uganda. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2014). School-To-Work-Transition-Surveys. Countries: Egypt, Liberia, Malawi, Togo, Zambia. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2013). School-To-Work-Transition-Surveys. Countries: Tanzania, Tunisia. Received upon request. Accessed 11 January 2019.

International Labour Organization (ILO) (2018a). ILO Stats. Variable used: Unemployment by Sex and Age – ILO Modelled Estimates (May 2018) (Thousands). https://www.ilo.org/ilostat/. Accessed 14 January 2019.

International Labour Organization (ILO) (2019). ILO Stats. Variable used: Unemployment Rate by Sex, Age and Rural/Urban Areas (%). https://www.ilo.org/ilostat/. Accessed 11 December 2018.

International Labour Organization (ILO) (2018b). ILO Stats. Variable used: Unemployment Rate by Sex and Age – ILO Modelled Estimates (May 2018) (%). https://www.ilo.org/ilostat/. Accessed 14 January 2019.

United Nations Development Programme (UNDP) (2016). Africa Human Development Report 2016: Accelerating Gender Equality and Women's Empowerment in Africa. http://mif.media/fr-2019-undp-report. Accessed 7 March 2019.

United Nations Economic Commission for Africa (UNECA) (2017). Urbanization and Industrialization for Africa's Transformation. http://mif.media/fr-2019-uneca. Accessed 13 March 2019.

World Bank (WB) (2018). The Global Findex Database 2017. Variables used: Coming up with emergency funds: possible, young adults (% age 15-24); Financial institution account, young adults (% age 15-24); Main source of emergency funds: family or friends, young adults (% able to raise funds, age 15-24); Main source of emergency funds: money from working, young adults (% able to raise funds, age 15-24); Received wages in the past year, young adults (% age 15-24). https://globalfindex.worldbank.org/. Accessed 14 December 2018.

IV. Youth and politics: a broken relationship?

Afrobarometer (2016/2018) National Public Attitude Surveys Round 7. Variables used: Q1; Q22; Q26A; Q43A; Q43B; Q43C; Q43E; Q43F; Q55PT1; Q56A; Q576B; Q56C; Q56I; Q56J; Q56R; URBRUR. Received upon request. Accessed 25 January 2019.

Brookings (2019). Figure of the Week: Youth Representation and Inclusion. http://mif.media/fr-2019-brookings-youth. Accessed 4 March 2019.

Commonwealth Secretariat (2016). Global Youth Development Index and Report 2016. http://mif.media/fr-2019-cwealth. Accessed 13 March 2019.

ExAfrica (2019). Special Report: The Cost of Internet Shutdowns in Africa. http://mif.media/fr-2019-exafrica. Accessed 4 March 2019.

GeoPoll (2017). Measuring Youth Sentiments about Civic Participation across Africa. http://mif.media/fr-2019-geopoll. Accessed 4 March 2019.

International Labour Organization (ILO) (2015). School-To-Work-Transition-Surveys. Countries: Congo, Madagascar, Uganda. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2014). School-To-Work-Transition-Surveys. Countries: Egypt, Malawi, Togo. Received upon request. Accessed 7 January 2019.

International Labour Organization (ILO) (2013). School-To-Work-Transition-Surveys. Countries: Tanzania, Tunisia. Received upon request. Accessed 11 January 2019.

International Youth Foundation and Hilton (2017). Global Youth Wellbeing Index Report. http://mif.media/fr-2019-iyfnet. Accessed 4 March 2019.

Inter-Parliamentary Union (IPU) (2018a). New Parline: the IPU's Open Data Platform. Variable used: Percentage of MPs 40 years of age or younger. http://mif.media/fr-2019-ipu. Accessed 17 December 2018.

Inter-Parliamentary Union (IPU) (2018b). Youth Participation in National Parliaments: 2018. http://mif.media/fr-2019-ipu-youth. Accessed 4 March 2019.

Mo Ibrahim Foundation (MIF) (2018). 2018 Ibrahim Index of African Governance (IIAG). Variables used: Absence of Government Violence Against Civilians; Civil Society Participation; Freedom of Association & Assembly; Freedom of Expression; Socio-economic Integration of Youth. http://mif.media/2018-iiag-report. Accessed 21 November 2018.

One Earth Future Research (2019). Rulers, Elections, and Irregular Governance (REIGN) Dataset. http://mif.media/fr-2019-oef. Accessed 1 February 2019.

The Conversation (2019). A South African Case Study: How to Support Young Job Hunters. http://mif.media/fr-2019-conversation. Accessed 4 March 2019.

United Nations Department for Economic and Social Affairs (UNDESA) (2017). World Population Prospects: The 2017 Revision. Variable used: Median Age of Population. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

Youthpolicy.org (2014). Factsheets: Youth & Public Institutions. http://www.youthpolicy.org/factsheets/. Accessed 4 March 2019.

Spotlight- Africa on the verge of losing its youth?

Gallup, Inc. (2018). Potential Net Migration Index. http://news.gallup.com/migration/interactive.aspx. Accessed 25 January 2019.

Institute for Security Studies (ISS) (2014). Radicalisation and al-Shabaab Recruitment in Somalia. http://mif.media/fr-2019-iss. Accessed 4 March 2019.

IRIN (2018). Why Some Malians Join Armed Groups. http://mif.media/fr-2019-irin. Accessed 4 March 2019.

Mercy Corps (2016). 'Motivations and Empty Promises': Voices of Former Boko Haram Combatants and Nigerian Youth. http://mif.media/fr-2019-mercycorps. Accessed 4 March 2019.

Mo Ibrahim Foundation (MIF) (2017). 2017 Ibrahim Forum Report: Africa At A Tipping Point. http://mif.media/fr-2017. Accessed 4 March 2019.

The Network for Religious and Traditional Peacemakers, Finn Church Aid, KAICIID Dialogue Centre (2016). Getting Behind the Profiles of Boko Haram Members and Factors Contributing to Radicalisation Versus Working Towards Peace. http://mif.media/fr-2019-nrtp. Accessed 4 March 2019.

United Nations Development Programme (UNDP) (2017). Journey to Extremism in Africa. http://mif.media/fr-2019-extremism. Accessed 4 March 2019.

United States Institute of Peace (USIP) (2014). Why Do Youth Join Boko Haram?. https://www.ciaonet.org/attachments/25304/uploads. Accessed 4 March 2019.

3. 21st CENTURY JOBS MARKET: WHAT PROSPECTS FOR AFRICA?

I. Jobless growth and premature deindustrialisation

African Development Bank (AfDB) (2019). African Economic Outlook 2019. http://mif.media/fr-2019-aeo. Accessed 13 March 2019.

African Union (AU), Organisation for Economic Co-operation and Development (OECD) (2018). Africa's Development Dynamics 2018: Growth, Jobs and Inequalities. http://mif.media/fr-2019-aueu. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2018). Made in Africa: manufacturing and the fourth industrial revolution. http://mif.media/fr-2019-iss-ir. Accessed 13 March 2019.

Irwin, S., Mader, P., Flynn, J. (2018). How youth-specific is Africa's youth employment challenge? http://mif.media/fr-2019-irwin. Accessed 13 March 2019.

Mo Ibrahim Foundation (MIF) (2018). 2018 Ibrahim Index of African Governance (IIAG) Report. http://mif.media/2018-iiag-report. Accessed 18 March 2019.

Supporting Economic Transformation (SET) (2018). Digitalisation and the future of manufacturing in Africa. http://mif.media/fr-2019-odi.

World Bank (WB) (2019a). World Development Indicators (WDI) dataset. Variables used: Agriculture, forestry, and fishing, value added (% of GDP); Manufacturing, value added (% of GDP); Services, value added (% of GDP). https://datacatalog.worldbank.org/dataset/world-development-indicators. Accessed 1 February 2019.

World Bank (WB) (2019b). World Development Report 2019: The Changing Nature of Work. http://mif.media/fr-2019-wdr. Accessed 13 March 2019.

II. The 4th Industrial Revolution: job-killer or job-creator?

CDC Group (2019). Can the gig economy help to create jobs in Africa? http://mif.media/fr-2019-gig. Accessed 13 March 2019.

Crew Pencil (2019). Crew Pencil – Home. https://www.crewpencil.com/. Accessed 13 March 2019.

Deloitte (2018). The Fourth Industrial Revolution is here – are you ready? http://mif.media/fr-2019-deloitte. Accessed 13 March 2019.

East Coast Radio (ECR) (2017). Why you should consider working from home – the benefits. http://mif.media/fr-2019-wfh. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2018). Made in Africa: manufacturing and the fourth industrial revolution. http://mif.media/fr-2019-iss-ir. Accessed 13 March 2019.

Institute of Labor Economics (IZA) (2017). Entrepreneurship, Education and the Fourth Industrial Revolution in Africa. http://ftp.iza.org/dp10855.pdf. Accessed 13 March 2019.

Personal Finance (2019). 7 reasons why you should promote flexible working hours. http://mif.media/fr-2019-flex. Accessed 13 March 2019.

Supporting Economic Transformation (SET) (2018). Digitalisation and the future of manufacturing in Africa. http://mif.media/fr-2019-odi.

World Bank (WB) (2019). World Development Report 2019: The Changing Nature of Work. http://mif.media/fr-2019-wdr. Accessed 13 March 2019.

World Economic Forum (WEF) (2018). The Future of Jobs Report 2018. http://mif.media/fr-2019-wef. Accessed 13 March 2019.

Spotlight – The 4th Industrial Revolution: better living standards to mitigate some migration incentives?

Africa.com (2017). Leading Africa into the $4^{\rm th}$ Industrial Revolution. https://www.africa.com/africa-industrial-revolution/. Accessed 13 March 2019.

Blockgeeks (2019). What is Blockchain Technology? A Step-by-Step Guide For Beginners. https://blockgeeks.com/guides/what-is-blockchain-technology/. Accessed 13 March 2019.

easysolar (2019). Home – easysolar. https://www.easysolar.sl. Accessed 13 March 2019.

Eneza Education (2019). Home – Eneza Education. https://enezaeducation.com/. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2018). Made in Africa: manufacturing and the fourth industrial revolution. http://mif.media/fr-2019-iss-ir. Accessed 13 March 2019.

Institute of Labor Economics (IZA) (2017). Entrepreneurship, Education and the Fourth Industrial Revolution in Africa. http://ftp.iza.org/dp10855.pdf. Accessed 13 March 2019.

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) (2019). SMS for Life – IFPMA. http://partnerships.ifpma.org/

Singularity Hub (2018). Leapfrogging Tech Is Changing Millions of Lives. Here's How. http://mif.media/fr-2019-singularity. Accessed 13 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Mobile money holds key to financial inclusion in Africa, experts say. http://mif.media/fr-2019-mobile. Accessed 13 March 2019.

III. Agriculture: from meeting needs to creating wealth

partnership/sms-for-life. Accessed 13 March 2019.

African Development Bank (AfDB) (2019). The High 5 for transforming Africa: Feed Africa. https://www.afdb.org/en/the-high-5/feed-africa/. Accessed 13 March 2019.

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variables used: Q1; Q94; Q95A; Q101. Received upon request. Received upon request. Accessed 25 January 2019.

Agriculture for Impact (A4I) (2014). Small and Growing: Entrepreneurship in African Agriculture, A Montpellier Panel Report. http://mif.media/fr-2019-a4i. Accessed 13 March 2019.

Brookings (2001). Foresight Africa 2016: Banking on agriculture for Africa's future. http://mif.media/fr-2019-brookings-agri. Accessed 13 March 2019.

Center for Strategic & International Studies (CSIS), International Youth Foundation (IYF) (2017). The 2016 Global Millennial Viewpoints Survey. Top Findings. http://mif.media/fr-2019-gmvs. Accessed 13 March 2019.

Commonwealth Secretariat (2016). Global Youth Development Index and Report 2016. http://mif.media/fr-2019-cwealth. Accessed 13 March 2019.

Financial Times (FT) (2019). Gro Intelligence looks to reap rewards from crop data. https://www.ft.com/content/e6530830-2b9f-11e9-9222-7024d72222bc. Accessed 14 March 2019

Grow Africa (2019). Who We Are | Grow Africa. https://www.growafrica.com/who-we-are. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2018). Made in Africa: manufacturing and the fourth industrial revolution. http://mif.media/fr-2019-iss-ir. Accessed 13 March 2019.

Mo Ibrahim Foundation (MIF) (2011). 2011 Forum Report: African Agriculture: From Meeting Needs to Creating Wealth. http://mif.media/fr-2011. Accessed 13 March 2019.

Singularity Hub (2018). Leapfrogging Tech Is Changing Millions of Lives. Here's How. http://mif.media/fr-2019-singularity. Accessed 13 March 2019.

Wefarm (2019). The world's largest farmer-to-farmer digital network. https://wefarm.co/. Accessed 13 March 2019.

4. THE WAY UP RATHER THAN THE WAY OUT: MANAGING AND STRENGTHENING MOBILITY

I. Strengthening geographical mobility

Abebe, T. T., Institute for Security Studies (2017). Migration Policy Frameworks in Africa. http://mif.media/fr-2019-ar2. Accessed 13 March 2019.

African Development Bank (AfDB) (2018). Africa Infrastructure Development Index (AIDI). http://mif.media/fr-2019-aidi. Accessed 8 March 2019.

African Development Bank (AfDB) (2019). Africa's air transport industry is dominated by three large, efficient airlines, with a fringe of small, financially precarious national flag carriers. http://mif.media/fr-2019-air. Accessed 8 March 2019.

African Development Bank (AfDB) (2015). Rail Infrastructure in Africa – Financing Policy Options. http://mif.media/fr-2019-rail. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU) (2018a). Africa Visa Openness Index. https://www.visaopenness.org/. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU) (2018b). Africa Visa Openness Report. http://mif.media/fr-2019-visa. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU), United Nations Economic Commission for Africa (UNECA) (2016a). Africa Regional Integration Index: Free Movement of People. https://www.integrate-africa.org/rankings/dimensions/free-movement-of-people/. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU), United Nations Economic Commission for Africa (UNECA) (2016b). Africa Regional Integration Index: Regional Infrastructure. https://www.integrate-africa.org/rankings/dimensions/regional-infrastructure/. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU), United Nations Economic Commission for Africa (UNECA) (2016c). Africa Regional Integration Index Report. http://mif.media/fr-2019-ariir. Accessed 8 March 2019.

African Development Bank (AfDB), African Union (AU), United Nations Economic Commission for Africa (UNECA) (2017). Assessing regional integration in Africa VIII: bringing the Continental Free Trade Area about. http://mif.media/fr-2019-aria. Accessed 8 March 2019.

African Union (AU) (2006). African Common Position on Migration and Development. http://mif.media/fr-2019-dev. Accessed 13 March 2019.

African Union (AU) (2015a). Agenda 2063: First Ten-year Implementation Plan (2014-2023). http://mif.media/fr-2019-first. Accessed 8 March 2019.

African Union (AU) (2015b). Agenda 2063: Framework Document. http://mif.media/fr-2019-framework. Accessed 8 March 2019.

African Union (AU) (2015c). Agenda 2063: the Africa We Want. http://mif.media/fr-2019-2063. Accessed 13 March 2019.

African Union (AU) (n.a.). Brochure on the Single African Air Transport Market. http://mif.media/fr-2019-saat. Accessed 8 March 2019.

African Union (AU) (2017). Draft Common African Position (CAP) on the Global Compact for Safe, Orderly and Regular Migration. http://mif.media/fr-2019-gcom. Accessed 13 March 2019.

African Union (AU) (2018a). Migration Policy Framework for Africa and Plan of Action (2018-2030). http://mif.media/fr-2019-mpfa. Accessed 13 March 2019.

African Union (AU) (2018b). Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment. http://mif.media/fr-2019-fmpa. Accessed 8 March 2019.

African Union (AU) (2018c). Status List of the Protocol to the Treaty Establishing the African Economic Community Relating to the Free Movement of Persons, Right of Residence and Right of Establishment. http://mif.media/fr-2019-rrre. Accessed 13 March 2019.

African Union (AU) (n.a.). Status of Integration in Africa (SIA V). http://mif.media/fr-2019-sia.

Afrobarometer (2014/2015). National Public Attitude Surveys Round 6. Variable used: Q78. Received upon request. Accessed 25 January 2019.

Ashurst (2016). Road infrastructure in Africa. http://mif.media/fr-2019-ashurst. Accessed 8 March 2019.

BBC News (2018). Why is it so hard for Africans to visit other African countries? https://www.bbc.com/news/world-africa-45677447. Accessed 8 March 2019.

BBC News (2019). African Migration 'a Trickle' Thanks To Trafficking Ban. https://www.bbc.com/news/world-africa-46802548.

Accessed 8 March 2019.

Circumspecte (2017). Visa-Free Travel in Africa: Where Can Africans Travel to Without A Visa? https://circumspecte.com/2017/08/visa-free-travel-africa/. Accessed 8 March 2019.

CNN (2016). United States of Africa? African Union launches all-Africa passport. http://mif.media/fr-2019-cnn. Accessed 8 March 2019.

Common Market for Eastern and Southern Africa (COMESA) (2011). Botswana Workshop. http://mif.media/fr-2019-rcp. Accessed 8 March 2019.

Common Market for Eastern and Southern Africa (COMESA), International Organization for Migration (IOM) (2017). Trainers Manual. Free Movement of Persons in the Common Market for Eastern and Southern Africa (COMESA). http://mif.media/fr-2019-comesa. Accessed 8 March 2019.

Deloitte (2018). Single African Air Transport Market: Is Africa ready? http://mif.media/fr-2019-saatm. Accessed 8 March 2019.

DLA Piper Global Law Firm (2018). China's One Belt One Road: Opportunities in Africa. http://mif.media/fr-2019-china. Accessed 8 March 2019.

East African Community (EAC) (n.a.). EAC to start issuing EA e-Passport January 2018. http://mif.media/fr-2019-eapass. Accessed 13 March 2019.

Eastern African Sub-regional Support Initiative for the Advancement of Women (EASSI) (2018). A quick guide to the EAC Common Market Protocol. http://mif.media/fr-2019-eac. Accessed 8 March 2019.

Economic Community of West African States (ECOWAS) (1979). Protocol Relating to Free Movement of Persons, Residence and Establishment. http://mif.media/fr-2019-fmp. Accessed 8 March 2019.

European Agency for the Management of Operational Cooperation at the External Borders (FRONTEX) (2016). Africa – Frontex Intelligence Community Joint Report. http://mif.media/fr-2019-eamoce. Accessed 8 March 2019.

European Strategy and Policy Analysis System (ESPAS) (2018). The Future of Mobility and Migration Within and From Sub-Saharan Africa. http://mif.media/fr-2019-frp. Accessed 13 March 2019.

Food and Agricultural Organization (FAO) (2017). Evidence on internal and international migration patterns in selected African countries. http://mif.media/fr-2019-fao. Accessed 13 March 2019.

Food and Agriculture Organization (FAO), Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD) (2017). Rural Africa in motion: dynamics and drivers of migration South of the Sahara. http://mif.media/fr-2019-relief. Accessed 13 March 2019.

Government of Canada (2014). History of Passports. http://mif.media/fr-2019-canada. Accessed 8 March 2019.

Hussein Askary (2017). The Need for Europe to Cooperate with China in the Industrialization of Africa and the Middle East. http://mif.media/fr-2019-eiw. Accessed 8 March 2019.

In On Africa (2018). In fits and starts, the Trans-African Highway extends its reach. IOA. http://mif.media/fr-2019-tah. Accessed 8 March 2019.

Institute for Security Studies (ISS) (2018a). African and global migration goals need to align better. http://mif.media/fr-2019-align. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2018b). Does the Global Compact on Migration reflect African priorities?

http://mif.media/fr-2019-saiia. Accessed 13 March 2019.

Institute for Security Studies (ISS) (2017). Policy brief. Freedom of movement: unlocking Africa's development potential. http://mif.media/fr-2019-fom.

Intergovernmental Authority on Development (IGAD) (2018). IGAD Closes National Consultations on Free Movement of Persons and Transhumance. http://mif.media/fr-2019-igad. Accessed 8 March 2019.

International Air Transport Association (IATA) (n.a.). The Single African Air Transport Market (SAATM). http://mif.media/fr-2019-iata. Accessed 8 March 2019.

International Institute for Sustainable Development (IISD) (2019). Highlevel Debate on Migration Invites Focus on Youth, Data and Partnerships. http://mif.media/fr-2019-iisd. Accessed 13 March 2019.

International Institute for Sustainable Development (IISD) (2018). UNGA Votes to Endorse Marrakech Compact on Migration. http://mif.media/fr-2019-unga. Accessed 13 March 2019.

International Labour Organization (ILO) (2015a). Labour Migration Statistics for Africa. http://mif.media/fr-2019-addis. Accessed 13 March 2019.

International Labour Organization (ILO) (2015b). The Joint Labour Migration Program for Africa. http://mif.media/fr-2019-ababa. Accessed 13 March 2019.

International Organization for Migration (IOM) (2019). Missing Migrants Project. https://missingmigrants.iom.int/region/africa. Accessed 8 March 2019.

International Organization for Migration (IOM) (2018a). World Migration Report 2018. http://mif.media/fr-2019-iom-report. Accessed 13 March 2019.

International Organization for Migration (IOM) (2018b). World Migration Report 2018. http://mif.media/fr-2019-iom-report. Accessed 13 March 2019.

International Union of Railways (UIC) (2016). Rail Transport in the World. Variable used: Length of Lines (km) – Global. http://mif.media/fr-2019-uic. Accessed 13 March 2019.

InterVISTAS Consulting LTD (2014). Transforming intra-African air connectivity: the economic benefits of implementing the Yamoussoukro Decision. http://mif.media/fr-2019-alr. Accessed 8 March 2019.

Lusaka Times (2015). Zambia drops visa requirements for all COMESA citizens. http://mif.media/fr-2019-lusaka. Accessed 8 March 2019.

Knoll, A., Weijer, F. de (2016). Understanding African and European perspectives on migration: Towards a better partnership for regional migration governance? http://mif.media/fr-2019-ecdpm. Accessed 13 March 2019.

Organisation for Economic Co-operation and Development (OECD) (2018). Enhancing Connectivity through Transport Infrastructure. http://mif.media/fr-2019-ecti. Accessed 8 March 2019.

Organisation of African Unity (OAU) (1991). Treaty Establishing the African Economic Community. http://mif.media/fr-2019-aec. Accessed 13 March 2019.

Passport Index (2019). Global Passport Power Rank. https://www.passportindex.org/byRank.php. Accessed 8 March 2019.

Quartz Africa (2017). African countries still can't raise enough capital to fix their poor road networks. http://mif.media/fr-2019-qz. Accessed 8 March 2019.

Stiftung Asienhaus (2017). The role of Africa in China's Belt & Road initiative. http://mif.media/fr-2019-obor. Accessed 13 March 2019.

The East African (2018). Single Air Transport Market; Towards one African sky. http://mif.media/fr-2019-satm. Accessed 8 March 2019.

The Economist (2016). Let Africans fly. http://mif.media/fr-2019-econ. Accessed 8 March 2019.

The Global Initiative Against Transnational Organized Crime (2017). Integrated Responses to Human Smuggling from the Horn of Africa to Europe. http://mif.media/fr-2019-horn. Accessed 8 March 2019.

The Guardian (2006). A brief history of the passport. https://www.theguardian.com/travel/2006/nov/17/travelnews. Accessed 13 March 2019. The Nation (2016). Review airport charges, IATA urges African govts. http://mif.media/fr-2019-charge. Accessed 8 March 2019.

The National (2018). Air freight sector takes off as Africa develops. http://mif.media/fr-2019-freight. Accessed 8 March 2019.

This is Africa (2019). AU to reveal details on production and issuance of the African passport. https://thisisafrica.me/au-production-issuance-african-passport/. Accessed 8 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Economic Development in Africa, Report 2018 – Migration for Structural Transformation. http://mif.media/fr-2019-unctad. Accessed 4 March 2019.

United Nations Department of Economic and Social Affairs (UNDESA) (2019). SDG targets and indicators relevant to migration. http://mif.media/fr-2019-sdg. Accessed 13 March 2019.

United Nations Department of Economic and Social Affairs (UNDESA) (2017). World Population Prospects: The 2017 Revision. Variable used: Total Population – Both Sexes. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

United Nations Economic Commission for Africa (UNECA) (n.a.). COMESA – Free Movement of Persons. https://www.uneca.org/pages/comesa-free-movement-persons. Accessed 8 March 2019.

United Nations Economic Commission for Africa (UNECA) (n.a.). EAC – Free Movement of Persons. https://www.uneca.org/pages/eac-free-movement-persons. Accessed 8 March 2019.

United Nations Economic Commission for Africa (UNECA) (n.a.). SADC – Free Movement of Persons. https://www.uneca.org/pages/sadc-free-movement-persons. Accessed 8 March 2019.

United Nations Economic Commission for Africa (UNECA) (2017). Urbanization and Industrialization for Africa's Transformation. http://mif.media/fr-2019-uneca. Accessed 13 March 2019.

United Nations for Refugees and Migrants (2017). Global Compact for Migration. https://refugeesmigrants.un.org/migration-compact. Accessed 13 March 2019.

United Nations High Commissioner for Refugees (UNHCR) (2019). Desperate Journeys: Refugees and Migrants Arriving in Europe and at Europe's Borders, January-December 2018. http://mif.media/fr-2019-dj. Accessed 8 March 2019.

United Nations Office on Drugs and Crime (UNODC) (2018). Global Study on Smuggling of Migrants 2018 Africa. http://mif.media/fr-2019-glosom. Accessed 8 March 2019.

United Nations (UN) (2018a). Global Compact for Safe, Orderly and Regular Migration. http://mif.media/fr-2019-gcm. Accessed 13 March 2019.

United Nations (UN) (2018b). World Leaders Adopt First-Ever Global Compact on Migration, Outlining Framework to Protect Millions of Migrants, Support Countries Accommodating Them. http://mif.media/fr-2019-un. Accessed 13 March 2019.

United Nations World Tourism Organization (UNWTO) (2018). 2018 Visa Openness Report. http://mif.media/fr-2019-vor. Accessed 8 March 2019.

Voice of America (VOA) (2018). Africa's Trafficking Gangs Flourish as Nations Fail to Work Together. http://mif.media/fr-2019-voa. Accessed 8 March 2019.

Wikipedia (2019a). ECOWAS passport. http://mif.media/fr-2019-ecowas. Accessed 8 March 2019.

Wikipedia (2019b). Passport. http://mif.media/fr-2019-pass. Accessed 8 March 2019.

World Atlas (n.a.). The largest countries in Africa by land area. http://mif.media/fr-2019-atlas. Accessed 8 March 2019.

World Bank (2018). Belt and Road Initiative. http://mif.media/fr-2019-bri. Accessed 8 March 2019.

World Bank (2019). World Development Indicators. Variables used: Air transport, registered carrier departures worldwide; Air transport, passengers carried. https://data.worldbank.org/indicator/IS.AIR.DPRT. Accessed 8 March 2019.

World Economic Forum (WEF) (2018a). The Global Competitiveness Index 4.0 2018. Variable used: Infrastructure pillar. https://wef.ch/2OVsxrX. Accessed 11 December 2019.

World Economic Forum (WEF) (2018b). The Global Competitiveness Report 2018. http://mif.media/fr-2019-gcr. Accessed 13 March 2019.

II. Maximising Africa's human capital

African Union (AU) (2015a). Agenda 2063: First ten-year implementation plan (2014-2023). http://mif.media/fr-2019-first. Accessed 8 March 2019.

African Union (AU) (2019a). Nyerere Scholarship and Academic Mobility Programme. http://mif.media/fr-2019-eduau. Accessed 7 March 2019.

African Union (AU) (2015b). Report on the follow-up on the Ouagadougou 2004. Summit: Employment, Poverty Eradication and Inclusive Development in Africa. http://mif.media/fr-2019-peid. Accessed 7 March 2019.

African Union (AU) (2019b). Skills Portability. African Union Youth Division. http://mif.media/fr-2019-tvet. Accessed 13 March 2019.

African Union (AU), New Partnership for Africa's Development (NEPAD) (2019). Skills Initiative for Africa, SIFA. https://skillsafrica.org/#funding. Accessed 13 March 2019.

African Union (AU), European Union (EU) (2014). Forth EU-Africa Summit – Declaration. http://mif.media/fr-2019-euafsum.
Accessed 13 March 2019.

Bhandari, R., Blumenthal, P. (2010). International Students and Global Mobility in Higher Education: National Trends and New Directions. Springer. https://www.palgrave.com/la/book/9780230618787

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (2019). Skills Initiative for Africa. https://www.giz.de/en/worldwide/43341.html. Accessed 13 March 2019.

Direção-Geral do Ensino Superior (DGES) (2019). Estudantes nacionais dos países africanos de expressão portuguesa bolseiros do Governo Português, dos Governos respetivos, da Fundação Calouste Gulbenkian, ao abrigo de convenções com a UE ou outros. http://mif.media/fr-2019-dges. Accessed 7 March 2019.

East African Community (EAC) (2019). Working in East Africa. https://www.eac.int/working-in-east-africa. Accessed 13 March 2019.

Economic Community of West African States (ECOWAS) (2019a). About the ECOWAS Nnamdi Azikiwe Academic Mobility Scheme (ENAAMS). https://ams.aau.org/about/. Accessed 7 March 2019.

Economic Community of West African States (2015). ECOWAS experts examine Certificates Equivalence for the Region. http://mif.media/fr-2019-cert. Accessed 7 March 2019.

Economic Community of West African States (ECOWAS) (2019b). ECOWAS Nnamdi Azikiwe Academic Mobility Scheme – Beneficiaries. https://ams.aau.org/beneficiaries/. Accessed 7 March 2019.

Economic Community of West African States (ECOWAS) (2019c). ECOWAS Nnamdi Azikiwe Academic Mobility Scheme – Programmes. https://ams.aau.org/programmes/. Accessed 7 March 2019.

Economic Community of West African States (ECOWAS) (2002). General Convention on the Recognition and Equivalence of Degrees, Diplomas, Certificates and other Qualifications in ECOWAS Member States. http://mif.media/fr-2019-cec. Accessed 7 March 2019.

Education, Audiovisual and Culture Executive Agency (EACEA) (2016). Intra-Africa. https://eacea.ec.europa.eu/intra-africa_en. Accessed 7 March 2019.

Education, Audiovisual and Culture Executive Agency (EACEA) (2017). Intra-Africa Academic Mobility Scheme: detailed list of selected partnerships. http://mif.media/fr-2019-eacea. Accessed 7 March 2019.

European Commission (EC) (2017). EU-Africa cooperation through Erasmus+. http://mif.media/fr-2019-erasmus. Accessed 7 March 2019.

European Union (EU), Economic Community of West African States (ECOWAS), International Organization for Migration (IOM), International Centre for Migration Policy Development (ICMPD), International Labour Organization (ILO) (2017). Support Free Movement of Persons and Migration in West Africa: Public Information (Baseline Assessment). http://mif.media/fr-2019-fmm. Accessed 7 March 2019.

ICEF Monitor (2017). South Africa remains an important regional hub for education. http://mif.media/fr-2019-icef. Accessed 7 March 2019.

Institut européen d'administration des affaires (INSEAD), The Adecco Group, Tata Communications (2018). The Global Talent Competitiveness Index. http://mif.media/fr-2019-insead. Accessed 7 March 2019.

Institute of International Education (IIE) (2017). A World on the Move: Trends in Global Student Mobility. http://mif.media/fr-2019-vtech. Accessed 7 March 2019.

International Organization for Migration (IOM) (2016). Regional Guidelines for the Development of Bilateral Labour Agreements in the Southern African Development Community. http://mif.media/fr-2019-bla. Accessed 13 March 2019.

Lee, J. J., Sehoole, C. (2015). Regional, continental, and global mobility to an emerging economy: the case of South Africa. http://mif.media/fr-2019-doi-sa. Accessed 7 March 2019.

Institute of Labor Economics (IZA) (2017). Entrepreneurship, Education and the Fourth Industrial Revolution in Africa. http://ftp.iza.org/dp10855.pdf.

Mo Ibrahim Foundation (MIF) (2018b). 2018 Ibrahim Index of African Governance (IIAG). Variable used: Tertiary Education Enrolment. http://mo.ibrahim.foundation/iiag/downloads/. Accessed 21 November 2018.

Organisation for Economic Co-operation and Development (OECD) (2017). Getting Skills Right: South Africa. http://mif.media/fr-2019-skills. Accessed 13 March 2019.

Organisation for Economic Co-operation and Development (OECD) (2018). How can the new African free trade agreement unlock Africa's potential? http://mif.media/fr-2019-afta. Accessed 13 March 2019.

Público (2018). Vistos de residência mais fáceis para estudantes de países de língua oficial portuguesa. http://mif.media/fr-2019-publico. Accessed 7 March 2019.

QS Digital (2016). What's happening to Africa's International Student Market? http://mif.media/fr-2019-qs. Accessed 7 March 2019.

Quartz Africa (2017). China has overtaken the US and UK as the top destination for anglophone African students. http://mif.media/fr-2019-students.

Republic of South Africa Department of Home Affairs (2019). Critical Skills Visa. http://mif.media/fr-2019-permits. Accessed 7 March 2019.

Republic of South Africa (2014). Government Gazette No. 37716. http://www.dha.gov.za/images/immigration_critical_skills.pdf. Accessed 7 March 2019.

Southern African Development Community (SADC) (1997). Protocol on Education Training in the Southern African Development Community (SADC). http://mif.media/fr-2019-sadc. Accessed 7 March 2019.

Southern African Development Community (SADC) (2007). Review of the Status and Capacities for the Implementation of the Protocol on Education and Training. http://mif.media/fr-2019-ancefa.

Accessed 7 March 2019.

Southern African Development Community (SADC) (2017). The Southern African Development Community Qualifications Framework (SADCQF). http://mif.media/fr-2019-saqa. Accessed 7 March 2019.

The Brookings Institution (2019). Foresight Africa – Top Priorities for the Continent in 2019. http://mif.media/fr-2019-bro. Accessed 13 March 2019.

The Grio (2009). Africans find unlikely education at Ukraine universities. http://mif.media/fr-2019-ukraine. Accessed 7 March 2019.

UK Government (2019). General student visa (Tier 4). https://www.gov.uk/tier-4-general-visa/eligibility. Accessed 7 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2018). Economic Development in Africa, Report 2018 – Migration for Structural Transformation. http://mif.media/fr-2019-unctad. Accessed 4 March 2019.

United Nations Economic and Social Affairs Population Division (UNDESA) (2017). International Migrant Stock: the 2017 Revision. Variable used: By destination and origin. http://mif.media/fr-2019-desa. Accessed 16 January 2019.

United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) (2019). Education (full dataset). Variables used: Total outbound internationally mobile tertiary students studying abroad, all countries, both sexes (number); Inbound internationally mobile students from Africa, both sexes (number); Inbound internationally mobile students by country of origin, both sexes (number). http://data.uis.unesco.org/. Accessed 7 March 2019.

University World News (2017). eLearning partnership opens doors to 10 million students. http://mif.media/fr-2019-elearn. Accessed 7 March 2019.

University World News (2014). Major survey of international students in South Africa. http://mif.media/fr-2019-uwn. Accessed 7 March 2019.

University World News (2018). Nine SADC countries geared for qualifications framework. http://mif.media/fr-2019-uwn-sadc. Accessed 13 March 2019.

World Bank (WB) (2018). Human Capital Index (HCI). http://mif.media/fr-2019-hci. Accessed 9 March 2019.

World Bank (WB) (2019). World Development Report 2019: The Changing Nature of Work. http://mif.media/fr-2019-wdr. Accessed 13 March 2019.

World Economic Forum (WEF) (2014). The four main barriers to talent mobility in Africa. https://www.weforum.org/agenda/2014/06/africatalent-mobility-barriers/. Accessed 7 March 2019.

World Economic Forum (WEF) (2017). The Future of Jobs and Skills in Africa. http://mif.media/fr-2019-foj. Accessed 13 March 2019.

Yurendra Basnett (2013). Labour Mobility in East Africa: An Analysis of the East African Community's Common Market and the Free Movement of Workers. http://mif.media/fr-2019-wiley. Accessed 7 March 2019.

Spotlight – The African Continental Free Trade Area: a real opportunity

Amb. Albert Muchanga (@AmbMuchanga) (2019a). Twitter post from 08.02.2019. http://mif.media/fr-2019-muchanga1. Accessed 13 March 2019.

Amb. Albert Muchanga (@AmbMuchanga) (2018). Twitter post from 09.11.2018. http://mif.media/fr-2019-muchanga2. Accessed 13 March 2019.

Amb. Albert Muchanga (@AmbMuchanga) (2019b). Twitter post from 10.02.2019. http://mif.media/fr-2019-muchanga3. Accessed 13 March 2019.

Amb. Albert Muchanga (@AmbMuchanga) (2019c). Twitter post from 27.02.2019. http://mif.media/fr-2019-muchanga4. Accessed 13 March 2019.

Deloitte Tax (NG) (@Deloitte TaxNG) (2019). Twitter post from 12.02.2019. http://mif.media/fr-2019-tax. Accessed 13 March 2019.

Face2Face Africa (2018). Uganda officially joins the Africa free trade deal, over 20 countries on the fence. http://mif.media/fr-2019-f2f. Accessed 13 March 2019.

International Monetary Fund (IMF) (2018). World Economic Outlook (October 2018). Variable used: GDP, current prices. https://www.imf.org/external/datamapper/datasets/WEO. Accessed 29 January 2019.

Africa Renewal (2018). Africa set for a massive free trade area. http://mif.media/fr-2019-mfta. Accessed 13 March 2019.

Brookings (2019). Foresight Africa – Top Priorities for the Continent in 2019. http://mif.media/fr-2019-bro. Accessed 13 March 2019.

Trade Law Centre (tralac) (2018). African Continental Free Trade Area (AfCFTA) - Questions and Answers No.1. http://mif.media/fr-2019-tralac. Accessed 13 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2017). African Continental Free Trade Area: Challenges and Opportunities of Tariff Reductions. http://mif.media/fr-2019-acfta. Accessed 13 March 2019.

United Nations Conference on Trade and Development (UNCTAD) (2015). The Continental Free Trade Area: Making It Work for Africa. https://unctad.org/en/PublicationsLibrary/presspb2015d18_en.pdf. Accessed 13 March 2019.

United Nations Department of Economic and Social Affairs (UNDESA) (2017). World Population Prospects: The 2017 Revision. Variables used: Total Population – Both Sexes; Population Growth Rate. http://mif.media/fr-2019-cfta. Accessed 5 February 2019.

United Nations Economic Commission for Africa (UNECA) (2018). Africa's infrastructure deficit under spotlight as PIDA Week 2018 opens in Victoria Falls. http://mif.media/fr-2019-vic. Accessed 13 March 2019.

III. Leaving no one behind: the extra mile

African Union (AU) (2017). Migrants, Refugees, Internally Displaced Persons and stateless persons in civil registration and vital statistic systems in Africa. http://mif.media/fr-2019-idp. Accessed 7 March 2019.

Afrobarometer (2016/2018). National Public Attitude Surveys Round 7. Variables used: Q1; Q89F; Q90; Q91A; Q91B. Received upon request. Accessed 25 January 2019.

Anders, M. (2017). Can a new pension scheme offer security to informal workers in Ghana? http://mif.media/fr-2019-devex.
Accessed 13 March 2019.

Claire E. Brolan and Hebe Gouda (2017). Civil Registration and Vital Statistics, Emergencies, and International Law: Understanding the Intersection. http://mif.media/fr-2019-oup. Accessed 7 March 2019.

Del Ninno, C., Mills, B. (2015). Safety Nets in Africa: Effective Mechanisms to Reach the Poor and Most Vulnerable. Washington DC: Agence Française de Développement (AFD) & World Bank (WB). http://mif.media/fr-2019-wbok.

Governance and Social Development Resource Centre (GSDRC) (2019). Social Protection. Topic Guide. http://mif.media/fr-2019-gsdrc.

International Telecommunications Union (ITU) (2017). ICT Development Index 2017. http://mif.media/fr-2019-itu. Accessed 29 January 2019.

International Telecommunications Union (ITU) (2018). World Telecommunication/ICT Indicators database. Variable used: Estimated proportion of households with Internet access at home. http://mif.media/fr-2019-wtid. Accessed 24 July 2018.

Mo Ibrahim Foundation (MIF) (2018a). 2018 Ibrahim Forum Report: Public Service in Africa. http://mif.media/fr-2018. Accessed 13 March 2019.

Mo Ibrahim Foundation (MIF) (2018b). 2018 Ibrahim Index of African Governance (IIAG). Variables used: Household with Internet Access; Mobile Phone Subscribers. http://mo.ibrahim.foundation/iiag/downloads/. Accessed 21 November 2018.

Supporting Economic Transformation (SET) (2018). Digitalisation and the future of manufacturing in Africa. http://mif.media/fr-2019-odi. United Nations High Commissioner for Refugees (UNHCR) (2016). Global Trends: Forced Displacement in 2016. http://mif.media/fr-2019-gtfd. Accessed 13 March 2019.

United Nations (UN) (2018). Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance. Revision 1. http://mif.media/fr-2019-crvs. Accessed 7 March 2019.

We Are Social, Hootsuite (2018). Global Digital Report 2018. http://mif.media/fr-2019-social. Accessed 13 March 2019.

World Bank (WB) (2017). Stocktaking of Global Forced Displacement Data. The World Bank. http://mif.media/fr-2019-elibrary. Accessed 7 March 2019.

World Economic Forum (WEF) (2019). Dialogue Series on New Economic and Social Frontiers: Shaping the New Economy in the Fourth Industrial Revolution. http://mif.media/fr-2019-nesf. Accessed 13 March 2019.

Spotlight - the elephant in the room: what about family planning?

International Monetary Fund (IMF) (2018). World Economic Outlook (October 2018). Variables used: Real GDP growth; GDP, current prices; GDP per capita, current prices. https://www.imf.org/external/datamapper/datasets/WEO. Accessed 29 January 2019.

United Nations Department of Economic and Social Affairs (UNDESA) (2017). World Population Prospects: The 2017 Revision. Variables used: Total Population – Both Sexes; Population Growth Rate. https://population.un.org/wpp/Download/Standard/Population/. Accessed 5 February 2019.

World Bank (WB) (2019). World Development Indicators (WDI) dataset. Variable used: Fertility rate, total (births per woman). http://mif.media/fr-2019-tfrt. Accessed 1 February 2019.

NOTES

The focus of this report is to present data-driven facts and figures on the topics of migration, youth, jobs and mobility in Africa. This research publication does not intend, by any means, to be exhaustive. The topics and data selected are those that the Mo Ibrahim Foundation (MIF) finds the most relevant.

This report makes use of the latest available data from a wide range of sources. A reference list containing all the sources used for this document is provided at the end of the report. Sources used are not always the primary data sources.

Each graph is accompanied by their respective data source. In the case of variables that are part of index projects, these are referenced alongside their sources. When figures presented have involved calculations by members of the MIF Research team, this is made explicitly clear. Where necessary, additional notes on the data used are also provided throughout the report.

Data were correct at the time of research (the last access date for each variable is provided in the references). In some cases, the numbers may not add up to the total due to rounding.

The size of African island countries has been re-adjusted to ensure their visibility in the maps of Africa in this report.

This report provides comparisons of regional averages. The composition of regions may vary according to source. When data in the report is presented disaggregated for North African and sub-Saharan African countries, this is done reflecting the choices made at source.

African averages are, in most cases, taken directly from source. When they have been calculated for the purpose of this report, they are unweighted. As not all sources provide data for the 54 African countries, some averages may not include data from all countries. This is usually made explicit in the analysis. Please see the sources for full details.

Data for Morocco may or not may include Western Sahara depending on the source. Migration flows for Western Sahara are included in the calculations and analysis of migration flows originating from the African continent.

Migrant stocks include both economic migrants and refugees unless specified otherwise.

For the figures representing refugee stocks, only refugees under the mandate of the United Nations High Commissioner for Refugees (UNHCR) were considered in this report.

Definitions such as that of youth may vary according to source. Further clarifications about these are provided in the relevant text and graphs.

GDP statistics are taken from the World Economic Outlook from the International Monetary Fund (IMF), and population and migration statistics are taken from the 2017 revisions of the World Population Prospects and Trends in International Migrant Stock datasets from the United Nations Department of Economic and Social Affairs (UNDESA). For population projections, medium variant estimates are used.

Dollars are US dollars unless indicated otherwise.

The Ibrahim Index of African Governance (IIAG) is an annual statistical assessment of the quality of governance in every African country, produced by MIF. The IIAG focuses on outputs and outcomes of policy.

To distinguish the IIAG, all measures from the IIAG included in this report are italicised, as opposed to measures obtained from other sources.

All the data included in this report are publicly available with two exceptions. The School-to-Work Transition Surveys (SWTS) for 11 African countries from the International Labour Organization (ILO) were shared with us via email by ILO's Work4Youth team. The merged Round 7 dataset of Afrobarometer's National Public Attitude Surveys, containing survey data for 34 African countries over the period 2016-2018, was shared with us ahead of its public release. The Foundation wishes to thank both organisations for sharing their data and contributing to this report.

From the SWTS surveys, we present answers to questions regarding internships, on-the-job training, main obstacle in finding a job, preferred employer, employment type, main problem faced when engaging in economic activity and advice/help/assistance from employment office. Although the surveys ask several questions about a respondent's work situation which can be indicative of an informal work arrangement, for the purpose of this report informal work has only been operationalised as working in a non-registered enterprise with less than five employees or as an unpaid family worker due to the lack of a sufficient number of answers in other relevant questions. We are aware that these figures are thus likely to underestimate the number of youth engaged in informal economic activities in the surveyed countries.

For calculations made using Afrobarometer survey data, answers labelled as Missing, Refused or Not applicable have always been excluded. Furthermore, when presenting figures disaggregated by respondents' answers to the gender or age questions, answers that do not allow us to classify the respondents according to their gender or age have also been excluded.

MIF is committed to making data freely available and accessible. We welcome and encourage any accurate reproduction, translation and dissemination of this material. The material must be attributed to the Mo Ibrahim Foundation, but not in any way that suggests that the Foundation endorses you or your use of the material.

To get in touch with the Research Team of the Mo Ibrahim Foundation about this report, please contact:

research@moibrahimfoundation.org

PROJECT TEAM

Foundation Research Team

Name	Title	
Nathalie Delapalme	Executive Director - Research and Policy	
Camilla Rocca	Head of Research	
Yannick Vuylsteke	Head of the Ibrahim Index of African Governance (IIAG)	
Diego Fernández Fernández	Senior Analyst	
Carolina Rocha da Silva	Senior Researcher	
Ines Schultes	Junior Researcher	
Madalena Silva Dias	Junior Analyst	

Foundation Design Team

Name	Title
Maria Tsirodimitri	Head of Design
Styliani Orkopoulou	Graphic Designer



If all those who wish to leave were to do so, Sierra Leone would lose 78% of its youth population, Liberia 70% and Nigeria 57% In 2017, 53% of surveyed members of extremist groups in Africa were between 17 and 26 years old when they joined

Over the last decade, Africa's economic growth has been mainly jobless

By 2030, 30 million youth are expected to enter the African labour market each year

In sub-Saharan Africa alone, while 18 million new jobs would be needed annually to absorb new entries in the labour market, only 3 million are currently being created

Employment was the most frequently cited need at the time of recruitment by the surveyed members of extremist groups in Africa

For 25 countries, accounting for 42% of Africa's GDP and 33% of its population, the GDP share of the manufacturing sector decreased between 2008 and 2017

Africa's window for a labour-intensive industrialisation strategy to achieve economic prosperity is closing much faster than previously expected

Currently, the farming sector accounts for up to 60% of African jobs and roughly ⅓ of the continent's GDP

Agriculture is expected to remain the main pool of employment for youth in sub-Saharan Africa, but for a majority of youth, agriculture is still often seen as outdated, unprofitable and hard work

Many simple technologies could solve some of the main challenges currently faced by African farmers

8 African countries import 90% of their food demand - Botswana, Cabo Verde, Djibouti, Gambia, Lesotho, Mauritania, Seychelles and Somalia

By the end of 2019, 2.6 million industrial robots could be in operation globally

With the 4IR, only about 1/2 of today's core jobs are expected to remain stable between now and 2022

ECOWAS is the only REC whose citizens can travel visa-free to all countries in the region

Only 11 African countries either request no visa or just a visa on arrival for all African citizens. Equatorial Guinea is the least open country, with all African citizens needing a visa

With around 204 km per 1,000 km², of which only ¼ are paved, Africa's road network lags far behind the world average (944 km per 1,000 km², more than ½ of which paved)

In 2018, only 5 African countries had direct flights connecting to 20 or more other African countries: Ethiopia, Kenya, Morocco, Nigeria and South Africa

African passports are among the weakest in the world, permitting on average the least visa-free entrance to other countries

Rwanda is the best scoring among low-income countries globally in the capacity to enable, grow and retain human talent

Only 22% of African students leaving to study abroad choose an African destination

China has become the second most popular destination for African students, after France

African post-secondary institutions amount to around 1 per 471 thousand students, compared to 1 per 154 thousand students in the EU

For many businesses in Africa, it is often easier to employ a skilled non-African expatriate than a skilled African expatriate 66% of African citizens are still offline

41% of sub-Saharan African children under 5 years have never been registered at birth

In 2019, the whole continent's GDP is smaller than that of the UK, for a total population nearly 20 times bigger

Of the world's ten countries with the highest fertility rates, 9 are African. Sub-Saharan Africa's fertility rate doubles the world's rate

However impressive, Africa's economic growth is running far behind its demographic growth

Migrant smugglers' income was estimated up to \$7 billion in 2016, equivalent to the EU humanitarian aid in the same year



mo.ib rahim. foundation

f /MolbrahimFoundation

@Mo_IbrahimFdn #MIFAbidjan

moibrahimfoundation