

TOWARDS AFRICA'S AUTONOMOUS DEVELOPMENT STRATEGIC REPORT 2018

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STRATEGIC REPORT 2018

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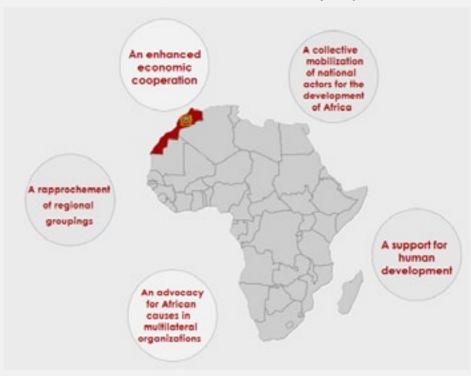
R OYAL VISION

Morocco emphasizes the importance of **South-South cooperation** and places Africa at the heart of its foreign policy priorities.

His Majesty King Mohammed VI has always pleaded in favor of a **autonomous development** of Africa "with a human face", focused on collective mobilization of African countries to succeed in restoring their unity and to establish Africa's leadership internationally.

Morocco's African policy thus hinges on bolstering mutually beneficial partnerships with African countries as well as on Morocco's diligent involvement in favor of the continent's main causes.

The levers of Morocco's African policy



Source : IRES

R OYAL VISION (2)

My vision of South-South cooperation is clear and constant: My country shares what it has, without ostentation.

Within the framework of a clear-sighted collaboration, Morocco – which is a major economic player in Africa – will become a catalyst for shared expansion...

Some say that, through this commitment, Morocco is seeking to gain leadership in Africa. I tell them that it is to Africa that the Kingdom is seeking to give the leadership...

My country has opted to share and transfer its know-how; in concrete terms, it is offering to build a safe, solidarity-based future....

It is time for Africa to benefit from Africa's wealth

We must work to enable our land, after decades of looting, to enter an era of prosperity...

For a long time, we have looked elsewhere to seek help in making a decision, a commitment.

Is it not time for this tropism to be stopped? Is it not time to look towards our continent? To consider its cultural wealth, its human potential?

Africa should be proud of its resources, its cultural heritage, its spiritual values, and the future should strongly support this natural pride!

This is the path to solidarity, peace and union chosen by my country. We reaffirm our commitment to the development and prosperity of African citizens.

Excerpt from the Royal Speech, delivered before the 28^{Th} Summit of the African Union, January 31^{st} , 2017

R OYAL VISION (3)

Despite the extensive damage caused by colonialism, I believe **Africa** has the means to ensure its development and to take its destiny into its own hands, thanks to the resolve of African people and to the continent's human and natural resources...

While it is natural that Morocco should benefit from cooperation with African sister nations, my country always makes sure that our cooperation is mutually profitable.

Morocco does not view Africa as a market for the sale and promotion of Moroccan products, or as a continent for making quick profit. We see Africa as a forum for joint action, for promoting development in the region, and for serving African citizens..

In this respect, Morocco contributes, along with other African countries, to the implementation of human development projects and the provision of social services which have a direct bearing on the lives of people in the region.

Excerpt from the Royal Speech on the Occasion of the 63rd Anniversary of the Revolution of the Kingand the People, August 20, 2016

Morocco's African policy will not be limited to West and Central Africa. I will see to it that it acquires a continental dimension and covers the whole of Africa...

I am keen to further contribute to consolidating security and stability in the various war zones and hotspots and to finding peaceful solutions to conflicts...

As far as migration is concerned, our country will continue to strive to deal with the real causes of the phenomenon and link it to development, within a human, solidarity-based approach which upholds migrants' rights and preserves their dignity.

I look forward to seeing the government adopt a comprehensive, integrated policy towards Africa and deal with the continent as one bloc.

Excerpt from the Royal Speech on the occasion of the 41st Anniversary of the Green March, November 6, 2016

R OYAL VISION (4)

"I propose to design an Africa that is resilient to climate change, an Africa that is resolutely committed to sustainable development.

It is important for our Continent to speak with one voice, to request climate justice and the mobilization of the necessary means, to make concerted proposals with respect to combating climate change."

Excerpt from the Royal speech at the opening of the Africa Action Summit, held on the sidelines of the 22nd Conference of the Parties to the United Nations Framework Convention on Climate Change (COP22), on 16 November 2016 in Marrakech



Source: UNECA, AfDB, UNDP. MDG Report: Lessons learned in implementing the Millennium Development Goals, Assessing progress in Africa Toward Millennium Development Goals. 2015

Structure of Richat known as "the Eye of Africa"



An exceptional geological structure with a 50 km diameter. Located at Ouadane in Mauritania and considered since a long time as a "scientific puzzle" which can only be observed from space.

Source: http://www.panoramio.com/photo/101869675

IMINARY (1)

Thinking Africa is a real challenge, because of its immensity, but especially the extraordinary diversity of its people, its history, its cultures, its reliefs and its richness.

This explains, in part, why this continent is poorly known, in addition to the difficulty of producing homogeneous data, the conflict situation prevailing in some parts of Africa, the "blanket of cloud", sometimes imposed by former colonial powers or by dictatorial regimes.

Yet, Africa's contribution to global economic wealth is high: both through the raw materials she provides to the rest of the world and the human resources she deploys within the continent and beyond. Therefore, the difficulties weighing on Africa (overpopulation, poverty, famine, degradation of natural resources, climate change...) and the damage they are likely to cause for the vulnerable populations, can leave no one indifferent.

This Strategic Report 2018 is dedicated to the autonomous development of Africa that His Majesty King Mohammed VI has always called for. Autonomy does not mean being independent. It embodies Africa's ability to decide for herself and make her voice heard in the community of nations.

The first part of the report aims to understand the African continent, while highlighting its main characteristics, in an approach that is meant to be African and therefore different, from the usual Western perception.

IMINARY (2)

The second part of the report, of a prospective nature, is devoted to the challenges Africa will face by 2050. Alongside climate change, it highlights three major nodes of the future: the urban sprawl, rural transformation and the challenge of security and governance.

The third part of the report, starting from this global panorama, focuses on the identification of the levers of Africa's autonomous development, namely the energy transition, the digital transition, the economic transition and economic governance, as well as the springs of autonomy such as human capital, the development of Ubuntu and the reconciliation of Africans with themselves and with nature.

It also highlights Morocco's current contribution as well as the role that the Kingdom could play, in the future, in favour of the atonomous development of this immense continent.

This report is rich in illustrations: Africa in figures, focuses and Africa on the move. Its elaboration starts from the observation that Africa is on the move and that, to become autonomous, she needs a new vision of the world, a pan-African vision, in favour of a global and civilizational African project.

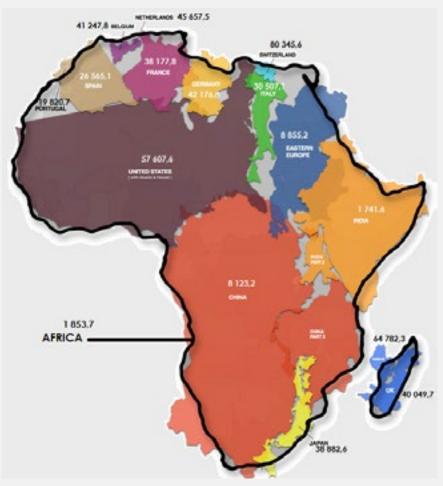
In addition to changing the perception of herself and strengthening her human potential, Africa, to become autonomous, must *leapfrog*, in terms of development to take another path towards growth.

Mohammed Tawfik MOULINE
Director General of IRES

Space and power

Comparing the size (in km²) of the African continent to other countries. This representation, which is more accurate than that of Mercator, shows the gigantic dimension of the continent on one hand, and the relative weakness of its economic weight on the international scene on the other hand, regarding its size compared to other countries.

Size and GDP per capita (in current 2016 dollars) of the African continent compared to those of other countries



Source: Review by IRES _ Kai KRAUSE and IMF

Part 1

ANOTHER LOOK AT AFRICA

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O VERVIEW

Is there one or several Africa(s)?

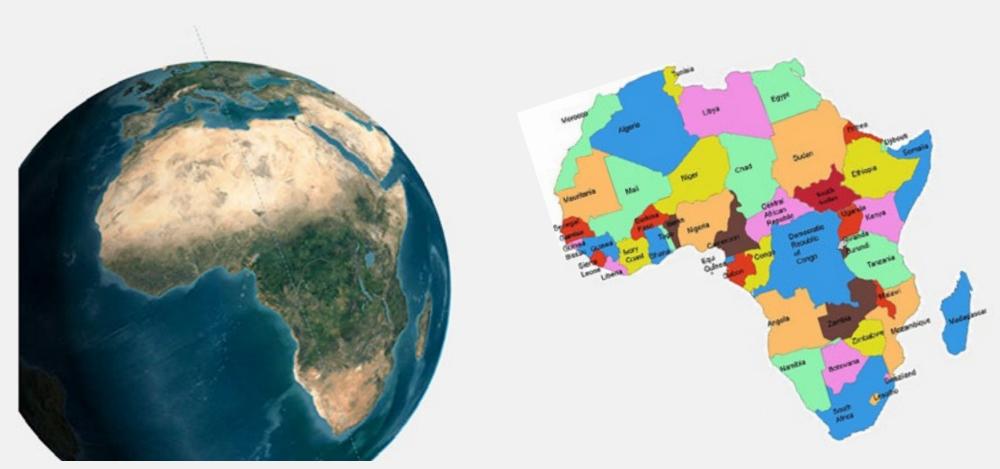
- Speaking of Africa, in general, amounts to speak about the prevailing mental representation of this continent. Because Africa is not a country; its people do not constitute a single nation; its reliefs and climates have given birth to different cultures; its religious beliefs are multiple. Depending on individuals and interests, this Africa evokes arid and harsh plateaus or a dense rainforest, resources to be exploited or habitats to be preserved, cheap labor or peoples endowed with rich and age-old cultures.
- ► This is why this first part of the report seeks to present another face of Africa that is closer to reality, more respectful of its diversity, rooted in its historical depth.

A multi-dimension face

At the outset, it is necessary to recall a fundamental, even primal, dimension: Africa was the cradle of mankind (Chapter 1). This past common to all our ancestors still resonates like a dream barely buried, through our aspirations to wide open spaces or in the rhythm of drums. A common cradle, a single species: nothing differentiates humans all over the planet, regardless of their color or gender.

- Natural conditions (soils, climates, hydrology) have forge very different spaces, thus concentrating on one continent almost all the plant and animal diversity of the planet. The peoples themselves are differentiated because of the vastness of the territory, the variety of its biomes and the multiplicity of human flows that have intersected or hybridized therein. All institutions have taken root, endogenous (tribal systems) as well as exogenous (Western systems) institutions,
- Africa is a cradle, an abundance of spaces and peoples, but one continent and, nowadays, a common reality. This third dimension referred to herein (Chapter 3) is a living experience of the least developed part of the world: Africanity, mobility, urbanization, food...

There are, indeed, several faces of Africa, but only one continent, a single cradle and, in the end, a single living reality. Neither pre/post colonial Africa, nor black Africa; Africa which is described here is that of the entire continent, rich and proud of its diversity.

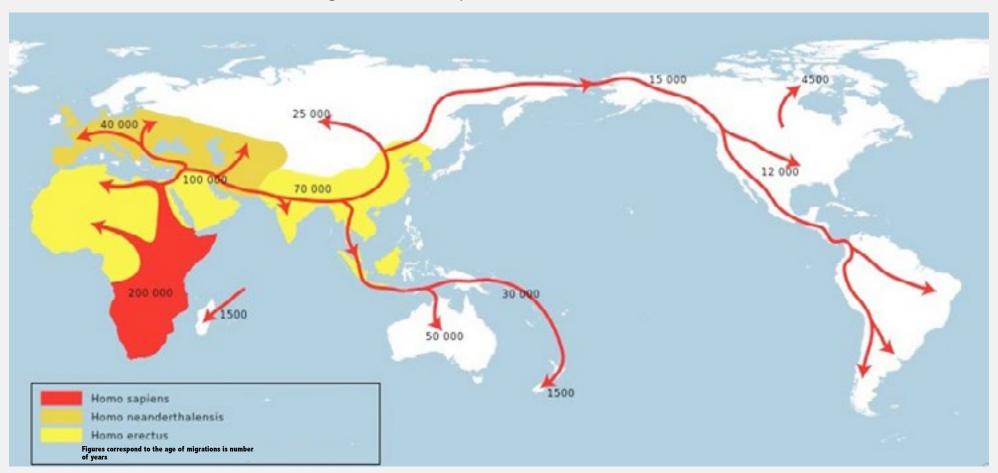


■ Source: Review by IRES of the map of Africa _ http://www.blackeconomicdevelopment.com/the-10-richest-countries-in-africa-list-by-gdp-ppp/

Chapter 1

ONE CRADLE

Migrations of Homo sapiens from Africa toward the world



Source: Processing by IRES _ "The genome at the service of the history of migration", published by Loïc Damiani on October 18, 2015: http://histoire-geoensemble.overblog.com/2015/10/les-genome-au-service-de-l-histoire-des-migrations.html

NTRODUCTION

The history of any territory, whatever its scale, is always a "construct", depending on what has been discovered, identified or even interpreted. This history, which is inevitably subjective, contributes to shaping the different representations of the world (*worldviews*). Ignoring entire chapters of this history amounts to denying peoples and objective realities.

This is why this first chapter will focus on the history of Africa, not as a textbook, but to shed light on three essential aspects.

▶ The cradle of mankind

Sub-Saharan peoples have often been discriminated, namely because of the color of their skin, out of ignorance and arrogance. Ignorance has been challenged by science which has demonstrated that all human beings are identical. Arrogance can be opposed through a better knowledge of history: we owe these peoples the same respect we owe to grandparents, for they are even the origin of our existence as homo sapiens.

► The cradle of civilizations

The history of the world, as it is generally presented by Westerners, tends to neglect Africa for two main reasons: ignorance of its history, due to the orality of its transmission; the fact of limiting the history of this part of the world to that of the Mediterranean basin as a whole.

Therefore, Africa's history amounts very often to that of North Africa, thus marking the separation between North Africa and Sub-Saharan Africa although these two large civilizational realms have never stopped interpenetrating one another.

The cradle of globality

At a time when globalization of the planet has reached its acme, thanks to the enlargement of freedoms and the development of communication technologies, the prospects of globality become more clear: diversity, creativity, appropriate answers to global issues...

Yet, more than any other one, the African continent has experienced an advanced form of globality throughout the last two millennia. Africa can speed up its independent development if it recovers its profoundly cosmopolitan dimension, combining integration and resilience.

HE CRADLE OF MANKIND

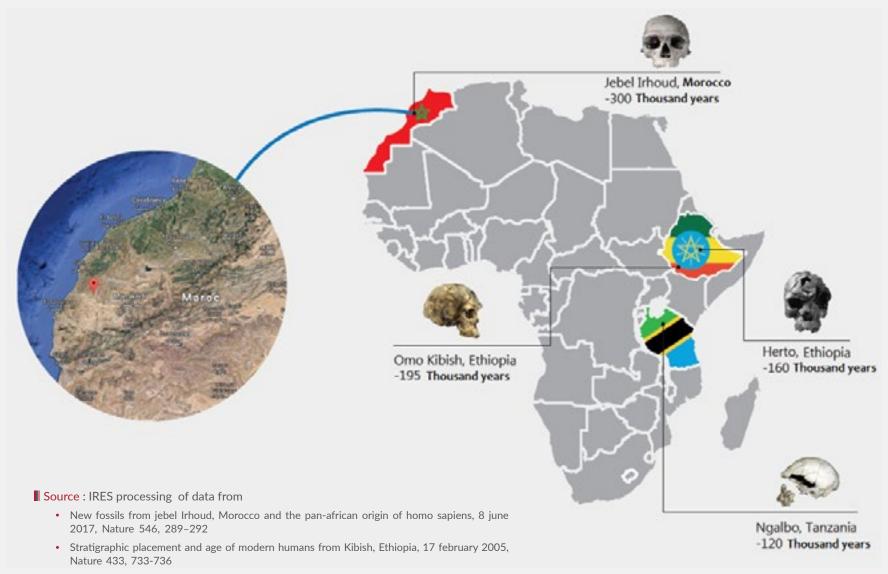
- If there is one subject on which international paleontologists agree, it is the African origin of the human species. Genetics has indeed demonstrated, since 1987, through analysis of mitochondrial DNA (passed on by women) that the current African populations' DNA is clearly the closest to homo sapiens DNA, before its dispersion throughout the planet generated minor genetic discrepancies.
- ► Thus, the human being stammered, then took shape in Africa, millions of years ago (Kenya, Chad).
- From Southern Africa to the Sahara, the first human beings left several traces of their existence and of the development of their techniques, such as the birth of art some 75.000 years ago (rock paintings), i.e. 50.000 years before such paintings appeared in Europe (1).

Rock painting in South Africa



Source: http://www.wonderful-art.fr/le-saviez-vous-l-art-rupestre-africain/

Pan African dawn of Homo-sapiens



- Pleistocene homo sapiens from middle Awash, Ethiopia, 12 june 2003, nature 423, 742-747
- A new hominid fossil skull (I.H. 18) from the Ngaloba beds, laetoli, northern Tanzania, 06 march 1980, Nature 284, 55 56

HE CRADLE OF CIVILIZATIONS (1)

Civilizations from the Nilotic area...

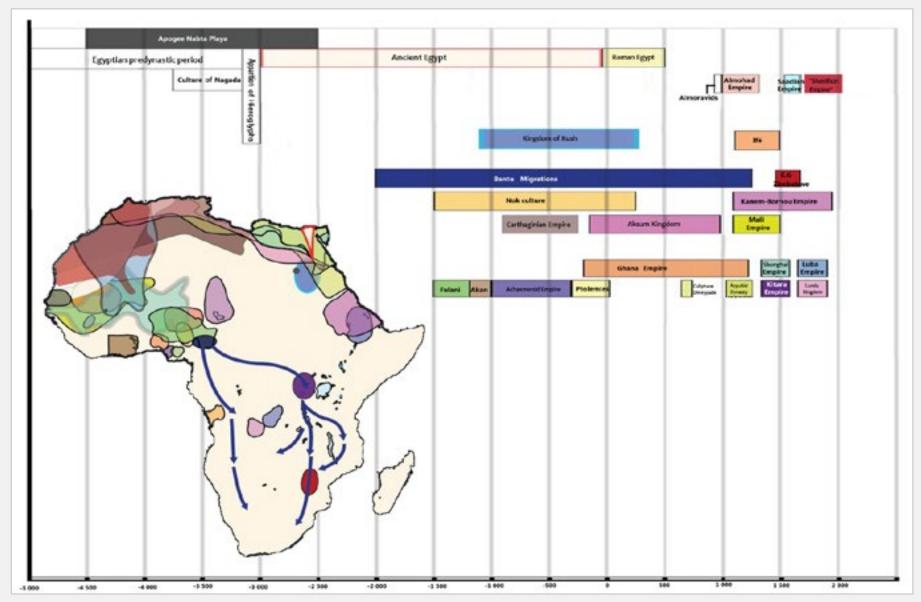
▶ Some 10.000 years ago, the Sahara was a fertile and inhabited region. When it dried out 5.000 years later, its inhabitants migrated toward the East and moved up along the Nile Valley. They mingled with farmers who had come from the Near East, following a massive migration some −3.000. Therefore, as a result of this hybridization, Pharaonic Egypt, one of the most advanced civilizations in the history of mankind flourished for more than 3.000 years.

to medieval empires...

Towards -1.500, another home of civilization appeared, this time next to current Nigeria. The Nok culture embodied the transition from the Late Stone Age to the Iron Age. It paved the path to the Civilization of Ife (Oduduwa), one of the most original civilizations in Sub-Saharan Africa (12th-15th centuries), an urban and commercial civilization whose spiritual importance still prevails nowadays, with Ife being the religious capital of Yoruba.

- ► Founded by the Soninkes, the Empire of Ghana (Wagadou) is the first largest medieval empire (3rd-13th centuries). When the Arabs conquered North Africa (7th century), they established close commercial ties with this empire which soon converted to Islam.
- ▶ In the 8th century, the Muslim Malinke Soundiata Keita founded the Empire of Mali, a confederation of tributary states and provinces, covering different ethnic groups (Malinkés, Bambaras, Wolofs, Toucouleurs). *Its major work* is the *Charter of Manden*, the first text enshrining the abolition of slavery and human rights (1222).
- A former kingdom subjugated by the two previous empires, the Empire of Songhai appeared in the 15th century. The cultural influence of its capital city, Tombouctou, is so strong that students and scholars used to come from Egypt, Morocco, Andalusia or Benin to attend courses at Sankoré University and its madrassas.

Synopsis of ancient civilizations in Africa



■ Source: IRES processing_ https://fr.wikipedia.org/wiki/Afrique#cite_ref-134

HE CRADLE OF CIVILIZATIONS (2)

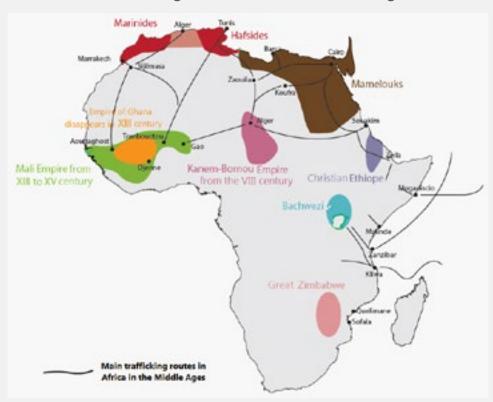
- ▶ Under the pressure of desertification in the Sahara, the Bantu peoples have migrated as far as Southern and Eastern Africa (-1000). There, in Mozambique and Zimbabwe, their Shona descendants built the Great Zimbabwe, the capital of the Monomotapa Empire (11th-17th centuries). This civilization of builders stood out by its good command of granite construction without mortar.
- ▶ Along these great empires which have left a few traces, a multitude of kingdoms (Aksoum, Kanem-Bornou, Djolof, Benin, Dahomey... Bambara, Zoulou, Peul...) have marked the history and geography of the African continent.
- Influences were present in some of these evolutions, from the Mediterranean (the Carthaginian civilization -814/-146-, Christianity) to the Arab world (islamization of North Africa up to the 10th north parallel, the trading posts of the East coast).

...and to the Arab-Berber civilization

- From the 7th century onwards, the Arab armies conquered North Africa where they ended up by entering into an alliance with the Berbers. For more than five centuries, powerful dynasties shaped the Maghreb and Egypt, and exerted a significant influence on the local cultures of North Africa.
- Having inherited from the exceptional breakthroughs of the ancient Mediterranean (Volubilis), this civilization attained a high cultural level and contributed to progress in architecture (Kairouan Mosque, 670, Al Quaraouiyine University, Fes, 859), in medicine (bimaristan), in law (Malekite school)... The cultures under its influence benefited from these achievements thanks to the exchanges that underpinned its prosperity.
- Islam coexisted so easily with the original African animism that it was paradoxically used later on by the converted sovereigns of the medieval kingdoms to justify the enslavement of populations which remained animists (*Islam in the Royal Court*). (2)

HE CRADLE OF CIVILIZATIONS (3)

Trafficking routes in Africa in the Middle Ages



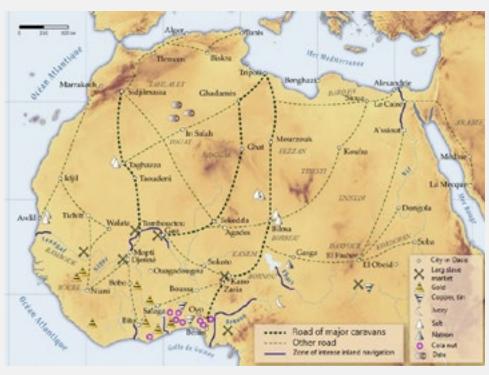
■ Source : Review by IRES_ Aliesin_https://commons.wikimedia.org/w/index. php?curid=1514436

Conclusion

- It was necessary to wait until the end of the 20th century to admit the truly African origin of most of the great achievements mentioned above. Because it has been deprived of its history, Africa was easier to exploit, and its own self-consciousness was easier to disguise.
- Lastly, and independently of their intrinsic virtues (organization, leadership...), all these empires which represented a melting pot of their history and the future of Africa, had common features:
 - The high degree of tolerance for the cultural, religious and ethnic diversity of peoples that constituted them, and acculturation with respect to foreign elements.
 - Prosperity based on (trans-Saharan) trade in gold, salt, goods, as well as on natural resources...
 - ❖ Intensive exploitation of natural, forest, mining, animal resources (feathers, ivory).
 - ❖ A permanent conflicting situation which often led to the end of these empires.

HE CRADLE OF GLOBALITY

Towns and routes of trans-Saharan trade at the end of the 15th century



■ Source: IRES processing of an article on trans-Saharan trade_http://www.le-cartographe.net/dossiers-carto/afrique/52-le-commerce-transsaharien

Trade, Africa's economic DNA

- ▶ While Sahara may be considered as a geo-climatic hiatus, it has, however, been crossed as early as the 5th century from East to West (objects in copper) and from North to South (gold). Trade, undoubtedly the most developed African activity during the last two millennia, is deeply rooted in globality.
- ▶ The Western economic image which most frequently circulates is that of a peripheral continent, a distant epiphenomenon, and a provider of raw materials and nothing else. Hence a lack of consideration for economic agents who did not know a priori how to process their resources at a time these were contributing to drive world growth directly: Sudanese gold used to finance Marco Polo's expeditions to China (13th century) while the gold of Zimbabwe provided the Muslim world with a major monetary instrument.

T

HE CRADLE OF GLOBALITY (2)

The globality of trade

From earliest antiquity, African economy has been developing around three strong particular features:

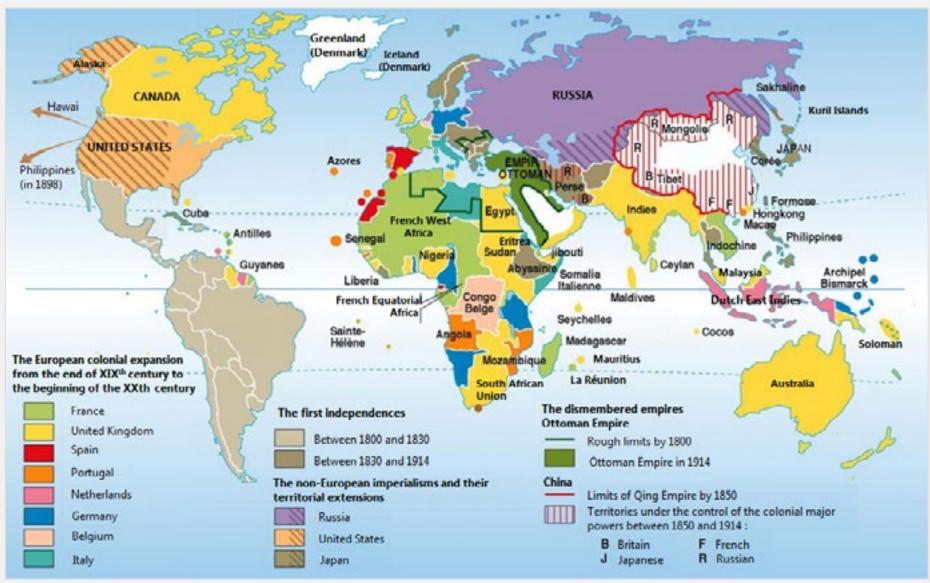
- ▶ Trading has characterized the continent's economy: i.e. exchange of goods bought for the purpose of reselling them. Thus, since -500, dumb bartering of gold against salt has contributed to make the port of *Leptis Magna* great. The slave trade, which was first intra-African, then Arab, Eastern and Western, has contributed to this trade for two millennia.
- ▶ At the crossroads of three major geographical and cultural groupings, Africans succeeded very early to develop **important international** and long-distance **commercial relationships**: with the Mediterranean (Antiquity), the Indian Ocean (5th-15th centuries) and the Atlantic Ocean (as early as the 16th century).
- Yet, even though the African labor force has spread throughout the world as far as China, **African tradesmen did not have to leave the continent**. The rest of the world reached out to them, in search of gold, slaves, natural resources and, namely, arable lands nowadays.

Global integration

- ▶ Did the African continent contribute very early to globality rather than to globalization. Globality is first and foremost cultural.
- The mixing of African populations as a result of collective migrations and individual movements is at the very origin of the dispersion of mankind throughout the planet and the emergence of a unique genre, the homo sapien. In addition to the **inter-African mixing**, the 6th century witnessed a process of **cross-fertilization** with the Arabs (through concubines), then with **Indian Ocean riparian** (through foreign seamen established on the East coast of Africa) and, to a lesser extent, with **Europeans** (through colonization).
- From this genetic or cognitive hybridization, new customs, architectures, political forms... have emerged, and more particularly an extraordinary resilience of traditional culture (cf. Chapter 2) and the capacity to integrate new cultures. The conjugation of these two assets has sometimes generated effects that are higher than the sum of parties, such as the Carthaginian civilization (Berbers and Phoenicians) or the Swahili culture (Bantus & Arabs).

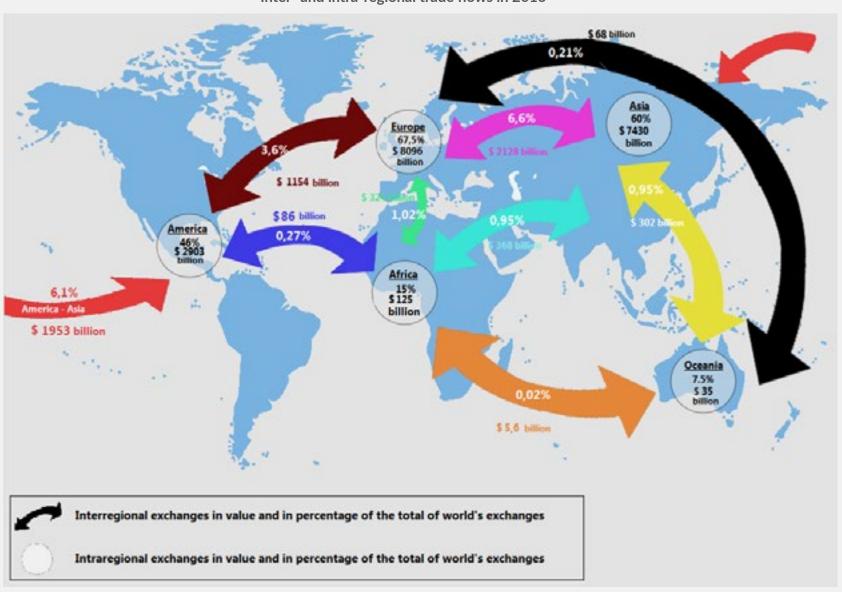
This is how the cosmopolitanism of globality has developed throughout this continent being the cradle of mankind.

The colonial expansion in the world from the 19th century to the middle of the 20th century



■ Source: Review by IRES _ Philippe Rekacewicz. Atlas du Monde diplomatique, 2003

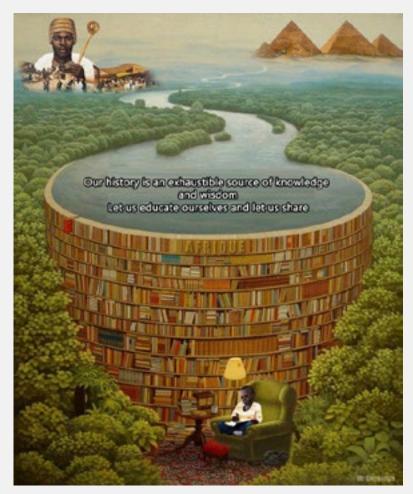
Inter- and intra-regional trade flows in 2016



■ Source : UNCTAD data processed by IRES

K EEP IN MIND

- Africa: one cradle for one mankind.
- A multitude of civilizations, often born from intra- or extra-African cultural mixing.
- ► A thousand-year-old culture of cosmopolitanism which has favored globality.



■ Source: Review by IRES _ http://sematawy.e.s.f.unblog.fr/files/2012/11/60692_519168024760255_532502242_n.jpg

Chapter 2

BIOMES, HUMANS AND INSTITUTIONS

A FRICA IN FIGURES N°1

The African territory

- A continent with a surface of 30,34 (3) million km².
- A North-South climate divide: the Sahara desert.
- A double East-West divide:
 - Rainfall, from both sides of the East-African Grand Rift (more arid eastward),
 - Geological: a "high Africa" in the East of a Port-Sudan-Lobito line and a "low Africa" in the westward.
- A continental territory covered by:
 - ❖ 58,3% (4) of relatively arid areas, inhabited by 39% (4) of the African population, i.e. 454 million inhabitants (4).
 - 13,4% (4) of semi-arid and sub-humid areas inhabited by 16,8% (4) of the population,
 - 20,4% (4) of deserts or hyper arid areas (Sahara, Namib...), hosting almost 12% (4) of the population,
 - 24,5% (4) of strictly arid areas (Sahel, Grand Karoo...) in which 10,4% (4) of the population live.
 - ❖ 41,7% (4) of non arid areas, inhabited by 60,6% (4) of the African population, i.e. a little more than 705 million inhabitants (4).
 - 4 large watershed catchment basins (5): Nile, Congo, Niger and Chad Lake, and 10% of world renewable water resources (4) (6952 km³ in 2014 (3).
 - 20,8% of forests (4), i.e. 6,27 million km² in 2014 (3).
 - 3% of mountains (with 14 skiing estates)
 - * Ecological niches (Madagascar) and 8 hotspots of biodiversity (6).



■ Source: IRES processing _ http://blogjparrignon.net/asc2i/wp-content/uploads/2014/03/2.jpg

NTRODUCTION

A deeply mosaic continent, both in its nature and its culture, Africa reflects its plurality through natural ecosystems (biomes) which shape its landscapes, its peoples who have diversified their culture throughout ages and thanks to the current coexistence of strongly differentiated institutions.

Different biomes

The African continent covers 6% of the land surface and 22,8% of the surface of emerged lands (4).

The variety of its climates (temperatures and rainfall) and its soils has generated different biomes (fauna, flora, relief, climate), which themselves embody diversity even though the names may, sometimes, be identical such as the deserts (Sahara, Namib, Kalahari).

These biomes have significantly influenced their human inhabitants (morphology, livelihood, habitat, traditions). But they are more and more degraded by human action (Anthropocene) and the resulting climate change, thus affecting in return the possibilities of survival they offer.

Different peoples

Being the world's second most populated continent after Asia, Africa with its 1,2 billion inhabitants (7) represented 16,4% (7) of the world population in 2016.

While an inexperienced look only distinguishes an undifferentiated mass of dark color in the middle and matte color in the North of the continent, the physiognomic and cultural diversity of African people is however exceptional, from Pygmies to Masaïs, from Berbers to Khoi-San.

Different institutions

Like the majority of countries in the 21st century, African states have adopted one political system or another or a combination of political systems, originating from the Greek-Latin culture: royal dynasty, republic, dictatorship or democracy.

But unlike most other countries, African states, North as well as South of Sahara, have often maintained a juxtaposition of customary law and Western law, which may sometimes disrupt its readability, but also ensure a strong anchoring in cultural roots.

IFFERENT BIOMES (1)

The African natural environment is characterized by three major biomes: the tropical and subtropical savannah which covers a large part of the territory, the desert and the tropical and subtropical rainforests.

From aridity...

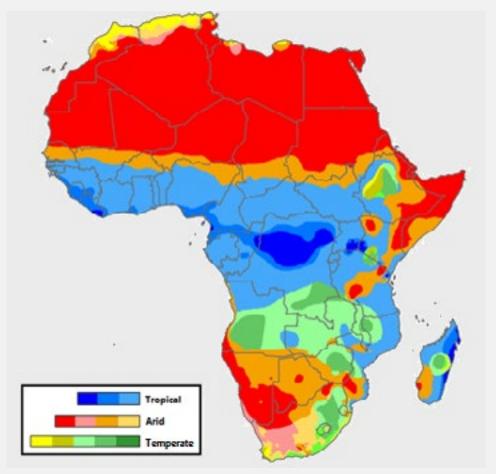
- ▶ Being the largest desert in the world, Sahara stretches over 5.000 km from East to West and over 2.000 km from North to South. If we add to it the Namib Desert in the South, then some 20,4% (4) of the Continent's surface is covered by desert areas (<100 mm/year of rainfall).</p>
- ► These areas have varied forms (See figure beside) and each one generates a distinct ecosystem, with its own fauna and flora, in spite of aridity.
- Strictly arid zones (between 100 and 400 mm/year of rainfall) represent almost 24,5% (4) of the continent. They host some 121 million people (4) who try to draw their food from them despite the climate hazards. They have shaped the specific traditional cultures (Berbers, Himbas, Sans) and forms of knowledge of highly technical level (Zaï, oasis irrigation ...).



■ Source : ProGective

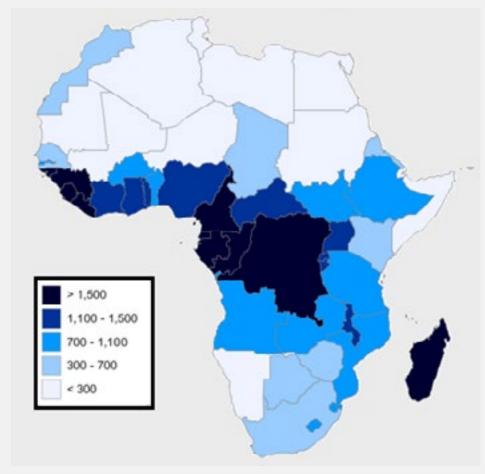
The multiple faces of the desert: the sand desert (20% of the Sahara), the mountain (Hoggar, Tassili, Tibesti), the rocky plateau (ex. Hamada el Harich), the stone desert or reg which is most widespread (e.g. Tenere of Tafassasset, Libyan Desert, Horn of Africa) or the sand sheet (e.g. Kalahari).

Different climates in Africa



■ Source: Review by IRES _ Hydrology and Earth System Sciences: "Updated world map of the Köppen-Geiger climate classification"

Average level of rainfall (in mm per annum), 2014

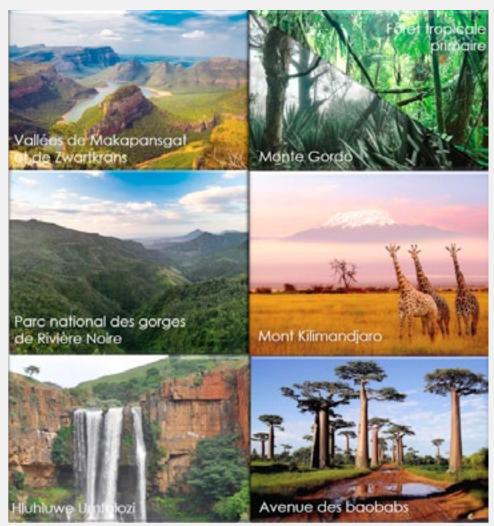


■ Source : IRES processing of AQUASTAT data (FAO)

D

IFFERENT BIOMES (2)

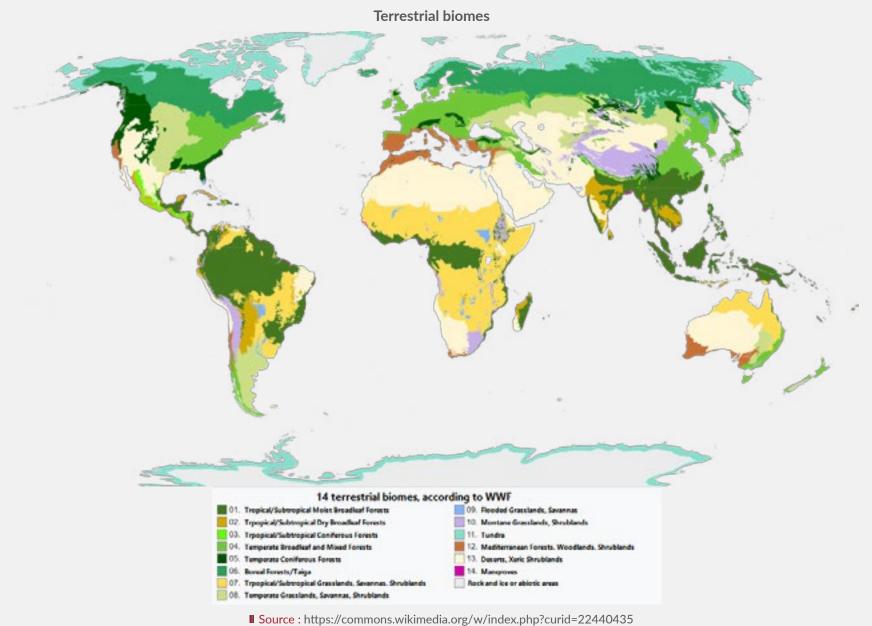
Diversity of African biomes



■ Source : ProGective

... to luxuriant fauna and flora

- Animal and vegetal biodiversity extends from the poles to the equator: the dense equatorial forest is therefore the richest and most diverse biome. This explains why Africa, with 15,6% of the world's forest area (6,27 million km² of forests in 2014 (4)) 10% of which are primary forests, hosts 25% of the planet's biodiversity (fauna and flora).
- ▶ In 2010, the Congo Basin alone used to cover more than 2,68 million km² of tropical forests (8), i.e. 6,7% of the global forest area (4). Being the world's second tropical forest cover after Amazonia, it hosts 10% of global biodiversity (8).
- ► This abundance also extends to several ecological niches such as:
 - mangroves: in Nigeria for example, these are the breeding areas of more than 60% of fish (9) caught between the Gulf of Guinea and Angola,
 - the highlands and mountains of Eastern Africa which particularly host a specific Afro alpine vegetation and the last mountain gorillas.



IFFERENT BIOMES (3)

Everything depends on water

Although 58,3% (4) of the continent are considered as arid (20.4% of which are desert areas), Africa is however rich in water in its two major forms, fresh and salt water.

Although it is nowadays unfit for consumption, salt water represents a great asset, which is barely or poorly exploited in fisheries, tourism, transport, renewable or thermal energies.

Marine salt water

- Nearly 25.750 km of hardly jagged coastline, bathed in cold currents to the West and more favorable to the East (Indian Ocean).
- A rich maritime domain, thanks to its biodiversity as well as its economic potential.

Terrestrial salt water

- Present in the chotts of the Sahara and in certain terrestrial aquifers.
- it may however be used either by turning it into freshwater, for irrigation or for the production of energy.

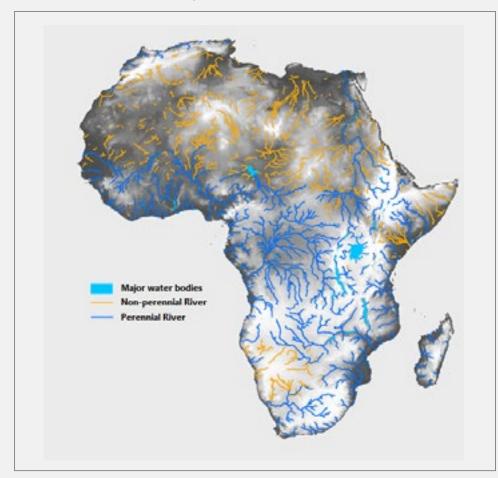
Underground freshwater

- ❖ Freshwater may be drinkable or not, renewable or not. The main stocks are in the aquifers, but their renewal capacity is not well known and has long been considered as null: In fact, the aquifer system of Northern Sahara, is replenished by nearly 2mm/year (10), for example.
- ❖ The total volume of underground water in Africa amounts to 660.000 km³ (11) 0.22% of which are exploited (1.420 km³ (3)). Nearly 72% (12) of the African population depend on this drinking water resource.
- ❖ The Northern Sahara aquifer system, one of the largest in the world, contains more than 30.000 km³ of water, which part of it is salt and another part is unexploitable based on the existing means and technologies.

Surface freshwater

- Storm water is in low quantity within the water reserves, due to evaporation and leaching as well as to the lack of appropriate storage.
- Surface water (rivers, lakes, reservoirs), are very unequally distributed, and provide some 5.532 km³ (3) of renewable freshwater.
 - Major basins: Congo, Niger, Nile, Lake Chad, Orange.
 - Large lakes: a volume of nearly 28.682 km³ (13).

Rivers and major surface water bodies in Africa



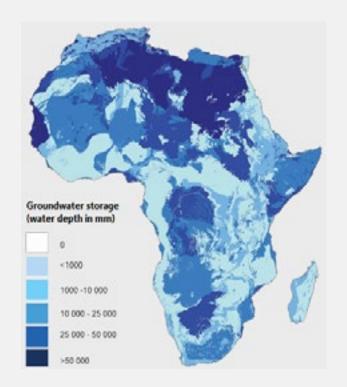
■ Source: World Wildlife Fund HydroSHEDS; Digital Chart of the World drainage and FAO Inland Water Bodies

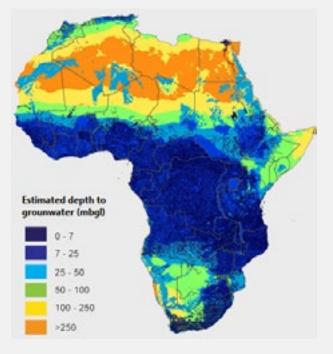
Hydrographic basins in Africa

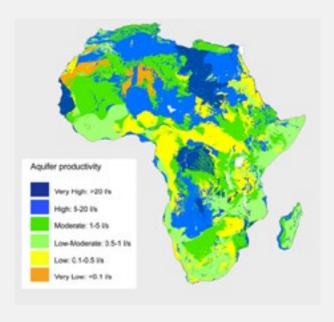


■ Source : The Transboundary Freshwater Dispute Database - Université d'État de l'Oregon

Groundwater resources in Africa







■ Source: Review by IRES_A M MacDonald, H C Bonsor, B ´E ´O Dochartaigh and R G Taylor, "Quantitative maps of groundwater resources in Africa", 19 April 2012

Twilight on Victoria Falls



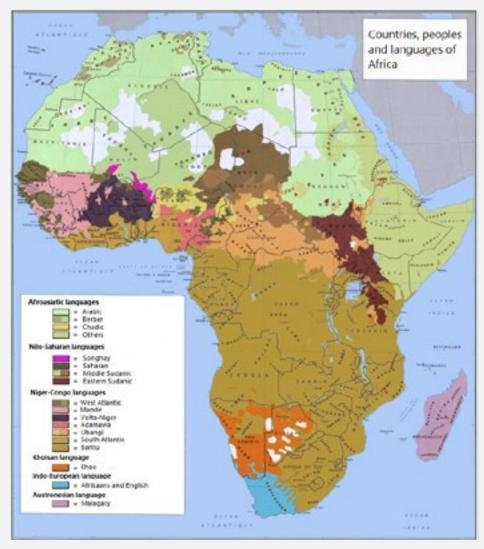
■ Source: http://www.itinera-magica.com/zebres-lions-et-cascades-les-merveilles-de-lafrique-australe/

IFFERENT PEOPLES

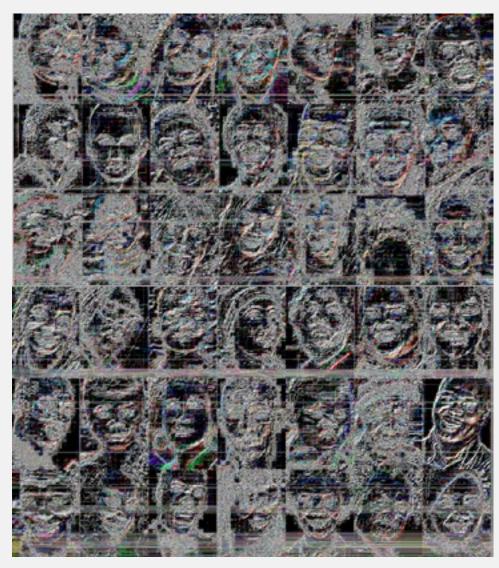
The population of the African continent is one of the most diversified in the world. Being genetic and cultural, this diversity uncovers several faces of Africa, but also some common features.

- ► The number of living languages in Africa amounts to 2.144 (14), i.e. 30,2% (14) of spoken languages in the world for a population representing 16,4% (7) of the world population.
- Africa has the highest language diversity in the world, from Bantu (from whom derive the majority of African languages) to Khoï-san (click languages), through Kiswahili (creolized language).

The linguistic families of the African continent



■ Source : CIA fact book & maps



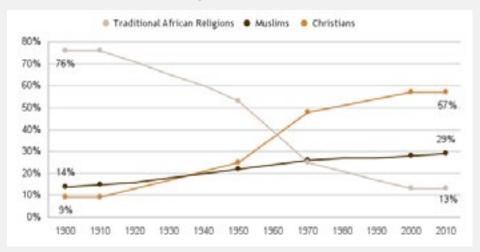
■ Source : ProGective

- More than a thousand ethnicities (15) have been inventoried in the continent: Bakongos, Bambaras, Bamilekes, Berbers, Bochimans, Dogons, Himbas, Massais, Peuls, Pygmies... Zulus. But even the notion of ethnicities and ethnic groups poses a challenge, as shown by the controversy over the ethnic or socio-professional origin of the division between Tutsi and Hutu groups. Africa is indeed a land of:
 - mobility due to conflicts, famine, drought, epidemics, but also because of trade which has always led to population movements,
 - ethnic intermingling, not only between Africans, but also between peoples from other continents (Arabs, Indians...),
 - reconstruction of identity, after the colonial classification, sometimes arbitrary, the embellishment by protest movements of a past often more imaginary than real, and a gradual integration into the globalization process.

IFFERENT CULTURES

- Much like the origins, the language, the culture, or sometimes the territory, religions contribute to determining ethnic groups. Under the influence of Arabs and Europeans, indigenous cultures have been "colored" with Christianism and Islam without however denying, sometimes, their initial beliefs. Hence the difficulty of evaluating the religious commitment of African population, namely the Sub-Saharan population, which is composed of (16):
 - ❖ 13% of followers of traditional religions,
 - ❖ 57% of Christians.
 - 29% of Muslims.
- Societal practices (cultural, merchant, productive practices) largely vary according to the terms of exchange, rites related to marriage, birth, and puberty, productive modalities (agriculture, cattle breeding), strongly influenced by their natural ecosystem (climate, land form).
- However, the major structural divide, nowadays, is no longer of cultural or "ethnic" nature. It is a divide between urban and rural residents, between peoples attached to their rich age-old traditions and their children who turn their back on these practices to better embrace urban modernity.

Distribution of the population of Sub-Saharan Africa according to their religion since 1900



■ Source: World Religion Database, Historical data draw on government records, historical atlases and reports of religious organizations at the time. Later figures draw on U.N. population estimates, surveys and censuses. Pew Forum on Religion and Public Life, April 2010



■ Source: a.i. 286, Painting by A. Idriss_ The Painter of the Sahel (Idrissa SAVADOGO), 2009

IFFERENT INSTITUTIONS

Foreign observers have for a long time believed that the powerful Arab-Muslim administration alone had succeeded to structure a part of the continent. In fact, **Sub-Saharan Africans countries also knew how to develop complex institutions** for the sake of administering their fellow citizens.

- While land was defined as private property by Roman law, in Africa it was considered as non appropriable: it was possible to possess it, but in no way to sell it. The old modes of administration were often based on a multi-secular knowledge of agricultural production. They were abandoned by the European colonizers who introduced mechanization and by the post-independence reforms implemented by certain authoritarian governments (grouping of villages as in Ethiopia), which resulted in ecological and human disasters.
- At the beginning of the 21st century, all of the 54 African states have adopted forms of government inherited from the Greek-Roman world (monarchy, republic, dictatorship...). The level of democracy which prevails in these countries characterizes clearly the African diversity: stable democracies, troubled democracies, "democratures" dictatorships in the form of democracies) and autocracies.

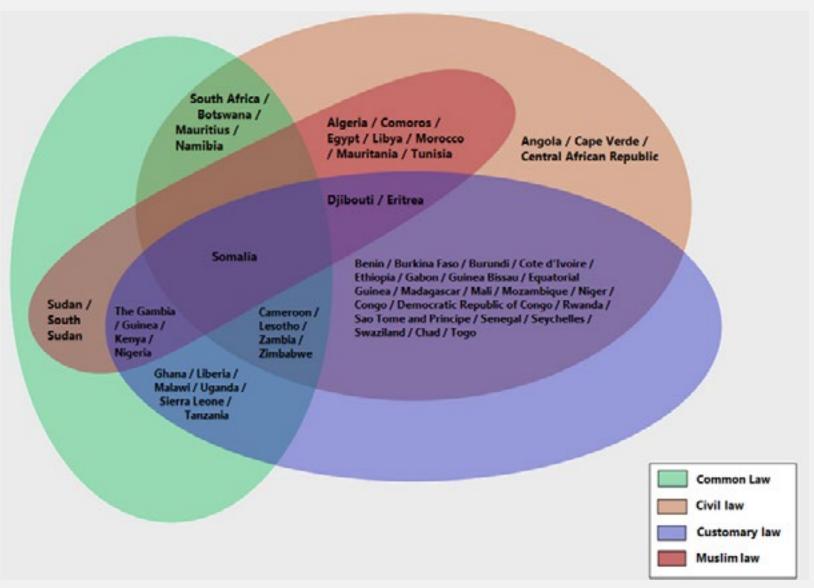
- The law systems which govern African societies take after several models:
 - Civil law: Angola, Cape-Verde and Central African Republic.
 - Common law: South Africa, Botswana, Mauritius, Namibia.
 - Customary law : Democratic Republic of Congo, Niger.
 - ❖ Islamic law: Mauritania, Libya, Sudan, South Sudan.
 - Mixed law: a combination of different systems.

The constitutions of African states clearly set out the legal standard in force. They tend to evolve towards a democratic constitutional state, often modelled after developed countries.

Sometimes, customary law remains the only means to handle complex situations relating to human rights, and especially to property law (Benin for example), particularly when it comes to determine the owners of a land in a world where land is not appropriable...

The leadership of traditional leaders, as recognized in several African countries, particularly, those of Southern Africa allows not only local arbitration which relieves the courts of justice, but also a system of subsidiarity that a number of European countries are nowadays seeking to put in place.

Institutional diversity



■ Source: IRES processing of data taken from the constitutions of African countries

K EEP IN MIND

- Africa: a continent with a twofold divide:
 - ❖ East-West through natural elements (reliefs) and two vehicular languages (French in the West, English in the East).
 - North-South by its climate (more arid in the North, more humid in the South) and its two religions: Islam in the North and Christianity in the South.
- From aridity to abundance, everything depends on water.
- ▶ Different peoples, languages, religions, institutions however form a single ecocultural biome that is as resilient as open, thanks to the impact of cross-fertilization.



■ Source : https://forum.sfr.fr/t5/image/serverpage/image id/94475i1EC41C572192389E?v=1.0

Chapter 3

ONE CONTINENT, A COMMON REALITY



■ Source: http://sematawy.e.s.f.unblog.fr/files/2012/11/60692_519168024760255_532502242_n.jpg

NTRODUCTION

Cradle of mankind, characterized by an exceptional natural and human diversity, Africa is first and foremost a continent. Beyond the sole geophysical aspect, what is the deep signification of this term?

Thinking Africa in terms of a continent means, first of all, casting a look which encompasses its plurality so as to draw up a **common reality**. The difficulty is to be measured in the light of the great issue lying ahead:

- Few global data are available:
 - either because no measurement has been made at all (as in the case of the continent's volume of drinkable freshwater, which is subject to approximations),
 - or because most data focus only on Sub-Saharan Africa and not on the entire continent.
- Sources of data are essentially non-African, which paves the way to :
 - numerous misunderstandings (misinterpretations and lack of knowledge),
 - errors in data transmission between field work and analysis (translation, inaccuracies, loss of information),
 - an interpretation which may eventually serve certain interests or an ethnocentric vision of the world.

Like any other territory, a continent is the conjugation of this common reality with the way it is perceived: there can be no Africa only if Africans recognize themselves as such. This is why this chapter is focused on three major components of this recognition:

Africa as a mental and symbolic construction

This construction, which is first of all cultural and based on human history and relationships, gradually becomes philosophical, by challenging the African and political identity (African Union, sub-regions...).

Africa as a commonly shared reality

Recognition of Africa goes, first of all, through decolonization of minds, after official decolonization of countries. But it is all the more difficult as interests at stake are high.

Africa as the collective project of a new generation

Great African intellectuals are endeavoring to think Africa in a global and prospective manner. By doing this, they are designing the configuration of a new continent.

SYMBOLIC CONSTRUCTION (1)

Thinking Africa as a single territorial entity and in its entirety is a great challenge. Not only because of its extreme diversity, but also because this needs to take a more measured and inclusive look from two distinct angles: an individual symbolic angle and a collective symbolic angle.

A mental construction

The capacity to form a mental picture of a given object depends at the same time on experience, knowledge and one's potential projection of it. Thus, constructing the object "African Continent" rests upon three approaches:

- ❖ The cultural approach: according to whether knowledge on Africa is communicated through an oral or written, national or foreign corpus, and in a vernacular or a vehicular language, the resulting culture and the underlying vision of the world will be different.
- ❖ The human approach: the experience of human beings is essentially based upon the relationship with others. In Africa, the group and the individual complete each other within the "common" where the most important thing is the relationship and not the human being, unlike in the Western world.
- ❖ The philosophical approach: a heightened identity awareness is necessary, by asking oneself about what we are in relation with the world. The answer to the question "What does it mean to be an African?" therefore presumes that we have already answered the question "What is Africa?".

Dialogue between Achille MBEMBE and Felwine SARR

1. What does it mean to be an African?

- "It means consciously linking one's destiny to that of Africa and reaching out to the world. It has nothing to do with the color of the skin, religion or ethnicity. One has to think in terms of Africa-world so as to take account of Afro-Indians, Afro-Europeans, Afro-Chinese, Afro-Arabs... This is what Afropolitanism is about. (...) It is clearly in movement and circulation that we must seek the "specifically African."
- ▶ "Generally speaking, the question of identity is posed in the past. But culture is a transactional concept. It is a fact and a dynamic. We have to clarify what "to be African" should mean to us in the future. If we know who we want to become based upon what we are, then we lay down the foundations of new questions: which Africa for the future? What space? What brotherhood?... From here, we can articulate, question, readjust our different legacies based on what we want to be." (17)

.../...

SYMBOLIC CONSTRUCTION (2)

Once symbolic construction of the continent becomes possible at the individual level, then collective symbolic construction may be initiated. The first form of its representation is first of all political.

► A political construction

Africa is a continent: this physical reality is often confused with the image of a single political construction. Speaking of Africa like a country is yet far away from reality. However, significant progress has been achieved since the independence of African countries.

After the failure in 1962 of the first attempt of a political union in Africa (the Union of Ghana, Guinea and Mali), the Organization of African Unity (OAU, 32 states) was established in 1963. The African Union, which now includes all African states, succeeds to it in 2000.

In parallel, the economic, social and cultural conditions necessary for the establishment of an African common market continue to be put in place. Eight economic communities have been created (CEN-SAD, COMESA, EAC, ECCAS, ECOWAS, IGAD, SADC, AMU) whose economic integration, though unequal, is generally achieving progress.

Towards Pan Africanism?

2. Towards Pan Africanism?

- ▶ "Our youth aspires to more democracy. In Burkina, Senegal, but also in the two Congo and even in Gabon or in Mauritania, civil societies have decided to promote much more balanced, fair and open societies. It is a dynamic that nothing can stop.
- Our political trainings are more or less heterogeneous assemblies of very diverse territories. They are not units characterized by a relative coherence and continuity. The question is to know on what conditions these accidents of history could be turned into a project, a concept and an idea.
- ▶ To be effective and meaningful to the relevant populations, democracy must be endogenous and must fit the cultural and civilizational forms. In Senegal, researchers are reflecting on new forms of democracy and elections do not seem to be a central criterion." (17)

.../..

A COMMON REALITY (1)

This symbolic, individual and collective construction of the African continent as a global territorial object, encounters two major obstacles: the management of the colonial heritage and a common reality with a sense of urgency.

► The colonial heritage

The legacy of the colonial period has marked the last 5 centuries of African history, namely the 20th century. It has generated a **fourfold reality**:

- ❖ A socioeconomic reality, that is imposed and often far away from what the natural development of these societies would have produced.
- A cultural reality, in which homogenization of ways of life tends to reduce the diversity of cultures and widen the gap between the urban and rural propulations. This reality has been kindled by the continuous implementation of colonial university and school systems and by maintaining the colonial languages.
- ❖ A political reality: the historical blocs, that have inherited power in the aftermath of independence, only accept to cede it under the pressure of internal dissent.
- ❖ A geopolitical reality, characterized by an imaginary wall between the North and the South of the continent as well as by tensions due to the arbitrary partitioning of the frontiers by the colonial powers.

3. An Africa which might become again its own center

- ▶ "It is up to us to disrupt it [the link of colonial domination] and replace it by other forms of exchange. No African state will succeed by itself. To do so, Africa will have to open up its internal borders, establish a right of return for the old exiled communities which would like to relink their fate with that of the continent, imagine flexible forms of citizenship, break free from the straightjacket of the nation state, and welcome new diasporas." (17)
- ▶ "The West has always had the will to make things fall within its own history. All those societies whose forms of organization are different from ours are called "underdeveloped". The entire reality is reduced to an expression based on economic criteria that absolutely denies all the other dimensions of human and social life." (18)

.../...

COMMON REALITY (2)

Although African countries have gained independence, **the persistent domination of foreign powers** and international institutions is an obstacle to the development of the African continent. This **new domination** takes several forms:

- ❖ A neocolonial form: CFA franc, financing of nearly 60% (19), in 2016, of the African Union budget by foreign donors, economic partnerships unfavorable to the African side, unfinished land decolonization, foreign military support perpetuating certain blockages, political support in favor of certain dictatorships, economic sanctions...
- ❖ A **predatory** form: land grabbing, ecologically disastrous exploitation of resources (forests, mines), selling of raw minerals at much lower prices than international rates...

Therefore, **decolonization** should at the same time set:

- ❖ a material objective: recover control over the continent's development, manage the wealth of African countries,
- ❖ a cultural objective: come to terms with Africa's pre-colonial history, revive local languages, and rebuild self-esteem,
- ❖ a political objective: make the civil society's voice heard, invent our own model of governance.

We should not lose sight of the fact that our perception of ourselves is the reflection of the perception of others: decolonization should be the concern of the rest of the world just as much as it should be the concern of the Africans.

4. Thinking Africa differently

- "One of these days, we should be able to think of a time which does not refer to the colonial dimension, and imagine creative concepts so as to seize a momentum which marks a different time. But we are not yet there. For the moment, we should, like Latin American thinkers, think of a "decolonia" dimension. Because in our so-called "postcolonial" world, colonial relations persist..." (17)
- "We must do away with those allegedly objective and universal evaluation criteria such as GDP or development. The latter is an "ecomyth" that has become hegemonic. Born from the belief in infinite progress, and stemming from the Age of Enlightenment and scientific positivism, the myth of development projects on African societies the Western vision as to the direction in which any society should go, while imposing itself as the sole means of describing them. Thus, African countries are "underdeveloped", and characterized by retardation and failure. In the same vein, modernity is also seen as something external that the continent must import, and African traditions are an obstacle." (20)

.../...

A COMMON REALITY (3)

Despite the continent's diversity, certain aspects of a common reality can be raised. As sources of urgency or transformation's issues, they can become the focus of attention to the detriment of symbolic construction, as mentioned earlier.

Common characteristics*(21)

In spite of their differences, **Africans have in common** a certain number of structural characteristics which shape their community, such as:

- cosmopolitanism, as a fruit of millennial cross-fertilization and the related mobility,
- conversation or palaver: a form of collective intelligence at the service of exchange, confrontation and reconciliation, but also transmission (22),
- the awareness that there is only one world and, quite often, that Africans find very difficult to take a share of it: What we increasingly have in common is therefore the proximity of the distant (23),
- the deep impact of spirituality usually marked by tolerance, , from traditional forms to modern religions,
- laughter: a viral form of expressed joy, humor, by averting unhappiness or conflict thanks to laughter, sometimes mockery, and often good humor.

It is however important not to make confusions with juncture-related characteristics (violence, corruption, conflicting situations, exile, fanaticism, clientelism) or culture-related characteristics (gender inequality, prejudices against albinos, for example, initiation rituals, polygamy, slavery...).

The common reality is also a reality that is imposed to the majority of Africans in their daily life, for example:

- ❖ a population growth rate which is not line with economic growth: in 2016, with a rate of 16,4% (7) of world population, Africa represents nearly 2,9% (24) of world GDP and 2,6% (25) of international trade. 38,26% (26) of its population live in a state of severe poverty (2015). Inequality is increasing at the same time as development, mainly in Southern African countries, namely in South Africa, Namibia and Botswana. In this subregion, the Gini index varies from 35,84 to 63,38 (26),
- a deteriorated health situation: in 2015, the continent totals some 73% (27) of deaths due to AIDS and nearly 70% (27) of HIV-related diseases at world level. Health infrastructures are inadequate and unequally distributed, pharmacopoeia is reduced,
- ❖ the rate of growth of urban population is not correlated with the necessary means for managing this uncontrolled and exponential urbanization (from 34,5% in 2000 to nearly 40% (28) in 2016): water management, slums (in 2014, 43,36% (29) of urban population), misery, violence, fear, groups of idle youths ready for anything (cf. Part 2).
- ❖ a preoccupying ecological situation: namely the issue of waste disposal constitute a major preoccupation for Africa with respect to the disposal of waste, even though this continent represents nowadays only 5% of waste generated in the world. Consisting of almost 60% of organic waste, solid waste might increase by 161% between 2012 and 2025 (30), in connection relation with Africa's economic catch-up process. Management of this waste would represent a significant challenge that African cities will have to address (cf. Part 2).

^{*}This presumes the idea of belonging together among multiple singularities (21)

A COMMON REALITY (4)

Nevertheless, Africa is changing at the pace at which its population is growing: a creative informal economy, frenetic activity in large urban centers, new mindsets... (cf. Part 3).

Africa has a remarkable potential both in terms of natural resources $(16,5\% \ (31))$ of the world's arable lands in 2014) and human resources (more than $\frac{1}{4} \ (32)$ of the world's population in 2050). The fact that African families attach a great deal of importance to the education of their children and do not hesitate to send them abroad to pursue their studies (the rate of mobility is twofold the world average rate), augurs well for the future generations.

In the meantime, two major challenges need to be faced.

Africa must break free from malnutrition which still affects more than 230 million people (31) nowadays, import food against the amount of over 72 billion dollars (33) in 2016 (cf. Part 2, Chapter 1) and feed 2.5 billions of Africans (32) in 2030.

With more than 235 million inhabitants, aged between 15 and 24 years (32), Africa is the world's 2nd continent, after Asia, which has the largest number of youths. With 41% (32) of the African population aged below 15 years – and up to 50,2% (32) in Niger –, the increase in the number of youths is exponential.

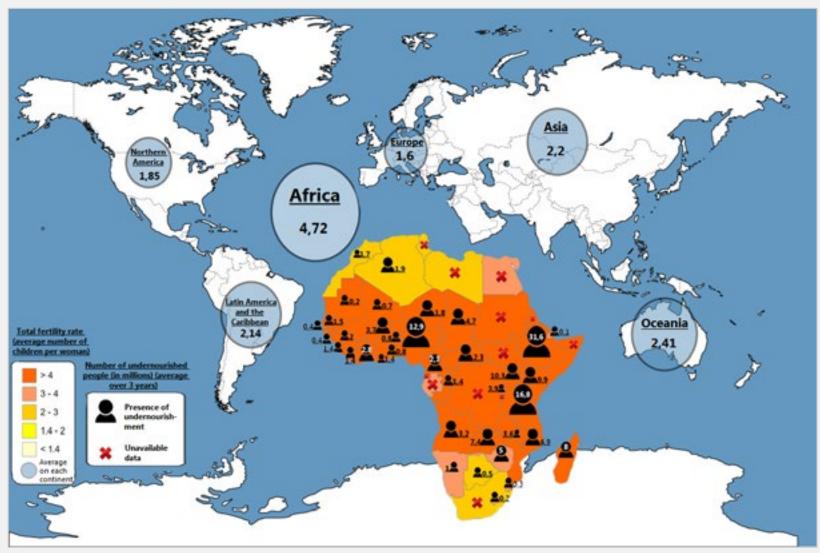
10 to 12 million youths enter the African labor market every year. Outside those involved in precarious employment and informal underemployment, the 15-24 years age group represent 60% of unemployed Africans. Although it is decreasing, youth unemployment still remains a time-bomb (34).

This means that **job creation is the continent's second imperative**. To address this problem, it is not enough to provide education, but to do it in such a manner as to enable this generation:

- to acquire the means to support themselves,
- to give sense to their lives and an alternative to marginalization, then violence and, lastly, rebellion (extremism, terrorism...) (23), when they do not choose to emigrate.

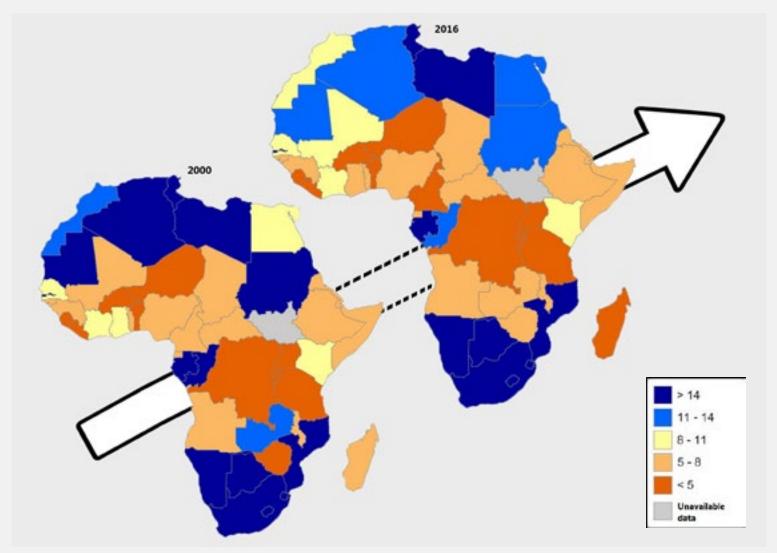
In addition to mobilizing its potential (biodiversity, forestry, hydrocarbons, mining) and maintaining a rate of economic growth above 5% (35) African players will have to quickly change their development model so as to meet the conditions of inclusive economic growth.

Fertility and under-nutrition in the world and a focus on the African continent (2010-2015)



■ Source: IRES processing of UN data (World Population Prospects_2017 revision) and FAO data

Unemployment rate in Africa between 2000 and 2016



■ Source: IRES processing of International Labour Organization data

CONTINENTAL PROJECTION (1)

Having become aware of this common reality, a new globalized generation of African thinkers is at work (36).

- They are present in multiple fields, from philosophy (37) to photography (38), through dance, choreography and drama (39), from sound and audiovisual production (40) to spaces of artistic creation (41) through literary creation (42). A mixed generation in which women are increasingly making their voices heard, a generation characterized by a mixture of blood and culture, and by its mobility (frequent travels between Africa and the outside world).
- ▶ These thinkers attest to a strong need to create an interconnected intellectual community respectful of the diversity of the African diaspora in writing, thought and creation. In order to give birth to a common and dialectic way of thinking, so as to move forward collectively on issues that seem urgent to them, they want to confront their ideas and understand what is at stake at world level.
- ► They attest to the plural attempt (philosophy, literary creation, architecture, arts...) and to **the need to build new concepts**, both to think the contemporary world and its transformations and to generate a new paradigm which is endogenous this time.

- The most living critical thought nowadays is a product of all sorts of circulations. What is essential is not to live in Africa. But to know what we do with the encounters that we experience as we walk along the paths of life and of the world. We think well of Africa only when we think of it as a moving space.
- The Japanese or the Westerner finds no problem to be in an all-world made of synthesis and cross-fertilization, since the elements of their contribution are recognized by all. This is definitely not the case for the African. We are just coming out of five centuries of symbolic, cultural and civilizational denial. In this world which is supposed to be a world for all of us, certain people are still asking us what is our contribution". (17)

.../...

CONTINENTAL PROJECTION (2)

A renewed vision of the world is being established and is gaining ground, both on the continent and within the diaspora

- ▶ Like the "Alien Generation" whose planet is the reference, this new connected generation thinks at the level of the tangible and intangible world.
- For this generation, the continent extends beyond its borders: this is Africa-world, rich with its diaspora and anxious to restore African identity, an identity open to plurality and mobility (43).
- Convinced that the West no longer represents the center of the world and that Africa will be the privileged theatre in which the fate of the planet could be at stake in a near future, this generation believes in the "planetarization of the African issue", an Africa at the heart of the world's transformations.
- In order to become the driving force of this world, Africa must now complete the decolonization process, update its own values and propose a civilizational project rooted in "its fortunate potentialities" (17).
- "With post-colonialism, there is an attempt to renew the conceptual frameworks within which we think the dynamics of the continent. For example, should we think our economies in terms of "development"? I do not think so. The concept of "development" has been forged at a particular time of Western history and is no longer necessarily appropriate for today's Africa. We should think our future by our own means and propose a civilizational project which places the human being, not production or consumption, at the heart of our concerns, by ensuring a better balance between the economic, the cultural and the spiritual.
- ► [We should take] seriously the major event that the planetarization of Africa represents: the fact that the future of the planet is now at stake in Africa." (17)

.../ ...

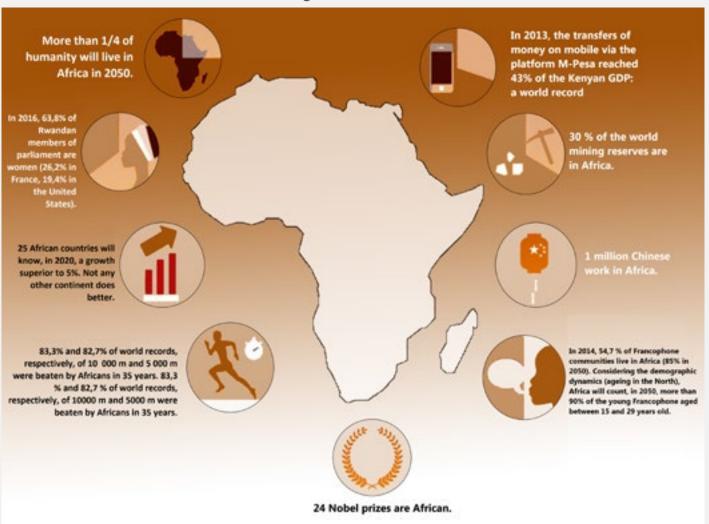
CONTINENTAL PROJECTION (3)

A strong aspiration emerges from this new vision of the world, which carries a civilizational project and a true faith in the future

- This vision, which is supported both by the new intellectual community and the plural groups which have discussed **Agenda 2063**, **embodies** a **deep and common aspiration to a new Africa**:
 - "A prosperous continent, founded on inclusive and environmentally friendly growth,
 - ❖ An integrated continent, building on its political unity and on pan Africanism,
 - ❖ A continent in which prevails good governance, democracy, respect of human rights and the rule of law,
 - ❖ A continent in which prevails peace and security, and endowed with a cultural identity, values and strong ethics,
 - ❖ A sound partner which exerts its influence on the world scene" (44).
- It is no longer a question of replicating a foreign model to carry out this project: it is within the soul of the African that we should seek the building blocks of a new utopia as Al Andalous was in its times without however giving up creolization:
 - Reconciliation of the African with himself, now that he is free and decolonized at last,
 - ❖ Returning to common values (hospitality, cosmopolitanism, palaver, laughter, spirituality...) and to the African philosophic and cultural legacy, which carries a relationship in harmony with space, with the living and nature (45).
 - A humanistic approach, creating a new balance between the individual and society, development and solidarity, rights and duties (46).

- ▶ "Africa has certainly not invented the idea of the universal, but it has developed all sorts of conceptions of the "common", whereby what really counts is the relationship and not the being, whereby the social and the individual complete one another., Conceptions which could serve as a basis to criticizing neoliberalism which means "everyone for himself".
- ▶ This utopia [of pan Africanism] has lost momentum. We have been constrained by national identities. This utopia should be revitalized because Africa is a project and a symbolic, political entity which is yet to be built. To this end, we should raise awareness among the population. But, in order to be consistent, this means that we should be able to circulate and settle in one country or another and to feel that in these spaces, we are most welcome." (17)

A few significant data on Africa



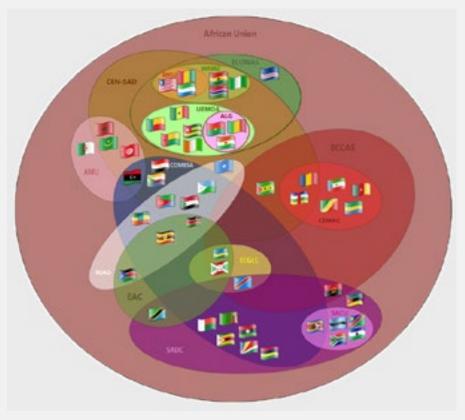
Source : Review by IRES of data from

- World Population Prospects 2017 Revision - ONU
- Inter-Parliamentary Union
- Measuring SAFARICOM's True value for years 2014-2015 KPGM SAFARICOM
- African Natural Resources Center _ Catalyzing growth and development through effective natural resources management _ ABD _ 2016
- World Economic Outlook, April 2017, FMI
- " China's Second Continent: How a Million Migrants Are Building a New Empire in Africa, Howard W. French"
- Review by IRES of data from the International Association of Athletic Federations
- http://www.nobelprize.org
- Estimation of francophones _ International Organization of Francophonie

K EEP IN MIND

- A symbolic, individual and collective construction of the continent in progress.
- ► A common contrasted reality, in rapid transformation, capable of switching to the two extremes.
- A new pan African vision of the world in favor of an African, planetary and civilizational project.

The regional economic communities in Africa



■ Source : IRES processing of data from "https://www.integrate-africa.org/"

S ELECTIVE BIBLIOGRAPHY (1)

- (1) COQUERY-VIDROVITCH, Catherine. Petite histoire de l'Afrique. Edition revue et augmentée. Paris : La découverte, 2016. 224 p.
- (2) DIALLO, Thierno Mahmoud. L'islam africain. In: Histoire de l'humanité. Volume VI, 1789 1914. UNESCO. 2008. p. 706-713. Collection Histoire plurielle. KANE, Oumar. La première hégémonie peule: Le Fuuta Tooro de Koli Tenella à Almaami Abdul. Paris: Karthala, 2005. 672 p.
- (3) FAO database. Online database: http://www.fao.org/statistics/databases/fr/
- (4) Data and definition available on the official website of FAO. Processing by IRES.
- (5) Research institute for development. Les grands bassins fluviaux (Exhibition realized in partnership with Aix-Marseille University, IRSTEA, CNRS and the Rhone Basin). 2015
- (6) UNEP-WCMC. The state of biodiversity in Africa: A mid-term review of progress towards the Aichi Biodiversity Targets. 2016.
- (7) World population prospects: the 2017 revision. Online database, United Nations, Department of Economic and Social Affairs: https://esa.un.org/unpd/wpp/. Calculs IRES
- (8) DE WASSEIGE, C. et al. Les forêts du bassin du Congo: état des forêts 2010. Luxembourg: Office for publications of European Union. 2012. 276 p. In TCHATCHOU, Bérenger et al. Déforestation et dégradation des forêts dans le Bassin du Congo: état des lieux, causes actuelles et perspectives. 2015
- (9) FAO (Regional office of Africa), 2009. The relevance of mangrove forests to African fisheries, wildlife and water resources. Nature & Faune. Volume 24, Issue 1. 143 p.
- (10) Research institute for Development, 2013. L'eau sous le Sahara: pas si fossile que ça. Fiches d'actualité scientifique. n°431. 2 p.
- (11) MACDONALD, Alan M. et al, 2012. Quantitative maps of groundwater resources in Africa. Environmental Research Letters. Volume 7, n° 2. 7 p.
- (12) AFDB Socio Economic Database. 1960-2019. African Development Bank Group. Online database: http://dataportal.opendataforafrica.org/bbkawif/afdb-socio-economic-database-1960-2019 >
- (13) SHIKLOMANOV, Igor A. and RODDA, John C. World water resources at the beginning of the twenty-first century. United Kingdom: Cambridge University Press, 2004. 435 p.
- (14) SIMONS, Gary F. and FENNIG, Charles D. (eds.), 2018. Ethnologue: Languages of the World, Twenty-first edition [en ligne]. Dallas, Texas: SIL International. Online version: http://www.ethnologue.com.
- (15) MORIN, Rich. The most (and least) culturally diverse countries in the world. 2013 In: Pew Research Center.

S ELECTIVE BIBLIOGRAPHY (2)

- (16) Pew Forum on Religion & Public Life. Tolerence and tension: Islam and Christianity in Sub-Saharan Africa. 2010. 331 p.
- (17) KODJO-GRANDVAUX, Séverine, 21 octobre 2016. L'avenir du monde se joue en Afrique. Entretien entre Felwine Sarr et Achille Mbembe. *Le monde*. URL:http://www.lemonde.fr/afrique/article/2016/10/21/l-avenir-du-monde-se-joue-en-afrique_5017948_3212.html#krd8dGFhRLPc5AKU.99
- (18) LE GROS, Julien, 28 juin 2016. Felwine Sarr: "Parler de développement, c'est mettre l'Afrique à la remorque". The Dissident. URL: http://the-dissident.eu/felwine-sarr-developpement-cest-mise-a-remorque de-lafrique/>
- (19) African Union. Decision on the budget of the African Union for the 2016 financial year. 2015
- (20) MARIVAT, Gladys, 29 mars 2016. L'utopie africaine, selon Felwine Sarr. *Le monde*. URL : httml#tLKhopj5B3RSDjeL.99>
- (21) CLARINI, Juilie, 22 juin 2016, Achille Mbembe, passant soucieux. Le monde. URL: http://www.lemonde.fr/livres/article/2016/06/22/achille-mbembe-passant-soucieux. 4955945_3260.html>
- (22) BENMAKHLOUF, Ali. La conversation comme manière de vivre. Paris : Albin Michel, 2016. 252 p.
- (23) LE BRIE, Micheal et Mabanckou, Alain. L'Afrique qui vient. Paris: Hoebeke, 2013. 328 p.
- STEINMETZ, Muriel, 14 février 2013. L'Afrique à venir au miroir de vingt-six écrivains. L'Humanité. URL : < https://www.humanite.fr/culture/l-afrique-venir-au-miroir-de-vingt-six-ecrivains-515250>
- (24) World Economic Outlook. January 2018. Online database. International Monetary Fund. Calculs IRES: http://www.imf.org/en/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>.
- (25) UNCTADSTAT. Online database. United Nations Conference on Trade and Development. Processing by IRES: http://unctadstat.unctad.org/FR/Index.html >
- (26) World Bank database. Online database: < https://donnees.banquemondiale.org/>
- (27) Global Health Observatory database. Online database. World Health Organization. Processing by IRES: http://www.who.int/gho/database/fr/
- (28) World urbanization prospects: the 2014 revision. Online database. United Nations, Department of Economic and Social Affairs. Calculs IRES: https://esa.un.org/unpd/wup/>
- (29) UN-Habitat Urban Data. Online database. UN-Habitat: < http://urbandata.unhabitat.org/ >
- (30) World Bank. What a waste: A global review of solid waste management. 2012. 116 p.

S ELECTIVE BIBLIOGRAPHY (3)

- (31) FAOSTAT. Online database. FAO: http://www.fao.org/faostat/fr/#home. Processing by IRES
- (32) World population prospects: the 2017 revision. Online database. United Nations, Department of Economic and Social Affairs. Calculs IRES: https://esa.un.org/unpd/wpp/
- (33) UNCTADSTAT. Online database. United Nations Conference on Trade and Development. Processing by IRES: http://unctadstat.unctad.org/FR/Index.html >
- (34) IGHOBOR, Kingsley, 2017. Le chômage des jeunes à l'ombre de la croissance économique. *Afrique Renouveau (Edition spéciale jeune)*. URL: http://www.un.org/africarenewal/fr/magazine/%C3%A9dition-sp%C3%A9ciale-sur-la-jeunesse-2017/le-ch%C3%B4mage-des-jeunes-%C3%A0-l%E2%80%99ombre-de-la-croissance>
- (35) World Economic Outlook Database. 2017. Online database. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx
- (36) KODJO-GRANDVAUX, Séverine, 27 octobre 2016. Dakar accueille les plus grandes figures intellectuelles africaines. Le monde. URL : http://www.lemonde.fr/afrique/article/2016/10/27/dakar-s-apprete-a-accueillir-les-plus-grandes-figures-intellectuelles->
- (37) Achille MBEMBE, Felwine SARR, Yala KISUKIDI
- (38) Sammy BALOJI sur la mémoire
- (39) Faustin LINYEKULA
- (40) Kidi BEBEY
- (41) Christine EYENE, Koyo KOUOH...
- (42) Léonora MIANO, Scholastique MUKASONGA, Hemley BOUM...
- (43) "Je souhaite réaffirmer 1 identité africaine ouverte sur le multiple et la circulation, contre une ID de clôture, de rejet", selon Achille MBEMBE.
- (44) Banque Africaine de Développement. Les 50 années à venir : L'Afrique que nous voulons. Assemblées annuelles 19-23 mai 2014, Kigali. URL :
- https://www.afdb.org/fr/annual-meetings-2014/the-next-50-years-%E2%80%9Cthe-africa-we-want%E2%80%9D/
- (45) GESBERT, Olivia, 09 juin 2017. Penser l'Afrique-Monde avec Achille Mbembe In La Grande table (2ème partie). France Culture. URL: https://www.franceculture.fr/emissions/la-grande-table-2eme-partie/
 penser-lafrique-monde-avec-achille-mbembe>
- (46) KONATE, Moussa. L'Afrique noire est-elle maudite? Paris: Fayard, 2010. 240 p.

Annex: Some quotations from African thinkers on the continent's emancipation

Kwame Anthony APPIAH - Cosmopolitanism:

"To be a citizen of the world is to feel completely free to belong here and elsewhere, to inherit from the entire mankind and contribute to enriching it from where we are. It means to conciliate the singular and the universal, the different and the in-common, to refuse identity assignments."

Jean-Godefroy BIDIMA - Crossing:

"More than just a key concept, crossing is an attitude towards the real, the desire to unfold the multiple and the diverse, to perceive the potential and the not-yet-expressed, to unravel the confused and the unspoken, in order to enable the possible to hatch."

Nadia Yala KISUKIDI - Epistemic injustice:

"It is the non-recognition of the existence of philosophical thoughts in African lands. A non-recognition that stems from Western philosophers themselves, but also from colonial agents, including the first anthropologists who decreed that there was no Reason in South of the Sahara but a "primitive mentality"."

Ali BENMAKHLOUF - Conversation:

"Conversation, whereby the link with oneself and others is at stake and whereby the relationship that "binds us one another through words". (...) Being a space for exchange, confrontation as well as reconciliation, conversation is also a space for passing on a legacy."

Souleymane Bachir DIAGNE - Free-thinking:

"It is more than ever "vital that thought in Islam puts forward critical thinking and pluralism". Switching from one language to another allows us to see how so-called universal philosophical problems are strongly linked to the different languages in which they are formulated."

Achille MBEMBE - **Afropolitanism**:

"It is urgent to build a tolerant, open, creole Africa. An "Africa-world" where everyone, whatever their religion, skin color, gender or sexual orientation, can flourish fully."

Kako NUBUKPO - CFA Franc:

"African states must get out from the CFA franc and develop their own monetary policy if they want to be able to "complete their political independence and strengthen the foundations for a structural transformation of their economy"."

Sabelo NDLOVU-GATSHENI - **Decoloniality**:

"It is more than ever urgent to think of "decoloniality". We must think of new concepts and new intellectual referents; a sine qua non condition to build a humanity based on equity, social justice and "ethical coexistence", and put an end to class and race power relations."

Leonora MIANO - Afropeanity:

"We must look without pathos or resentmenton our common past characterized by exploitation and commoditization, by alienation and resistance, in order to better grasp our present and to chart the paths of emancipation."

Felwine SARR - Afrotopia:

"It invites the continent's thinkers to embark on an epistemic disruption by abandoning Western concepts that are ill adapted to the realities of the continent and by investing African notions such as jom ("dignity"), teranga ("hospitality"), ngor ("sense of honor")... to identify the possible profitable contributions."

Part 2

CHALLENGES AND PERSPECTIVES BY 2016-2050

P LAN

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G ENERAL OVERVIEW

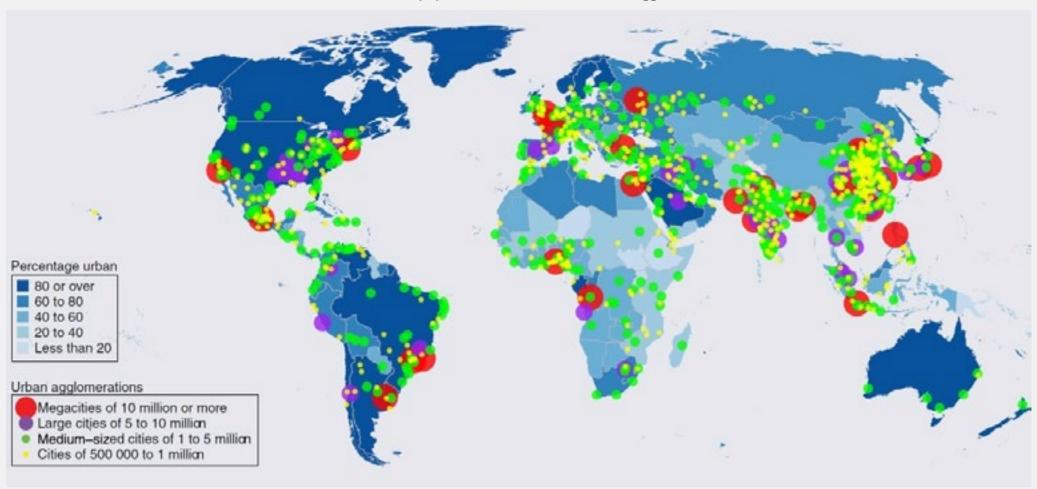
Challenges 2030-2050

- ▶ Health, security, nutrition, employment, education, housing, transport, electricity, sanitation... are so many challenges facing Africa. Hence, the choice was made to address only a few of them. As in any choice, it is subjective. Nevertheless, the choice was made on the basis of two major criteria:
 - taking account of the future developments, by 2030 (medium term) and 2050 (long term), which dictated to focus on what may seem to be trivial today, but which might cause serious problems tomorrow,
 - ❖ a systemic approach which makes it possible to link the three issues selected to better highlight their interdependence (see opposite).
- As climate change and its impacts on Africa have been broadly discussed in IRES Strategic Report for 2017, they will be addressed here as a risk factor among others and not as an issue in itself, although it is of crucial importance for the future of the African continent and of mankind as a whole.

Three major future issues

- ▶ Urban sprawl (chapter 1): the rapid pace of African urban growth is unprecedented. Fuelled by a strong demographic dynamics and coupled with a lack of resources, or weak governance, this urban sprawl represents a major systemic challenge to economic growth and human development among other things, including the quality of the environment which involves the stability of society.
- ▶ Rural transformation (chapter 2): Defined as "anything that is not urban", the African rural world is at a turning point in its history, Three major changes are shaping the current transformation: the intended or unintended mobility of people, the dangerous deterioration of natural resources and the insufficient modernization of African agriculture, in view of the continent's food requirements.
- ▶ The individual and collective challenge of security and governance (chapter 3): the evolution of conflict's forms and associated violence shows that while peacekeeping is progressing in the continent, it is far from being fully achieved because security of goods and people is also a matter of governance and education.

Distribution of urban population and location of urban agglomerations worldwide



■ Source : Reprocessing by IRES _ https://morphocode.com/global-trends-urbanisation/

Chapter 1

URBAN SPRAWL



FRICA IN FIGURES N°2

Demography

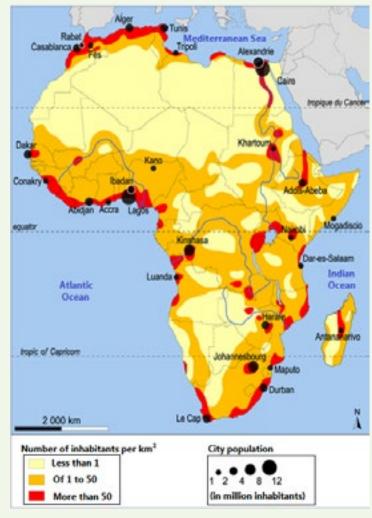
Key Facts

- Population (1):
 - ❖ 1950: 228.6 million, i.e. 1 person out of 11 worldwide.
 - 2100: 4.4 billions, i.e. 1 person out of 3 worldwide.
- Demographic transition (1): World average: 2.5 children/women in 2015.
 - * "African fertile crescent": Niger: 7.4; Burkina Faso: 5.6; Ethiopia: 4.6.
 - African countries in demographic transition: South Africa: 2.5; Libya: 2.4; Tunisia: 2.2; Morocco: 2.2 (2); Mauritius: 1.5

Trend	1980	2015	2050
Increasing Population (1)	0,48 billion	1,2 billion	2,5 billion
Declining fertility (children/women) (1)	6,6 (1975-1980)	4,7 (2010-2015)	3,1 (2045-2050)
Declining maternal mortality (3)	965 in 1990 (for every 100 000 live births)	542 (for every 100 000 live births)	(-)
Declining child mortality (1)	121 (for every 1 000 live births) (1975-1980)	57 (for every 1 000 live births) (2010-2015)	24 (for every 1 000 live births) (2045-2050)
Growing life expectancy (1)	49 years (1975-1980)	60 years (2010-2015)	71 years (2045-2050)
Proportion of under-25s / total population (4)	64%	60%	50%

(-): Data not available

Population density in Africa



■ Source: Reprocessing by IRES _ http://2.bp.blogspot.com/-vLjYin4he3E/URD8rJ1bA0I/AAAAAAAAAMM/fbe_gR3aJRQ/s1600/africa_popz.jpg

RBANIZATION ISSUES

A global urban dynamic...

The rapid urbanization of the world was one of the main features of the twentieth century and will still continue to strongly mark the first half of the twenty-first century. Since 2007, there have been more urban than rural people on earth. Between 2015 and 2050, Asia and Africa together would account for nearly 90% of the 2.5 billion expected additional urban dwellers (5).

with complex mechanisms...

This announced reality today leads public authorities and researchers to question themselves, in depth, on the urban phenomenon, its reasons and consequences, such as:

- rural exodus in Africa generates 1/3 of new urban dwellers, yet the number of rural people is not decreasing (6),
- the phenomenon of human concentration: in 2030, 6 of the 41 world's megacities (cities with more than 10 million inhabitants) would probably be in Africa (7),
- city management: is Africa ready to host 1 billion urban dwellers within 20 years (6)?
- ▶ industrialization and economic development as an engine of urbanization: a model that does not work in Africa where 60% of urban people live in shanty towns (8).

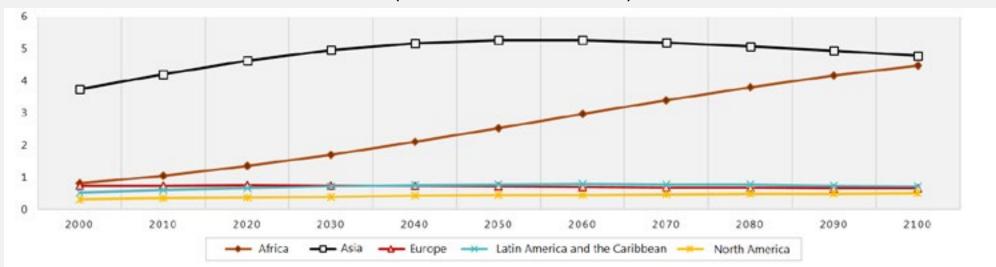
...which exposes Africa to major challenges

- ► The continent's current urban sprawl is an unprecedented fact in the history of mankind, both in terms of speed and volume. It may also become an excellent accelerator of development or lead entire countries to chaos.
- The prevailing quality of life there is both a cause and a consequence of the difficult economic takeoff of African cities. It highlights the major risks caused by speed differentials of urban growth and systemic development (economic, social, political, technological...).
- ► The urban fact forces us to look at the African city in a different way, highlighting both its specificities and its need for governance and civic responsibility on the part of its population.

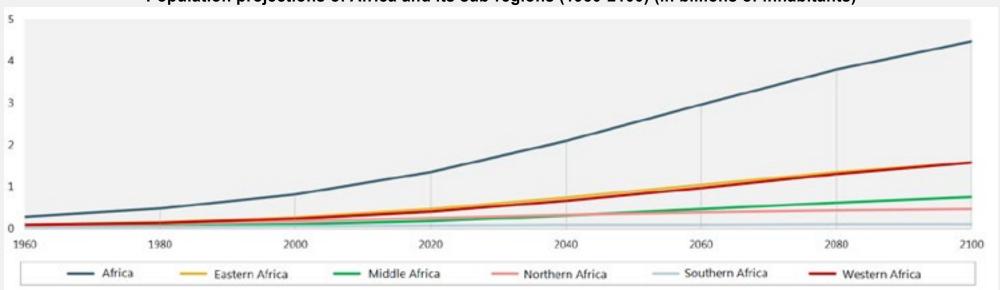
Urbanization refers to the continuous process of urban population growth and urban expansion. It may be qualified by the two following measures:

- the rate of urban growth which measures the increase in urban population,
- the rate of urbanization which measures urban population as a percentage of the total population at a time T.

Population development in the world's regions between 2000 and 2100 (in billions of inhabitants)



Population projections of Africa and its sub-regions (1950-2100) (in billions of inhabitants)



■ Source: Processing by IRES of data from World Population Prospects, 2017 Revision

A FRICAN URBANIZATION (1)

The developed countries model...

- ▶ Urbanization characterizes the transformation of economies from low-productivity rural societies to more complex systems, in which industries and tertiary activities take gradually a predominant position.
- ► Fuelled by rural exodus, which provides the workforce needed for these new activities, urbanization generally increases sharply in its early stages and then slows down sharply when it reaches 75 to 90% of the total population.
 - At this stage of development, rural exodus of young people is often offset by urban flight of households and retired people.
 - While economic development results in a demographic transition, natural urban growth weakens.

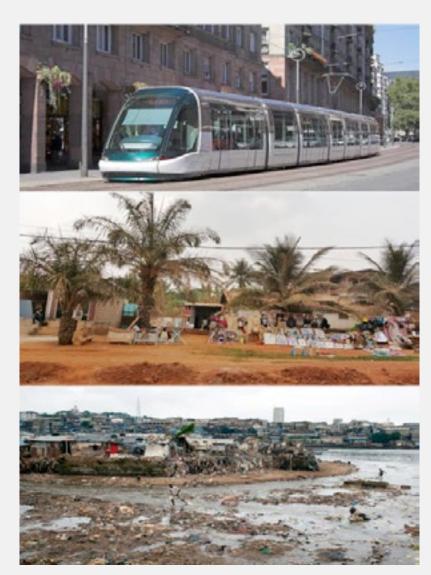
...from which Africa partially derogates

- ► The extremely rapid development of African cities over the past half century has not been the result of massive industrialization or tertiarization, colonization having interfered with this natural mechanism.
 - African urban growth is more the result of natural population growth averaging 2.6% per year over the 2000-2015 period (4) than of rural migration which contributes only one third of the population...
 - ❖ Therefore, the rate of urbanization remains low, at 40.4% in 2015 (9), with the natural increase of rural people remaining high.
 - ❖ The combination of a still broad base of the age pyramid (high fertility and falling infant mortality) with a peak that begins to widen (increasing life expectancy) explains the continent's strong demographic dynamic
- The continent is experiencing highly differentiated situations, depending on the level of the combination of economic development and demographic transition. Southern Africa and North Africa, for example, are moving closer to the developed countries model, moving away from sub-Saharan Africa.

A

FRICAN URBANIZATION (2)

- Most African cities operate, not at two speeds according to the classical model, but at three speeds around:
 - an "upper" city with flamboyant modern architecture, public spaces, institutes, business centres, brand shops, paved roads, tramways and basic infrastructure (electricity, water, sanitation),
 - a "lower" city, with its dusty laterite tracks, cut off from everything whenever it rains cats and dogs, made up of hard-wall dwellings, wasteland, street stalls, a city in which people wander in the darkness as soon as night falls, and where the infrastructures are uncertain (frequent cuts of goods and social services),
 - An overcrowded and smelly "non-city", made up of precarious shelters (shanty towns) on unserviced, sometimes already polluted land administered by local gangs (tsotsis), and the seat of all sorts of illegal trafficking: a vast refugee camp with an unimaginable amount of misery.



■ Source : ProGective

A FRICAN URBANIZATION (3)

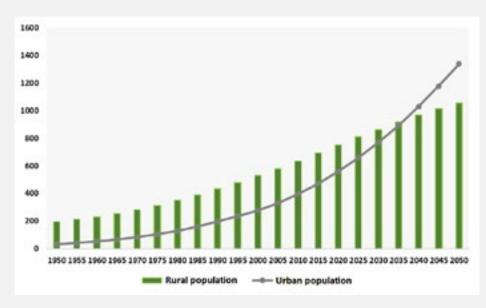
Factors of urban growtht

- ► The strength of **natural growth of African population**, both urban and rural, can be explained by a low level of income combined with a high number of children and a high proportion of young people.
- ► The city's attractiveness to Africans migrating there is not limited to offering better economic opportunities:
 - ❖ The city is a refuge against violence of which the rural world is an easy prey (conflicts, armed gangs) and against the total destitution that can result from events such as drought (especially in the Sahel).
 - It also appears as a place of modernity that allows us to get away from traditions that are sometimes sclerosing or from the boredom of isolated campaigns (leisure, meetings), but also to open a door to the world (education, technologies, connection).

Also, the greater the dichotomy between urban and rural areas, the greater the rural migration to the cities. This graph shows that **from 2035 onward**, **the number of urban dwellers could exceed the number of rural people in Africa**.

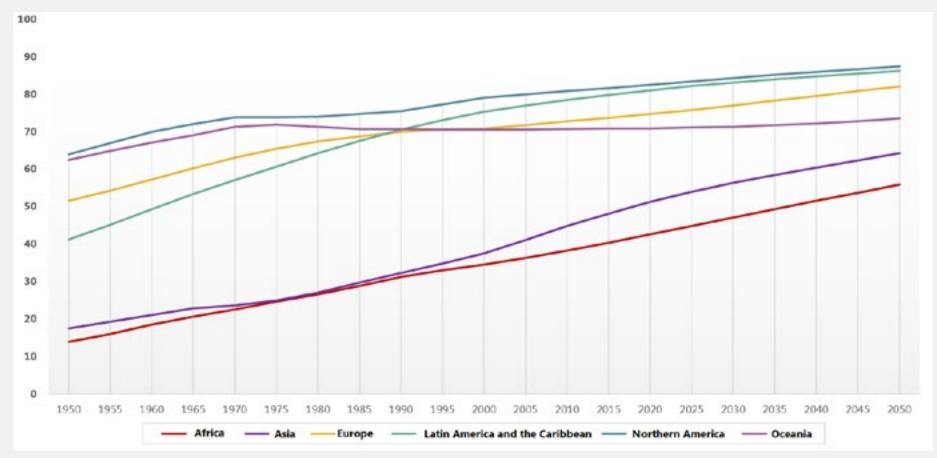
- Who then will maintain the ecosystems on which urban life also depends? (see next chapter).
- ❖ At the same time, there is even the question of the existence of these biomes that architecture and agriculture, in the broadest sense, are increasingly degrading every day.

Evolution of African population by place of residence (in millions of inhabitants)



■ Source: Processing by IRES of data from World Urbanization Prospects, 2014 Revision

Evolution of the urbanization rate in the world's regions between 1950 and 2050 (in %)



■ Source: Processing by IRES of data from World Urbanization Prospects, 2014 revision

A FRICA IN FIGURES (3)

Urbanization

Key Facts

- In 2015, Africa had 47 cities with more than one million inhabitants and 120 with more than 500,000 inhabitants (10).
- ▶ Urban growth in North Africa (excluding Egypt), while continuing, is expected to remain modest. This region has already achieved an average urbanization rate of 51.6% in 2015 (9). For example:
 - Casablanca (3.5 million inhabitants in 2015) would have a population of 5.1 million in 2030 (11).
- In sub-Saharan Africa, on the other hand, by 2050 (12):
 - Nigeria would have an additional 208 million urban dwellers,
 - populations of the Democratic Republic of the Congo, Ethiopia and Tanzania could each grow by 63, 51 and 52 million urban dwellers, respectively.

Definitions

- Megacity: more than 10 million inhabitants (13). Example: Lagos in Nigeria, Cairo in Egypt, Kinshasa in the Democratic Republic of Congo.
- Large cities: between 5 and 10 million inhabitants (13). Example: Luanda in Angola, Nairobi in Kenya, Mogadiscio in Somalia.
- Intermediary cities: between 50,000 and 1 million inhabitants (14). Example: Tamale (Ghana), Lichinga (Mozambique), Tangier (Morocco)
- Small towns: less than 50,000 inhabitants (15).
- Shanty towns, slums: a disadvantaged part of a city characterized by poor housing, extreme poverty and no rights or security of tenure (16).

Trend	1980	2015	2050
Urban population (9)	128 million	472 million	1,3 billion
Annual growth rate of urban population (9)	4,3%	3,5%	2,5%
Of which: Natural growth (1)	28,4 (per 1.000 inhabitants)	26,5 (per 1.000 inhabitants)	18 (per 1.000 inhabitants)
Urbanization rate (9)	26,7%	40,4%	55,9%
Annual increase in the rate of urbanization (9)	1,4%	0,95%	0,8%
GDP per inhabitant (in constant 2010 dollars) for regions with a similar level of urbanization (17)			
Sub-Saharan AfricaMiddle-East and North AfricaEast Asia and the Pacific	1.464 5.833 2.929	1.656 7.455 9.228	(-)

(-): Data not available

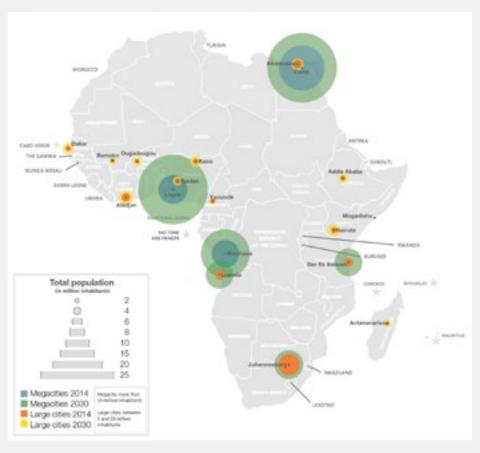
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FRICAN URBANIZATION (4)

Diversity of forms of urbanization

- The global trend towards concentration of human beings in increasingly larger cities is reflected, particularly, in **the rapid growth of megacities** with more than 10 million inhabitants **and large cities** (5 to 10 million inhabitants) despite the already high cost of living.
 - ❖ In 2014, 3 of the 28 global megacities were African cities: Cairo (18,4 million inhabitants), Lagos (12.6), Kinshasa (11.1). In 2030, Johannesburg (11,6), Dar es Salaam (10,8) and Luanda (10,4) would be added (13).
 - ❖ In 2035, with 30 million inhabitants, Lagos would become the largest city on the continent (18).
- ▶ Intermediary cities (50,000 to 1 million inhabitants) (14) which are better places to live, are the fastest growing cities. By positioning them as a link between rural and urban economy, they are the key to resolving the severe regional imbalances that threaten to make both emerging metropolises and increasingly deserted rural areas ungovernable (19).
 - ❖ In low-and middle-income countries, they account for 43% of the urban population (more than 1.5 billion inhabitants in 2015) (19).
 - ❖ In Africa, the number of large intermediary cities (30,000 to 1 million inhabitants) has doubled in less than a decade (145 in 2015) and will reach 230 by 2030 (19).
 - ❖ They are the subject of various dynamics, such "banlieuisation" or suburbanization (rejection of disadvantaged populations outside the city centre) and periurbanization (urban sprawl) (19).

Megacities and large cities in Africa in 2014 and 2030



■ Source : Reprocessed by IRES _ City population data/estimates from UN DESA

A FRICAN URBANIZATION (5)

- In sub-Saharan Africa, 59% of urban dwellers in 2015 lived in a slum (20), a precarious and informal urban form that accounts for the major part of urban growth in southern countries.
 - ❖ The slum has no basic infrastructure (electrification, waste water drainage system, garbage collection, etc.), including access to drinking water. The slum is characterized by poor quality housing, overcrowding, precariousness... (21).
 - ❖ Poverty, promiscuity, lack of hygiene... expose its inhabitants to epidemics, illegal trafficking and, in particular, to new forms of slavery.
 - Without rapid economic growth, diminishing income inequality and a strong and systemic urban governance, and despite the significant efforts already undertaken in both North Africa and sub-Saharan Africa (22), the number of slum dwellers in several African countries could triple by 2050 (23).
- ► The most recent form of urbanization affecting the African continent is undoubtedly rurbanization. Organized around the nuclei of rural housing, it refers to a process of urbanization of rural areas characterized by:

- the urban sprawl of spaces (low continuity of existing building),
- adoption by rural people of the same lifestyles as city dwellers,
- multiple mobility (back-and-forth trips) by improving means of transportation,
- diversification of employment (pluriactivity, food crop merchant, craftsman...): rural areas are no longer reserved exclusively for agriculture,
- tensions sometimes arise between rural people, returning migrants (heirs, retirees) and new urban emigrants (unemployed, young school dropouts...).
- While in developed countries, the process of urban concentration and then urban sprawl has stretched over time, the main forms of urbanization are now being telescoped in Africa, creating as many positive effects as tensions. This acceleration of urbanization without compensation in terms of economic growth and improved living conditions increases the risks of destabilization.

The multiple forms of the African city



■ Source: Processed by ProGective of images from: https://commons.wikimedia.org/w/index.php?curid=24943696

UALITY OF URBAN LIFE (1)

Difficult living conditions

The vast majority of African cities, although to varying degrees, lack the necessary means (financing, management, organization) to offer an optimal quality of life to their entire population. Four aspects underline more particularly the living conditions of their inhabitants: access to land, and often degraded public space, random access to basic services and a high level of risk.

- The city is first of all a physical space, represented by land and the buildings it carries. Two major problems affect the African land tenure system:
 - The frequent absence of cadastral surveying and registration of property rights – often in opposition to customary law – which leads, on one hand, to the precariousness of private property and, on the other hand, to low investment by real estate developers.
 - An unbridled real estate speculation, based on the strong demand for housing whose scarcity alone leads to soaring prices. Real estate prices thus become an obstacle to acquisition by first-time homeowners and to renting a house by new-coming young rural people. Periurbanization therefore becomes the only way to obtain adequate housing.

- Constructed areas are surrounded by a public space whose quality is supposed to contribute to the well-being of urban populations. While a number of Africans are attracted by the urban amenities (modernity, urban landscape and cleanliness) of the upper city, the lower (the most widespread) offers a concentration of environmental degradation that increases with poverty (see Focus n° 1):
 - Solid and liquid waste: according to the World Water Council, 300 million Africans do not have access to latrines or clean water; waste collection is not institutionalized; sanitation, where it exists, is undersized...
 - Pollutants: from artisanal economic activities (dyeing, leather crafts), they contaminate soils, plants and water.
 - ❖ Air pollution from, inter alia, landfill fires, CO₂ emissions and ambient dust: in 2013, according to OECD, the number of premature deaths due to air pollution was higher than those due to infant malnutrition or lack of drinking water (24).

OCUS N°1

Treatment of contaminants

- As a space of life and activity, the city necessarily generates waste. Without an adequate tax system, most African countries do not collect or process their waste.
- The result is open dumps, several metres high, which the local residents set on fire because they cannot get rid of them, to avoid pestilential odours, rats, cockroaches, cholera... Sometimes trash blocks traffic, trains or boats (25).
- Landfill is only the visible aspect of these contaminants that undermine the health of the inhabitants, which are sources of epidemics and increased misery: wastewater, chemicals, electronic waste, multiple agents of air pollution ... Carried away by rainfall, this solid, liquid or gaseous waste, often rotten, contaminates soils, fauna and flora and ends up in rivers or in the ocean. In the Sahel, 30% of livestock die from contamination by plastic bags (26).
- Essential for life, water is not better considered. Not only is it untreated/decontaminated at the source, but its distribution is often random, while a significant proportion of the water is lost in leaks from pipes (27).
- Not only is it crucial for public health to manage these urban effluents, but it can also be a source of income, as scavengers in many countries have realized.



■ Source : ProGective processing of works from :

- http://blogcopte.fr/2013/07/29/news-egypte-les-chiffonniers-coptes-du-caire seclairent-au-solaire/
- http://www.magcentre.fr/117460-orange-offre-une-seconde-vie-a-vos-mobiles/
- https://www.lesechos.fr/medias/2016/11/04/2040170_recyclage-a-lagos-un-dechet-sur-deux-nest-pasramasse-aujourdhui-web-0211426795599.jpg

UALITY OF URBAN LIFE (2)

- The city differs from informal settlements in the public services it provides. However, access to these basic services (drinking water and sanitation, electricity, roads and waste management) can be uncertain, because:
 - infrastructure does not exist (pipings, power lines, roads) or has not been repaired,
 - local or national authorities do not have the means to supply themselves or produce enough electricity or water to meet their needs and manage by cutting off water or electricity when the ceiling is reached,
 - public services have been delegated to incompetent or unpaid providers...
- Most of the time, municipalities simply do not have the financial, human or technical means to deploy infrastructure, at the pace imposed by this urban explosion. For example, laterite tracks, which are often impassable during the rainy season, sometimes isolate an entire neighbourhood, to the detriment of economic activity and education.

- ▶ Urban populations in Africa are all the more at risk from poverty, violence, disease and ignorance as their living conditions deteriorate:
 - ❖ The poorest slums become lawless zones, subjected to the control of gangs. They are often the only providers of income through their illegal activities (drugs, prostitution, aiding and abetting, racketeering, gambling, corruption).
 - ❖ The proximity of middle classes and the ostentatious demonstration of the new rich generate frustrations and encourage violence and exactions which, in turn, result in rejecting these populations.
 - Overcrowding, lack of hygiene and environmental pollution as well as public transport accentuate health risks, particularly epidemics, as shown by the persistence of AIDS (see Focus n° 2), the occasional outbreak of the plague, the recent Ebola virus epidemics in West Africa (2014-2016)...

OCUS N°2

The forgotten cost of HIV

- ▶ In 2016, for the first time, 53% of the world's HIV-positive population had access to antiretroviral treatment. Coupled with a global decline of 48% in AIDS-related deaths and 16% in new infections between 2010 and 2016, this evolution has led to less pressure on the fight against HIV while international investment has declined and growth in national investment has slowed down (28).
- East and Southern Africa hosted 43% of the world's total new HIV infections in 2016 (31). Through prevention and treatment efforts, it is now on the way to eradicating the AIDS epidemic. Life expectancy has already increased in this region by nearly 10 years between 2006 and 2016 (1) as well as the probability of finding and keeping a job.
- In contrast, AIDS-related deaths increased by 19% between 2010 and 2016 (29) in the Middle East and North Africa, although Morocco and Algeria significantly increased access to HIV treatment by 48% (30) and 76% (31) respectively in 2016.
- West and Central Africa remain far behind the rest of the continent, with only 35% of patients accessing HIV treatment in 2016 (29).

- Externalities of development:
 - The growing number of orphans (49.4 million in sub-Saharan Africa in 2015, of whom 22% are due to AIDS (32)) will increase by 1 million a year, the number of street children, child soldiers, child slaves... most of whom will not exceed the age of 25 (33).
 - By the end of 2016, 19.1 billion dollars was available for AIDS relief in low- and middle-income countries. Domestic resources accounted for 57% of total resources for HIV in these countries in 2016 (29).
 - ❖ GDP could be reduced by an average of 2% per year in countries with HIV prevalence rates above 20% (34).
 - Life expectancy would tend to decline. The same applies to the available workforce (34).
 - The cost to cities would be significant, especially those whose share of the HIV-positive population that needs to be screened and treated in order to halt the epidemic is 1.7 times higher than the HIV prevalence in rural areas (35). Despite the successful results achieved, eradicating this scourge has a cost that most countries concerned are unable to pay.
- Insufficient access to adequate sexual education, laws on consent, certain beliefs and harmful representations of masculinity contribute to maintaining or even developing the epidemic. Faced with criminalization and high levels of stigma and discrimination, many urban dwellers are still evading treatment for their disease, perpetuating its spread.

UALITY OF URBAN LIFE (3)

Improved but insufficient living resources

If living conditions refer to the general framework of a human being's survival, living resources (employment, education, networks) give him/her the possibility of developing (enabler) and getting out of his/her initial condition...

- While access to employment is one of the main needs of a population, it should not obscure the complex issue of employment conditions.
 - ❖ In sub-Saharan Africa, 57% of women and 71% of men of working age were employed in 2017, slightly higher than the average for high-income countries, 49% and 64% respectively (36). The major cause of poverty is therefore not lack of access to work, but employment conditions: in 2007, before the international financial crisis, 51% of people employed in sub-Saharan Africa lived on less than \$1 a day, in purchasing power parity (37).
 - On the other hand, employment conditions (training, health coverage, career planning...) are considerably improving in the formal sector, driven by the arrival of new competitors on the continent and the expectations of young graduates and experienced managers recruited from diasporas who tend to disrupt established practices (38).

- ▶ The basic resources needed for the economic development of urban dwellers are changing, with access to networks of all kinds becoming essential.
 - ❖ The public and private sectors each have a role to play in the provision of these services: education, health system and telecommunications networks depend on government; relational networks, labour market information and the financial system depend on private initiative.
 - ❖ While quantitative progress is evident in many areas and in many African countries (see Africa in Figures n°4), it does not allow, however, the slightest slackening of the quality that still needs to be improved, as has been noted for employment.
 - ❖ In the field of education, for example, the net primary school enrolment ratio rose from 55% in 1995 to 74% in 2012, while the level of knowledge remained low (39). This raises the question of whether the unemployment rate of African graduates is due to this low level or to the scarcity of jobs requiring such skills?

A FRICA IN FIGURES (4)

Living conditions and resources

Undernutrition (in % of population) (-) 18,9% (40) (-) Without access to electricity (17) 76,6% (1990) 62,6% (2014) 42,3% (2038)	
, , , , , , , , , , , , , , , , , , , ,	30)
Proportion of children, teenagers and out-of-school youths of primary or secondary school age (41) Proportion of children, teenagers and 48,6% (1999) 32,6% (-)	
Gross enrolment ratio from primary to secondary school education (41) 44% (1999) 58,6% (2015)	
secondary school education (41) Without access to improved sanitation facilities (17) Secondary school education (41) 76% (1990) 70% (-)	
Population not using Internet (17) 93% (1996) 82% (-)	
Fixed-line telephone subscriptions (17) 2,3 millions (-)	
Mobile telephone subscriptions (17) 0 751 millions (-)	

(-): Data not available

UALITY OF URBAN LIFE (4)

- ▶ In the absence of improvement of living resources (training, information, connection) for most of the African population, the practice of "lawlessness" is developing.
 - * Women and children are the first victims of illegal activities, often through the practice of slavery: trafficking in children, the recruitment of children into armed groups, forced prostitution, forced and enslaved labour or the use of children in the international drug trade (42).
 - ❖ The informal (non-agricultural) sector accounts for 50 to 80% of urban employment in sub-Saharan Africa (37). It brings together companies or independent entrepreneurs (self-employment) that do not always respect the legislation in force (labour law, company law, taxation, protection of workers...). This sector undoubtedly hinders the modernization of economies by avoiding taxation and permitting unfair competition with the formal sector. However, despite its limited wealth creation, the informal sector remains necessary for the survival of at least half of the urban sub-Saharan population and will continue to be so in the near future. This deserves a great deal of attention in order to integrate it gradually into the formal sector.

- Intermediate activities, considered to be legally illegal, are part of current practices and are finally as unavoidable. Two examples are given below:
 - Although in decline throughout the world, child labour (5-14 years old), continues to grow in Africa (43). Over the period 2009-2015, it concerned 28% of children, mainly those in West and Central Africa (44), in both urban and rural areas.
 - Discreet corruption is multifaceted, and is not confined to the corruption of
 public or private sector employees who have any kind of power. It leads, for
 example, to the sale of counterfeit products instead of medicines or, again, to
 a high rate of absenteeism among health service providers... (45).



■ Source: https://opinion.premiumtimesng.com/2015/09/30/the-princess-bride-and-other-non-stories-by-chris-ngwodo/

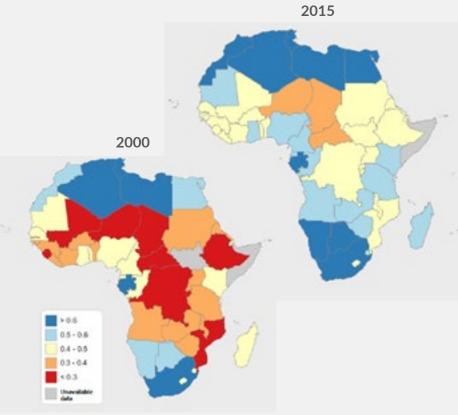
"Development is a process which enables human beings to realize their potential, build self-confidence and lead lives of dignity and fulfilment.

It is a process which frees people from the fear of want and exploitation. It sets back political, economic or social oppression.

Through development, political independence acquires its true significance. It is a process of growth, a movement essentially springing from within society that is developing".

Report of the South Commission led by President Julius NYERERE (Tanzania)

Human Development Index in Africa



■ Source: Processing by IRES of UDP data

A FRICA IN FIGURES (5)

The socioeconomic situation

	Trend	1980	2015	2050	
	Human Development Index (score) (46)	0,426 (1990)	0,524 (2014)	(-)	
African population	"Floating" middle class (\$2 to \$4 per day)	51,1 millions (47) (11,6% of the population)	228 millions (2013) (48) (21% of the population)	2040 (49) : 900 millions	
Afr	"Affluent" middle class (\$4 to \$20 per day)	64,2 millions (47) (14,6%of the population)	148 millions (2013) (48) (14% of the population)	(42% of the population)	
	The poor (<\$1.90 per day) (50)	355 millions (56% of the population) (1990	418 millions (35% of the population)	(-)	
ran					
Sub-Saharan population	Active population	190 million (1990) (17)	391 million (17)	(-)	

(-): Data not available

Evolution of HDI by African Sub-Region (46)

African Regions	1990	2014	Evolution between 1990 and 2014
North Africa	0,533	0,668	25,3%
East Africa	0,337	0,497	47,5%
West Africa	0,333	0,461	38,4%
Central Africa	0,453	0,507	11,9%
Southern Africa	0,481	0,570	18,5%

A few key facts

- Africa's economic growth of 5%, on average, per year over the 2000-2016 period, i.e. a level higher than world economic growth (3.8%) (51).
- A level of foreign exchange reserves equivalent to 8 months of imports, on average, over the 2000-2015 period (52).
- A significant decline in total outstanding debt as a percentage of GDP from 53% in 2000 to 22.4% in 2016 (52).
- External financial contributions of about 180 billion dollars in 2017 (53), but an average investment rate of nearly 17% in 2016 (54).
- A poverty rate down from 56% of the total population in 1990 to 35% in 2015, while the number of poor people has increased by 63 million in the meantime (50).

T

HE URBAN FACT (1)

Sub-Saharan urban specificity

- ▶ Si While North African cities have had similar developments to those of European cities (10), sub-Saharan Africa's cities have experienced nothing comparable, both in terms of the engines of their growth and its pace and scale.
- ▶ It is now time to rethink the sub-Saharan urban fact as a global system in which all its components are interdependent, collective or individual, economic, social or environmental.
- ► This approach, which is both transversal rather than vertical and aimed at linking rather than separating, leads to the recognition of the specificity of the African city.
 - This integrates de facto culture as a functional urban component and calls into question the very mechanical western vision of the urbanization/ economic growth relationship, which is already being undermined by the field data (see Africa in Figures n° 3).
 - On the other hand, the African urban fact benefits greatly from agglomeration economies, as shown by the growth of the continent's megacities and large cities. These external economies of scale, stemming from the proximity of a large pool of manpower, suppliers, customers, and competitors, make it possible to reduce transaction costs and to benefit from network effects (sharing of information and skills).

The sub-Saharan city, a reflection of socioeconomic polarizations

- Like many cities in the South, spatial segregation clearly distinguishes slums from the poorest, townships from the relatively poor (floating middle class) and better served neighbourhoods from affluent middle class (\$4 to \$20/day).
- ▶ Urban congestion, overcrowded infrastructure and high living costs characterize the sub-Saharan city. Negative externalities (water and power cuts and other malfunctions) reduce productivity, increase commercial costs and discourage private investment which, at best, is concentrated in city centres, further accentuating, the divide with the periphery.
- Finally, spatial growth of African cities is mainly the result of premature urbanization (demographic growth being higher than economic growth in some African countries). With some 65,936 new urban dwellers per day between 2015 and 2050 (55), it is therefore necessary to expect a continuous growth of slums, as in Lagos where 2 out of 3 inhabitants are packed (56).

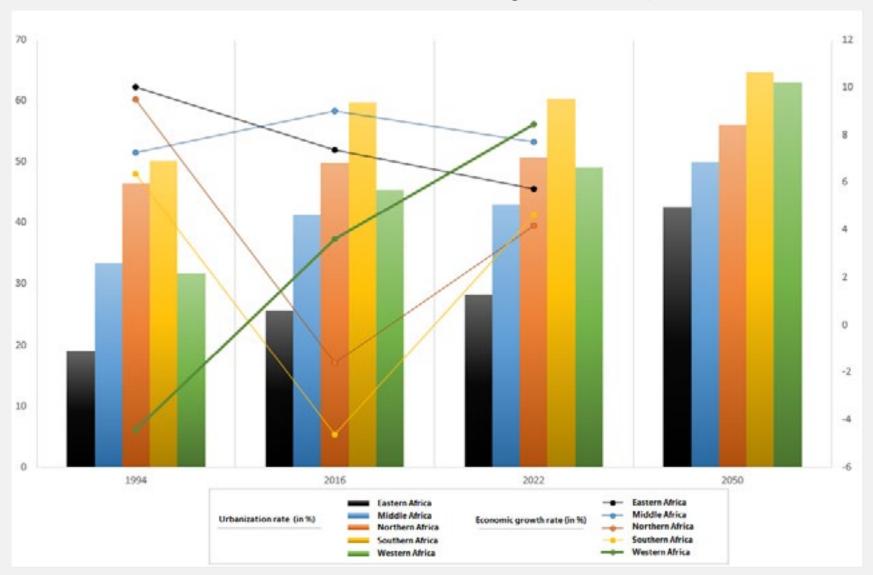
HE URBAN FACT (2)

A multifaceted urban future

- ▶ While all African countries are experiencing an urban drift, some have less than others the means to cope with it.
- ▶ In several African countries, economic growth is driven by the extraction and export of raw materials (oil, gas, coal, diamonds, etc.) and by agricultural production. However, this form of economic development does not naturally benefit cities:
 - ❖ In countries such as South Africa, the continent's leading economy, Nigeria and Angola, the economy is dependent on world prices and currency volatility. As a result, they are subject to indebtedness and low endogenous growth: an average of -0.7% in 2016 compared to 4.2% in 2000 for these three countries (57).
 - ❖ In terms of human development, people in these countries are more heavily affected than those in other countries: they live, on average, ten years less (1), have more illiteracy problems, suffer more from malnutrition and domestic violence.

- In other countries, concentration of political power has generated a windfall economy through preferential access to political elites at the expense of productive activities. This model of growth benefits the capital city, which sometimes includes up to half the population.
 - The positive effect lies in the large number of jobs in the public sector, relatively high wages and a large number of professional services, public works companies, embassies, media and consultants seeking government contracts.
 - The negative effect is reflected in unequal redistribution (nepotism, clientelism), high levels of corruption and poor development of productive activities.
- ► Countries without major resources, such as Senegal, Côte d'Ivoire, Ethiopia or Tanzania, have been able to undertake reforms and diversify: variations in their growth rates indicate a steady increase over a long period, averaging 7.4% in 2016 compared to 4% in 2000 (57) for these countries.

Evolution of the economic growth rate (average over the last 5 years) and of the urbanization rate in the African regions (left-hand scale)



■ Source: Processing by IRES of data from World Population Prospects 2017 and from IMF

HE URBAN FACT (3)

Slow structural transformation

- The complexity of the urban object lies in its multi-dimensionality: all of its components (security, health, economy, power, management, etc.) are interdependent. Any local public policy must therefore be able to act on all these components. This is the reason why decentralization of power is accelerating worldwide, especially in Africa, including where central power is strongest (58). Proximity and subsidiarity, as well as consultation and citizenship, give local authorities back room for manoeuvre.
- ▶ Obtaining the financial resources necessary for the maintenance and development of the city is another necessity. In Africa, they come either from the central, remote and biased power or from one-time and targeted contributions of the business community. The population remains little associated with urban development (taxes, participation, etc.). Hence the importance of the association sector and its local action, whose dynamism and inventiveness manage to improve certain situations, despite the lack of resources.



Kibera (Kenya), one of the largest slums in Africa: 1 million inhabitants. Mobilization of residents, at the Kounkuey Design Initiative (KDI), has led to a significant improvement (since 2012).



■ Source: https://brianjacobbell.com/2013/07/08/kibera-returns/

T

HE URBAN FACT (4)



Despite the lack of attractiveness of many cities to regional or global investors and potential trading partners, the aspiration for freedom, social justice and, more than anything else, the hope of a better life for their children are guiding Africans to the cities.

Urban attractiveness is only just beginning

- Although African urbanization is associated with overcrowding, traffic congestion, high pollution and constrained resources, urban attractiveness is unabated because its positive effects predominate: higher enrolment rates, improved sanitation and access to water. In sub-Saharan Africa, 87% of urban population has access to an improved water source compared to 56% of the rural population in 2015 (17).
- ► Today, it is the natural growth of urban dwellers that is responsible for almost two-thirds of the urban sprawl (13). Then, following the example of North Africa and Southern Africa, urban fertility rates will begin to decline in other parts of Africa as the rural exodus to the cities increases. This is due to population growth in rural areas which is stronger than the increase in their resources.
- ▶ In 2050, African cities are estimated to have around 1.3 billion urban dwellers (9), of which nearly 476 million are young active people aged 15 to 34 years (59). Even if Africa has a high rate of economic growth in the future, this will not suffice: the African urban world will need a flawless governance regardless of the development models chosen.

K EEP IN MIND

- ▶ Whatever the living conditions, cities are an irresistible attraction.
- ▶ Urban growth is booming across the continent, fuelled by the demographic upsurge and migration (13).
- ▶ Intermediate cities have the highest growth rate.
- ► The inadequacy of governance systems in most cities (urban planning, infrastructure development, sanitation water, waste, epidemics) contributes to increasing urban poverty.
- Africa's urbanization is changing the face and future of the continent: it is urgent to invent an African model of urban development, adapted to the continent's challenges, particularly in sub-Saharan countries.

The urban fact from 1950 to 2030



■ Source: http://luminocity3d.org/WorldCity/#3/12.00/10.00

Kampala, the capital of Uganda



■ Source: https://www.populationdata.net/2017/04/19/ouganda-poussee-urbaine-a-kampala/

Chapter 2

RURAL TRANSFORMATION

A FRICA IN FIGURES (6)

The rural world

Agricultural activities

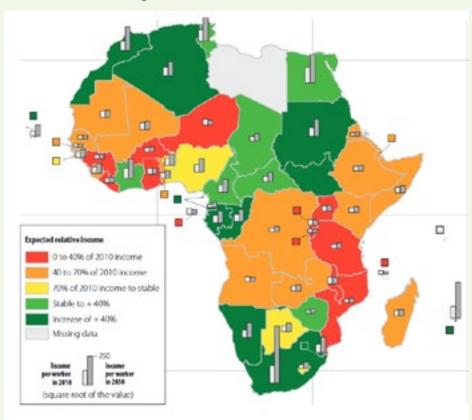
- Subsistence agriculture which involves nearly 300 million Africans (60).
- An agricultural sector which has generated between 55% and 60% of jobs in sub-Saharan Africa over the 2000-2016 period (61).
- An added value of the agricultural sector which represented nearly 16% of GDP over the 2000-2016 period (62).

Electrification (63): More than 620 million Africans did not have access to electricity in 2015.

- An average electrification rate in the continent of 42% in 2015 (63).
- An average electrification rate in sub-Saharan rural areas below 18% in 2014 (64).
- ▶ In the Democratic Republic of Congo, for example, the rate of access to electricity was 13.5% in 2014 (64).
- The net demand for electricity will likely triple across the African continent between 2010 and 2030, according to the International Renewable Energy Agency (63).

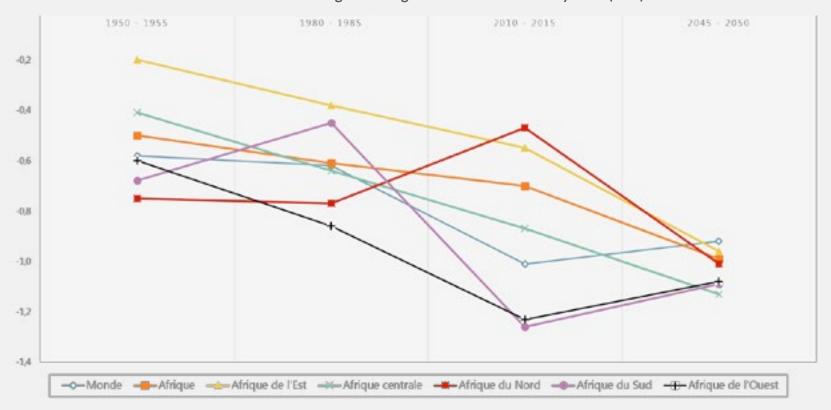
Trend	1980	2015	2050
Sub-Saharan rural population (9)	287 million inhabitants	590 million inhabitants	938 million inhabitants
Rural population of North Africa (9)	63.5 million inhabitants	105 million inhabitants	117 million inhabitants
Annual growth rate of African rural population (9)	2.2% between 1975 and 1980	1.76% between 2010 and 2015	0.75% between 2045 and 2050

Evolution of agricultural income between 2010 and 2050



■ Source: Report on "A new emerging rural world: An Overview of rural change in Africa, 2nd edition", Cirad-Nepad

Evolution of the average annual growth rate of the rurality rate* (in %)



■ Source: Processing by IRES of World Urbanization Prospects data

^{*}Rurality rate: Share of rural population within total population

T

HE RURAL TRANSFORMATION ISSUE

In the developed counties model, urbanization is strongly correlated with increases in agricultural productivity. This will both free up labour available for urban activities (rural exodus), and feed the inhabitants of these booming cities (productivity). But this model does not apply to the African rural world.

Two-thirds of the continent are rural

- ▶ Defined by default as anything that is not urban, the African rural space is the largest in the world. This heterogeneous space included most of the continent (from desert areas to tropical mountains) and populations: around 700 million inhabitants in 2015 (9).
- Difficult living conditions often prevail: endemic poverty (see Focus n°3), the undernourishment of nearly one in eight Africans in rural areas (65), slowed or provoked mobility, a strong erosion of the "human resource".
- These conditions place a heavy burden on the necessary and rapid transformation of the agricultural world, which is expected to feed the 2.5 billion Africans by 2050 (1).

A deep transformation underway

- ▶ "Rural transformation" changes rural areas into artificial, often builtup, spaces much more quickly than expected. The uncontrolled use of natural areas (forests, grassland) or cultivable areas pushes livestock breeders and farmers to migrate or alter biomes in turn.
- ► This transformation also affects human activities. The farmers become landowners or are replaced by the latter. Non-agricultural activities are developing at the expense of modernizing African agriculture, which is too weak in terms of food requirements.
- Thus, natural spaces, human activities and living conditions impact one another, leading to the "vicious circle" of increasing degradation of resources, because of uncontrolled activities and the struggle for survival that the scarcity of precarious resources makes even more vulnerable. This makes it difficult to find appropriate solutions.
- ▶ But the continent's demographic expansion is increasing the urgency and imperative need to put an end to this systemic degradation of the rural world.

IVING CONDITIONS (1)

The first of the three major challenges facing the rural world by 2050, the state of rural living conditions in Africa is based on three main factors: survival conditions, mobility and the state of "human resources".

Survival conditions

- ► The number of the poor continues to grow (see Focus n° 3), due to the consistently higher fertility rate in rural areas than urban areas.
- Malnutrition and migration are the two main outcomes of African poverty. They are due to climate change, the fall in agricultural prices or conflicts..., but also to an international aid, which is always punctual.
- ▶ When livestock die from disease or drought, when the land becomes unproductive due to desertification, confiscation or urbanization, the entire heritage of the peasant, herder or farmer, disappears, with no possibility of return.
- ▶ Its survival depends, then, on the knowledge drawn from the ancient memory of nomads to guide it towards springs, oases, microclimates...

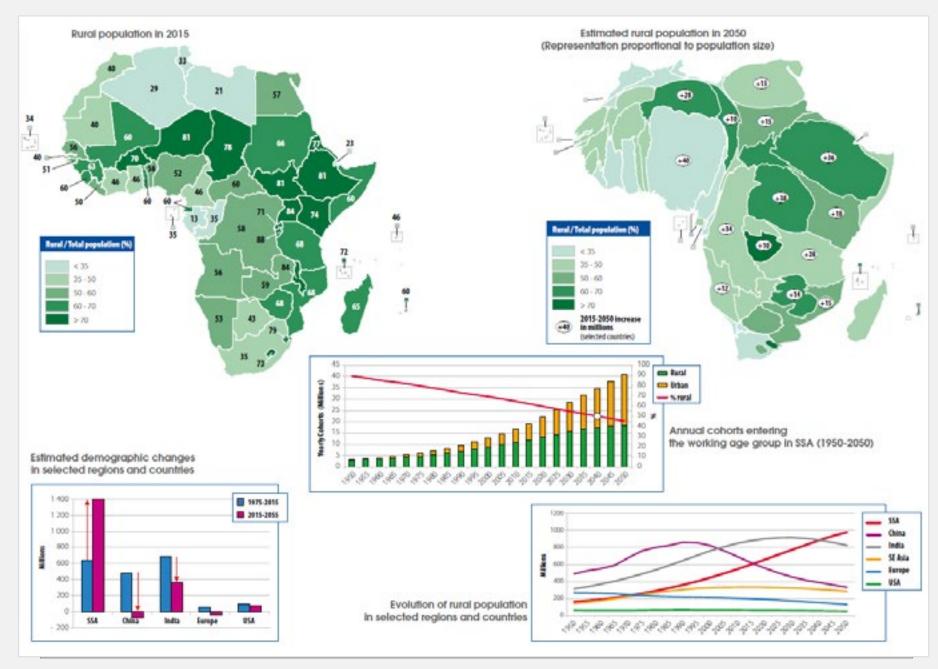
- When this mobility of survival is not possible (frontiers, conflicts, laws) and in the absence of alternative activities (agricultural wage-earners, non-agricultural work), only **predation on natural resources** (hunting, fruit picking, timber) or on the property of others (armed gangs) remains.
- ▶ By 2050, although the trend is towards the pacification of the continent and its economic development, the disastrous consequences of climate change are likely to seriously worsen the situation:
 - Decreased agricultural yields by 10-20% in sub-Saharan Africa by 2050 (66), barren arable land (salting of the Nile Delta) and increased food insecurity.
 - Escalation of conflicts: "land war", as in the Sahel, between livestock breeders and farmers; "water war" between population groups or between different users.
 - Development of epidemics (cholera, meningitis...) linked to the increasing scarcity of drinking water or global warming (extension of the areas exposed to Harmattan winds).
- ▶ Without a quick way of ensuring minimum survival conditions for rural Africans, the state of the continent's "human resource" could only deteriorate.

OCUS N°3

Rural systemic deprivation

- Despite significant progress made for more than a decade, rural systemic deprivation continues to grow in sub-Saharan Africa. The speed and scale of the continent's population growth is such that 418 million people in 2015 (50) live below the absolute poverty line (<\$1.9 per day).
- Malnutrition is the first indicator of rural poverty: one in 13 Africans is chronically undernourished in cities and nearly one in 8 Africans is chronically undernourished in rural areas (65).
- Income and human development are not always strongly correlated in Africa. In Angola, for example, the gross national income per capita increased by 86% between 2000 and 2015 from 2010 constant \$2.407 to \$4.483 (17), while the human development index increased by only 36% rising from 0.391 to 0.533 (67).
- While natural causes such as desertification, aridity, climate change, lack of availability of arable land and water can be incriminated and difficult to combat, human factors are equally responsible.

- Most of the human causes of this poverty could be eliminated:
 - The poor performance of African agriculture in general, due to the lack of infrastructure (roads, electricity, etc.) and training of farmers as well as climatic hazards (see below).
 - * Exploitation of natural resources by foreign companies and the virtual absence of processing of these resources into value-added products.
 - ❖ A financing gap that affects not only the entire continent, but especially the rural world:
 - Low reinvestment of revenues generated from natural resources in Africa.
 - Inadequate domestic resource mobilization (public revenue excluding grants) despite an increase from \$142 billion in 2002 to \$580 billion in 2012 (68); low public and private investment, hampered by the cost of corruption; capital flight: about \$50 billion per year (69).
 - Insufficient external financial resources: FDIs in 2016 amounted to \$56.5 billion, remittances from migrants in 2016 rose to \$64.6 billion and net official development assistance of \$50.2 billion in 2016 (53).



■ Source: Rural Africa in Motion Reprocessed by IRES

IVING CONDITIONS (2)

The complex issue of mobility

- ▶ Because the fifth (70) of the African continent is practically uninhabitable (deserts) and about a third (70) is not very hospitable (arid zones and dense forests) or, quite simply, because nomadism is developed, the millennial mobility of Africans is still often their first condition of survival: flows that come and go, according to climatic hazards, from the exhaustion of land or from interactions (see part 1, chapter 1), thus regulating relations with nature (reconstitution of soils and biomes).
- ▶ However, since colonization, most public authorities have tried to put an end to this mobility because it is considered uncontrollable and nomadism is not well regarded, even evading the founding notion of citizenship. Like the West, many Africans assimilate nomads to backward populations, to the primitive way of life that should be civilized while the sedentary way of life represents modernity and development. They are judged to be opposed to modernity or to sustainability of resources and are increasingly prevented from:
 - pastoral nomadism through border controls or land ownership rights (heritage of colonial systems),
 - agrarian semi-nomadism by governments or non-governmental organizations (see below).

- ► The more recent notion of agricultural mobility, broadly defined, describes migration within the rural world in various forms :
 - Cross-border movement of farmers, in search of arable lands or forests to be exploited, fish to be fished or better working conditions (climate, security, etc.).
 - ❖ Transition from agriculture to artisanal mining, as in Cote d'Ivoire, for example, where this has been favoured by falling cocoa prices and the explosion in mineral prices: 0.5 million artisanal gold miners who have appeared since the beginning of the 21st century (71).
 - ❖ The constitution of "pioneer fronts", spaces for expanding cultivated areas, aimed at increasing agricultural production, ensuring a better balance in terms of rural density and, possibly, controlling the margins of a territory (Burkina-Faso, Cote d'Ivoire, Democratic Republic of Congo, Madagascar).
 - ❖ Finally, the endogenous population growth of the sub-Saharan rural world, estimated at 1.9%, per year on average over the 2000-2015 period, or even 2.5% for some countries in East Africa (9), leads to the increasing transformation of rural spaces into urban spaces (small and medium-sized cities), attracting agricultural populations from remote areas, thus finding new outlets.
- More recently, a reverse movement of mobility has emerged, that of urban to rural: periurban, neo-rural, new farmers, especially in South Africa and East Africa. This trend, particularly in countries where land tenure rights are weak, is not without generating new tensions (see below).

Endo-African mobility

- Nomadism, an ancestral way of life, is still deeply rooted among the populations of arid zones, pushing people and animals to mobility, in search of food, pasture or arable lands.
 - Nomads like the Tuareg of North Africa or semi-nomads like the Maasai of East Africa, pastoral peoples are mobile in essence. Although sometimes forced to settle, 50 million livestock breeders in East Africa and in West Africa still meet their needs thanks to their livestock, fed exclusively on natural pastures in arid zones (72).
 - Caravanners, often semi-nomadic, such as the Tekna of southern Morocco or the Afars of the Horn of Africa, were masters of trans-Saharan trade and, even today, of the invisible routes (ergs, regs) of the continent.
 - Agriculture itself, through logging and slash-and-burn agriculture, can become mobile.
- > 75% of sub-Saharan Africans and 50% of all Africans migrate within the continent (2015). West Africa with 5.7 million intraregional migrants in 2015 and East Africa (3.6 million) are the most dynamic regions. In half of the cases, these migrations take place within national borders (73).
- In 2016, nearly 4 million Africans were forcibly displaced compared to 3.3 million in 2009 (74), either because they had to flee from all kinds of abuses (conflicts, persecutions) or because they were chased off their lands that others had taken control of or sanctuarized, especially indigenous peoples (Maasai in Tanzania, Pygmies in Cameroon...), or because they have been moved to be relocated elsewhere (territorial planning policies).

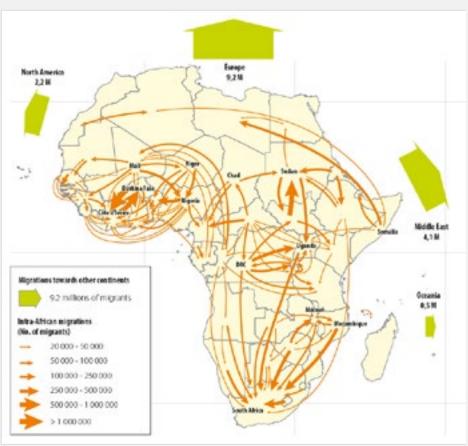
- The new generations seek to earn a better living by working less hard, in a more appropriate environment. It is the principle of rural exodus that generally fuels urban development.
 - Nearly 60% of African rural migrants are between 15 and 34 years old. The majority of them come from farm families and have a lower level of education than urban dwellers (73).
 - Most rural migrants are men, although in some countries (Mozambique, Democratic Republic of Congo, Burkina), women make up the majority of migrants (73).
 - Workers in the agricultural sector earn wages, often scarcely enough to survive (75) and not commensurate with the incomes of non-agricultural workers.
- Nevertheless, African rural exodus is increasingly an expression of the precariousness of rural spaces.
 - ❖ Young people are moving away from rural areas, due to the lack of attractiveness of low-productivity agriculture (64% of working youth derive their livelihoods from land) (72), underemployment and a high unemployment rate. Nearly 220 million rural African youths are expected to enter the labour market in the next 15 years (76) more than the rural economy could absorb.
 - Some rural migrants also flee poverty, exhausting labour, sometimes suffocating traditions (marginalization, discrimination) and periodic or even chronic hunger, not to mention unequal access to wealth, conflict and the impact of climate change.

IVING CONDITIONS (3)

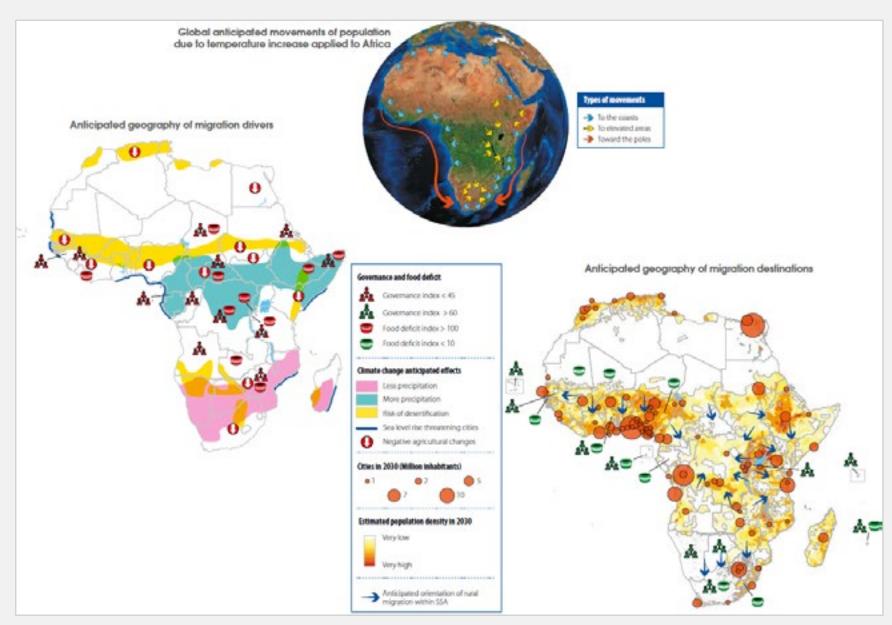
The challenge of recovering rural mobility

- While from 2030 (9), rural populations worldwide would be declining, the sub-Saharan rural population would continue to grow well beyond 2050. There are 327 million rural people who, by 2050, could be added (natural balance) to the 610 million in 2017 (9).
- It is therefore likely that, under the dual impact of population growth and climate change, rural mobility is ongoing, either in the form of rural exodus or migration from one rural area to another.
- But this mobility has a double limitation:
 - * The threshold effect that is reached when indigenous people feel overwhelmed by migrants, especially if land tenure rights are not firmly established or if the pressure on resources is already high (food, housing, etc.). In this case, the tradition of hospitality may turn into xenophobia, as has recently been observed in North Africa and Cote d'Ivoire.
 - ❖ The willingness of most African governments, like 88% of the world's least developed countries in 2013 (77), to reduce rural exodus, in particular by letting urban property prices soar, making access to housing impossible. As a result, shantytowns are spreading as well as periurbanization.
- Mobility of African populations, particularly rural populations, whether intended, forced or restricted, is at the heart of a complex set of problems, requiring systemic and innovative solutions.

African migrations in 2015



■ Source: "A new emerging rural world: An overview of rural change in Africa", Cirad-Nepad



■ Source : Rural Africa in Motion _ Reprocessed by IRES

Living conditions of rural population in some Sub-Saharan African countries



■ Source : Images from:

https://i.pinimg.com/originals/60/cc/60/60c603e10a19a85ca40b342d47d3b3b.jpg https://nu.aeon.co/images/07dee13d-1487-4688-bd96-0febb53949f6/header_Turkana-life-two.jpg http://www.kachwanya.com/wp-content/uploads/2016/05/PG-clean-drinking-water.jpg https://www.globespots.com/pictures/africa/benin/stiltvillages.jpg

IVING CONDITIONS (4)

The state of "human resources"

- ► The notion of "human resources" implicitly refers to a population that is properly nourished, educated, autonomous, free of its choices and capable of taking initiatives.
- Pending the positive effects of recent rural development policies in African countries, rural populations are now facing a deterioration in the quality of "human resources", which is reflected in:
 - ❖ Inadequate preparedness to studying or working as a result of malnutrition or illiteracy.
 - Low productivity, linked to inefficient cropping methods such as vertical furrows on sloping lands (78).
 - Women exclusively tasked with unproductive chores, such as long distances covered to fetch water or wood.
 - ❖ Girls prevented from schooling, sold, married or teenage mothers: 1 in 2 married before the age of 18 in Malawi, 1 in 10 before the age of 15 in Benin (79); maternal mortality is the world's major cause of death among adolescent girls aged 15 to 19 (80).
 - ❖ Children enrolled as soldiers in Africa which has become the world's leading recruiter (81) and children engaged in illegal trafficking.
 - ❖ A survival of age-old traditions, such as making migrant foreign nationals at the disposal of the village (modern slavery)...

- When the local situation is no longer sustainable, mobility appears to be the only hope for improving individual situations. But it weighs heavily on the poorest, those who cannot afford the means to leave. Indeed, here are some of the negative consequences of rural exodus for the regions of departure:
 - impossibility of reviving the local economy due to depopulation: in Cameroon, for example, loss of 60% of rural populations (82),
 - decrease in agricultural production, following the departure of young workers, and the concurrent increase in hunger,
 - the gradual closure of rural schools and colleges, to the benefit of better equipped urban centres, leading to an increase in rural illiteracy,
 - destabilization of families, especially with the departure of girl-mothers to the city, thus abandoning their children to the village where they grow up without real education.
- Thus, erosion of "human resources" in African rural areas leads not only to the increasing impoverishment of those who remain there, but above all to the degradation of human capital necessary to restore the balance of biomes, produce enough to feed urban and rural populations, and develop a rural economy likely to reduce current and future poverty.

ATURAL RESOURCES MANAGEMENT (1)

As the second of the three major challenges facing the rural world by 2050, the state of African biomes is more than worrying. African authorities are gradually becoming aware of this, but the issue is pressing.

A dangerous disruption in the balance of the natural environment

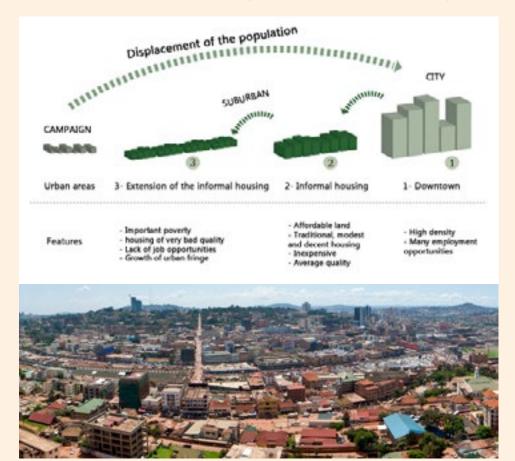
- ▶ Today, there are **three reasons** behind the disruption in the balance of natural environments that are yet robust: **artificialization of sites**, as a result of urbanization and the exploitation of natural environments, the degradation of natural resources that alters ecosystem services, and **the lack of consideration of the impact of human activities**.
- ► The result is a decrease in natural resources, both plant and animal, which is dangerous for the whole of the biocenosis that allows ecosystems and, therefore, human life on the planet earth to exist.
- ▶ If, from time immemorial, African peoples have been able to draw their livelihoods from a difficult land, a generous subsoil, mountains and forests with exuberant vegetation (see part 1, chapter 2), the millions of people whose subsistence practices ensure their survival are, today, in an extremely precarious situation.
 - 2/3 of African lands would already be degraded, impacting 485 million Africans (83). Desertification mainly affects the Sahel, Kalahari and the Horn of Africa. With drought, it causes the loss of 12 million hectares of arable lands each year (84).

- ► The drastic reduction in biodiversity and the resulting disruption of natural environmental balances leads to sustainable phenomena, such as the unproductivity of arable soils, accelerating desertification or the proliferation of pests, attacking crops, food and livestock by default of predators.
- The situation is too serious to continue to be dealt with in terms of the usual urban-rural divide. It has now become necessary to rebuild an alliance between nature and human activities and needs.

Artificialization of natural spaces

- ► The development of cities, infrastructure and related economic activities are extremely space consuming.
 - Urban land consumption is contingent upon urban population growth and the decline in population density. Thus, urban land cover in sub-Saharan Africa could increase by more than 12 times between 2000 and 2050, if urban densities were to decrease, for example, by 2% per year (85).
 - At the same time, other elements contribute to the degradation of soils and plant cover, such as agricultural practices (pioneer fronts, extensive and semi-nomadic agriculture, extensive pastoralism), logging, forest harvesting activity (basic facilities, evacuation routes, log storage sites, etc.) and, in particular, mining activity (waste, release of toxic products, contamination of water which contributes to sterilize exploited spaces, "extractive frontiers").

The environmental impact of the urban sprawl



■ Source: https://le-cartographe.net/dossiers-carto/monde/34-mon-travail/monde/67-bidonvilles et Urban growth of Kampala, Uganda: pattern analysis and scenario development, Vermeiren K, Van Rompaey A, Loopmans M, Serwajja E, Mukwaya P

- The city is expanding to the detriment of natural spaces, especially arable lands: a major challenge in an arid continent with exploitable areas suffering from degradation.
 - Periurbanization and construction of new towns (e.g. Akatsi in Ghana and Agaie in Nigeria) in rural hinterlands is developing rapidly. Many urban fringes are strewn with unfinished houses and building materials stores, without any land servicing.
 - The same is true of existing cities, which are growing faster, even more rapidly, in size than in population: for example, Lagos whose surface area almost tripled while population doubled between 1990 and 2014 (13).
- In addition to the urban extension itself, including informal settlements, urban sprawl and periurbanization, there are also space-consuming transport routes (roads, railways) that are multiplying between rapidly expanding agglomerations.
 - Roads have long been absent from residential planning. They are, therefore, the subject of new land rights-of-way, such as the Trans-African Highway Network, a multiparty project aimed at building some 56,683 km of road infrastructure (see map of the Trans-African Highway Network).
- Thanks to their induced effects, the peripheral activities of urbanization, such as construction sites or logistics platforms, contribute as much to the baring of soils (removal of the vegetal cover, erosion, etc.) as to the generation of waste. For example, in Cameroon, plastic bags are believed to be responsible for the annual loss of 200 000 hectares of vegetal cover (86).
- In total, cities could occupy 5.87 million km² of land by 2030, which is nearly 8 times the surface area of Morocco (87).

ATURAL RESOURCES MANAGEMENT (2)

Degradation of natural resources

- ► Are considered natural resources, both:
 - nature's products (substances, living organisms, natural environment, raw materials, energy source...) likely to satisfy human needs,
 - ecosystem services provided by nature that include supply services (oxygen production, food, drinking water, etc.), regulation (floods, climate system inertia, etc.), support for life on earth (biomass, trace elements, recycling, etc.), life creation (ontogenesis) and carbon sequestration (forests, oceans, soils, etc.).
 - more recently, biodiversity, the aesthetic, scientific or recreational benefit of nature and its eco-potentiality have been integrated into "natural resources".
- ► The notion of "natural resource" therefore goes far beyond the purely economic framework of the value it can represent in market terms. It is, first of all, an essential, non-substitutable condition of human life on earth.
- ▶ Hence the interest of **considering biomes in their global, systemic function**, like tropical primary forests, rather than treating the different resources separately (cf. part 1).

- Today, three major challenges must be addressed by everyone:
 - ❖ The decline of biodiversity (of genes, species and ecosystems) that the Strategic Plan for Biodiversity 2011-2020 for the Africa region and the "Aichi Targets" (UNEP-WCMC, 2016) are trying to address.
 - The destruction of natural habitats (first cause) and overexploitation (hunting, fishing, poaching) lead to a loss of biodiversity, which is all the more rapid as the interdependence of ecosystems and the food chain is strong.
 - By 2050, climate change could become the dominant factor in biodiversity loss, followed by logging and, to a lesser extent, land cultivated for bioenergy.
 - The growing scarcity of available freshwater, which will mainly affect North Africa and South Africa, in the context of a global freshwater deficit, estimated at 40% by 2030 (88);
 - Alterations in ecosystem services (including pollination, maintaining soil fertility, climate moderation, wastewater treatment, air and water quality) that accelerate the degradation of biomes. These alterations are already quite serious, due in particular to the conversion of forests and grasslands into croplands, large-scale fishing, diversion of freshwater and its storage behind dams.

The 6th mass extinction

- Overexploitation of resources (particularly fishery and forest resources), destruction of specific biomes (e.g. mangroves) and mismanagement of freshwater (diversion and dams) have already led to considerable alterations of African ecosystems (89).
 - The African population, faced with a high risk of water stress, could reach in 2050 between 350 and 600 million people (90).
 - ❖ Yields from rainfed agriculture could be reduced by up to 50% in some African regions by 2020 (91).
 - Between 2005 and 2030, 13% of the planet's natural forest area could disappear, with the highest rates of deforestation recorded in Africa and South Asia (92).
- While the decline of animal species is worldwide (6th mass extinction of terrestrial and marine animals, vertebrates and invertebrates) (93), it takes on a particular dimension in tropical Africa. In this region, between 130,000 and 170,000 people (94) live directly from nature.
 - ❖ The decline in wildlife population has been 58% since 1970 and could reach an average of 67% by 2020 worldwide (95).
 - ❖ The "empty forest syndrome" is already spreading in Africa, while 75% of tropical trees depend on animals to disperse their seeds, hence the accelerated disappearance of forests, especially primary forests (96).
 - ❖ The Congo Basin is the most affected area on the continent. Yet, more than 93.2 million people live on its 3.7 million km², a population that could double by 2035 (97).



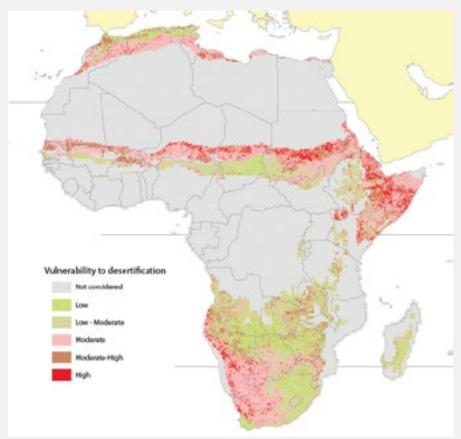
There were 35,000 African lions left in 2016, i.e. 43% less than in 1993 (93): an extinction expected by 2050?



An animal, now protected, the pangolin, on the brink of extinction, is the most poached animal in the world (for its scales, meat, blood). Essential however in the food chain because it consumes 70 million ants/termites per year.

ATURAL RESOURCES MANAGEMENT (3)

Risk of desertification in Africa



■ Source : Soil Atlas of Africa: Issues affecting the soils of Africa, European Commission _ Reprocessed by IRES

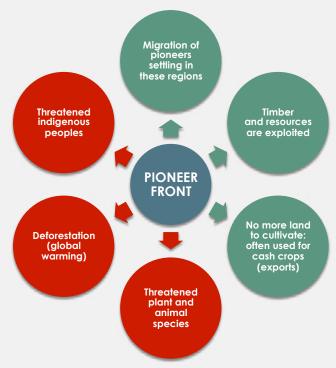
- The three main causes of natural resources degradation that must particularly be considered in order to better understand the global mechanism at work (cf. IRES Strategic Report 2017) are the following:
 - Chain reactions: marine and terrestrial biomes are systemic sets with interdependent components, just like the food chain or the climate system. When a reaction is initiated, its impacts are more exponential than linear and it is difficult to predict when it will stop after the generating cause is gone. Similarly, the degree of resilience of the biomes, particularly in terms of regeneration capacity, is poorly known,
 - Climate change: the complexity of the earth's climate system is such that no model can now take into account all its interactions. The only certainty is that, like biomes, climate chain reactions will not stop only because of the reduction in CO₂ emissions. Here again, the triggered mechanisms escape human corrective action.
 - Thus, by reducing carbon sequestration, deforestation amplifies and accelerates climate change: the 2nd green lung of the planet, the Congo Basin could reach 3°C of warming in 2050, disrupting the entire rainfall regime in Central Africa (98).
 - Human activities: by ignorance or short-termism, because of immediate needs to be met or because of ancestral, today harmful, practices, urban and rural populations are altering natural environments. The vastness of the African continent argues in favour of these natural environments: the impact of human activities seems to be unable to change such a vast environment. But "small rivers make great rivers".

ATURAL RESOURCES MANAGEMENT (4)

The double dilemma of natural resources management

- ▶ Regardless of the distribution of damage caused to African natural resources and natural spaces, human action has a high proportion of responsibility. However, a double dilemma makes arbitration particularly complex.
- The first dilemma is most obvious: feed or preserve? Faced with the need to feed not only 18.9% of Africa's current population (99) who are undernourished, but the 1.3 billion Africans who will be born by 2050 (4), we must ask ourselves how crucial is the protection of natural environments compared to those needs?
 - In the Congo Basin, for example, the expected doubling of the population between 2010 and 2035 (97) would lead to increased deforestation and consequently to an increase in cultivable and buildable lands.
 - Similarly, demand for energy wood is also exploding (cooking, heating) as a result of the much too slow progress of electrification compared to the needs.
- ► Two major issues illustrate this dilemma:
 - The issue of pioneer fronts (see graph opposite) that create development, but damage the environment and threaten local populations.
 - The issue of "green colonialism", which prohibits access to protected areas by indigenous peoples who lived there or whose survival depends on those areas (e.g. Pygmies).

Threats and opportunities of the pioneer front



■ Source: Processing by IRES _ http://histoire-geo-crecy.over-blog.com/ article-les-fronts-pionniers-90298376.html

ATURAL RESOURCES MANAGEMENT (5)

- ► The second dilemma is more complex: it opposes the Western development model to the traditional development model.
- ▶ On the one hand, modernity is embodied in urbanization, control of nature (Anthropocene), the use of science, technology and Western models, and accelerated economic development. But the human and environmental impacts of such an approach are significant:
 - urban planning, which is either non-existent or inadequate, leads, for example, to watercourses diversion or infilling, thus causing the disruption of a whole watershed and its environment.
 - Interrupted ecological corridors, excessive consumption of bush meat by city-dwellers because it is "fashionable" and the introduction of new exotic species via international transport lead to the "empty forest syndrome".
 - The persistence of the colonial land concession model (multinational agrifood, forestry and mining companies, appropriation of land by the new national economic elites, etc.) is a major threat to the future of local populations and ecosystems.

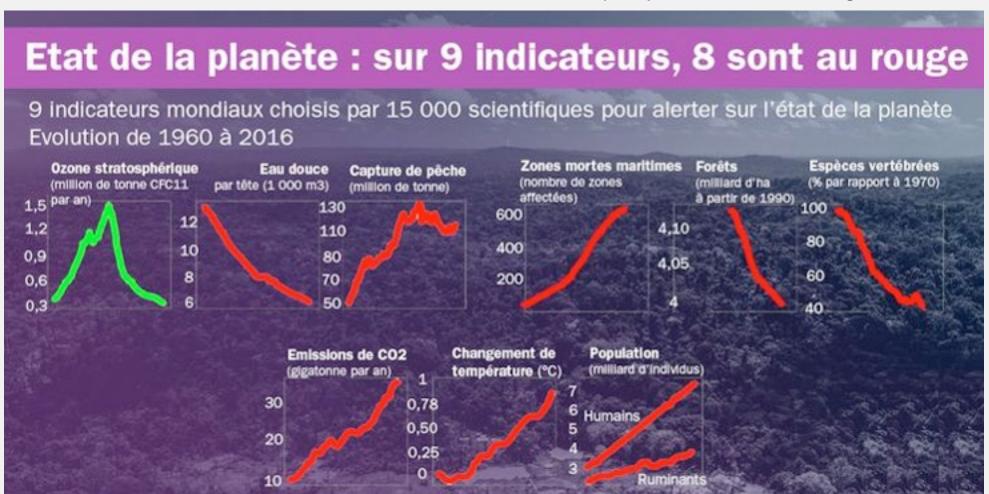
- On the other hand, traditions, ancestral lifestyles, and indigenous peoples are all regarded, at best, as survivors doomed to disappear, at worst, as obstacles to progress. This partly explains:
 - the frequent absence of local participatory processes in the conception and implementation of biodiversity conservation strategies, in spite of the commitments made to obtain "free, prior and informed consent" (100),
 - the failure to follow up on subsequent complaints against violence committed by local militias acting on behalf of environmental NGOs against indigenous peoples. Local governments, which are supposed to protect these populations from such abuses, receive financial, technical and logistic support from these NGOs (100),
 - the blatant disregard for animism, regarded as "a religion of primitives", whereas its vision of the world carries a reconciled approach to nature,
 - the loss of traditional knowledge, especially in agriculture and pastoralism, as transmission is refused by the new generations who prefer modern techniques. Most of the damage caused by agriculture comes, in reality, from colonial techniques imposed on soils, climates and crops for which they were unsuitable (101).

ATURAL RESOURCES MANAGEMENT (6)

Towards an African ecological thought?

- ► "What man has done, he can undo": this conviction is necessary to manage the natural resources of the African continent. Otherwise, inertia takes over everything:
 - ❖ Indeed, the complexity resulting from systemic interactions within natural environments often discourages the intervention of competent authorities. The same is true of the extent and speed of certain degradations (recurring droughts, floods), attributed to climate change alone or, yet, emerging scourges, such as the appearance of new zoonoses or the spread of invasive alien species.
 - ❖ However, adaptation policies can still be pursued, conservation measures and warning systems put in place to limit damage.
 - In fact, with the exception of unpredictable factors (political instability or armed conflicts in biodiversity-rich areas), many of the causes leading to lethal alteration of African biomes are likely to be curbed.
- ▶ This conviction is not enough, however, as it must be based on genuine self-determination of peoples, which is the only condition for giving a real meaning to the term "independence". This is based on two key factors: full knowledge of the multiple stakes and forces at work which depend on the level of education (cf. part 3) and full awareness of who we are and what we want to become (cf. part 1).

- Therefore, the double dilemma described here can only be resolved through the most objective possible knowledge of the environmental situation of the entire continent and its medium- and long-term consequences for African populations. African thought, as a champion of syncretism, has, today, the means to reconcile socioeconomic development and sustainable development: degradation of the continent's biomes is not inevitable (102), but it is urgent to act (see below the Call of the 15.000 scientists).
- Transformation of the rural world is already underway, supported by:
 - the growing awareness among both the diaspora and local intellectual elites as well as an indigenous African ecology is possible (cf. community forest management (102), the Makishi masquerade in Zambia),
 - the proliferation of smartphones in rural areas, allowing access to knowledge (explanations, data, warnings) and anticipation tools (weather forecasting, mutualization, etc.), as well as the creation of shared networks (innovations, best practices) becomes a powerful tool for a better management of the continent's natural resources.



9 indicators of earth destruction since 1960

■Source: Reprocessing by IRES _ https://www.franceculture.fr/environnement/alerte-de-15000-scientifiques-leurs-9-indicateurs-de-degradation-de-la-planete-analyses

S CENARIOS 2050

What will happen in Africa by 2050 if global warming exceeds 2°C? (1)

► Cote d'Ivoire, outbreaks of epidemics

The strategy paper of the National Climate Change Programme, published by the Directorate-General for Environment in September 2014, pointed to this risk. With the rise in temperatures, the harmattan, this hot and dry wind has now reached the coast. Epidemics of meningococcal meningitis have appeared with it, 10% of which are fatal cases throughout the country. Abidjan must also face water scarcity, leading to an increase in cholera cases.

► Morocco, thirsty...

Despite the implementation of its National Water Plan, Morocco consumes more water than it produces. The expansion of agriculture, industrialization and the exponential increase in household demand, due to the logical rise in their standards of living, have caused the Kingdom's water reserves to fall by 80%. To solve the problem, the country had to build several dozen desalination plants. These energy-intensive plants are powered by solar energy, which has long since become the country's main source of energy.

► Egypt, peril on the Nile delta

Already in 2014, Saeed, a young farmer, was worried about his clover field. Located 400 meters from the coast, in the Nile delta, it was dying. Today, it is only a distant memory: the sea has covered 8,000 km, or two-thirds of this vast and once fertile area. The country's richest region, once inhabited by 40 million Egyptians, is now almost sterile.

Nigeria, a sea of crude oil

The world consumes 14 more million barrels of crude oil than thirty years ago. To meet the demand, Africa has doubled its efforts and Nigeria, the continent's largest producer, was the first to do so. The acts of siphoning off oil pipelines have resumed more intensively after the amnesty has been cancelled, based on an income in exchange for the protection of these infrastructures. The Ogoni country, where unemployment accounts for nearly 30% is now a black and viscous sea, devoid of all aquatic and human life.

■ Source : Comments by national experts collected by Jeune Afrique

http://www.jeuneafrique.com/mag/375292/societe/cop22-scenarios-se-passera-t-afrique-dici-2050-rechauffement-climatique-depasse-2c/

S CENARIOS 2050

What will happen in Africa by 2050 if global warming exceeds 2°C? (2)

► The Sahel, a land war

The extent of the crises experienced by the Sahel region in the first two decades of the twenty-first century, attributed to Islamic radicalization, has ended up by concealing another reality: the start of a real land war. Driven to the south by drought, pressed by the increase in cultivated land, victims of growing intolerance to their way of life, nomadic herders, when they do not join the ranks of jihadists, take up arms and do not hesitate to shoot farmers who threaten them with the same fate if they encroach on their fields.

Seychelles, inundated

The Alliance of Small Island States had sent out alarm signals in 2015 in Paris, at COP21: it was urgent to take the necessary measures to limit global warming to 1.5°C, otherwise most of the small islands would disappear by 2100 due to the inexorable rise of the ocean from one to two meters on average. The appeal was relayed, but actions did not follow. Thirty-five years later, most of the coral islands that make up the Seychelles were emptied of their inhabitants. To cope with the influx of these climatic refugees, the State launched the construction of artificial islands, on the model of Perseverance Island, which emerged from the waters in the years 2000, on the outskirts of the capital city Victoria and which hosts more than 2,000 Seychellois people.

Senegal, rising water levels

The Gate of the Third Millennium, erected in 2001 on the corniche of Dakar, is built on the waterside. The entire seaside, renovated and modernized in 2008 has disappeared. Luxury hotels and the country's first mall, the Sea Plaza, had to close. The World Bank and the Senegalese government, in a study published in 2013, were right: the numerous extractions of sand for construction, the disappearance of the mangrove or, again, urbanization of the upper side of the beaches have accentuated the rise in water levels, linked in particular to global warming.

► Tanzania, a forest around the volcano

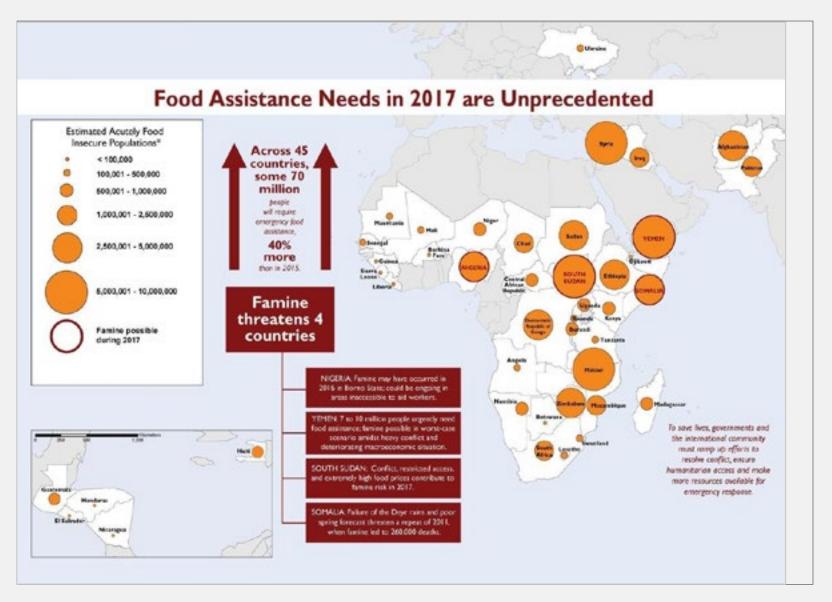
The vast stretches of grassland at the foot of the smoking volcano Ol Doinyo Lengaï, the sacred mountain of the Maasai, is only a distant memory. The concentration of CO_2 in the atmosphere, coupled with an increase of 20% in rainfall, has created a high and dense forest, forcing the typical buffaloes of this part of northern Tanzania to migrate.

In South Africa, where the same phenomenon has been observed, botanists have noted the extinction of 25% of the plant species that are typical of this ecosystem, giving credence to the scenario established in 2005 by Geographer Colin J. McClean, according to which 40% of them could have disappeared from these areas by 2085.

■Source : Comments by national experts collected by Jeune Afrique.

http://www.jeuneafrique.com/mag/375292/societe/cop22-scenarios-se-passera-t-afrique-dici-2050-rechauffement-climatique-depasse-2c/

Food aid needs in 2017



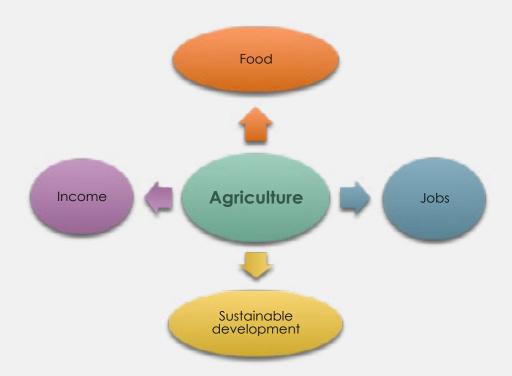
■ Source: https://www.weforum.org/agenda/2017/03/21st-century-famines-have-nothing-to-do-with-a-lack-of-food

HE AGRI-FOOD CHALLENGE (1)

The major challenge facing the rural world by 2050 is its capacity to feed all Africans, urban and rural, while respecting the environment.

A quadruple challenge...

- "Of course we are worried about the ecological consequences. But we have to grow the economy. We have to create jobs for our own people. How we do it sustainably is where we are struggling." Amara KONNEH. Finance Minister of Liberia.
- The food challenge: despite the continent's remarkable agricultural potential, 223.8 million Africans between 2014 and 2016 were undernourished (18.9% of the population) of whom 205.2 million are sub-Saharan (99), or 21.3% of the population.
- The employment challenge: agriculture is the main activity of the continent. It employs nearly 60% of Africans, half of whom are women (103), although this sector represents only 16% of the region's GDP (62).
- The income challenge: improving agricultural performance and associated supply chains should transform the economic misery of rural areas into prosperity.
- The challenge of sustainability: 65% of the soil is degraded and 3 million hectares of forest disappear every year. The loss of land and nutrients already reduces Africa's GDP by 3% (104).

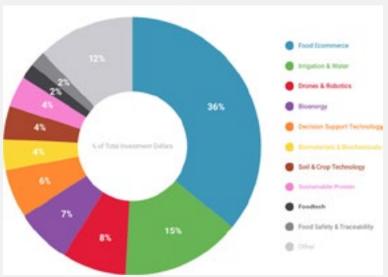


HE AGRI-FOOD CHALLENGE (2)

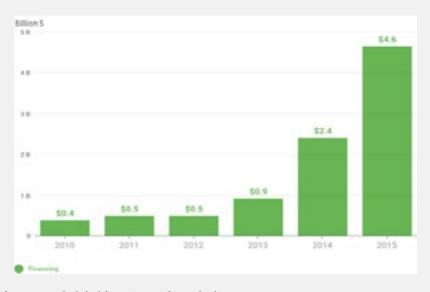
... under an increasing global pressure

- In order to feed an estimated world population of nearly 10 billion people in 2050, global food production is expected to increase by 70% between 2007 and 2050 (105), supported by an investment estimated at \$83 billion per year in 2009 in agricultural development (106).
- After the 2006 and 2008 food crises, a large part of the increase in agricultural production aimed at lowering international prices was provided by developed countries. But they will not be able to meet the future needs of humanity.
- In many emerging countries, the growing demand of more numerous and affluent populations is hampered by a decline in local production: for example, in China, cultivated land could be reduced by 2 million hectares by 2025 (107).
- All eyes then turn to sub-Saharan Africa, which is supposed to host more than 60% of the available and unexploited arable land in the world. The recent interest for private investment in agriculture bears witness (see the graphs opposite).
- ▶ But Africa will have to be able to feed itself before it can feed the world.

Breakdown of global investment in Technological Agriculture (Ag Tech) by sector



Evolution of Ag Tech's annual financing worldwide



 $\blacksquare \ \, \textbf{Source}: \textbf{https://gro-intelligence.com/insights/planting-dollars-the-growing-pace-of-global-investment-in-agriculture} \, \, \textbf{Source}: \textbf{https://gro-intelligence.com/insights/planting-dollars-the-growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agriculture} \, \textbf{https://growing-pace-of-global-investment-in-agricult$

A FRICA IN FIGURES (7)

Food

▶ Prevalence of undernourishment in 2014-2016 (99):

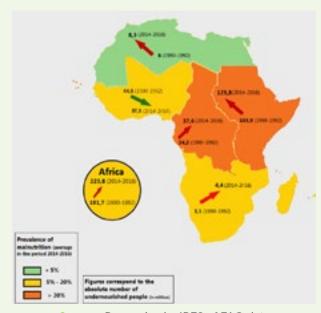
Southern Africa: 7%Middle Africa: 24.8%

Western Africa: 10.6%Eastern Africa: 32%

Northern Africa: 4.5%

- Protein and caloric intake per capita (108): the growth rate of this intake by 2025 varies between 1.5% in Middle Africa and 7.5% in Eastern Africa.
- Food insecurity in Africa is evidenced by:
 - chronic malnutrition, mentioned above, which affects an additional 23 million school-age children who used to go to school on an empty stomach in 2012 (109),
 - recurrent hunger riots: 2008 in Egypt, in Mauritania and Senegal following the increase in agricultural commodity prices on world markets and, therefore, consumer prices,
 - food crisis episodes: 2011 in the Horn of Africa, 2017 in Eastern Africa,
 - lack of water: 319 million people without access to drinking in 2015 in sub-Saharan Africa (110),
 - the growth of obesity in Africa (30% of adults), notably because of lack of access to a balanced diet: according to the World Health Organization, a quarter of the 41 million obese children under 5 years old are African a number that doubled between 1990 and 2014. Thus, non-communicable diseases linked to obesity (diabetes, cardiovascular diseases) could be the leading cause of mortality in Africa by 2030 (111).
- This food insecurity is a specifically urban problem: in 2016, food was about 35% more expensive in African cities than in other low- and middle-income countries (112).

State of malnutrition in Africa by region



■ Source : Processing by IRES of FAO data

By 2050, an increase from approximately 1.2 to 1.9 degrees celsius will suffice to raise the number of undernourished Africans by 25 to 95%: + 25% in Middle Africa, + 50% in Eastern Africa, + 85% in Southern Africa and + 95% in Western Africa. (113)

HE AGRI-FOOD CHALLENGE (3)

To meet these challenges, solutions must be found to three problems: food insecurity, land availability and agricultural productivity.

Food insecurity

It occurs in the event of unavailability or unstable access to food in sufficient quantity and quality.

- ▶ Regardless of cyclical phenomena such as food crises (soaring international prices) or famines (conflicts or climatic events), the problem of food insecurity in Africa is based on the following triptych:
 - ❖ Africa's population is growing faster than the evolution of agricultural production, which per capita declined by 25% between 1967 and 2007 in sub-Saharan Africa (114).
 - ❖ For the 418 million people living on less than \$1.90 a day in Africa (50), incomes are insufficient to access the food market, which is too expensive.
 - ❖ The weak organization of the food chain and the lack of infrastructure hamper the distribution of food products, even though agriculture today provides livelihoods for about 70% of the African population (115).

"Africa has \$35 billion in net food imports per year, a figure that is expected to reach \$110 billion by 2025, if current trends continue. By cultivating what we do not consume and consuming what we do not cultivate, Africa is ruining its rural areas, exporting its jobs, weakening the incomes of its farmers and losing its youth who prefer to migrate to Europe or to other horizons".

Excerpt from "Transforming Africa's Agriculture" by Akinwumi A. ADESINA, President of the African Development Bank, 15/10/2017 (Inter Press Service) (116)

The continent's food security is dependent on improving domestic agricultural yields, on the state's ability to regulate stocks based on the anticipation of famines and on privileged partnership agreements with producer countries likely to avoid these famines. The Comprehensive Africa Agriculture Development Programme (see Focus n°7) is doing well in this direction, but is struggling to bear fruit across the continent.

Agricultural transformation and food security in Africa -1

Maputo Declaration

Objectives of the Maputo Declaration

The commitment by the governments of the signatory countries to allocate a minimum of 10% of their national budget to agriculture and rural development with a view to achieving agricultural growth of at least 6% per year.

Achievements of the Maputo Declaration

Setting up food reserve systems. To this end, "the majority of funds allocated to consumer programmes in the region have been used to maintain public stocks of the main staple cereals".

Africa surpassed the target set by the Comprehensive Africa Agriculture Development Programme (CAADP) in 2007 for agricultural growth, with the number of countries meeting this target almost doubling to 10.

(Source: African Development Fund, 2010).

Progress towards an agricultural growth rate of 6% has been achieved, however, with a wide variation from one country to another.

Agricultural growth was mainly due to an increase in the area of cultivated land and not to an increase in productivity per unit area.

Less than 20% of countries have met their commitments on agricultural expenditure (OECD/FAO, 2016).

The Maputo agreement did not resolve the issue of investment efficiency or accelerate the use of agricultural innovations by producers.

Objectives

- The Declaration on Agriculture and Food Security, known as the "Maputo Declaration", signed in July 2003, made the Comprehensive Africa Agriculture Development Agenda a continental priority.
- Its 4 major pillars are:
 - sustainable land and irrigation water resources management,
 - access to markets (increase in investment for infrastructure improvement and development...),
 - food development and hunger reduction (improvement of production and increase in trade),
 - agronomic research.

Results

- Depending on the volatility of food prices, the impact of conflicts and climatic conditions (droughts and floods), the results obtained have been limited. Between 2004 and 2010:
 - 10 countries (Ghana, Zimbabwe, Malawi, Senegal, Chad, Mali, Ethiopia, Niger, Burkina Faso, Guinea) have reached the target of 10% of their national budget allocated to agriculture (117),
 - ❖ 3 countries reached this target over the whole period (118),
 - ❖ 1/3 of the countries experienced a decline in public expenditure on agriculture during this period (119).

Agricultural transformation and food security in Africa -2

New agreements

- The African Heads of States meeting in Malabo in 2014 adopted two declarations, known globally as the "Malabo Declaration" (120).
 - One is the Comprehensive Africa Agriculture Development Programme and the commitment to accelerate the growth and processing of agricultural products for shared prosperity and improved livelihoods. It follows that of Maputo and contains 7 commitments.
 - The other concerns food security for inclusive economic growth and sustainable development in Africa and includes two decisions, of which the importance of Africa's food sovereignty and a programme to combat climate change in Africa.
- Other objectives include doubling agricultural productivity, halving current levels of post-harvest losses and tripling intraregional trade. In the context of resilient agricultural systems, there is also the objective of providing social protection systems and decent employment opportunities for rural populations (108).
- Progress and performances will be assessed every two years on the basis of a single form, completed in March 2017 (121).

The Maputo Declaration

The new objectives of the Malabo Declaration

Evaluation of progress and performance every 2 years on improvement and use of resources.

Consideration of rural areas as engines of agricultural growth and transformation.

The objectives

of the Maputo

Declaration have

been reaffirmed

in the new

Malabo Declaration

Allocate 10%

of public resources

to agriculture.

Consideration of the role of women in improving agricultural production.

Young people, an indispensable asset to achieve the transformation of the agricultural sector.

Private sector contribution essential for agricultural transformation.

Alignment of policies and investment to build partnerships and support the agri-food industry.

Main commitments of the Malabo Declaration

Commitment to eliminate hunger by 2025 by doubling productivity, with a focus on inputs, irrigation and mechanization.

Halving poverty by 2025, by building or strengthening inclusive public-private partnerships.

Willingness to stimulate intra-African trade in agricultural products and services through the acceleration of the Continental Free Trade Area and the transition to a continental common external tariff system.

Increased resilience of livelihoods of production systems to climate change hazards and risks.

The changes introduced by this new declaration are better intersectoral coordination through effective coordination mechanisms and strengthening the role of central government agencies in implementing the Comprehensive Africa Agriculture Development Programme.

HE AGRI-FOOD CHALLENGE (4)

- ▶ At the same time, **Africa is being impacted** :
 - by climate change with particularly strong impacts on the continent: by 2050, four regions of the world, including North Africa and sub-Saharan Africa, will face food insecurity due to climate change (122),
 - by urbanization that modifies the demand for food (fruit, vegetables, meat), thus altering traditional production balances. In North Africa, for example, rapid urbanization has increased demand for water and wheat (urban diet), thus increasing the region's dependence on volatile global food markets (123).
 - by public policies that have not always provided the agricultural sector with the investment it needed and that, by choosing exogenous development, have sometimes favoured the export of food products at the expense of local markets.
 - The drought that hit southern and eastern Africa in 2016 diverted international aid away from productive investment to alleviate the food crisis (124).

- ► The prospects in the coming decades are rather mixed because:
 - In sub-Saharan Africa, food insecurity is the highest in the world and progress in overcoming it is most uneven, despite the increase in the total value of agricultural production over the last decade,
 - Nevertheless, by 2025, agricultural production is expected to grow at a rate of 2.6% per year (125) as a result of improved productivity rather than land expansion, thanks to:
 - the rapid adoption of technology,
 - · the emergence of medium-sized farms,
 - better integration of small-scale producers into the value chain,
 - significant investment.
 - However, as agricultural supply is growing at a slower pace than demand, the import of most basic food commodities is expected to continue to increase in Africa.
- ► The future of food security on the African continent therefore depends on the ability of governments to rapidly transform the rural world as well as the overall African economic system.

HE AGRI-FOOD CHALLENGE (5)

Availability of land

- ▶ Since the realization that the planet is indeed a "finite world", the availability of land has become a crucial issue. Because natural action (erosion, climate change) and anthropogenic action (overexploitation, contamination of the environment, salinization, disappearance of natural regulation systems) is now responsible for an increased destruction of agricultural land: approximately 30 million hectares of cultivable land lost per year (126) worldwide.
 - ❖ In order for the world to be able to feed itself in 2050, Africa is now considered the future breadbasket of the world, with its 600 million hectares of unused agricultural land, representing more than half the world average (127).
 - But this simplistic view does not take into account two availability factors that characterize the African continent: the environmental situation and the legal status of the soil.
- ▶ The environmental problems can be summarized as follows:
 - Unused land includes wooded areas. These are essential for maintaining biodiversity, especially primary forests, combating soil erosion and capturing CO₂. Already, 3 million hectares of forests are disappearing every year in Africa (108).

FAO Definitions

Arable land is a situation, not a potential. They refer to land currently used for temporary agriculture, including fallow land.

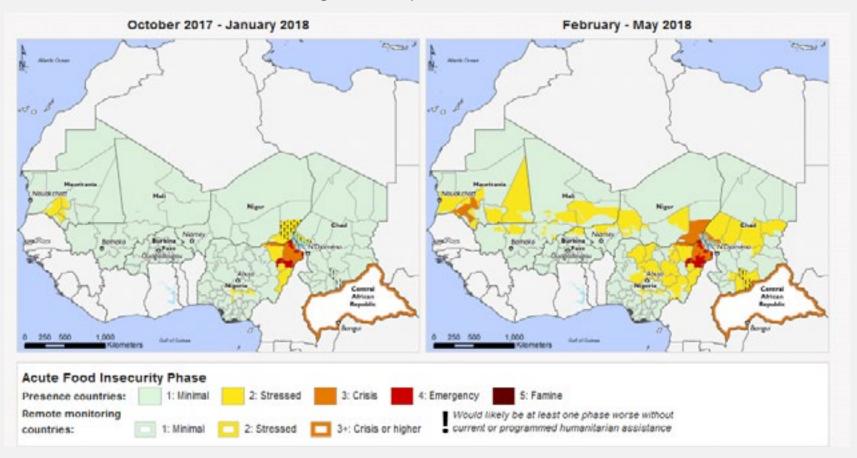
Agricultural land refers to the whole of arable land, permanent crops (orchards, vineyards, ...) and pastures.

Cultivable land refers to all areas likely to be cultivated.

Useful agricultural area (UAA) includes land whose potential for rainfed or irrigated crops would allow "yields above an acceptable minimum".

Land unsuitable for agriculture consists of bare rocks and soils covered with less than 1.80 m of tillable land.

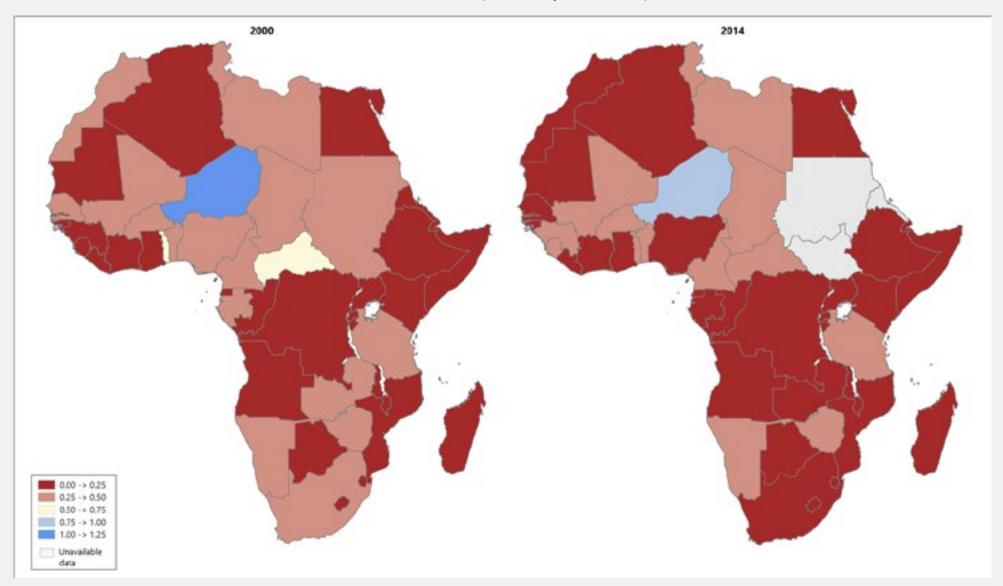
Alarming food security situation in the Sahel



Food insecurity will remain a concern in the Lake Chad basin despite improved security conditions and availability of crops,

■ Source : Processing by IRES_ Fews net

Arable land in Africa (in hectare per inhabitant)



■ Source : Processing by IRES of FAO data

HE AGRI-FOOD CHALLENGE (6)

- ▶ Impoverishment of African soils in organic matter compromises their fertility. The continent has already lost 65 million hectares of productive land in 50 years (128); by 2016, 65% of its soils were degraded; loss of land and nutrients reduces Africa's GDP by 3% (108).
- ▶ In 2050, aridification in the Sahel zone and southern Africa may reduce the potential for cultivation. This loss would eventually be offset by the decrease of a large part of the fallow land in the savannah zone in West Africa and the clearing of the eastern edge of the Congo's forest basin, further increasing pressure on natural environments (128).
 - ❖ Desertification, which is progressing around the Sahara at a rate of 2 km per year, threatens 75% of Tunisian cultivable land (128).
- A In total, 83% of rural people in sub-Saharan Africa depend on the region's land for their livelihoods, but 40% of it is already affected by soil erosion, human activity and high temperatures, leaving a large proportion of it unusable (129).
 - ❖ In Rwanda, for example, in 2014, while four fifths of the population live on agriculture and the average age of population is 19 years, there is virtually no wasteland left (130).
- Land availability is also a legal issue: land law. Under African customary law, land belongs to no one but to those who temporarily earn a living from it.

- In reality, whether sterile or fertile, almost all African land is subject to specific rights and uses, originally built around lineage (131). But in the absence of clearly established and recognized ownership documents, most traditional African farmers have been looted by colonizers as well as new independent governments.
- ▶ Even today, with more than 90% of rural land in sub-Saharan Africa being "undocumented" (132), small farmers are still in a precarious situation, which explains why they are seeking maximum profit in the short term rather than investing in irrigation systems or quality fertilizers. This is even more true for the 400 million traditional African farmers (132) whose land is subject to discriminatory land laws and customs (e.g., abandoning land in the event of widowhood).
 - ❖ In Tanzania, women with guaranteed rights earn three times more than their landless counterparts (132).
- It is easy to understand that the conflict between Western and local land law norms is a major impediment to agricultural productivity and the maintenance of a sustainable productive environment.
 - ❖ In Ethiopia, farmers are 60% more likely to invest in preventing soil erosion when they have guaranteed rights on their plots of land (132).
 - In Cotonou, urban planning has not provided access to land for urban agriculture, although it is a necessity to reduce food insecurity in the city (133).

HE AGRI-FOOD CHALLENGE (7)

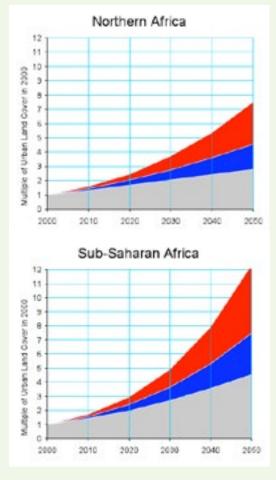
- ► Finally, availability of land also depends on three factors that contribute to the current transformation of the African rural world:
 - * Agricultural land grabbing by foreign or domestic investors concerns all countries in the world, including developed countries. However, half of the 50 million hectares of agricultural land acquired worldwide in 2016 (131), was in sub-Saharan Africa (131). The lack of clarity of land rights makes it possible to sell or lease unused land to large farmers or investors at any given time, regardless of whether it is set-aside land or land used for shifting agriculture or by forest communities. In addition, about 62% of this area is used for non-food crops (134).
 - ❖ The development of medium-sized farms is a new reality in sub-Saharan Africa. More and more educated and informed middle-class urban dwellers are buying farmland to increase their income by developing medium-sized farms (135).
 - In Tanzania, urban dwellers already own 33% of agricultural land, compared to 12% only 10 years ago.
 - 38% of agricultural land in Ghana and 52% in Zambia is occupied by farms of 5-100 hectares.
 - Already in Kenya, Malawi, Ghana and Zambia, medium-sized farms collectively occupy more land than large farms.

- Supported by associations, social networks and the media, claims for sanctuarization of certain lands are increasingly difficult to ignore, be they:
 - "sacred" lands, i.e. lands that have symbolic (cultural, political, religious) or vital (community forests) value for a community,
 - lands requiring specific protection to be conserved or regenerated (protected areas, highly degraded ecosystems biodiversity reserve sites),
 - land devoted to permanent pasture and extensive pastoralism: 1/4 of the land considered as unused and therefore available, particularly in the Sahel (131), which is necessary to provide meat and milk for both rural and urban dwellers.
- ► Thus, sub-Saharan Africa would eventually have 958 million hectares of usable agricultural land, including 192 million hectares of arable land (99).
 - ❖ Available and unused, they would be biologically useful and economically viable, without excessive costs to society or the environment (131).
 - Prioritizing these lands, clarifying the land rights of communities and small-scale producers, and conditioning the transfer of land to their almost exclusively food use would significantly contribute to addressing the agrifood challenge of the coming decades.

A FRICA IN FIGURES (8)

African land

- Total surface area of the continent: 30.3 million km² (99) of which 8.5 million km² in North Africa and 21.8 million km² in sub-Saharan Africa.
- Useful agricultural area: 1.1 billion hectares (99), or 20% of the world's total useful agricultural area (99):
 - Land cultivated in 2015: between 190 and 230 million hectares.
 - Available balance: between 820 and 860 million hectares.
- ▶ Subsistence agriculture: 80% of the sub-Saharan economy (136).
 - Small farms in Africa (137):
 - Average area of 2.2 hectares.
 - 90% of all farms.
 - 15% of total agricultural area.
 - 80% of total agricultural area utilized (138).
- Non-cultivable, non-forested, unprotected areas with a population density of no more than 25 inhabitants per km², but which can become cultivable: 201 million hectares in 2010 in sub-Saharan Africa (139).
 - Only 47% of these lands allow access to markets in less than 6 hours (139).
- Soil degradation: 65% (104).
 - Disappearance of forests: 3 million hectares per year (104).
 - Deforestation of the Congo basin: 721,000 hectares per year between 1990 and 2000, 700,000 hectares per year between 2000 and 2010 (140).
 - Lost arable land (133): 12 million hectares per year, producing 20 million tons of cereals (136).
- Land tenure: In 31 of the 54 African countries, less than 5% of rural land is privately owned (141).



Source: "A Planet of Cities: Urban Land Cover Estimates and Projections for All Countries, 2000 2050"

LAND GRABBING (1)

The terms of the debate

In a scenario where foreign agricultural investments exercise exclusively their control over 10% of arable land, the simulation (Global Trade Analysis Project model) shows:

- A 1-3% decrease in food production for the local market and a 3-5% increase in food prices in sub-Saharan Africa, generating immediate concerns about the food insecurity situation,
- An increase in food imports of 6-9% while food exports fall by 10 to 17%,
- An improvement in the terms of trade despite the worsening of the foreign trade deficit, mainly due to higher export prices in the food and manufacturing sectors,
- An increase in the profitability of factors, particularly land (up to 20%) and labour (up to 5%) as well as real income and household consumption.

The total effect on prosperity would be more important if investment used previously vacant land and a previously unemployed and unskilled labour force. The results of the simulation show, above all, that investments with a positive impact on technology would lead to greater efficiency at the domestic level and, therefore, to greater economic gains in sub-Saharan Africa.

Manitra A. RAKOTOARISOA, "Effects of Foreign Agricultural Investment in sub-Saharan Africa", PASSERELLES, Volume 17 – Number 5, 29 June 2016 (142)

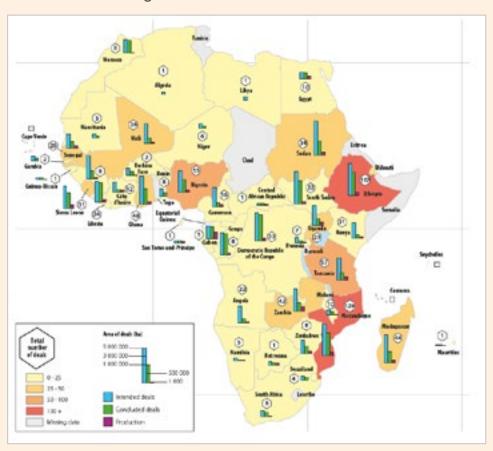
- During this (post-independence) period, despite the social and environmental changes resulting from the scramble for Africa, there has never been any mention of possible forms of retrocession of access to land resources for the benefit of communities that have undergone the expropriation of lands.
- The concession model has survived political change, through agri-food multinationals, forestry and mining companies and the appropriation of land by new national economic elites.
- This model continues to marginalize rural dwellers and indigenous peoples, even creating ethno-communal tensions in areas that already had high population densities and where, in addition, antagonistic productive activities, including agriculture and pastoralism, existed. It contributes to the loss of traditional land tenure, limits access to resources and disrupts agricultural production methods, in particular reducing fallow periods.
- The worst is yet to come with the advent of mega-concessions granted to multinationals in emerging countries that have, among other things, the intention of producing biofuels.

Robert KASISI, "Perspectives of biodiversity in sub-Saharan Africa: Rethinking the management model collectively". (143)

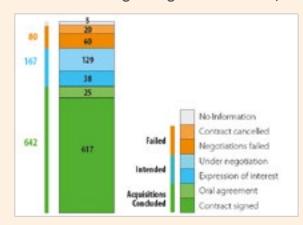
Land grabbing (2)

The current situation (1)

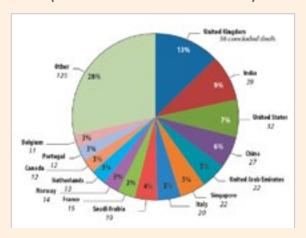
Large-scale land transactions in Africa



Number of deals according to negociation status (2000-2015)



Main land-purchasing countries (% of total contracts concluded)

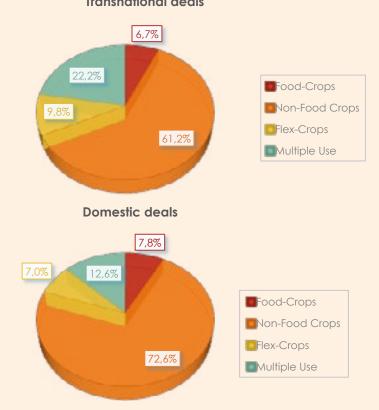


■ Source: Processing by IRES_ "A new emerging rural world: an overview of rural change in Africa", 2nd edition

Land grabbing (2)

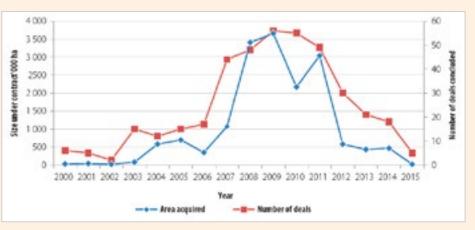
The current situation (2)

Acquisition of land in Africa according to their use Transpational deals



■ Source: T Processing by IRES of data from http://www.landmatrix.org/en/get-the-idea/agricultural-drivers//

Number of contracts and areas acquired per year in Africa



■ Source: "A new emerging rural world: an Overview on rural change in Africa", 2nd edition

HE AGRI-FOOD CHALLENGE (8)

The challenge of agricultural productivity

- Africa, in its current state of development, has two main means of feeding its population: to produce food at the fairest price for the buyer and seller or to provide the income needed to buy food that cannot be produced.
 - ❖ In the first case, the key to meeting the agrifood challenge is agricultural productivity. The second is the use of the country's non-food resources.
- ► The non-food resources of the continent are mainly minerals (metals, crystals, phosphates, rare earths...) and forests.
 - The economic gain-ecological damage assessment argues in favour of a better governance of the continent's natural resources (illegal concessions, anarchic management, poorly respected laws, corruption).
 - However, the use of foreign mining companies is still necessary because of the significant financial and technological resources mobilized by the mining industry.
 - ❖ But the impact on the local population is low. The absence of transformation is a major constraint on overall economic development.

- This explains why agriculture still accounts for more than 60% of the continent's employment (144).
 - Although agricultural production in Africa has increased significantly over the last 3 decades (+160 % in value), yields have remained low. Probably because 80% of the farms, with less than 2 hectares, are devoted to subsistence agriculture, with little mechanization and little irrigation (145) which employs up to 80% of the working population in Rwanda or Burundi (146).
 - ❖ For decades after independence, African governments, anxious to demonstrate their modernity, paid more attention to urbanization than to modernization of the rural world. The post-independence era is now beginning, marked, in particular, by the awareness of the importance of rural world (cf. part 3), which is both the anchor for African identity (cf. part 1) and the continent's source of nourishment.
 - The African Union-NEPAD recognizes that, "in the African context, the return on investment in family farms will be higher while job creation will be maximized per unit area, provided they have access to adequate financing" (145).
 - While 81% of African governments consider that their countries' urbanization
 is excessive and are developing policies to limit rural exodus (147), the African
 Union-NEPAD now admits that some small farms "will be unable to generate
 income for all active family members, some of whom will be forced to leave
 the agricultural sector, which requires support measures" (147).

HE AGRI-FOOD CHALLENGE (9)

- In the race against the clock, which is currently being played out between population growth and increased agricultural yields, in a context of accelerated climate change, 4 levers are essential for the transformation of the rural world and the creation of jobs in rural areas.
 - ❖ Water: most of Africa's agriculture is rainfed. Yet, freshwater and groundwater resources are abundant. The problem lies in their management (leaks...) and in the acquisition of sophisticated or expensive irrigation technologies. This is the case, especially, in West Africa and Central Africa, which uses only 14% of renewable water for agriculture (148).
 - Energy: polluting generators, often impossible repairs, adulterated petrol, fuel theft... are all elements that make everyday life particularly difficult for Africans who live far away from electricity distribution networks; hence, in general, agricultural mechanization remains weak. However, productivity also depends on the preservation of agricultural produce and market access, especially for fresh produce (food chain).
 - ❖ Roads: the need to link cities to their hinterlands is self-evident. But at an average price of 150,000 and 200,000 euros per kilometre of paved road in rural Africa (149), the track remains the main communication route, with all the hazards it represents (floods, potholes, collapses...). Only half of the sub-Saharan rural road network is in fair or good condition. As a result, the cost of road freight is three times higher than in other developing regions, which discourages production (150).

- ❖ Information and communication technologies: the smartphone has become the tool through which African farmers can improve the productivity of their farms (access to advice, insurance and financial services), organize themselves with other producers (share technical and market information) and facilitate the marketing of their products (courses, risk management, traceability) (151). The use of smartphones is the first step towards increased use of new technologies (sensors, smart water management...), for the benefit of a more profitable and sustainable agriculture.
- These levers are, however, dependent on the conditions that accompany their use:
 - training of farmers and organization of services (market analysis, price comparisons, weather forecasting, etc.) enabling them to be better informed in order to make the right decisions,
 - ❖ self-financing capacities (microcredit, access to banking services) and strengthening of public investment: the Agriculture Orientation Index (AOI) declined between 2001 and 2015 from 0.38 to 0.21 (152) and private investment (see part 3),
 - the creation of a cooperative rather than competitive mindset, allowing farmers from the cities to share their new ideas and technologies with traditional rural farmers wherever they settle (tractors, mechanical seed drills, high-yield hybrid seeds).

A FRICA IN FIGURES (9)

Agriculture

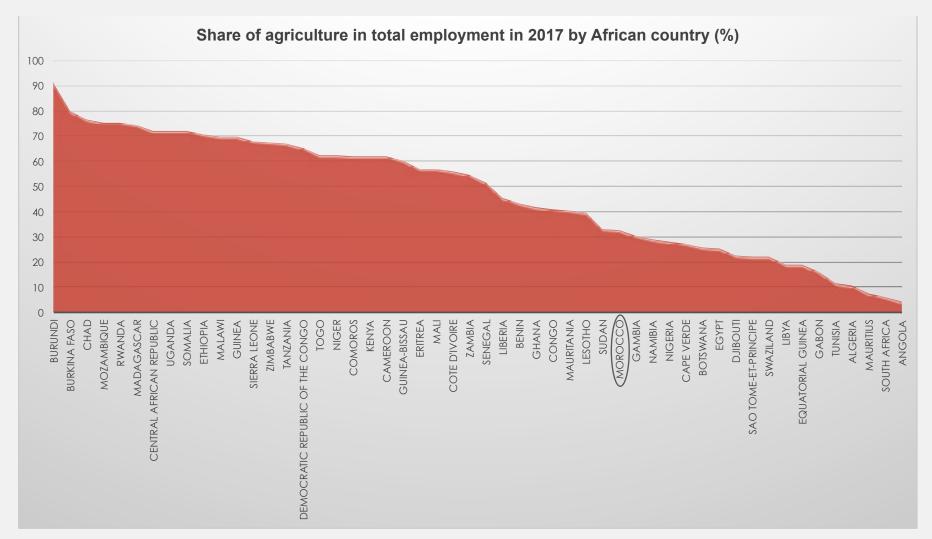
Main activities

- Africa has 33 million farms of less than 2 hectares, representing 80% of all farms (2013) (145).
- Agriculture: more than 60% of the continent's jobs; women constitute more than half of the agricultural labour force (144).
- ▶ Urban agriculture: In Malawi, for example, urban agriculture is the second largest source of income after formal employment (153).
- ▶ Urban agriculture provides jobs and income for poor women and other disadvantaged groups. A 100 m² garden can generate 1 job in horticultural production, the supply of inputs, marketing and the creation of added value from producer to consumer (154).

Key data

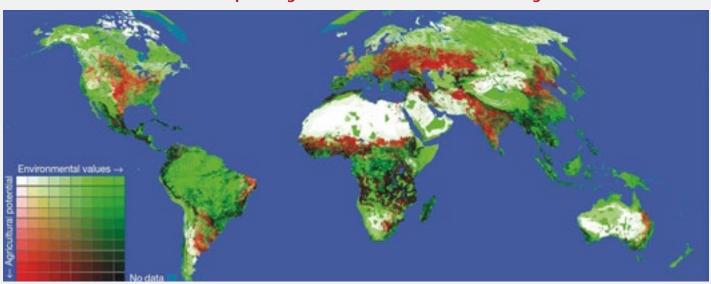
 Only 20% of rainfed cultivable land is cultivated in sub-Saharan Africa (155). Approximately 95% of cultivated land in sub-Saharan Africa is rainfed (156).

- ▶ 75% of African raw wood exported to China in 2015 (157).
- Fertilizer use: 15.9 kg per hectare of arable land in 2014 in sub-Saharan Africa compared to 138 per hectare worldwide (17).
- Cost of artificial fertilizers (especially due to transport): 50% more expensive in Tanzania and 80% more expensive in Mali than in Thailand (158).
- In the world, irrigated agriculture is practiced in 20% of cultivated land and produces 40% of food. In sub-Saharan Africa, it is practiced in only 3.5% of cultivated land (148).
- Only 34% of Africa's rural population lives less than 2 km from a rural road, compared to 90% in East Asia and 59% in Latin America (150).
- By 2050, even if the temperature rise is limited to 2°C, yields of most crops could decrease by 10% and the costs of Africa's adaptation to climate change could reach \$50 billion each year (159).



■ Source : Processing by IRES of ILO data

Towards road planning that reduces environmental damage



■ Source: www.lemonde.fr/planete/article/2014/08/27/25-millions-de-nouvelles-routes-de-quoi-faire-600-fois-le-tour-de-laterre_4477577_3244.html#c4L0uw80MuW2Db2A.99

Researchers have drawn up a planetary map of regions where the construction of new roads would be the least environmentally devastating by 2050.

In green, areas of environmental value where new roads should be excluded.

In red, those where agricultural production could be developed without major environmental damage.

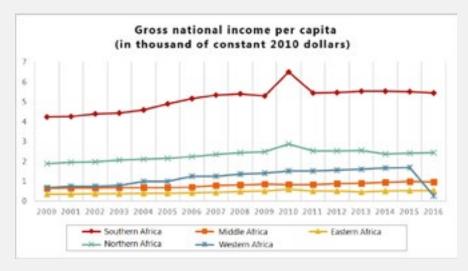
In black, those of high environmental and agricultural interest at the same time. In white, those with low environmental and agricultural value.

Magazine Nature, August 28, 2014

HE AGRI-FOOD CHALLENGE (10)

Conclusion

- ► The agri-food challenge is, strictly speaking, a key issue for the African population.
- Its resolution excludes any general solution to the problems mentioned, but requires two conditions that are so complex that they cannot be implemented following the Western model which has shown its limits:
 - * The development of an ecologically intensive, sustainable model of agriculture capable of producing high nutritional yields while regenerating already degraded soils requires training, investment and infrastructure, but also the coexistence of different production methods adapted to the relevant agro-ecological zones (subsistence agriculture and agro-industry, traditional and urban agriculture, small and medium-sized farms...) and the creation of an agri-food chain.
 - * Rural transformation by the national or even sub-regional environment needs to be ensured through participatory and inclusive governance, strict enforcement of laws at all levels and increased pacification.



■ Source: Processing by IRES of data from the World Bank and World Population Prospects

"Feed Africa" programme (1)

Dramatic increase in production and productivity: large-scale dissemination of inputs, capital and technologies to increase productivity Simultaneous creation of market structures for inputs and agricultural products to achieve the expected value of greater production / governance and incentives

Mobilization of a wellfunded private sector, capable of scaling up successful agri-food experiences, developing agro-industry and stimulating sustainable and long-term growth

The public sector, as a key factor in initiating the process, scaling it up and creating an environment of assets and conditions conducive to transformation by the private sector.

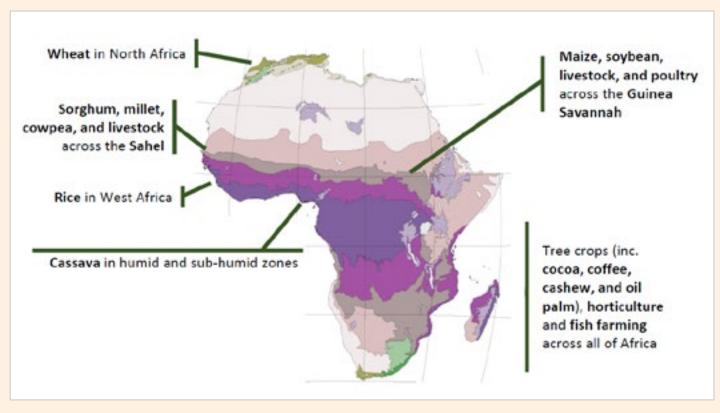
Feed Africa will in particular use a commodity-based integrated approach, while taking into account the many bottlenecks in all priority agricultural commodity value chains and related agro-ecological inputs.

- In October 2015, the African Development Bank organized a high-level ministerial conference in Dakar on "Feed Africa: An Action Plan for African Agricultural Transformation" to define a strategy in accordance with the objectives of the Comprehensive Africa Agriculture Development Programme, unlock the continent's agricultural potential and stimulate job creation in order to diversify African economies.
- ► "Feed Africa" is based on the commitments made at this event as well as on existing activities and previous commitments.
- The Bank and its partners will continue a programme to transform selected key agricultural products and agro-ecological zones.
- Achieving the goals of "Feed Africa" will require strengthening a wide range of value chains. In the short term, however, resources will focus on selected agricultural value chains and related agro-ecological zones. Prioritization of these chains and zones is based on the following set of criteria: future demand, comparative advantage, the scope of recovery efforts contributing to transformation, potential to feed Africa and current priorities.

Excerpt from the brochure "Feed Africa", April 2017

"Feed Africa" programme (2)

Agricultural value-added chains and agro-ecological zones in Africa



Source: African Development Bank. Feed Africa: The Road to Agricultural Transformation in Africa.

K EEP IN MIND

- ► The African rural world remains one of the main zones of poverty in the world.
- ▶ Climate change, rapid population growth, lack of jobs, degradation of ecosystems, impoverishment of African soils and aridification of the Sahel area expose the continent to the risk of recurrent famine by 2050.
- ► There is, however, a growing interest in the rural world from foreign investors and central governments as well as city-dwellers who are becoming new gentlemen farmers.
- With increased vigilance and strengthened governance, it is a new model of agricultural development that Africa must invent, capable of producing enough and fast, while regenerating biomes and respecting traditional rural farmers.



■ Source: http://www.primeinvestmentslimited.net/page/189/WATER-TREATMENT/

Chapter 3

THE TWIN CHALLENGES OF SECURITY AND GOVERNANCE

Main conflicts in Africa between 1974 and 2017



■ Source: Processing by IRES of data from Military Balance, The International Institute for Strategic Studies

S ECURITY AND GOVERNANCE ISSUES

In an increasingly densely populated world with over-exploited resources, slower economic growth and increased inequality, tensions are naturally exacerbated. Climate change aggravates these conditions. Africa, more than any other continent, is particularly sensitive to this evolution, which hinders its development.

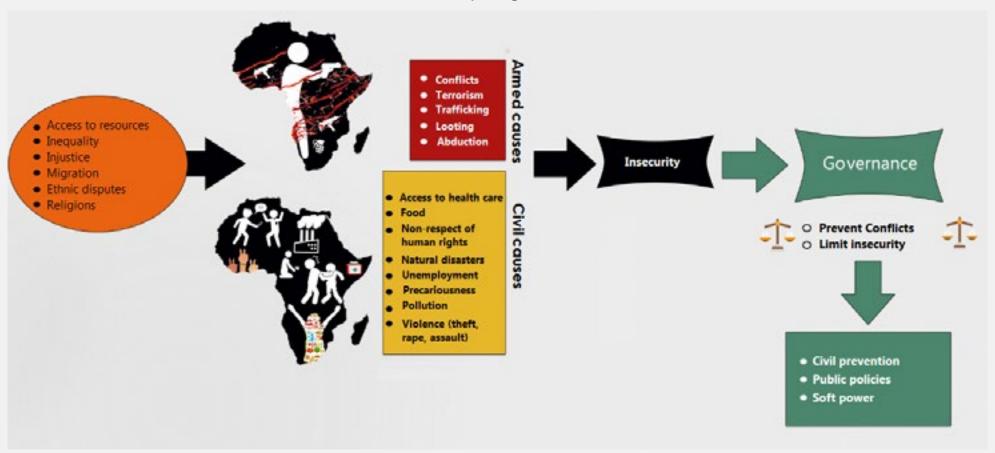
Multifaceted, individual and collective insecurity

- ▶ While the level of violence in most countries has diminished significantly over the centuries, it seems to have evolved in the opposite direction in some countries, culminating in the massacres of the 90s in Rwanda, the Democratic Republic of Congo, Somalia...
- At the same time, while insecurity tends to shift from collective to individual insecurity in peaceful societies, the same level of individual and collective insecurity still exists in some parts of the continent.
- This insecurity is the result of multiple causes that need to be well understood in order to be addressed effectively. But as in many other regions, poverty can actually lead to collective or individual violence.

Governance, the new soft power

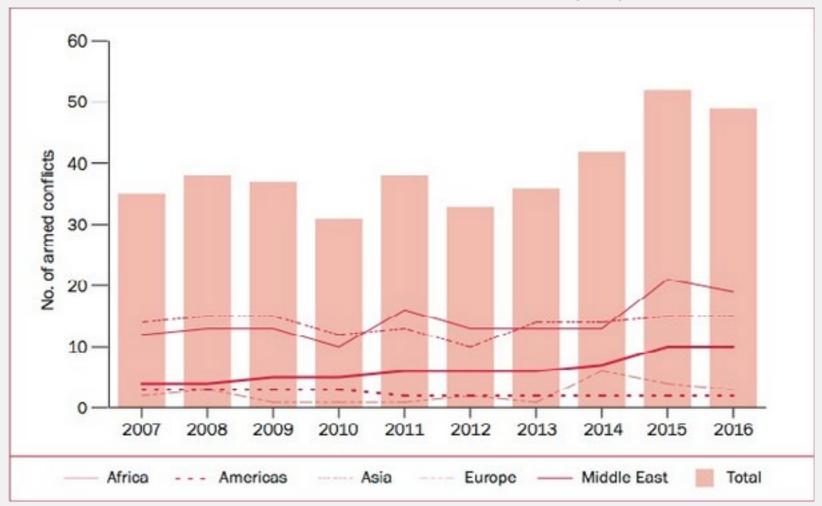
- Faced with this situation and the challenges mentioned above (urbanization, poverty, food, climatic events), governance appears in the 21st century as the only way to anticipate threats, prevent or limit disasters and avoid or even overcome conflicts.
- ► The global system of geopolitical regulation has gradually succeeded in reducing conflict on the planet since the last world war.
- Africa has not escaped this process, albeit in a more gradual manner. Over the past two decades, considerable progress has been made to tame, in a relatively peaceful manner, violent ups and downs in African countries such as Cote d'Ivoire, Gambia, Zimbabwe...
- The post-independence era is marked by the growing expression by African peoples of their aspiration for greater freedom and security. The challenge of governance on the continent is precisely to satisfy this aspiration.

Main causes of insecurity that governance must address



■ Source : Graphics designed by IRES

Trends in the number of armed conflicts between 2007 and 2016 according to regions of the world



Africa is among the regions of the world with the highest number of armed conflicts.

■ Source : graph from SIPRI: https://www.sipri.org/node/4275

TTHE HEART OF VIOLENCE: MISERY (1)

The notion of insecurity is constantly growing, a corollary to the growing awareness of the importance of the human person. Any risk of undermining human dignity, survival and rights, as well as property, is now a factor of insecurity.

Armed insecurity

- The first cause threatening human security is conflict, whether in a collective form, such as war, or in an individual form, such as aggression.
 - ❖ While the number of inter-state conflicts is decreasing, internal conflicts persist (160) (see Africa in figures n°10). Some conflicts are getting bogged down (Darfur, Somalia, etc.), jeopardizing all possible forms of development in these regions where poverty already reigns. Since 2000, approximately 48% of civil conflicts worldwide have occurred in Africa (161). In 2016, the African continent recorded the largest number of conflicts, amounting to 19, followed by Asia with 15 conflicts (162).
 - The difficult global economic situation, the number of unemployed young people, growing inequality... are leading to civil movements of unrest throughout the African continent.
 - * This systemic poverty (poverty, illiteracy) provides easy recruits for terrorist movements that can both subsist and hide in the continent's uninhabited areas.
 - * At the same time, armed gangs are sowing terror, with no other motive than personal enrichment: warlords, drug lords, pirates (in Somalia since 2005; in the Gulf of Guinea since 2012...) recruit child soldiers, terrorize local populations (theft, rape, assassinations...).

" ...respecting the sovereignty, the national unity and the territorial integrity of our respective countries... cannot be achieved in full unless we resolutely combat the transnational threats to peace and security, wherever they may be in the continent. Terrorism, acts of maritime piracy, organized crime, networks involved in human trafficking and in drug and arms smuggling call for collaborative, inclusive and concerted responses..."

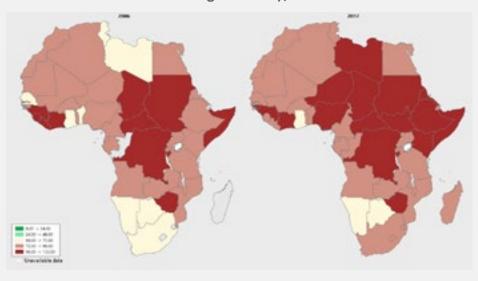
Excerpt from the speech addressed by His Majesty King Mohammed VI to participants at the 4th European Union-Africa Summit, April 2014.

A

T THE HEART OF VIOLENCE: MISERY (2)

- The will to curb the "law of the strongest" has given rise to a law aimed at solving international conflicts as well as individual abuses. But it is not enough to set forth the law, it still has to be applied.
 - ❖ The lack of resources likely to help establish a regular army or police force, properly remunerated, trained and equipped is the first obstacle to the rule of law.
 - ❖ Tolerance of lawlessness, or even the benefit that some people can derive from it (destabilization, corruption, dictatorship), is the second obstacle to establishing the rule of law: indifference to daily misdeeds, although sometimes necessary to survival, is the worst obstacle to any attempt to eradicate this violence.
 - ❖ The third obstacle lies in the sheer vastness of the continent, which allows to house entire camps of armed groups that are both sanctuaries and operating bases. Without specific detection equipment (satellites, drones), it is difficult to locate them and, therefore, get rid of them.
- ► Correlation between poverty and conflict must be taken into account in the upcoming decades, especially if the speed of development is not greater than that of population growth and resource degradation.

Fragile state index (score between 0: stable country and 120: very fragile country)



■ Source : Processing by IRES of data from the « Fund for peace » Institute

A gulf at high risk (1)

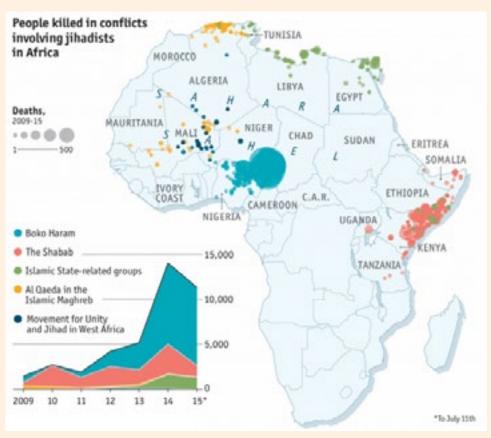
- The Gulf of Guinea is a maritime area covering about 16 countries (163). In addition to its hydrocarbon and fisheries resources, this area is an important maritime axis.
 - However, the unequal distribution of this space among riparian countries creates disagreements and leads to latent conflicts over the appropriation of waters, the extension of the exclusive economic zone and the claim to the continental shelf.
 - ❖ The major challenge of this space lies in the problem of piracy. This emerging crime takes advantage of the heavy maritime traffic in this area and lack of coordinated actions to combat this phenomenon, which has been on the rise since 2012.
 - Despite the signing of a memorandum of understanding and a code of conduct and the establishment of regional coordination mechanisms, the results have not been reached. At stake are delays in the operationalization of coordination structures, technical difficulties and the absence of comprehensive strategies.
 - However, the Lomé Extraordinary Summit held in October 2016 and the signing of the "African Charter on Maritime Security" confirm the willingness and determination of African leaders to combat maritime piracy. It is therefore becoming urgent to eradicate this threat, which directly weighs on the future of the region's port economy.

Possible connection between piracy, terrorism and drug trafficking

- Acts of piracy in the region have increased. They have also changed in form, from abduction of crews, looting of fuel cargoes to the hijacking of cargo vessels.
- In addition to this threat, which is a source of insecurity for international maritime transport in the South Atlantic, West Africa is now positioning as a hub for drug trafficking (cocaine, methamphetamine) between Latin America and Europe.
 - Drug traffickers, anxious to maintain the fragility of the states in which they
 operate, collaborate with local armed gangs to hasten their destabilization.
- Terrorism seeks the sources of income it needs both in drug trafficking and piracy.
- ❖ A Sahel-Atlantic axis is thus emerging that is conducive to the junction in West Africa between these three previously compartmentalized phenomena: drug trafficking, piracy and terrorism. Security cooperation is necessary between all the States of the region in order to curb the expansion of such threats, if not put an end to them.

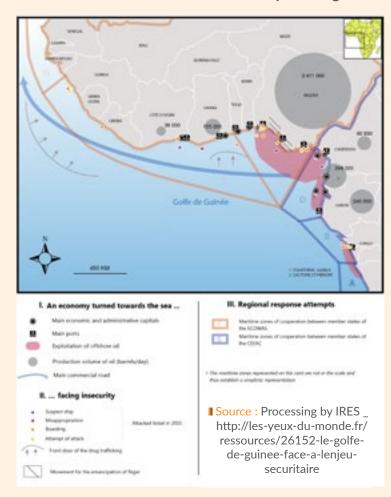
A gulf at high risk (2)

Conflict-related deaths involving jihadist groups in Africa



■ Source: Reprocessing by IRES _ https://www.economist.com/blogs/graphicdetail/ 2015/07/daily-chart-jihadists-africa

The Gulf of Guinea and the security challenge

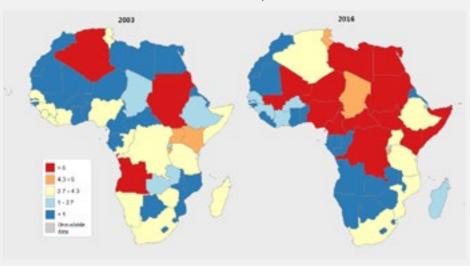


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T THE HEART OF VIOLENCE: MISERY (3)

- ► The more complex the world becomes, the more the risks increase while threats are becoming numerous. **Stress factors** also grow accordingly, such as:
 - food insecurity, particularly in the Sahel and the Horn of Africa, where drought is prevailing, and in South Africa, where the water stress is of particular concern,
 - political insecurity which is demonstrated through electoral and postelection violence.
 - economic insecurity reflected in the number of unemployed, low incomes, the vulnerability of households to the slightest accident (illness, widowhood) and the difficulty of young people to get jobs,
 - the feeling of social injustice, another form of insecurity experienced by a part of African societies, excluded from the dividends of development or exploitation of their country's resources,
 - ❖ forced displacement: in 2016, out of the 65 million uprooted people worldwide, 19 million people of them are from Africa (164).
- The resulting misery offers easy prey to all kinds of extremism, starting with terrorist groups that have proliferated over the past 10 years. These not only fill the security gap, but also provide territorial administration (taxes) and judicial administration (courts) and "religious" supervision of citizens in vulnerable countries.

Global Terrorism Index (Score between 0: no incidence of terrorism and 10: high impact of terrorism)



Source: Processing by IRES of data from the "Institute for Economics and Peace"

Photo credit Mahmud Turkia. AFP

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T THE HEART OF VIOLENCE: MISERY (4)

Civil insecurity

- ▶ In addition to armed insecurity, the multiple causes of which contribute to increased conflict, there is also civil insecurity resulting from threats posed by natural risks (climatic or geological) and risks inherent in human activities (occupational accidents, industrial risks, etc.) and conflicts.
 - The year 2017 was, for Africa, one of the worst years in terms of natural disasters: torrential rainfall in Guinea, Senegal, Nigeria, Sierra Leone, Niger; drought in South Africa, Somalia, Kenya, Ethiopia...
- ► This general insecurity food, health, economic, educational, political, and environmental is leading an increasing number of Africans to migrate in search of better conditions elsewhere (cf. Focus n°4 and Africa in figures n°11).
- ▶ In reality, threats have always existed, but **two factors explain the current level of insecurity**:
 - ❖ The indigence of civil protection, or even the lack of provision for victims and damage, while this has reached a previously unknown level.
 - The conjunction of these events with armed insecurity.



"I'm thinking of the body of this child washed up on the beach, symbol of those Africans who came to seek a future and were swallowed up by the sea. We must address all the problems that could lead them to leave the continent at the risk of their lives."

John Dramani MAHAMA, former President of Ghana, September 2015

M

ARITIME PIRACY IN AFRICA

Acts of piracy in the Gulf of Guinea in 2017



Acts of piracy in the Horn of Africa in 2017



■ Source: International Maritime Bureau Piracy & Armed Robbery Map 2017



According to the International Maritime Bureau, acts of piracy worldwide have reached their lowest level in a decade. The Gulf of Guinea is the only one where acts of piracy have increased, surpassing those in the Horn of Africa from 2012 onwards.

The Gulf of Guinea has registered 90 acts between 2016 and 2017 compared to 39 in 2010 (165). The cost of this crime was estimated at about \$800 million in 2016 (166).

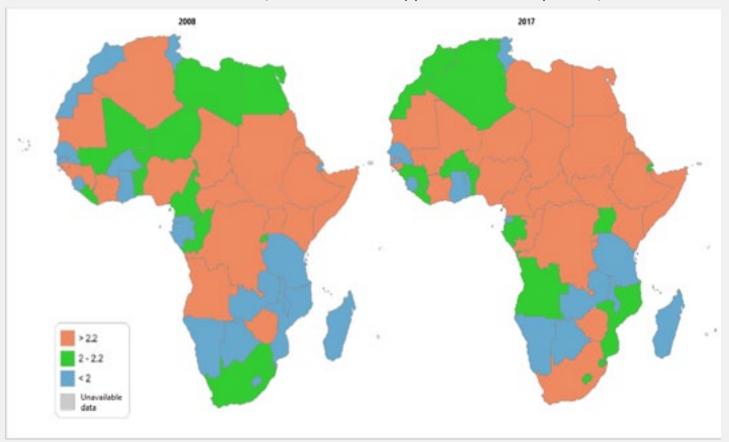
A FRICA IN FIGURES N°10

Conflicts

- Internal conflicts, war, terrorism and dictatorships around the world have forced a significant number of citizens to move and seek asylum in other countries, seeking even precarious security.
- ▶ Between 1946 and 2016, Africa suffered 88 coups, 153 attempted coups, 14 civil wars, 24 rebellions and armed conflicts (167).
- Currently, of the 15 United Nations peacekeeping operations, 8 are taking place on the African continent with a total of 106,544 personnel deployed, divided among troops, UN international volunteer observers and civilians. For example, the average annual cost of these operations is almost \$3.5 billion (168).
- Countries with a GDP per capita of \$250 have a 15% chance of a situation evolving into conflict, compared to 4% for countries with a GDP per capita of \$1,250 or more (169).
- ► Kenya's economic losses due to post-election violence in 2008 are estimated at \$3.6 billion (170).

- ▶ In Somalia, 1,121 children were killed or maimed in 2016 and sexual assaults in that country affected 311 children (310 girls and one boy) (171) (172).
- In Southern Sudan, 1,022 children were recruited and used as child soldiers in 2016 compared to 162 cases in 2013 (171) (172).
- In 2016, the number of victims among children in the Democratic Republic of Congo is the highest since 2012 (171).
- Sexual assaults against girls are very common in Nigeria, the Democratic Republic of Congo, Sudan, Southern Sudan and Somalia (171).
- In the Central African Republic, the number of children recruited and used as child soldiers increased from 188 in 2013 (171 boys and 17 girls) to 74 in 2016 (50 boys and 24 girls), some of whom were just under nine years old. The UN confirmed that in 2016, 55 girls were victims of rape and other forms of sexual violence. In 2016, 98 children were abducted, including 66 boys and 32 girls (171) (172).
- Asymmetric attacks by non-state armed groups have had a serious impact on children in Somalia, as well as in Nigeria and neighbouring countries, particularly by forcing children to commit suicide bombings. The number of violations committed by the Chabab, Boko Haram, the Islamic State and the Taliban reached more than 6,800 in 2016 in Africa, but also in the Middle East (171).

Global Index of Peace (score between 1: very peaceful and 5: not peaceful)

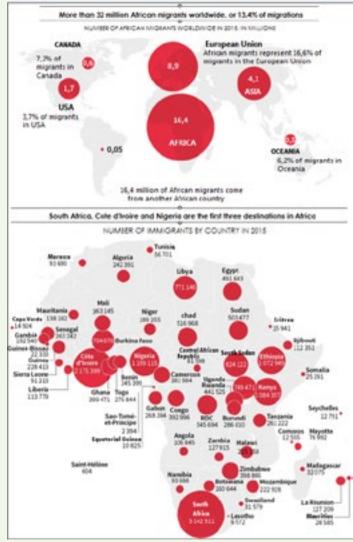


■ Source: Processing by IRES of data from the « Institute for Economics and Peace »

A FRICA IN FIGURES N°11

Migrations

- ▶ 32.5 million Africans living outside their country of origin in 2015 (173), or 2.6% the continent's population (4). Their distribution by region of origin in 2015 is as follows (173):
 - Northern Africa: 27.2%.
 - Western Africa: 25.8%.
 - Eastern Africa: 24.7%.
 - Southern Africa: 13.8%.
 - Middle Africa: 8.5%.
- Destination of African migrants (173):
 - ❖ In 2015, more than 50% of African migrants remained within the continent, or 16.4 million Africans.
 - 28% took the direction of Europe.
 - The rest went to North America and some countries in the Middle East and Asia.
- Africa-Europe migration routes:
 - Central route to Italy, from Libya via Niger.
 - Western route to Spain, from Morocco via Mali.



■ Source: Processing by IRES Of International Organization for Migration data

Ethnic diversity: risk factor of violence in Africa or wealth to exploit?

- Ethnic conflicts have had a strong impact on Africa for decades. Borders drawn at the will of the colonial powers did not respect identity, ethnic, linguistic and religious realities of the African peoples (174) (175).
- New borders established denied the realities of African identities and enclosed communities that were little homogeneous, even antagonistic, often carrying multiple unrestrained forces (174).
- With the departure of the colonial settlers, many African states saw ethnic diversity as a risk to national unity and, in turn, tried to control it. Ethnic diversity has become an obstacle to social stability as some ethnic groups have been given preferential treatment by some African leaders: inequitable access to power and resources between different ethnic groups sharing the same space has led to major ethnic conflicts in Africa. This situation has proved to be endemic in certain regions of the continent (176).

- The last genocide of the 20th century took place in Rwanda in 1994 and killed a million people within 3 months (177).
- In the Great Lakes region (Rwanda, Burundi, Democratic Republic of Congo and Uganda), the aftermath of genocide of the 1990s remains present. This region remained unstable, especially in the eastern Democratic Republic of Congo.
 - The Kivu region is still experiencing massacres and divisions between the
 various rebel factions. The lack of political will to resolve this conflict and
 the interference of some countries in the region prevent its stabilization.
 With an estimated number of more than 6 million victims, according to the
 "International Rescue Commission", since 1998, the region has experienced
 the largest humanitarian disaster in Africa.

OCUS N°11 (2)

Poorly extinguished ethnic conflicts or the risk of a new cycle of violence

- ► The arc of instability running from the Sahel to the Horn of Africa and the Great Lakes region are high-risk areas of epidemics, famine and conflict.
- Security in those areas is quite uncertain, due to the emergence of conflicts arising in other historical contexts. Ethnic conflicts over the routes established by colonizers in the region have re-emerged in recent years as a result:
 - of the crisis of governance in some states,
 - of the dichotomy between centre and periphery,
 - of a non-inclusive development model and unfair distribution of wealth,
 - of the total decomposition of institutional structures in some states, such as Somalia and South Sudan.



Photo Karel Prinsloo

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TTHE HEART OF SECURITY: GOVERNANCE (1)

- A two-speed Africa is emerging, one which is relatively prosperous, open, intermingled, somewhat appeased, democratically governed, and developing for the benefit of the general interest on the one hand, and one that is stagnating, poor, undernourished, violated, subjected to permanent conflicts on the other hand, while its wealth is confiscated by a minority which rules with an iron fist or through insatiable armed gangs. The two coexist in the same place, which makes governance of the whole continent all the more necessary.
- Peace at any cost

The vulnerability of the continent is surely still tangible.

- On the one hand, many young African states are paying the price of their immaturity with armed conflicts, political instability and state fragility.
- On the other hand, external conditions such as climate change, global economic crises and scarcity of resources do not give them the time to mature in serenity, as most other countries in the world have done before them.
- Confronted with the fast-growing global insecurity, African states must double their efforts and struggle while building up themselves, and empower themselves while being dependent on external aid.

- However, considerable progress has been made in sub-Saharan Africa in recent decades in the field of conflict resolution and peacekeeping. Liberia, Sierra Leone or Burundi have shown that it is possible to break out of real civil wars and move towards sustainable development.
 - Echoing ancestral processes of easing social tensions, such as the West African tradition of kinship joking, the reconciliation process is a characteristic of the African model of governance that spreads across the whole continent:
 - Truth and Reconciliation Commission (TRC) in South Africa (1995); Equity and Reconciliation Commission in Morocco (2003-2005); Similar Commissions in Liberia, Burundi, Togo, Cote d'Ivoire, Sierra Leone and Tunisia; Truth and Reconciliation, Reparation and Compensation and Nation Building in Madagascar (2015).
 - Within the African Union, three instruments of security and judicial governance have been put in place: the Court of Justice, the Peace and Security Council, which works for conflict prevention, and the African Standby Force (ASF), a permanent peace-keeping force at the continental level.
 - Finally, non-governmental organizations on the continent have become stakeholders for peace. They are necessary to provide African solutions to African problems.

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T THE HEART OF SECURITY: GOVERNANCE (2)

Hesitant public policies

- The establishment of a state based on the rule of law, capable of ensuring and maintaining peace within a given territory, is reflected, besides its judicial system, in the public policies implemented and in the resources allocated to them.
 - In addition to military and food security (cf. previous chapter), civil security is a major duty of every state. It includes protection against disasters of all kinds and access to health care and acceptable sanitary conditions.
- Anticipation and reduction of risks, disaster management and short-, medium- and long-term management of the consequences of climate change (risk mapping, massive warning systems, evacuation routes, organization of population movement, ...), and the organization of daily health care (hospitals, clinics, first aid) are already a major concern for most African states.
 - ❖ The 1st African meeting of the International Civil Protection Organization (Ouagadougou, 2013) showed the importance of this issue for the 22 African countries present, particularly in the face of the increase in natural resources (action plans, relief mechanisms, prevention systems).

- But this protection, such as security against transnational or domestic armed violence, is difficult to ensure. It requires both expertise and financial resources.
 - Since knowledge is generally provided by United Nations aid programmes, the Western model tends to impose itself from the outset. Yet, following the example of African urbanization, the continent is developing its own peculiarities that require the creation of a specific African civil society management model.
 - ❖ The need to rely on external funding sources is another difficulty that weighs on the effectiveness and autonomy of African public policies. Foreign aid is often, in fact, tainted with conditionalities...
 - Without this assistance, it is sometimes impossible to reduce the gap between humanitarian emergencies and long-term development, for example, when refugees or veterans need to be helped to resettle and resume economic activity (housing, micro-credits, mutualization) as soon as possible.
 - International cooperation, both intra-continental and external, the refore appears to be a necessity, but its cost, in terms of counterparts, is sometimes exorbitant and can hinder African autonomy.

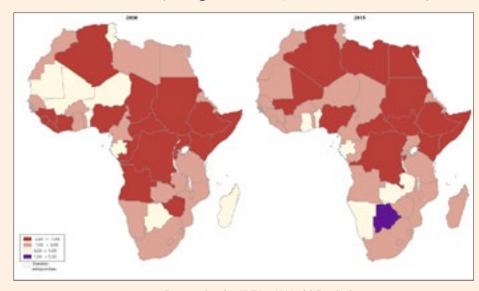
The rule of law in Africa

Definition of the main dimensions of the rule of law

- Performance: institutions provide services that are efficient and effective, accessible and responsive to the population.
- Integrity, transparency and accountability: institutions operate transparently and with integrity and are held accountable for standards and rules of conduct.
- Treatment of members from vulnerable groups: how do criminal justice institutions treat minorities, victims, minors in need of protection or in conflict with law and the mentally ill?
- Capacity: institutions have the human and material resources necessary to carry out their functions and the administrative and management means to deploy these resources effectively."

Excerpt from the United Nations Rule of Law Indicators, Implementation Guide and Project Tools, United Nations, 2012

Rule of law index (the higher the score, the better the situation)



■ Source: Processing by IRES of World Bank data

The "rule of law" index measures the perception of citizens' confidence in, and their respect for society's rules, including the quality of enforcement measures for contracts and property rights, police services and the courts. It also measures the likelihood of crime and violence.



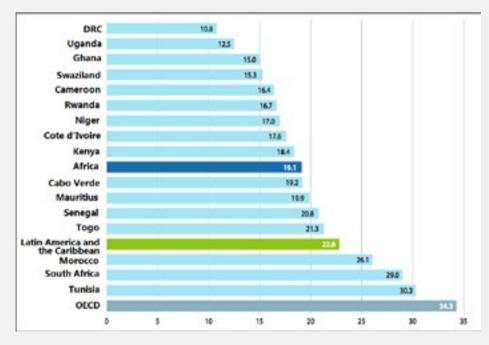
■ Source: http://information.tv5monde.com/sites/info.tv5monde.com/files/assets/images/AP_789231672332.jpg

A

TTHE HEART OF SECURITY: GOVERNANCE (3)

In a context of limited fiscal resources (see graph opposite) and immense social and infrastructure building needs, the implementation of a country's strategic orientations and the public policies that embody them is crucial for the future of its population.

Tax revenue as % of GDP in 2015



■ Source: Processing by IRES of data from the OECD report on "Government Revenue Statistics in Africa 1990-2015"

T

HE HEART OF SECURITY: GOVERNANCE (4)

In addition to food security (see previous chapter), two other examples illustrate this situation in Africa in particular:

- ▶ Social security (social unrest) is increasingly threatened by the high proportion of migrants within a population.
 - ❖ The causes are, above all, the lack of preparedness of host countries in terms of basic goods and services (accommodation, care, food) and socioeconomic integration (problems of undocumented migrants, access to employment and education).
 - ❖ In addition, regional cooperation and governmental machinery are inadequate in managing migration flows and strengthening asylum and refugee protection systems. The issue is all the more important since these migrants are easy prey to terrorism and other illegal activities and the already high number of refugees: 1.2 million people in Uganda in 2017, 0.8 million in Ethiopia (164) could grow by 2050, due to climate change.

- Fighting poverty, which is a key to insecurity, requires effective economic governance and the choice of a development model that is quite different from the current one.
 - Africa's priority is to create the jobs needed to meet the demand for work within 20 years. Yet, although the continent has almost doubled its GDP over the last fifteen years (179), the African economy could barely generate 100 million jobs over the 2015-2035 period, compared to 450 millions Africans entering the labour market during the same period (180).
 - As the risk of a social explosion is high, this situation becomes critical as automation progresses rapidly in the rest of the world. Ethiopia, for example, whose economic model is based on a low-cost labour force, could lose up to 85% of its jobs (181).



T THE HEART OF SECURITY: GOVERNANCE (5)

Towards an African governance?

- While colonization may have been a factor of material improvement in some countries (infrastructure, education, industry), it nevertheless had a particularly negative effect on the local governance systems it sought to destroy.
 - ❖ The colonial partition of territories is one of the continuous drivers of the continent's conflict situations. This iniquitous and arbitrary colonial partition, which deliberately divided ethnic, tribal and denominational communities, has led to upheavals that have marred relations between communities and generated genocidal situations unprecedented in the history of 20th century Africa.
 - On the other hand, resilience of traditional customary law systems has allowed them to coexist in parallel to, or hiding from colonial governments. After independence, some customary law provisions were incorporated into the new constitutions, such as the National House of Chiefs in Ghana (see focus n° 14).
- However, African governance existed long before the arrival of Arabs, Asians or Westerners. African kingdoms then had a state structure, similar to the current parliamentary monarchies, based on the complex and meticulous rules of society, and highly effective in terms of social cohesion (182). Without extra-continental interference, the evolution of these political systems would have been similar to other systems of governance in the world.

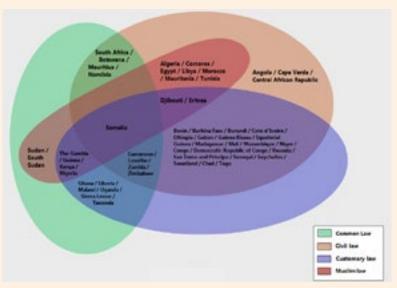
- ❖ Palaver, a place of encounter and public discussion, is an ancestral mechanism of participative democracy: the general will that emerges from it imposes itself on the governing authority. It is still present in many aspects of modern African societies, including family affairs, although it has been reduced (183).
- ❖ The Councils of Elders (such as the kikuyu kiama) are bodies that sit next to the chiefs, like a parliament. Their power is great in traditional gerontocratic societies (such as the boulé in Ancient Greece) where only experience, and therefore age, brings the maturity necessary to wisely administer the interests of the community and guarantee social stability (184).
- ▶ A growing number of African thinkers and states are aware that the Western political model is not necessarily better or more legitimate than the ancestral African models. Hence their quest for a hybrid model, corresponding, at the same time, to the international standards according to which Africa wishes to subscribe and the degree of political maturity of nations that have enjoyed autonomy for only half a century, while other nations have enjoyed it for more than a millennium... At its own pace, the African Union is already acting as a Council of Elders at the continental level.

Legal systems of African states

According to a study by the Royal Institute for Strategic Studies (IRES), the place of customary governance systems in the constitution and law of each of the 54 African states is as follows:

- Custom can take on the most diverse aspects, depending on whether it is rooted in wisdom built on everyday practice or, more intellectually, in great spiritual or philosophical traditions.
- There are no longer any political entities whose legal system can be said to be entirely customary.
- However, customary law, as a system and not only as an ancillary complement to substantive law, still plays a role.
- ▶ In 51 mixed-law countries, customary law has so far been of great importance, particularly in relation to personal status.

Institutional diversity



■ Source : IRFS

K EEP IN MIND

- ► The level of security of a city or state determines its level of development.
- African conflicts are often orchestrated by those who benefit from the neo-colonizers to extremist groups.
- Only education, information security and prosperity can resist the attraction of violence.
- Neither singularity nor exception, African governance is a hybrid system that is still hesitating between emergency management and long-term preparedness, the scale of needs and scarcity of resources, appeared democracies and corrupt dictatorships.
- ► For African countries, the security model should take into account African specificity and not just be satisfied with the universal doctrine on the subject.



 \blacksquare Source : Processing by IRES_ https://www.behance.net/gallery/21264267/Citations-de-feu-Hassan-II ;

http://www.afrinous.com/article-hommage-aux-panafricanistes-108024630.html

S ELECTIVE BIBLIOGRAPHY (1)

- (1) World Population Prospects, 2017 Revision, United Nations. Department of Economic and Social Affairs
- (2) General Census of Population and Housing 2014, High Commission for Planning (HCP)
- (3) Global Health Observatory (GHO) data. On-line database, World Health Organization (WHO), http://www.who.int/gho/database/fr/
- (4) World population prospects: the 2017 revision. Online database. United Nations, Department of Economic and Social Affairs. < https://esa.un.org/unpd/wpp/>. Processing by IRES
- (5) United Nations. Department of Economic and Social Affairs. World urbanization prospects: the 2014 revision: Highlights. 2014
- (6) Le Monde Afrique (2017). "L'Afrique en villes", notre série d'été en 28 épisodes, 15 reporters et 10 000 km. Le Monde Afrique, [en ligne] 30 juillet 2017. URL : http://www.lemonde.fr/afrique/article/2017/07/30/l-afrique-en-villes-notre-serie-d-ete-en-28-episodes-15-reporters-et-10-000-km_5166712_3212.html
- (7) BELLO-SCHUNEMANN, Julia and AUCOIN, Ciara (2016). Six of the world's 41 megacities will be in Africa by 2030. How we made it in Africa, [online] 11 December 2016. URL: https://www.howwemadeitinafrica.com/2030-six-worlds-41-megacities-will-africa/
- (8) SOW, Mariama. Foresight Africa 2016: Urbanization in the African context. 2015 In: Brookings. URL: https://www.brookings.edu/blog/africa-in-focus/2015/12/30/foresight-africa-2016-urbanization-in-the-african-context/
- (9) World urbanization prospects: the 2014 Revision. Online database. United Nations, Department of Economic and Social Affairs. < https://esa.un.org/unpd/wup/ >
- (10) D'ABBUNDO, Antoine (2015). Quelles sont les villes africaines au plus fort potentiel de développement? La Croix, [en ligne] 22 mars 2015. URL: https://www.la-croix.com/Actualite/Monde/Afrique/Quelles-sont-les-villes-africaines-au-plus-fort-potentiel-de-developpement-2015-03-22-1293949
- (11) Morocco, Urban agency of Casablanca, . Schéma Directeur d'Aménagement Urbain du Grand Casablanca, 2008
- (12) World urbanization prospects: the 2014 Revision. Online database. United Nations, Department of Economic and Social Affairs. < https://esa.un.org/unpd/wup/ >. Processing by IRES
- (13) United Nations, Department of Economic and Social Affairs. World urbanization prospects: the 2014 revision. 2014
- (14) UCLG: the global network of cities, local and regional governments (2018). Intermediary cities. URL: < https://www.uclg.org/en/agenda/intermediary-cities>.
- (15) UCLG: the global network of cities, local and regional governments (2018). Territories. URL: https://www.uclg.org/en/agenda/regions-and-small-towns
- (16) Official Web site of the United Nations Human Settlements Programme
- (17) World Bank Database. Online database. . https://donnees.banquemondiale.org/
- (18) Punchng.com (2017). Lagos to become largest mega city in Africa by 2035. [Online] 22nd June 2017. URL: http://punchng.com/lagos-to-become-largest-mega-city-in-africa-by-2035-researchers/
- (19) IGLÉSIAS, Borja M. (2015). The new urban agenda must recognize the importance of intermediary cities. [Online] 6th November 2015 : http://citiscope.org/habitatlll/commentary/2015/11/new-urban-agenda-must-recognize-importance-intermediary-cities
- (20) United Nations-Habitat. Slum almanac 2015/2016: tracking improvement in the lives of slum dwellers. 2016
- (21) Official Web site of UN-Habitat: https://unhabitat.org/
- (22) VIDAL, John (2010). Africa warned of 'slum' cities danger as its population passes 1bn. *The guardian*, [online] 24th november 2010 : https://www.theguardian.com/world/2010/nov/24/africa-billion-population-un-report
- (23) African Development Bank, OECD Development Centre and the United Nations Development Programme. The African economic outlook 2016. Sustainable Cities and Structural Transformation. 2016
- (24) Nigerdiaspora (2017). Un milliard de citadins dans vingt ans : L'Afrique est-elle prête ? [En ligne], 6 août 2017 : < https://www.nigerdiaspora.net/index.php/l-actu-africaine/1657-un-milliard-de-citadins-dans-vingt-ans-l-afrique-est-elle-prete>
- (25) Afrique-tv (2016). Luanda étouffe sous des montagnes d'ordures. [Online] January 28, 2016 : https://afrique-tv.info/luanda-etouffe-sous-des-montagnes-dordures/

S ELECTIVE BIBLIOGRAPHY (2)

- (26) Collective of the associations (ASI) of the southeast for Burkina (2011). Report of the weekend in October 15-16th, 2011. URL: http://collectifburkina-dag.fr/pdf/compterendu16octobrebuis2011.pdf
- (27) Infrastructurene (2017). Here's how much water SA loses through water. [Online] 6th March 2017: <//www.infrastructurene.ws/2017/03/06/heres-how-much-water-sa-loses-through-water-leaks/>
- (28) ONUSIDA. En finir avec le sida : progresser vers les cibles 90-90-90. Synthèse. 2017
- (29) ONUSIDA. Fiche d'information : Journée mondiale de lutte contre le sida. 2017
- (30) ONUSIDA (2018). Country profile: Morocco. [Online]: http://www.unaids.org/fr/regionscountries/countries/morocco
- (31) ONUSIDA (2018). Country profile: : Algeria. [Online]: http://www.unaids.org/fr/regionscountries/countries/algeria
- (32) UNICEF Data and Analytics. 2015. Online database: http://devinfo.org/unicefdata/libraries/aspx/Home.aspx
- (33) Geopolis, franceinfo (2012). Enfants des rues africains. URL: < http://geopolis.francetvinfo.fr/enfants-des-rues-africains-1533> and Lift the children. < https://www.liftthechildren.org/facts- the-children/
- (34) BERESFORD, Belinda. Le coût économique et social du sida. Afrique Relance. Vol.15, 1-2, juin 2001, p. 19. URL: http://www.un.org/fr/africarenewal/vol15no1/151aid9f.htm
- (35) UNAIDS In: Swedish International Development Cooperation Agency, HIV, aids and urban development issues in sub-saharan Africa. 2007
- (36) Key Indicators of the Labour Market database. 2015. Online database. International Labour Organization. < http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index. htm >
- (37) DE VREYER, Philippe et ROUBAUD, François. Les marchés urbains du travail en Afrique subsaharienne. Marseille : new edition, IRD Editions. 2013. [Online] : http://books.openedition.org/irdeditions/9639>. DOI : 10.4000/books.irdeditions.9639.
- (38) CLEMENÇOT, Julien (2015). Ces entreprises aux petits soins pour les salariés. Jeune Afrique, [Online] mai 18, 2015 : http://www.jeuneafrique.com/232192/economie/emploi-en-afrique-ces-entreprises-aux-petits-soins-pour-les-salaries/
- (39) World Bank. Toujours plus de personnes pauvres en Afrique malgré les progrès réalisés en matière d'éducation et de santé. Press release. 2015.
- (40) FAOSTAT. Online Database. FAO. http://www.fao.org/statistics/databases/fr/
- (41) UIS. Stat. Online Database. UNESCO. http://data.uis.unesco.org/index.aspx?lang=fr&SubSessionId=0dbdaa3a-d49d-4587-b7d8-169a4a8d381c&themetreeid=-200#
- (42) Olivier (2015). L'esclavage moderne : les enfants esclaves du 21ème siècle. Humanium, [Online] , June 19, 2015 : https://www.humanium.org/fr/lesclavage-moderne-les-enfants-esclaves-du-21eme-siècle/
- (43) UNICEF Website. Protection de l'enfant contre la violence, l'exploitation et les abus. URL : https://www.unicef.org/french/protection/57929_child_labour.html>
- (44) UNICEF. La situation des enfants dans le monde 2016 : L'égalité des chances pour chaque enfant. 2016
- (45) Web site of the General Confederacy of the Companies of Ivory Coast. La corruption : un frein au développement de l'Afrique. URL : http://www.cgeci.org/cgeci/index.php?option=com_content&id=506:la-corruption-entrave-le-developpement-de-lafrique
- (46) UNDP. Rapport sur le développement humain en Afrique 2016 : accélérer les progrès en faveur de l'égalité des genres et de l'autonomisation des femmes en Afrique. 2016
- (47) AfDB. The middle of the pyramid: dynamics of the middle class in Africa. Market brief. 2011
- (48) Deloitte. La consommation en Afrique : le marché du XXIème siècle. 2015
- (49) BALDE, Assanatou (2015). In 2040, the middle class will represent 900 million people in Africa, according to CAD-CAM. Afrik.com, [Online] October 15, 2015 : < http://www.afrik.com/en-2040-la-classe-moyenne-representera-900-millions-de-personnes-en-afrique-selon-cfao>

S ELECTIVE BIBLIOGRAPHY (3)

- (50) World Bank. Always more poor people in Africa in spite of the progress realized regarding education and regarding health. Press release. 2015. Processing by IRES. URL: http://www.banquemondiale.org/fr/news/press-release/2015/10/16/africa-gains-in-health-education-but-numbers-of-poor-grow
- (51) World Economic Outlook Database. 2018. Online database. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx
- (52) AFDB Socio Economic Database. 1960-2016. Online database. African Development Bank. < ttp://dataportal.opendataforafrica.org/bbkawjf/afdb-socio-economic-database-1960-2019 >
- (53) African Development Bank, Organization for Economic Cooperation and Development, United Nations Development Programme. Perspectives économiques en Afrique 2017: entrepreneuriat et industrialisation. 2017
- (54) World Bank Database. Online database. https://donnees.banquemondiale.org/. Processing by IRES
- (55) World urbanization prospects: the 2014 Revision. Online database. United Nations, Department of Economic and Social Affairs. < https://esa.un.org/unpd/wup/ >. Processing by IRES
- (56) The Economist Group Limited (2017). The great urban racket. Exploitation and short-sightedness in Africa's slums. The Economist [Online]: https://www.economist.com/news/middle-east-and-africa/21721141-making-slums-less-exploitative-may-be-africas-biggest-challenge-exploitation-and
- (57) World Economic Outlook Database. 2018. Online database. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx. Processing by IRES
- (58) EVAH-MANGA, Emmanuel (2014). La décentralisation en Afrique : une approche comparative par sous-région. [Processing by] : < http://www.wikiterritorial.cnfpt.fr/xwiki/wiki/econnaissances/view/Questions-Cles/LadecentralisationenAfrique-uneapprochecomparativeparsous-region>
- (59) World Population Prospects and World Urbanization Prospects Database. United Nations. Online database: < https://esa.un.org/unpd/wup/>. Processing by IRES
- (60) World Bank Database. Online database. https://donnees.banquemondiale.org/ . Processing by IRES
- (61) Key Indicators of the Labour Market database. 2015. Online database. International Labour Organization. < http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm >
- (62) AFDB Socio Economic Database. 1960-2016. Online database. African Development Bank. http://dataportal.opendataforafrica.org/bbkawif/afdb-socio-economic-database-1960-2019 >
- (63) Energies pour l'Afrique (2015). Les enjeux de l'électrification de l'Afrique. [Online] : http://www.energiespourlafrique.org/fr_Les_enjeux_de_l__electrification_de_l_Afrique_685.html
- (64) Sustainable Energy for all (SE4ALL) database. 2017. Online database. World Bank, IEA. http://data.worldbank.org/data-catalog/sustainable-energy-for-all >
- (65) FAO and World Urbanization Prospects Database. Online database. United Nations :< http://www.fao.org/statistics/databases/fr/; < https://esa.un.org/unpd/wup/ > Processing by IRES
- (66) United Nations Environment Programme. Africa's Adaptation Gap report. 2014
- (67) United Nations Environment Programme database. Online database: < http://hdr.undp.org/en/data/explorer/>
- (68) UNCTADSTAT. Online database. United Nations Conference on Trade and Development. < http://unctadstat.unctad.org/FR/Index.html>. Processing by IRES
- (69) Economic Commission for Africa. Flux financiers illicites. Groupe de haut niveau sur les flux financiers illicites en provenance d'Afrique.
- (70) FAOSTAT. Online database. FAO. http://www.fao.org/statistics/databases/fr/
- (71) The Economist (2016). Jobs in Africa. In praise of small miners. The Economist, [online] 7th may 2016: https://www.economist.com/news/middle-east-and-africa/21698262-boom-artisanal-mining-offers-lessons-development-praise-small-miners
- (72) International institute for Environment and Development & SOS Sahel UK. Modernité, mobilité. L'avenir de l'élevage dans les zones arides d'Afrique. 2010.
- (73) FAO, CIRAD. Rural Africa in motion: dynamics and drivers of migration South of the Sahara. 2017
- (74) the Internal Displacement Monitoring Centre database. Processing by IRES.
- (75) FAO, OIT, BIT. Les travailleurs agricoles et leur contribution à l'agriculture et au développement rural durables. 2017

S ELECTIVE BIBLIOGRAPHY (4)

(76) FAO website. Un premier atlas sur les migrations rurales en Afrique subsaharienne. 2017 : http://www.fao.org/news/story/pt/item/1054334/icode/

(77) The Economist (2016). Mobility. High hopes meet high fences. The Economist, [online], 23rd January 2016: https://www.economist.com/news/special-report/21688584-moving-around-good-young-people-governments-stand-their-way-high-hopes-meet and FOX, Sean. Neglected drivers of urbanisation in Africa. International growth centre. 2017

(78) MAATHAI, Wangari. The Challenge for Africa. New York: Pantheon, 2009. 336 p.

(79) Le Monde (2017). Au Malawi, dans les camps d'« initiation sexuelle » pour fillettes. Le Monde, [online] July 23, 2017 : http://abonnes.lemonde.fr/afrique/article/2017/07/23/dans-le-sud-du-malawi-dans-les-camps-d-initiation-sexuelle-pour-fillettes_5164041_3212.html and KHALIL, Fawaz (2017). Odile, 13 ans : "J'ai été vendue pour devenir la quatrième épouse d'un homme de 50 ans". Le Monde, [online] October 11, 2017: http://abonnes.lemonde.fr/afrique/article/2017/10/11/journee-internationale-de-la-fille-j-ai-ete-enlevee-pour-devenir-la-quatrième-epouse-d-un-homme-de-50-ans_5199387_3212.html (80) BLUM. Elena (2017). Après les déclarations de Macron sur la natalité en Afrique, que disent les chiffres ? Le Monde, [online] July 12, 2017 : http://www.lemonde.fr/afrique/article/2017/07/12/apres-les-

declarations-de-macron-sur-la-natalite-en-afrique-la-verite-des-chiffres_5159751_3212.html#dclU1jMrjvmbf9sV.99>

(81) BERNAS, Anne (2016). Des milliers d'enfants soldats toujours impliqués dans les guerres. Rfi Afrique, [online] February 12, 2016: http://www.rfi.fr/afrique/20160212-enfants-soldats-impliques-trentaine-conflits-daech-syrie-soudan-onu-reinsertion

(82) SERC (2016). L'exode rural : un des obstacles majeurs au développement des communautés villageoises du Cameroun. Lutte contre l'exode rural au Cameroun, [online] April 2, 2016 : http://stopexoderuralcameroun.exa

- (83) Economic Commission for Africa. Africa review report on drought and desertification. 2007
- (84) United Nations Convention to Combat Desertification official website (UNCCD)
- (85) Lincoln Institute of Land Policy. A planet of cities: urban land cover estimates and projections for all countries, 2000-2050. Working paper. 2010
- (86) Ministry of the Environment, Nature conservation and Sustainable development. Cameroun. In DEVEAUX, Jacques (2013). Five tons of bottles plastic collected every day at Douala. Géopolis. Franceinfo, [online] March 05, 2013 : < http://geopolis.francetvinfo.fr/cinq-tonnes-de-bouteilles-plastique-collectees-chaque-jour-a-douala-12819>
- (87) C., Karen et al. Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools. PNAS. 109 (40). 2012. [Online]: < http://www.pnas.org/content/109/40/16083>
- (88) UNESCO, UN-Water. Water and jobs: Facts and Figures. 2016
- (89) Greenfacts Site web. Degradation of Ecosystems: https://www.greenfacts.org/fr/ecosystemes/evaluation-millenaire-2/1-degradation-ecosystemes.htm#1>
- (90) UNEP. Afrique: Atlas de l'eau. 2010
- (91) OCDE. Chapter 3: Climate change. In: OECD Environmental Outlook to 2050. 2011 [online]: https://www.oecd.org/env/cc/49082173.pdf
- (92) OCDE. Chapitre 9: Biodiversité. In: Perspectives de l'environnement de l'OCDE à l'horizon 2030. 2008 [online]: < https://www.oecd.org/fr/env/ressources/43901839.pdf>
- (93) CEBALLOS, Gerardo et al. Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. PNAS. 114 (30). 2017. [Online]: < http://www.pnas.org/content/114/30/E6089 >
- (94) SIEMENI, Raoul (2016). Les forêts tropicales: Les forêts tropicales. Agence d'information environnementale, [online] July 13, 2016: http://afriquenvironnementplus.info/680-2/
- (95) WWF. Rapport planète vivante 2016 : risque et résilience dans l'Anthropocene. 2016
- (96) Ministry of Sustainable development, Environment and Fight against climate change. Quebec. Do you know what the nature makes for us? Plants used trickery to propagate better
- (97) TCHATCHOU, Bérenger et al. Déforestation et dégradation des forêts dans le Bassin du Congo: état des lieux, causes actuelles et perspectives. CIFOR. 2015
- (98) AKKERMANS, Tom et al. The regional climate impact of a realistic future deforestation scenario in the Congo basin. Journal of Climate, [online] April 2014: < https://doi.org/10.1175/JCLI-D-13-00361.1 >
- (99) FAO database. Online database: http://www.fao.org/statistics/databases/fr/

S ELECTIVE BIBLIOGRAPHY (5)

(100) CARAMEL, Laurence (2017). Dans le bassin du Congo, les Pygmées persécutés au nom de la protection de la nature. Le Monde, [online] September 24, 2017: http://www.lemonde.fr/afrique/article/2017/09/24/ dans-le-bassin-du-congo-les-pygmees-sacrifies-sur-l-autel-de-la-protection-de-la-nature_5190365_3212.html#M9VMfAZCfGFfp2p1.99> and CAMEROON, Baka. The destruction of Congo basin tribes in the name of conservation: How will we survive?. Survival international. 2017

(101) COQUERY-VIDROVITCH, Catherine. Petite histoire de l'Afrique. Édition revue et augmentée. Paris : La découverte, 2016. 224 p.

(102) Youba Sokona, Vice-president of the Intergovernmental Panel on Climate Change; Haïdar El Ali, Former Senegalese Minister for Ecology and Peach, director of the Oceanium of Dakar; Ali Tapsoba, President of the association Earth for life; René Ngongo, President of the commission environment and natural resources of the Economic and Social Council of RD Congo; Nnimmo Bassey, Founder of the NGO Environmental Rights Action; Ndranto Razakamanarina, Chairman of the Alliance Voahary Gasy. ROGER, Benjamin (2016). Comment protéger l'environnement en Afrique? Des figures de l'écologie nous répondent. Jeune Afrique, [online] november 17: http://www.jeuneafrique.com/mag/373366/societe/proteger-lenvironnement-afrique-figures-de-lecologie-repondent/

(103) AfDB. Nourrir l'Afrique : la voie vers la transformation agricole en Afrique. 2017

(104) World Bank website (2016). L'Afrique compte restaurer 100 millions d'hectares de terres dégradées d'ici 2030: http://www.banquemondiale.org/fr/news/feature/2016/11/14/africas-bold-and-ambitious-endeavor-restoring-100m-hectares-of-land-by-2030

(105) FAO. Comment nourrir le monde en 2050 ? 2009

(106) ONU website. FAO: L'agriculture des pays en développement a besoin de gros investissements.2009: http://www.un.org/apps/newsFr/storyF.asp?NewsID=20282#.WkaWqt_T5PY

(107) Statista. Online database: https://www.statista.com/statistics/201800/projection-for-total-cropland-area-in-china-from-2010/

(108) OCDE, FAO. Chapitre spécial: Afrique subsaharienne. In: Perspectives agricoles de l'OCDE et de la FAO 2016 2025. 2016

(109) World Food Programme website. Faits et chiffres sur la faim (2012): https://fr.wfp.org/faim/faits-et-chiffres>

(110) WHO. Rapport 2015 sur les progrès en matière d'assainissement et d'alimentation en eau : les principaux faits. 2015.

(111) Website of the World health organization. Noncommunicable diseases: http://www.afro.who.int/health-topics/noncommunicable-diseases>

(112) World Bank. Africa's cities: opening doors to the world. 2017

(113) MUNANG, Richard and ANDREWSH, Jesica (2014). L'Afrique face au changement climatique. *Afrique Renouveau*. Edition Spéciale Agriculture 2014. [online]: http://www.un.org/africarenewal/fr/magazine/%C3%A9dition-sp%C3%A9ciale-agriculture-2014/l%E2%80%99afrique-face-au-changement-climatique

(114) FREEMANTLE, Simon. Le potentiel de ressources dormantes en Afrique. Mouvement pour une Organisation Mondiale de l'Agriculture. [online]: http://www.momagri.org/FR/articles/Le-potentiel-de-ressources-dormantes-en-Afrique_1033.html

(115) AfDB. Agriculture. Revue sur l'efficacité du développement. 2016

(116) ADESINA, Akinwumi A (2017). Transformer l'agriculture en Afrique. In: African Development Bank. [online]: < https://www.afdb.org/fr/news-and-events/transforming-agriculture-in-africa-17432/>

(117) JOHANSSON KREUGER, Linnea (2015). Has the Maputo Declaration Made a Difference? Looking at the past ten years of Sub Saharan agriculture within the CAADP. LUP Student Papers. [Online]: https://linnea.com/repapers/search/publication/8045580>

(118) TAONDYANDE, Maurice. Dialogue politique: 10 ans après la déclaration de Maputo. Système régional d'analyse stratégique et de gestion des connaissances. Monrovia. 11-14 september.

(119) WADE, Idrissa (2014). L'engagement de Maputo : le mot d'ordre a-t-il été respecté? Centre international pour le commerce et le développement durable (ICTSD), [online] July 18, 2014: https://www.ictsd.org/bridges-news/passerelles/news/l%e2%80%99engagement-de-maputo-le-mot-d%e2%80%99ordre-a-t-il-%c3%a9t%c3%a9-respect%c3%a9>

(120) AfDB, NEPAD, CAAPD. Synthèse de la Déclaration de Malabo sur le PDDAA et d'autres décisions en rapport avec l'UA, NEPAD. 2014

(121) AfDB, NEPAD, CAAPD. Formulaire de préparation du Rapport Pays. Document de préparation du Rapport National de Revue Biennale sur les progrès accomplis dans la réalisation des objectifs et cibles de la Déclaration de Malabo. 2017

(122) CIRAD website. Prospective Agrimonde-Terra: http://www.cirad.fr/publications-ressources/edition/etudes-et-documents/prospective-agrimonde-terra

S ELECTIVE BIBLIOGRAPHY (6)

- (123) Futures Studies Forum for Africa and the Middle East. Reflections on 2016. Special Edition. North Africa Horizons. Bulletin 5. January 2017
- (124) The Economist Intelligence Unit. Global food security index 2017: measuring food security and the impact of resource risks. 2017
- (125) FAO website. La période de prix agricoles élevés touche probablement à sa fin mais la vigilance reste de mise. 2016 : < http://www.fao.org/news/story/fr/item/422695/icode/>
- (126) Planetoscope- Statistiques. Online Database. https://www.planetoscope.com/sols/1175-disparition-de-surfaces-agricoles-dans-le-monde.html
- (127) BARMA, Aboubacar Yacouba (2016). Agriculture et sécurité alimentaire : le grand défi de l'Afrique. La tribune Afrique , [Online] December 13, 2016 : < https://afrique.latribune.fr/entreprises/agriculture/2016-12-31/agriculture-et-securite-alimentaire-le-grand-defi-de-l-afrique.html>
- (128) DORMIEU, Raphaëlle (2017). Afrique : la grande muraille verte repousse le désert du Sahara. [Online]: https://positivr.fr/progession-sahara-desertification-grande-muraille-verte-afrique/
- (129) The Economist (2016). What is Africa's "Great Green Wall"? [Online]: https://www.economist.com/blogs/economist-explains?fsrc=gnews
- (130) WESTON, Mark (2014). Rwanda. Le péril démographique. Courrier international, [Online] April 8, 2014: https://www.courrierinternational.com/article/2014/03/28/le-peril-demographique>
- (131) JACQUEMOT, Pierre (2017). Le mythe de l'abondance des terres arables en Afrique. [Online]: http://www.willagri.com/2017/11/20/mythe-de-labondance-terres-arables-afrique/
- (132) World Bank, Securing Africa's land for shared prosperity: a program to scale up reforms and investments. 2013
- PICHEL, Frank (2017). Securing land rights in Africa. Project syndicate. Project Syndicate, [online] 4th October 2017:
- (133) BOKO, Hermann (2017). A Cotonou, l'agriculture urbaine perd du terrain face au béton. *Le Monde*, [Online] August 09, 2017 : <En savoir plus sur http://www.lemonde.fr/afrique/article/2017/08/09/a-cotonou-l-agriculture-urbaine-perd-du-terrain-face-au-beton_5170638_3212.html#Sk515XyivPIMgIQd.99 http://www.lemonde.fr/afrique/article/2017/08/09/a-cotonou-l-agriculture-urbaine-perd-du-terrain-face-au-beton_5170638_3212.html>
- (134) Land Matrix: agricultural drivers. 2018. Online database: http://www.landmatrix.org/en/get-the-idea/agricultural-drivers/
- (135) The Economist (2016). Africa's real land grab. The Economist, [online] 21st july 2016: https://www.economist.com/news/middle-east-and-africa/21702472-never-mind-foreign-interlopers-african-urbanites-are-scooping-up-more
- (136) BEN KHATRA, Nabil and LOIREAU, Maud (2017). The immense challenge of desertification in sub-Saharan Africa. The Conversation, [online] 5th October: https://phys.org/news/2017-10-immense-desertification-insub-saharan-africa.html#iCp>
- (137) "GRAIN" website. Affamés de terres : les petits producteurs nourrissent le monde avec moins d'un quart de l'ensemble des terres agricoles. 2014 : https://www.grain.org/article/entries/4960-affames-deterres-les-petits-producteurs-nourrissent-le-monde-avec-moins-d-un-quart-de-l-ensemble-des-terres-agricoles
- (138) FAO. Smallholders and family farmers. 2012
- (139) World Bank. Rising global interest in farmland: can it yield sustainable and equitable benefits?. 2011
- (140) FAO, ITTO. The state of forests in the Amazon basin, Congo basin and southeast Asia. 2011
- (141) The Economist (2016). Land ownership. The Economist, [online] 16th july: https://www.economist.com/news/middle-east-and-africa/21702175-property-rights-are-still-wretchedly-insecure-africa-title-come
- (142) RAKOOARISOA, Manitra A. L'impact économique des investissements agricoles étrangers en Afrique sub-saharienne. Passerelles, volume 17, n° 5. 2016. [Online] : https://www.ictsd.org/bridges-news/passerelles/news/l%E2%80%99impact-%C3%A9conomique-des-investissements-agricoles-%C3%A9trangers-en-afrique>

S ELECTIVE BIBLIOGRAPHY (7)

(143) KASISI, Robert. Les perspectives de la biodiversité en Afrique subsaharienne : repenser collectivement le modèle de gestion. VertigO - la revue électronique en sciences de l'environnement, volume 12, n°2. 2012. [Online] : http://journals.openedition.org/vertigo/12263 >

(144) AfDB. Nourrir l'Afrique : stratégie pour la transformation de l'agriculture en Afrique pour la période 2016-2025. 2016

(145) NEPAD. Les agricultures africaines : transformations et perspectives. 2013

(146) L.A. Story (2015). L'Afrique : les défis du développement. [online] : http://la-story.over-blog.com/2015/05/l-afrique-les-defis-du-developpement.html

(147) United Nations, Department of Economic and Social Affairs. World population policies 2009. 2010

(148) Official website of the International Fund for Agricultural Development: https://www.ifad.org/ >

(149) ARCHONDO-CALLAO, Rodrigo. Roads works costs per km. World Bank. 2000. [Online]: http://siteresources.worldbank.org/INTROADSHIGHWAYS/Resources/338993-1122496826968/kmcosts.pdf Calculs IRES.

(150) African monitor. Rural infrastructure in Africa: unlocking the African moment. Development Support Monitor. Paper series n° 1. 2012

(151) World Bank. ICT in agriculture, connecting smallholders to knowledge, networks and institutions. 2017

Horizon scanning of CEP website. Les TIC au service de la petite agriculture familiale : nouvelle version du recueil de la Banque mondiale. 2017 : http://veilleagri.hautetfort.com/archive/2017/10/18/les-tic-auservice-de-la-petite-agriculture-familiale%C2%A0-nouve-5990380.html

(152) FAO. Indice d'orientation agricole des dépenses publiques. 2017

(153) MKWAMBISI, David D. et al. (2011). Urban agriculture and poverty reduction: evaluating how food production in cities contributes to food security, employment and income in Malawi. *Journal of international development*, volume23, Issue 2, March 2011. p. 181-203. [Online]: https://doi.org/10.1002/jid.1657>

(154) FAO website. L'agriculture urbaine: http://www.fao.org/urban-agriculture/fr/w

(155) TABARLY, Sylviane (2011). Agricultures sous tension, terres agricoles en extension: des transactions sans frontières. *Géoconfluences*, [online] june 23, 2011: http://geoconfluences.ens-lyon.fr/informations-scientifiques/articles/agricultures-sous-tension-terres-agricoles-en-extension-des-transactions-sans-frontières

(156) African union, African Development Bank, Economic Commission for Africa. Changements climatiques, agriculture et sécurité alimentaire. Document de travail n°2. Septième Forum pour le développement de l'Afrique: agir face aux changements climatiques pour promouvoir un développement durable en Afrique. 2010

(157) Central Africa News Agency (2016). Exploitation forestière: 75% de la production de bois d'Afrique exporté en Chine, selon l'ONG Greenpeace. [online]: http://adiac-congo.com/content/exploitation-forestiere-75-de-la-production-de-bois-dafrique-exporte-en-chine-selon-long

(158) The Economist (2016). World climate talks address agriculture. *The Economist*, [online] 13th October 2016: < https://www.economist.com/news/middle-east-and-africa/21708691-more-productive-african-farms-could-help-both-people-and-planet-world-climate>

(159) UNEP. Africa's adaptation gap2: bridging the gap, mobilising sources. Technical report. 2015

(160) N'DIMINA-MOUGALA, Antoine-Denis. Les conflits africains au XXème siècle. Essai de typologie. Guerres mondiales et conflits contemporains, 2007/1 (n° 225), p. 121-131. URL : https://www.cairn.info/revue-guerres-mondiales-et-conflits-contemporains-2007-1-page-121.htm

(161) FAO et al. The state of food security and nutrition in the world: building resilience for peace and food security. 2017

(162) SIPRI. SIPRI Yearbook 2017: armaments, disarmament and international security. 2017

(163) UKEJE, Charles and ELA, Wullson Mvomo. Approche africaine de la sécurité maritime : cas du Golfe de Guinée. Friedrich-Ebert-Stiftung. 2013

(164) UNHCR Populations Statistics data. Online database. UNHCR. http://www.unhcr.org/fr/apercu-statistique.html

(165) ICC International maritime bureau. Piracy and armed robbery against ships. Reports for the period 1 January-31 December 2016 and 1 January-31 December 2017. 2017

(166) Oceans Beyond Piracy. The state of maritime piracy 2016: assessing the economic and human cost. Executive summury. 2016

S ELECTIVE BIBLIOGRAPHY (8)

- (167) Integrated Network for Societal Conflict Research data. 2017. Online database. Center for Systemic Peace. http://www.systemicpeace.org/inscrdata.html. Calculs IRES
- (168) United Nations Peacekeeping website. Fiche d'information sur les opérations de maintien de la paix en cours. Calculs IRES: http://www.un.org/fr/peacekeeping/resources/statistics/factsheet.shtml>
- (169) PNUD. Inégalités de revenus en Afrique subsaharienne : tendances divergentes, déterminants et conséquences. 2017
- (170) LOPES, Carlos. The economic costs of electoral violence in Africa. UNECA. Eight African Governance Forum, 16th-18th October 2012: http://www1.uneca.org/ECAStatementsDetail/tabid/5067/ArticleId/2202/
- Statement-by-Mr-Carlos-Lopes-at-the-Eight-African-Governance-Forum.aspx
- (171) General Assembly, Security Council. Le sort des enfants en temps de conflit armé en 2016. Rapport du Secrétaire général. 2017
- (172) General Assembly, Security Council. Le sort des enfants en temps de conflit armé en 2013. Rapport du Secrétaire général. 2013
- (173) UN Migration database. 2015. Calcul IRES
- (174) KWAA PRAH, Kwesi, African wars and ethnic conflicts; rebuilding failed states, UNDP, 2004
- (175) MWEYANG AAPENGNUO, Clément. La mauvaise interprétation des conflits ethniques en Afrique. Bulletin de la sécurité africaine, n°4 / Mai 2010. URL: https://africacenter.org/wp-content/uploads/2016/06/
- ASB04FR-La-mauvaise-interpr%C3%A9tation-des-conflits-ethniques-en-Afrique.pdf>
- (176) JICA Research Institute, Research Institute for Economics & Business Administration, Kobe Université ethnique et instabilité économique en Afrique : perspectives interdisciplinaires. 2012
- (177) Website of the Shoah Memorial. Le génocide des Tutsi au Rwanda: http://www.memorialdelashoah.org/archives-et-documentation/genocides-xx-siecle/genocide-tutsi-rwanda.html
- (178) D'ALLARD, Marion, 15 novembre 2016. Réfugiés climatiques, la crise du siècle. L'Humanité.fr: URL: https://humanite.fr/refugies-climatiques-la-crise-du-siecle-626101>
- (179) Opendata de la BAD. Calcul IRES
- (180) African Development Fund, World Economic Forum, World Bank. The Africa competitiveness report 2017: addressing Africa's demographic dividend. 2017
- (181) Citi Global Perspectives & Solutions. Technology at work v2.0: the future is not what it used to be. United Kingdom: Oxford Martin School, University of Oxford. 2016
- (182) SAKPANE-GBATI, Biléou. La démocratie à l'africaine. Ethique publique, [en ligne], vol. 13, n° 2., 2011. URL: http://journals.openedition.org/ethiquepublique/679>
- (183) DIANGITUKWA, Fweley. La lointaine origine de la gouvernance en Afrique: l'arbre à palabres. Revue Gouvernance, 11 (1). 2014. URL: http://id.erudit.org/iderudit/1038881ar
- (184) THOMAS, Louis-Vincent. La vieillesse en Afrique noire, transmission orale et rareté individuelle. Communications, n°37, pp. 69-87. 1983. URL : https://www.persee.fr/doc/comm_0588-8018_1983_ num_37_1_1553>

Part 3

AFRICA IN MOTION

PLAN

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A GENERAL OVERVIEW

Africa in motion

- Africa has undoubtedly never been so coveted, either for its agricultural or mining resources or for its cheap labour. Some of its economies have taken off in a sustainable manner, but the challenges it faces are very serious.
- How, then, to become autonomous? First of all, by changing one's self-perception, by strengthening one's potential and by trusting oneself to exploit it. Then, by refusing the steps followed by the West in terms of development, and opting for a *leap-frog* approach which, alone, can allow us to take another path towards growth.
- Of course, structural changes take time. But in the absence of assertive state intervention, it is up to communities and individuals to override conventional efforts to fill the gaps on the map of Africa's autonomous development.

Towards autonomy?

- The levers of change (chapter 1): Part of Africa has already projected itself into the future, as it is shown by some examples of good practice. Three levers will accelerate the transformation of the continent towards greater autonomy: the digital and energy transition and value-added economy.
- The springboards of autonomy (chapter 2): Africa's rapid evolution can be accelerated and some of its challenges can be overcome if it proves capable of mobilizing its own assets, such as its diaspora, its new generations, the mobility of its citizens, its cultural resources...
- Morocco's contribution (chapter 3): Back in the community of African nations, Morocco wishes to contribute to the construction of a stable and prosperous continental edifice. How can Morocco fit into intra-African cooperation?

Definition of African autonomy

"An Africa that thinks for herself and speaks to the rest of the world.

Africa must become her own centre again and can only do so by opening up to others and to herself". (1)



■ Source: http://www.bpifrance.fr/A-la-une/Dossiers/L-Afrique-un-marche-a-conquerir

Chapter 1

THE LEVERS OF CHANGE



■ Source: http://trac-fund.com/wp-content/uploads/2015/09/Business-in-Africa.jpg

HE ISSUE AT STAKE

Africa, a continent of all possibilities

- ▶ During the 20th century, the world entered a new phase of major change, one of its great systemic transitions. This is reflected as much in the impacts of digitalization as in the new aspirations of peoples. Africa is not immune to this global transformation.
- ► The 21st century will clearly be one of great change for the continent. All prospects are now open:
 - ❖ The sinking of a continent, unable to control its environmental, climatic and economic challenges, sources of all forms of violence.
 - The definitive division, within states or populations, between areas of prosperity and growth and areas of total disengagement, rapidly becoming areas of lawlessness and new human jungles.
 - The virtuous circle, which will see a continent united, in solidarity, autonomous, become one of the great world powers of this century.
- What will make the continent switch towards one future or another will be its ability to activate these levers of change without giving up its autonomy.

But an Africa already in motion...

Today, Africa is in motion. This is not measured by the usual indicators, such as GDP, whose variability and limits are known, but by the multitude and diversity of good practices across the continent, as shown by the examples presented here.

... which must quickly seize the levers of change, opening access to the world of tomorrow

- The energy transition is the first lever to operate. On the one hand, to stop the degradation generated by current energy systems and, on the other hand, because without energy, development cannot take place.
- The digital transition is the second lever: operators on the continent, often faster than their international competitors, have already embarked on the digital battle which has only just begun.
- ▶ The economic transition is another major lever. It is time for Africa to embrace the economy x.0 which consists in creating added value, through the transformation of its natural resources and moving to a demand-based economy, using the collaborative economy and hybrid innovation.

OCUS N°14

Changing the energy system

- The cost of building the power plants and electrical grids needed to supply the 620 million Africans who do not have access to electricity in 2015 (cf. Africa in figures n°6), especially in rural areas, would amount to some 63 billion US dollars per year until 2030. Only 8 billion per year are spent today (2).
- Millions of Africans are now able to bypass the grid and get electricity from rooftop facilities for a few dollars a week.
- ▶ Of course, the efficiency of solar panels and the difficulty of storing this energy do not make it possible to satisfy all needs, particularly for continuous electricity. Hence the need for an energy mix with local resources, such as geothermal in East Africa, hydropower in Ethiopia and Central Africa or natural gas in Mozambique and Tanzania.
- The market could rapidly be divided between:
 - Traditional public utility services or major international operators, providing continuous electricity to cities and businesses,
 - And smaller, more innovative enterprises, supplying off-grid, individual electricity to poorer households in rural areas or via local mini-grids,

Verbatim (3)

- "Accelerate the deployment of clean energy: we can invest in completely new things and benefit from the most efficient and least polluting technologies". Youba SOKONA, Vice-President of the Intergovernmental Panel on Climate Change.
- "In the near future, we want to install mini-hydro and solar power plants, thus using two resources that abound in the country, in order to replace wood-energy by a clean energy". René NGONGO, President of the Environment and Natural Resources Committee of the Economic and Social Council of the Democratic Republic of Congo.
- "Our states must also understand that our dependence on petrodollars affects the economy as a whole by preventing other sectors from developing. (...) Communities are becoming increasingly sensitive and are watching oil tankers. (...) The polluter pays principle must become the norm". Nnimmo BASSEY, founder of the NGO Environmental Rights Action.

T

HE ENERGY TRANSITION

From one world to another

- ► The energy production that allowed the economic boom of the 20th century was based on:
 - exploitation of hydrocarbons which are now causing environmental damage, from greenhouse effect to chemical intoxication,
 - centralization of production within superstructures (mega-dams, refineries, nuclear power stations) which has led to high distribution costs in developed countries and inaccessible in many developing areas.
- ► Emerging energy sources in the 21st century are renewable. Nevertheless, these can have a negative impact on biodiversity:
 - Windmills: collision with birds and bats.
 - ❖ Dams: alteration of ecosystems, salinization of soils, development of diseases such as bilharzia.
 - Solar farms: impact on animal movements (birds, ecological corridors).
 - Wood: deforestation, CO₂ emissions .
- ▶ It is, therefore, the whole energy system that is being rethought: from the reduction of energy consumption to shared local production, via micro grids, a 100% renewable energy mix and domestic batteries.

The African challenge

- Africa's energy needs are considerable and urgent. Day after day, the lack of modern energy services hampers the continent's economic growth, job creation, sustainable agriculture, health and education. Decision makers understood that exploiting the high potential of renewable energies (solar, hydro and wind) would reduce their energy dependence and improve their competitiveness.
- Also, the African Renewable Energy Initiative, concluded in 2016 at COP21, aims to install large-scale renewable energy capacity on the African continent by 2020. It is supported by donors, the private sector and African civil society.
- However, an African energy development model has yet to be defined that could be based, in part, on local production, local storage systems and micro grids, such as the islands of Ta'u (solar autonomy) and El Hierro (hydro-wind autonomy). But, it is difficult to give up:
 - the hydroelectric potential of which 92% is untapped in Africa (4), particularly in West Africa where ECOWAS might want to exploit the rivers of the sub-region,
 - the godsend that oil represents for the producing states including Nigeria, as well as for the African oil ports.

A FRICA IN MOTION N°1

Towards clean energy

Good practices

- Akon Lighting Africa: this initiative, launched in February 2014 by international artist Akon, leader Thione Niang and entrepreneur Samba Bathily, aims to electrify African villages with an innovative, clean and accessible solar solution, i.e. 16 million Africans who will benefit from this initiative by 2020 (5). In November 2017, more than 500 localities had benefited from the initiative, spread over fifteen countries (Senegal, Gambia, Rwanda, Sierra Leone...), more than 100,000 solar streetlights installed, 3,000 solar mini grids, 102,000 solar domestic kits and 5,500 indirect jobs created (6).
- The Women Barefoot Solar Engineers of Africa: these women, most of them illiterate grandmothers, work in Africa's 21 least developed countries, helping to provide their communities with clean, inexpensive domestic lighting from solar energy. In six months, they learned how to manufacture, install and maintain solar-powered home lighting systems, transforming the lives of more than 2,000 families in solar-powered villages (7).

► M-KOPA and Off-Grid Electric (8):

M-KOPA, which operates in Kenya, Uganda and Tanzania, and Off-Grid Electric, in Tanzania and Rwanda, offer a kit consisting of a few LED bulbs, a mobile phone charger and a radio, all powered by a solar panel and a battery.

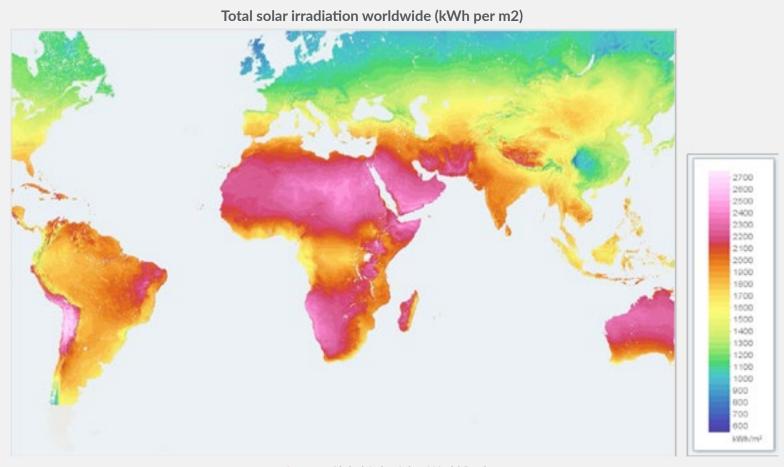
Payments are made by mobile phone. An initial cost of \$150 to \$500 would be prohibitive for most of their clients. The companies charge, therefore, in sufficiently spaced instalments so that the monthly cost is less than that of purchasing kerosene for the bulbs.

Default rates are negligible. If payments stop, the service is disconnected remotely, disabling the box that connects the solar panel to the devices.

Once the loan is repaid, there are no further payments until a customer invests in a larger system with more appliances, such as a television or refrigerator.

M-KOPA claims to supply 500 new customers with electricity every day.

320 days of sunshine per year on average in certain regions of Africa (9)



T

HE DIGITAL TRANSITION (1)

From one world to another

- A socio-economic transformation
 - The dematerialization of physical objects that have become digital (digitization), combined with the creation of cyberspace and associated communication and information technologies, is leading to a wave of massive transformation (digitization) not only of human activities, but also of their economic models.
 - New activities are developed at lower cost from a computer, a connection and knowledge, often empirical. Hence the development of start-ups and freelancers who can operate worldwide.
 - ❖ No industry can escape the digital transition that comes with increased automation. It is only a matter of time. Miniaturization of terminals for access to this global Internet network and their growing power make smartphones the essential interfaces. The creation and dissemination of applications is, therefore, at the heart of this new economy.
 - The increasing use of connected objects, 3D printers and standalone robots shows that this transition is just beginning.

A political-cultural transformation

- Access to the global infosphere opens the door to comparisons of situations, making equalities less and less bearable. At the same time, the Web becomes a powerful means of individual and collective expression, capable of relaying dissatisfactions to the point of causing the advent of insurrections (Arab spring for example).
- From digital identity theft to data piracy, including the recruitment of extremists, cyberspace is also becoming the new playground for crime. States themselves are tempted to use it to control their populations, or even censor them, up to the point of cutting off networks (China, Cuba, Cameroon, Libya, Turkey, ...).
- ❖ Digitization is a means of control, pressure, upheaval, but also of creativity, economic development or of connecting people globally. It transforms people's relationships with their environment: their families, communities, institutions and the world. It "de-insulates", globalizes, gives access to everything immediately. Information and presence (ubiquity) become the foundations of a new culture that is no longer Western or Eastern, African or Asian, but only digital.

T

HE DIGITAL TRANSITION (2)

The double African challenge

- The first challenge is to free up Internet access while fighting cybercrime.
 - Indeed, on-line freedom of expression is considered as important as offline freedom and access to the Internet is considered an intangible right. However, African governments still tend to censor on-line expression (cf. "Zone 9" in Ethiopia, Tanzania...) or to cut off Internet access during elections (Uganda, Gabon, Democratic Republic of Congo...) for reasons sometimes more political than public order (10).
 - ❖ The counterpart of accessibility, since 2013, is the increase in African cybercrime. A new generation of West African cybercriminals has emerged, mainly young unemployed graduates. Between "Yahoo Boys" and "Cybercrime Barons", they scour African individuals as well as foreign companies, in connection with foreign pirates. Their booty amounts to several millions of dollars: an annual average of 2.7 million dollars for companies and 422,000 dollars for natural persons (11).

- ► The second challenge is to go beyond the digital economy to boost African growth in an inclusive and sustainable manner.
 - Long before most developed countries, Africans saw the development of an application-based economy coming. This allowed them to skip the computer stage and invest directly in the mobile economy. A mosaic of entrepreneurs, technology start-ups and innovation centres join their forces across borders to create a true information technology ecosystem, attracting major players like Facebook, Netflix and SAP, while Silicon Valley invests in these digital projects from South Africa to Kenya.
 - The entire technology, media and telecommunications sector is being impacted by Africa's growth, from smartphone applications in the health sector to biometric solutions for bio-monitoring of agricultural diseases (Uganda), as well as inland navigation services for airports, for example, (South Africa) or SMS alerts in the event of natural disasters (Rwanda).

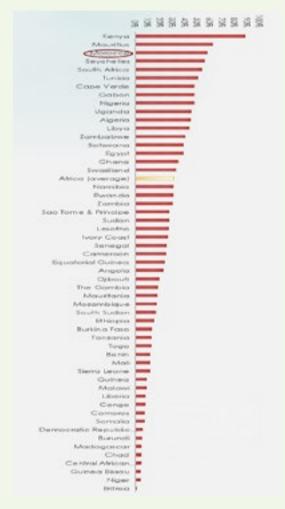
A

FRICA IN FIGURES N°12

Digitization

- A number of African Internet users up 85% between 2000 and 2017 (12).
- ▶ With 388 million Internet users in 2017, Africa accounts for 10% of the world's total Internet users (12).
- In 2017, 160 million Facebook social network users were located on the African continent, representing 8% of the world's total users (12).
- In January 2017, Cairo was the 6th city in the world with the largest number of users on Facebook (13).
- A high cost of cybercrime in Africa. For example, in 2016 it was 2 billion dollars (14).

Internet penetration rate by African country in 2017



■ Source: IRES processing of data from Internet World Stats

A FRICA IN MOTION N°2

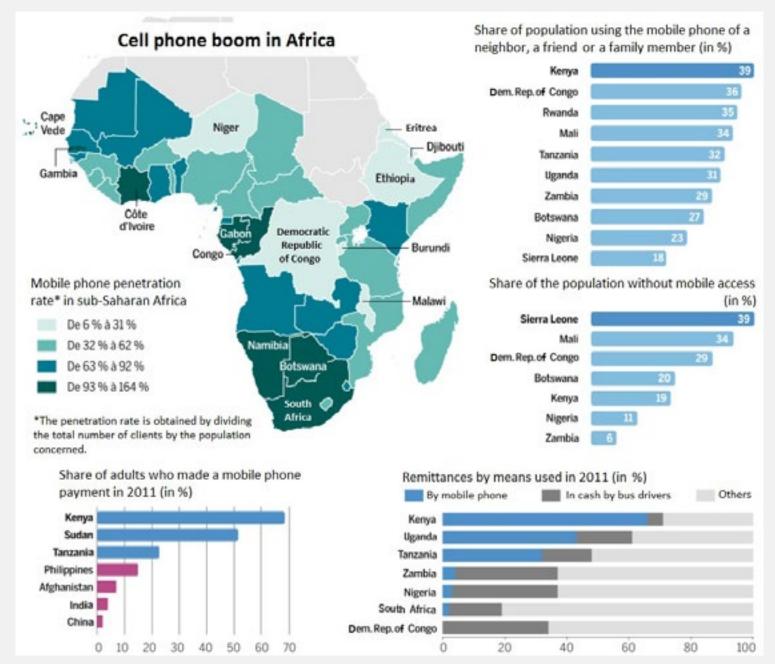
Towards digital energy

Good practices

- ▶ MTick: an on-line booking and payment platform for bus tickets, launched in April 2016 in Abidjan. It allows carriers to forecast the number of passengers, manage bookings and adjust the number of buses scheduled and, for passengers, to avoid endless queues without a guarantee of departure (15).
- ▶ **SEEN**: in Niger, the Niger water supply company offers its customers the possibility of paying directly by mobile phone (16). Nearly 65% of water consumption is thus directly managed and paid for by telephone (17).
- ► M-Pedigree: a Ghanaian mobile solution to verify the authenticity of medicines that was deployed in Ghana in 2008 and, since then, in Niger, Tanzania, Nigeria, Uganda... (18).
- ▶ **Njorku**: a Cameroonian platform for job seekers which lists job offers in Nigeria, Cameroon, Ghana, Kenya, South Africa, Uganda and Egypt (19).

M-Pesa

- ▶ Launched in 2007 by Kenyan operator Safaricom, the pioneering mobile payment platform M-Pesa is now the world leader in mobile financial transfer (20).
 - Of the nearly 30 million users worldwide (21), 18 million are Kenyans, or 70% of the country's adult population (22).
 - ❖ The "Lipa Na M-Pesa" payment tool accounted for 5% of total transactions in Kenya in 2017 and targets 20% in 2020 (22).
 - ❖ Its activities expanded in 2012 to micro-credit (M-Shwari). In 2017, 2 loans per second are contracted via M-Shwari (22).
- In 10 years, M-Pesa has transformed the Kenyan economy (22):
 - 2% of Kenyans have been lifted out of poverty thanks to microcredits obtained.
 - ❖ M-Pesa has created some 860,000 jobs and \$1 billion in economic activity.
 - Farmers, for example, have been able to access essential bank services (credit, savings, transfers), despite their distance from any local banking facilities.



■ Source: Sub-saharan Africa Mobile Observatory 2012, Gallup and the World Bank

E CONOMIC TRANSITION (1)

From one world to another

- ▶ Born in Germany in 2010 (23), the industrial concept 4.0 designated increasingly automated plants (smart factories) thanks to numerical simulation, cobotics, augmented reality, additive manufacturing, machine-to-machine communication and artificial intelligence. In response to the productivity generated, the new industry concept x.0 aims to extend digital continuity to the entire value chain. The resulting gains are then reinvested in new, more personalized products and services (24).
- In reality, this paradigm shift is revolutionizing not only industry or business, but the economy as a whole for three major reasons:
 - The transformation of the customer status from a standard individual who has to be satisfied with what is offered to him, on the basis of the price-quality equation (supply economy), to a specific person whose individual need must be best captured in order to satisfy it in the most personalized way possible (demand economy). Hence the importance of big data, data confidentiality, personalized advertising... and all the means developed to capture, as quickly as possible, the aspirations of these new consumers.

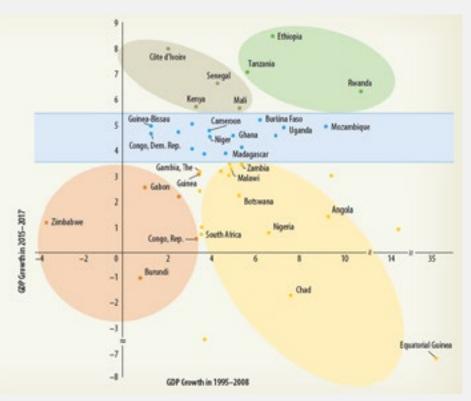
- The radical change in production methods, which reduces time to market and allows for local assembly and customization. This requires complete reorganization of the large centralized groups of the 20th century, whereas digital native companies have already organized themselves in agile mode (cf. Local Motors). Hence the exponential development of logistics, in particular autonomous delivery systems, but also short and local circuits (cf. urban agriculture).
- Changes in the very nature of jobs, which in turn become more flexible, more autonomous and also more precarious. While permanent, secure jobs with relatively low added value are easily replaced by physical or virtual machines, a "task economy" supported by digital platforms is developing on a global scale: the gig economy (25). This market of nearly 77 million self-employed workers in Europe (8.9 million), India (15 million) and the United States (53 million) (26), which covers the full range of possible tasks, is gradually being organized by huge globalized marketplaces such as Upwork or Freelancer. Hence the persistent idea that the massive wage model has lived, and with it the system of social protection by distribution.
- Finally, this economy x.0 gives unprecedented importance to the sustainability of its development mode: inclusive growth, circular economy, *jugaad* innovation (doing more with less), open partnerships and training...

E CONOMIC TRANSITION (2)

The new African economy

- ► The leap-frog paying choice, i.e. improving its position by skipping a few steps.
 - ❖ Unlike the image conveyed of a continent apart from the rest of the world whose capacity to face the 4th industrial revolution is in doubt, Africa is well in the world: the aspirations at the origin of the economy x.0 are also those of numbers of Africans who are already preparing for the x.0. Here again, Africa is in motion.
 - ❖ The development of this new form of economy will allow the continent to make a great leap forward without having to go through the costly industrial development stage of the 20th century. Already, the strong and stable GDP growth of African countries whose economies are little dependent on raw materials is supported by investments in infrastructure, resilient service sectors and the recovery of agricultural production (Ethiopia, Senegal, Tanzania... see graph opposite), preconditions for the growth of the economy x.O.
 - ❖ Recent development in African countries has shown that those richest in natural resources are actually the most vulnerable and least socially developed. According to the same logic, the least well endowed with transport infrastructure, for example, will be those where the new economy will be most flourishing since its objective is to meet unmet needs. It therefore becomes necessary reason differently to understand the current phenomenon. The four factors of change that form the key to African growth x.0 can help.

GDP growth in sub-Saharan Africa in 1995-2008 and 2015-2017



■ Source: IRES processing of the graph from « Africa's Pulse, an analysis of issues shaping Africa's economic future, World Bank »

CONOMIC TRANSITION (3)

New human resources

- Up until now, on the continent, salaried employment has been the path to follow in order to build a career and earn respect. Today, entrepreneurship and self-employment (service delivery) are increasingly valued as signs of courage, autonomy and responsibility.
- ❖ In the face of a saturated traditional labour market, where the field of needs has never been so vast, the notion of innovative personal enterprise is finding more and more echo (27). Already, the continent accounts for 1.4% of the total number of self-employed workers in the world (26).
- Competition between service providers leads everyone to be more professional and more innovative than their neighbour. The result is an increase in skills and the development of partnerships to bring in complementary expertise ("liquid" ecosystem). The African diaspora plays a crucial role.
- Innovation is essential to the economy x.0 that seeks to meet expressed needs. As in India, it must be ingenious (jugaad) to do much with little. Young Africans excel (cf. illustration opposite) and distinguish themselves in international competitions (Digital Africa, Innovation Prize for Africa, ...). Africa innovation is hybrid, both high and low technology. It is open, involving nationals, residents abroad and foreigners.

3D printer made in 2013 by Woelab, a Togolese fablab from the recovery of toxic computer waste (28).



■ Source: https://edition.cnn.com/2017/11/28/africa/3d-printer-electronic-waste/index.html

CONOMIC TRANSITION (4)

- the new infrastructure deal:
 - ❖ The key to the development of the technology, media and telecommunications sector.
 - Les International agencies emphasize Africa's dramatic progress in the quantity and quality of telecommunications, in contrast to persistent delays in electricity generation and access (29). These advances correspond to the needs of this sector which feeds the digital development of the continent. But it is not sufficient to meet the growing demand for business-specific, simplified, standardized, transparent and user-priced "IT as a service" (30).
 - However, telecommunications are all the more a priority: an increase of 10% in the Internet penetration rate leads to a gain of 0.25% to 1% of GDP (31) as the innovations they convey will completely change the situation. At the beginning of 2016, only 50% of Africans have access to 3G and 16% to 4G (32); of the 10 countries in the world recording the most expensive data downloads, 7 are in Africa (Chad, Uganda, Rwanda...) (33).

- Hence the need for a paradigm shift from the traditional system of posts and diesel generators, millions of which are needed to cover the savannah or forest and the cost of which is exorbitant, to new solutions.
- ▶ Innovations such as NuRAN's GSM Litecell base station or VANU's solar coverage (Rwanda), Google's LOON project or Telecom Infra Project's OpenCellular Grant Program are specifically designed to make a difference in rural areas of developing countries, particularly in Africa.
- New cables, optical fibre networks (Accra, Kampala) and satellite technologies could reduce transmission costs by 4/5th by 2020. (33).

OCUS N°15

Infrastructure Development Programme in Africa

- Well aware of the role of infrastructure as a catalyst and accelerator for continental development, particularly in the area of telecommunications, The African Union, together with the NEPAD Agency and the African Development Bank is conducting a programme for infrastructure development in Africa (PIDA).
- The PIDA, approved by the African Heads of States in January 2012 (34) "will have to develop an investment programme in infrastructure (short, medium and long term), based on well-defined priorities. It will be the AU's main policy document for transport, energy, water and ICT investment programming, policies and priorities between 2011 and 2040" (35).
- By 2020, the cost of this vast infrastructure project is estimated at nearly 68 billion dollars and includes 51 projects, according to the NEPAD and regional infrastructure Department at the African Development Bank (36).
- The 3rd edition of the PIDA Week was held in December 2017 in Namibia on the theme "Developing regional infrastructure for job creation and economic transformation". It was clarified that the model law on programme for infrastructure development (PIDA) for cross-border infrastructure projects in Africa will harmonize cross-border regulation of cross-border infrastructure projects, promote intra-African trade and open domestic markets to international trade (37).
- ► The Africa50 investment fund offers significant support (60% of investments in energy and transport by 2025) for the reduction of the African infrastructure deficit (38).

- PIDA The African Union had developed the programme for Infrastructure Development in Africa. The Information and communication Technology (ICT) component aims to ensure that all African countries are connected to a least two international links, support to improve policies and regulatory frameworks and for IXP.
- ECOWAN- the regional backbone infrastructure of ECOWAS and the cyber governance platform. ECOWAS plans to develop 8000 km of terrestrial fiber, and the link WIMAX of the last kilometer in the government offices.
- WARCIP- West Africa's Regional Communication Infrastructure Program. 9 candidates: Burkina Faso, Sierra Leone, Liberia, Guinea Bissau, Mali, Gambia, Niger and Togo. The project supports the implementation of neutral landing stations towards operators and virtual landing points in landlocked countries.
- SADC RIDMP- Regional Infrastructure development Master Plan, implemented by southern Africa countries, including support for IXP and cross-border links were necessary.
- ECCAS-The REC which implements the cross-border fiber main plan in Central Africa.
- CAB-Central Africa Backbone-the development of fiber links supported by the World Bank in Cameroon, Chad, Central Africa Republic, Sao Tome and Principe.
- RCIP Regional communication Infrastructure Program open to 25 countries in Easter and Southern Africa supported by IFC and the World Bank, COMESA, SADC and EAC programs of ICT work on coordination such as the Tripartite Alliance.
- Source: Processing by IRES from the regional interconnection strategy for Africa: slideplayer.fr/slide/1179329

CONOMIC TRANSITION (5)

- A paradoxically promising infrastructure deficit:
 - Although 67.5% of the sub-Saharan population had access to improved drinking water sources in 2015, compared to 46.8% in 1990 (39), the disparity between rural and urban areas, recurrent draughts and inadequate infrastructure management (leaks, contamination, etc.) lead to untenable situations. However, new solutions are emerging (see next chapter).
 - Several regional projects aim to increase cross-border trade in electricity, thereby reducing dependence on fossil-fired power plants, such as the NELSAP project or the Djibouti-Ethiopia electricity interconnection. In doing so, they are working towards the regionalization of the continent (see Part 3, Chapter 2).

- Major projects are being set up in the field of transport infrastructures, from the modernization of ports (Kribi, Bagamoyo, etc.) to the extension of the road and rail network, motivated in particular by the need to link ports to mining basins and to circulate in highly urbanized areas.
- Nevertheless, the delay in this area could become an advantage, enabling
 the continent to equip itself from the outset with disruptive technologies
 such as the Hyperloop a clean and cheaper train, running at 1000km/
 h- or sustainable roads with 100% recycled asphalt. Taking into account
 the evolution of vehicles is also essential, such as the arrival of the truck
 platooning, platoons of autonomous trucks, communicating with each other:
 a safer and more economical system, which would symbolically renew with
 the old trans-Saharan caravans...

CONOMIC TRANSITION (6)

The rise of artificial intelligence in Africa

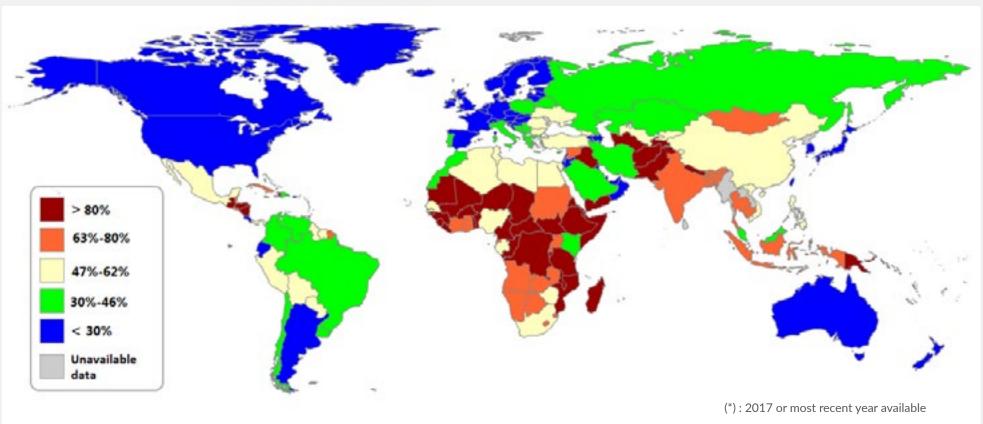
- There too, Africa has made an unexpected leap-frog? Despite the structural delays already mentioned, many sectors of activity have been reinforced by the rapid adoption of intelligent technology (40).
- In agriculture, the example of the ECX e-Trade Platform is worth mentioning: in 2015, the Ethiopian Commodity Exchange (ECX) joined forces with IBM to build a coffee traceability solution, based on the Internet of things (41).
- In the field of health, artificial intelligence is beginning to be integrated into health care systems: medical institutions in Morocco, Cameroon and South Africa are using SOPHIA, an artificial intelligence to analyse patients' genomic data to decide on the most effective care (42).
- The establishment of national unmanned aerial vehicle (UAV) networks (Rwanda, Tanzania) is making East Africa a world leader in UAV logistics (43).
- Finally, the use of artificial intelligence is accelerating the continent's entry into the world of financial technology "fintech" (for example, micro-insurance developed by the South African Stockshop).

The Kumba Virtual Reality Centre at the University of Pretoria in South Africa simulated a complete mining environment to train professionals and students in its risky occupations (44).



■ Source : Official website of the University of Pretoria: http://www.up.ac.za/en/ mining-engineering/article/21863/kumba-virtual-reality-centre-for-mine-design

Share of population without Internet access in 2017 (*)



■ Source : IRES processing of data from Internet World Stats

Although nearly eight in ten Africans (77.8%) have a mobile phone, only three in ten Africans use the Internet in 2017 (45).

A FRICA IN MOTION N°3

Towards the economy x.0

Good practices

- ▶ Aajoh: this very young Nigerian start-up uses artificial intelligence to help sick people diagnose their state of health from a list of their symptoms via text, audio and photographs, in a country where the number of doctors per 10,000 inhabitants hardly exceed 4 in 2010 (46).
- ▶ Aerobotics: this South African start-up has developed its Aeroview Platform, based on artificial intelligence, satellites and unmanned aerial vehicles to help farmers optimize their yields through cartographic analysis of their crops, resulting in a 20% reduction in crop failures. In 2017, the platform is already in use in South Africa, Malawi, Zimbabwe and Mozambique.
- ▶ Genesis Telecare: The first telemedicine company in Cameroon, launched in 2009, to provide rural populations with access to examinations and sustained medical monitoring.
- ▶ **Green Keeper Africa**: two Beninese engineers have turned an invasive plant that destroys ecosystems into an economic opportunity. Once treated, the water hyacinth is transformed into a depolluting product, capable of absorbing hydrocarbons.

KONIKU

- Oshiorenoya AGABI grew up in Lagos (Nigeria) where he obtained his B.Sc. in Physics. After working in Switzerland on machine learning, he completed his PhD in bioengineering in London. Thus, for 15 years, he sought to understand how neurons communicate with each other.
- This approach led him to want to design an electronic chip, equipped with living and learning processors "in order to solve the urgent problems of the real world". Thus was born KONIKU, its start-up located in Silicone Valley.
- In October 2017, he revealed publicly in Tanzania, the *Koniku Kore*, the world's first neurotechnological object. Working like a dog's sense of smell, it can detect explosives, methane leaks or cancer cells without any intrusion. It is sufficient to program the synthesis neurons to perform specific tasks (47).
- In addition to the power, this chip would consume almost no more energy than a human brain (10 watts). This technological revolution would enable the rapid deployment of the Internet of things, blockchain and artificial intelligence in Africa.

E CONOMIC TRANSITION (7)

In search of tomorrow's added value

A new African reality to take into account

- ❖ Post-crisis growth in Africa over the period 2015-2017 was driven by domestic demand in seven countries: Cote d'Ivoire, Ethiopia, Kenya, Mali, Rwanda, Senegal and Tanzania (48), with annual growth rates above 5.4% (49). Together representing 22.5% of Africa's population (50) and 12% of its GDP (49), these countries constitute the emerging part of an Africa that is not only in the making, but in the midst of change. Structural reforms, the attraction of foreign direct investment, and the diversification of activities have contributed to this success.
- "Should we leap-frog industrialization?" Iconoclastic in the light of the recommendations of international institutions, this question nevertheless arises for the following reasons:
 - The increase in world agricultural demand by 2050 may be enough to fuel economic growth, as in Senegal.
 - The rapid development of intelligent automation (industry x.0, additive manufacturing) will necessarily lead to a reduction in marginal costs, such as low-cost labour (which fuels Ethiopian growth, for example) will no longer be a competitive advantage.
 - With a global share in manufacturing of just over 1%, Africa is at the bottom of the value chain. Although the manufacturing industry recorded an average annual growth rate of 3.5% over the period 2004-2014, its contribution to the overall economy fell from 13% to 11% over the period under review (51).

Coping with poverty

- Systemic poverty, both urban and rural, is an intolerable condition in itself. Combatting it is, therefore, both a human necessity and a means of ensuring the security that prosperity needs.
- Innovation jugaad uses cost-effectiveness as a means to deliver higher value to customers. The "bottom of the pyramid" segment (52) is an economic system which makes it possible to combat poverty and make a profit. Today, these two elements can be combined with digitalization and mobile telephony to deploy a multitude of quality services, at a relatively low cost, corresponding exactly to the needs of these populations, as is already the case with solar kits or telephone subscriptions.
- The results of the universal basic income experiment underway in Kenya (Siaya and Bomet County) will help to learn more about its capacity to reduce poverty in the long term.

▶ The challenge of a new alliance between nature and culture

The degradation of natural resources is neither sustainable nor liveable. It is no longer possible to de-correlate wealth production from the resources it requires. This change of outlook leads to a new alliance between nature and culture, as reflected by the concepts of blue economy (cf. Focus no 16), agro-ecology or sustainable tourism.

OCUS N°16

The blue economy

- The Blue Economy, a concept invented by Günter PAULI in 2004, which aims to draw inspiration from nature (bio-mimicry) to found a new economic model, using at least natural resources and, to the maximum, available local resources (53).
- This new "blue" paradigm opposes industry in its current (red), polluting and over-consuming form and sustainable development (green), considered insufficient and superficial.
- It thoroughly reorganizes all activities to avoid waste, reuse waste to generate new products and promote territorial proximity.
- It aims to produce products that are healthier, more fairly priced for everyone (short circuits) and more respectful of the natural environment.
- ▶ It seduces by its holistic dimension:
 - Use of local traditions, cultures and know-how.
 - Assimilation of water, air and soil to common goods.
 - Adaptation and change established in principle as the functioning of an ecosystem economy.

- The circular economy is part of the blue economy: it is a restorative industrial economy, in which material flows are of two distinct types:
 - Biological nutrients, intended to re-enter the biosphere safely (subject to an absolute volume).
 - * Technical inputs, designed to be continuously recycled, remaining at a high level of quality, without entering the biosphere.
- This approach has the advantage of:
 - clearly reorganizing activities through the different stages of recycling,
 - developing waste recovery and second-hand markets,
 - being immediately applicable without significant investment.
- The increase in the life span of products resonates with the fight against poverty and the increase in the cost of living.

E CONOMIC TRANSITION (8)

- The new added values of tomorrow should be found in activities for the simultaneous benefit of nature and humans. Given the place of agriculture in the African economy, three sectors of activity have begun to explore this path: eco-restoration, agriculture and food processing.
- The New Restoration Economy aims to help mitigate the impacts of climate change and improve food security. It must also lead to financial results through the restoration of ecosystems. This new economy is based on three pillars: profitable development models, private investment and supportive public policies (54). The Great Green Wall is the best known example. But other initiatives are developing on the continent (see opposite).
- ❖ The concept of food sovereignty is also beginning to make its way: "We must produce what we consume and consume what we produce" (Thomas SANKARA). Three implications follow: the return to agro-ecology to the detriment of agro-chemistry and, in particular, genetically modified organisms (cf. the movement Burkinabe cotton farmers Cotton Bt); the policy, now adopted in most African countries, of favouring domestic demand over export; the gradual substitution of local production over imports, such as Fresh Direct in Lagos: urban agriculture (55).

Accompany, protect and reforest

"We are conducting projects to support local communities in the area of reforestation and sustainable agriculture associated with the tree [agroforestry].

For example, we explain how to fertilize the soil with legumes planted in the alleyways [alley-cropping]. Thanks to this natural green manure, they no longer have to resort to slash-and-burn agriculture in the forest, which is one of the drivers of deforestation in the Congo Basin.

In the near future, we want to install mini-hydro and solar power plants, using two resources that the country abounds in, to replace wood energy with clean energy.

We have long been misunderstood in our fight to protect the forest. Today, this is no longer the case".

René NGONGO,

President of the Environment and Natural Resources Committee of the Economic and Social Council of the Democratic Republic of Congo

A FRICA IN MOTION N°4

Towards a new alliance

Good practices

- Songhaï: "a Beninese institution that creates green rural cities (sustainable socio-economic development) throughout the continent, with the practice of integrated agriculture; an organic agriculture that respects nature and is based essentially on bio-mimicry: no chemical products; we dance with nature, we study how it works to bring us in step with it, because we want to practice sustainable agriculture that is profitable but also competitive" (56).
- Funweni Beer Brewery: "Make bread and mushrooms out of cereals from the beer brewing process". This Namibian brewery operates according to a natural reuse circuit (Blue Economy) which involved a mushroom farm, vermiculture, an animal farm, settling tanks, a biodigester, algae ponds, fish ponds and an irrigated area of 600 hectares of orange and mango trees (57).
- ▶ GreenPot: Kenya's first integrated bamboo company, it embodies the new economy of catering in Kenya after demonstrating the financial benefit of rehabilitating degraded land with bamboo, a fast-growing plant with versatile applications in the energy, construction and textile sectors (58).
- ▶ Bionexx, this Malagasy company succeeded in increasing the production of artemisinin, a key ingredient in antimalarial medicines, from 0 to 12 tons by organizing a network of nearly 10,000 subcontracted farmers to whom it supplied a market with higher added value, enabling them to increase and guarantee their income (59).

The Great Green Wall (60)

- ► The Sahel's natural potential is currently exposed to various forms of degradation, particularly overexploitation, desertification, climate variability and anthropogenic pressure.
 - The Sahelian terroirs most affected have become breeding grounds for poverty, food insecurity, malnutrition and forced migration.
 - This recurrent situation in the Sahel has exacerbated the risks of social tensions and conflicts, due to strong competition over relict resources and the absence of alternative solutions.
- The Great Green Wall Initiative aims to be an innovative model of sustainable development and resilience for local communities in the terroirs. Its approach:
 - is built on the 4 paradigms: conservation, protection, restoration and enhancement of the local potential,
 - is self-centred on the economic valorisation of local development opportunities,
 - ❖ is based on the optimization and enhancement of natural capital and the implementation of efficient and transparent local governance.

E CONOMIC TRANSITION (9)

- Given the dependence of some African countries on agricultural exports, these new approaches must generate a significant increase in agricultural yields to satisfy both domestic demand and exports. Artificial intelligence and associated technologies, mobile telephony and associated services. Finally, research and training are the key to this new agricultural development:
 - climate-resistant: climate-smart agriculture has been very successful in Africa, e.g. the *Maarifacenters* in Kenya, the "Creating a climate-resistant coffee" projects in Ethiopia, or the "Community Market Management Project for Landscape Conservation" in Zambia and many others in Kenya, Morocco, Uganda, Tanzania and Zambia (61) (62).
 - strengthening the natural resistance of plants: by crossing ordinary food crops with their wild counterparts, found in the most remote areas of the earth, farmers find that they can use less insecticide,
 - benefiting from a better knowledge of the properties of plants: less than 16% of the species used in remedies are cited in medical publications, for example, while there are more than 28,000 medicinal species in the world in 2017 (63).
 - optimized by a new crop distribution, increasing production while reducing water consumption: this optimization could feed 825 million more people worldwide (64). Already, South African researchers in artificial intelligence are studying the subject.



Climate-Smart Agriculture

It is an approach for achieving agricultural development priorities in the context of climate change. The aim is to increase productivity in a sustainable manner, while strengthening the adaptive capacity of some key aspects of rural household livelihoods. It should be noted that the implementation of a smart agricultural policy is determined by the specific context and capacities of each country.

A FRICA IN MOTION N°5

Towards agricultural transformation

Good practices

- ▶ Since 2010, the Ethiopian Agricultural Processing Agency has sought to promote transformation, providing increased support to existing public structures, the private sector and other non-governmental partners to address structural processing bottlenecks (65).
- ▶ Since 2012, Niger has been pursuing the Presidential Initiative "Nigeriens Feed Nigeriens" (65). This large-scale cross-sectoral initiative enhances the development of sustainable agriculture and the socio-economic resilience of farmers and ranchers. This policy has been developed through an inclusive and participatory process. Since 2011, Niger has reduced the proportion of people suffering from hunger by 50% (66).
- Recently acquired by Philafrica Foods one of the key players in the transformation of agriculture in Africa ("Moving from subsistence farming to agriculture that feeds its population and exports") the Dutch company DADCOT has developed and patented an innovative and mobile technology that allows cassava to be processed on the production site. In 2016, only 5% of production was industrially processed (67).

Cocoa processing

- ▶ With a world share of 73% in 2014-2015, Africa is the world's largest producer of cocoa beans. But it accounts for only 20% of processed cocoa production (68).
- Among the countries that have decided to take up the processing challenge is Cote d'Ivoire with 40% of Africa's raw cocoa (69). This country intends to transform 50% in 2020 against 30% in 2016 and its raw cocoa production, according to the International Cocoa Organization (68)(69).
- Elsewhere, private actors have already taken over, such as Choco Togo which produces organic chocolate in Togo and Choco Ouak, the first chocolate factory in Congo.



■ Source: http://www.cavie.org/images/19_01_2017/cacao-chocolat.jpg

CONOMIC TRANSITION (10)

In Cameroon, canoes made of recycled plastic bottles help to clean the environment and save trees.



Source: http://www.lemonde.fr/afrique/article/2017/09/10/au-cameroundes-pirogues-en-bouteilles-en-plastique-recyclees_5183663_3212.html

- Agriculture is not the only activity impacted by a new alliance between nature and culture. This can generate direct income and positive induced effects in many other areas, such as:
 - Waste treatment and plastic substitution: Several countries such as Senegal, Gabon, Cameroon, Togo, Burkina Faso, Mali, Cote d'Ivoire, Rwanda and Morocco (designated as "Zéro mika" law) have already banned the production and import of plastic packaging. It remains, therefore, to recycle existing waste and stocks, like paving stones in Cameroon, produce and distribute alternative products, such as cloth bags in Morocco (70),
 - Water management: Faced with increasing urban water stress, particularly in North and Southern Africa, water pricing will become the norm, generating new services for quality improvement, equipment maintenance and distribution. Burkina Faso, South Africa and Kenya are already innovating (71),
 - Sustainable tourism: the under-exploitation of Africa's potential is evident. Here again, it is an opportunity for a leap forward (leap-frog) which should enable the continent to avoid massive overbuilding - which has already destroyed many Mediterranean and Asian landscapes - and the monopolization of tourist exploitation by foreign multinationals. Inclusive tourism, benefiting local populations as well as sustainable tourism, i.e. tourism that respects the environment, is possible, as shown by the examples of CAMPFIRE (Zimbabwe), Grootbos Private Nature Reserve and Lodge (South Africa) or II Ngwesi Community Trust (Kenya) (72).

Water, between service and common good



■ Source: http://blog.la-pigiste.com/2017/04/22/warka-water-tour-transforme-air-eau-potable-nuage-condensation-arturo-vittori/and https://www.afrikmag.com/cameroun-grosses-inquietudes-au-sujet-de-la-qualite-de-leau-potable/#prettyPhoto/0/

A FRICA IN MOTION N°6

Innovations from elsewhere



■ Source: http://observers.france24.com/fr/20160606-comment-fabriquer-climatiseur-ecolo-gratuit-bouteilles-plastique-maison and http://www.shoutgladigladi.com/about/the_bboxx

Ε

CONOMIC GOVERNANCE (1)

From one world to another

- According to the "IT Governance Institute", the purpose of governance is "to provide strategic guidance, to ensure that objectives are achieved, that risks are managed appropriately and that resources are used responsibly. It ensures, as a priority, that the interests of "rights holders" (citizens, public authorities, partners, shareholders...) are respected and that their voices are heard in the conduct of business" (77).
- The impact of government policies on the conduct of economic affairs is always a matter of debate. Overall, however, most countries have moved from a largely state-controlled system to the abandonment of economic planning at the end of the 20th century. Today, consensus is globally established around a neoliberal type of global regulation. It is then up to each government to create a business climate likely to support the development of its country.
- At the same time, while the political and economic world tended to ignore each other, a continuous dialogue on major global issues was engaged between the many actors of economic growth, private and public, more particularly within the World Economic Forum in Davos.

The African dilemma

- Africa is becoming more and more autonomous. This legitimate claim, however, comes up against strong predation on the continent, both by public institutions and by private, foreign or African companies.
- ▶ Ahealthy business climate is a prerequisite for economic development. In addition to the legislative base required, the improvement of the business in which more and more African countries are engaged and which has shown its effectiveness in Morocco, for example, has to go through:
 - the fight against corruption, which plagues the administrations and, at higher levels, diverts part of the countries' wealth, i.e. 148 billion/year in Africa (78), by means, for example, of a mobile application, such as the Wahala Dey app, launched in Nigeria by the Anti-Corruption Commission,
 - the promotion of economic initiatives, through any modality allowing the guarantee of land rights, administrative simplification (e-government, for example), facilitation of access to finance (micro-credit, crowdfunding), reduction of certain taxes, more particularly on mobile telephony....
 - the commitment, in a context of great legislative volatility, of states to guarantee land or intangible assets (intellectual property, for example).

Ε

CONOMIC GOVERNANCE (2)

- ❖ finally, the introduction of reliable and transparent evaluation instruments (international indicators, statistics, surveys, censuses (see Focus n°17), enabling more efficient economic decision-making, especially as digitization considerably reduces costs. It is also necessary to mention the open availability of this information, where it exists, as in the case of hydrogeological data.
- The interest for a country of good economic governance is **to set strategic priorities**. At a remarkable speed in view of the long times of history, more and more African countries have gone from government action (politicized and short-sighted) to state action (structural and anticipatory).
 - Anticipation and foresight are inseparable from the exercise of power based on the notions of state and nation. Customary kings know this better than anyone. The African Union has set an example with Agenda 2063. Today, African states have more and more forecasting units, leading their strategic thinking (for example, the departments and organizations Prospective in Morocco, Benin, Gabon, Togo...).
 - ❖ This is all the more necessary since dependence on fluctuations in world markets is high, as the instability of growth in oil-exporting countries has recently shown, and the transformations to be carried out (economy x.0) are radical, as in the agricultural and mining sectors or in infrastructure, for example.

- Once priorities have been established and announced, a government's job is to support those choices.
 - On the one hand, by defining and coordinating the public policies that are inherent in the various ministries (organization by systemic poles).
 - The former General Planning Commissions were in charge of this task, but with the disappearance of planning, this coordination is increasingly difficult to ensure. The temptation to partition the sector remains one of the major obstacles to more systemic African governance.
 - With regard to current priorities, this governance would be reflected through
 investment in the search for local substitutes for plastics, by deploying lowcost innovations in waste treatment, by introducing digitalization and ecorestoration in school curricula, by systematically setting up training on the
 basis of priorities...
 - On the other hand, by setting an example through its own practice, which would also help to break the de facto monopolies that still exist, despite continued anti-privilege efforts:
 - Thus, the need to have to recycle plastic packaging could lead public procurement to systematically favour, at equal quality, the products resulting from this recycling process, such as Cameroonian paving stones or the PlasticRoad project.
 - Finally, by creating, through consultation with all stakeholders, the development ecosystems necessary for the take-off of new sectors of activity, such as the economy of sport, the intangible and sharing economy (such as AirBnB, OuiCar) and leisure economy.

OCUS N°17

About statistics

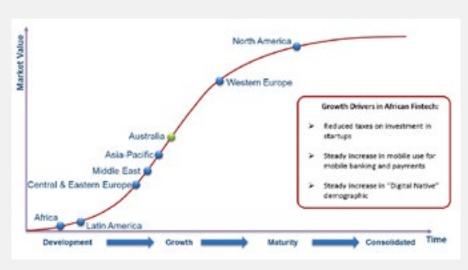
- For a growing number of experts, the indicators published by international organizations do not reflect the economic reality of African countries. Among the reasons given, the inability of the continent's states to collect reliable data features prominently. According to the Togolese economist Kako NUBUPKO, "the financing and strengthening of national statistical institutes are not among the priorities of the states". However, data published by international bodies are originally provided by the countries themselves. While some, such as Morocco, Tunisia, Niger and Rwanda, are updating their statistics, in most cases "the figures are a guessing game", says Morten JERVEN, a Norwegian academic and author of *Poor Numbers* (Cornell University Press, 2013).
- Second pitfall: the very structure of African economies, marked by the weight of the informal sector. Henri-Bernard SOLIGNAC-LECOMTE, Head of the Europe, Middle East and Africa of the Organization for Economic Cooperation and Development (OECD) notes: "If no economy in the world is really measured accurately, in Africa it is much more difficult to grasp the completeness and reality of the activity". According to Kako NUBUKPO, "the models used by international institutions, notably for the calculation of GDP, mainly aggregate data related to the formal sector, the balance of payments, public finance... Any other element that could contribute to wealth creation is not necessarily taken into account".

Excerpt from the article "African Statistics: The Great Lie", of Stéphane BALLONG, Jeune Afrique, March 2013.

E CONOMIC GOVERNANCE (3)

- Today, the African dilemma lies, for all countries that have embarked on the path of economic transition, in the **trade-off between** autonomy and recourse to foreign subsidies.
 - Indeed, autonomy of the continent's development depends on its own capacity to finance its policies to meet the needs of a growing population. This requires increasing its performance and producing new added value, as all states are well aware.
 - However, the damage caused by climate change (droughts, floods) is significant and dependence on international commodity prices (hydrocarbons, food products) is high, making it all the more expensive to put in place the necessary infrastructure and basic responses. The trade-off between financing emergency solutions (food crisis) and long-term investments in the economy x.0 is becoming complicated, including for countries like South Africa.
 - ❖ Because international public aid is rarely free or disinterested. It can lead to the adoption of policies, imposed from outside, to the detriment of the country's autonomy and its economic progress or its environmental conservation, as is the case, for example, with certain mega-dam projects or the projects of certain NGOs, little aware of local issues.

The FinTech sector in Africa is ready for exponential growth that will challenge existing financial service providers, despite the fact that it is in its start-up phase compared to the rest of the world (79).



■ Source : Global FinTech Business Cycle : Frost & Sullivan Research

CONOMIC GOVERNANCE (4)

- Several solutions are nevertheless emerging.
 - The common pillar for each is to allow only projects that achieve a long-term national strategic vision, such as Kenya's Vision 2030, for example, regardless of the source of funding.
 - ❖ The use of private investment is increasingly sought. Thanks to the improved business climate and economic stability demonstrated by nonwindfall economies, foreign companies and private investment funds are flowing into the continent.
 - This is particularly the case in the agricultural sector where improved data tools and the prospect of improved yields are attracting investors, hitherto reluctant, because of the risks inherent in agricultural production. The Farmcrowdy digital platform has raised \$1 million for Nigerian agriculture (80).
 - Alternative finance opens up new possibilities, especially funds from faith communities:
 - The international Islamic Trade Finance Corporation already supports several African countries in its financing strategy, targeting key sectors that stimulate economic growth and generate income for the population (81).

- The Mouride brotherhood plays an important role in Senegal in this field.
- A cooperative finance company, Oikocredit invests in microfinance, renewable energy, agriculture and fair trade (82).
- ❖ Regional cooperation and the pooling of investments are a powerful factor for the continent's autonomy, supporting national projects, while serving the overall strategy of the African Union, such as the Africa Finance Corporation. This pan-African multilateral development financial institution has invested, namely, in Cabéolica in Cape Verde, the first commercial wind farm in sub-Saharan Africa (80).
- At the same time, ethical issues are beginning to be taken into consideration both by states, such as Liberia vis-à-vis palm oil, and by investors (the withdrawal of the Norwegian pension fund in 2012, for example) and companies (cf. Olam in Gabon).

FRICA IN MOTION N°7

The words of transition

- "What works more and more in Africa is innovative personal enterprise. By innovation, we mean doing something other than what the cousin or paid friend with whom you have studied for years does. It means proposing to intervene in a new field, little explored, and able to respond to a certain number of social and/or economic demands of the targeted context". Chams DIAGNE / Talent2Africa
- "Lagos is a place that demands grit. Growing up there gave me an unconventional way of always looking at problems.(...) We have to find a way to build much more with less if we as a species are going to survive". Oshi AGABI / KONIKU
- "The more I travel, the more I realize we're at a turning point. African operators must become involved in wealth creation, otherwise in 5 to 10 years our children will leave and our economy will collapse. Those who succeed will be threatened by crime as a consequence of the prevailing poverty. I am familiar with all kinds of circles, which allows me to have a clear vision of the situation. The other continents must help us because we will soon be 2 billion people". Samba BATHILY / Africa Development Solutions
- "Let us help Africans move freely and make Africa a more open, prosperous and truly connected continent". Akinwumi ADESINA, AfDB President

- "Mobile phones are no longer just a traditional means of communication in Africa and the rest of the world. It is now used for complementary services, to facilitate access to key services such as education, health, but also financial inclusion, through the creation of electronic purses and the development of diverse mobile applications". Cina LAWSON, Minister in charge of Digital Economy in Togo
- "We categorically reject the idea that Africa must choose between economic growth and low-carbon development. Africa must use all its energy assets in the short term, while building the foundations for a low-carbon and competitive energy infrastructure". Kofi ANNAN
- "To know why we ingeniously waste what allows us to live remains an unanswered question. However, the behaviours that could be tolerated in the days when we were less numerous and when destroying vegetation had only a limited impact on the environment now threaten our very existence. (...) The land belongs to you but you no longer care for it. You let the soil erode when all you need to do is replant trees to avoid it. You have given up your traditional crops to grow imported cereals that are just as unsuitable for your soil as for your food. Don't be surprised if your children have deficiencies!" Wangari Muta MAATHAI, Nobel Peace Prize winner

CONOMIC GOVERNANCE (5)



■ Source: Digital Art - Olalekan Jeyifous

Towards a strategic transition?

- ▶ The African continent is well on the way to an economy, combining digitalization and preservation of its natural capital (enterprise x.0)
- Its backwardness in a number of areas (infrastructure, agriculture, etc.) can become an opportunity to "leap-frog", i.e. jump from the usual stages of development, such as heavy industry, vast centralized equipment to costly distribution networks, etc., in order to move forward more quickly and solve the crucial problems that are emerging in the medium and long term (poverty, food, pollution).
- For this reason, African countries must make trade-offs between easy money and long-term productive investment. The African Union and several African countries have already adopted strategic visions that must guide and coordinate their various policies. Continental financial instruments are being put in place to achieve these visions for the future. But the needs are vast.
- It remains, now, to activate the continent's autonomy to enable it to assume its choices, to the benefit of a more autonomous development.

K EEP IN MIND

- Africa has entered the digital transition, albeit less massively, but often earlier than other developed countries.
- ► This requires an energy supply that is still often lacking, which favours its leap-frog towards off-grid solar and micro-grid.
- ► The on-going economic transition to the economy x.0 (gig economy, demand economy, eco-remediation economy) requires a new workforce that is already evident in urban areas.
- ▶ It is based on infrastructures that are being invented in the world's laboratories.
- ► The new added value it can generate will accelerate the transformation of the continent, but it requires a complete paradigm shift in the minds of traditional decision-makers, starting with the financing of this transformation.



Chapter 2

THE SPRINGBOARDS OF AUTONOMY



■ Source: http://www.rfi.fr/afrique/20131129-archives-frontieres-africaines-Addis-Abeba

HE ISSUE AT STAKE

The limits of progress

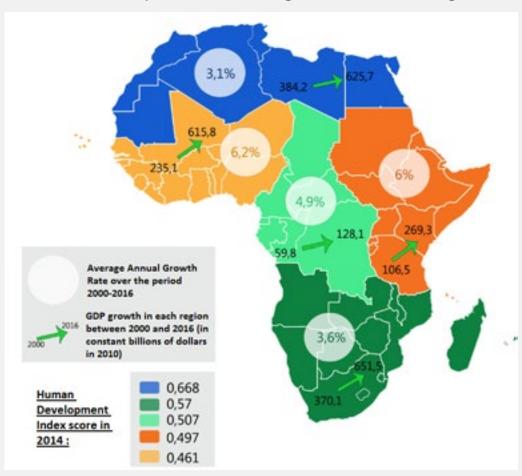
- As stated earlier, a real African dynamic has begun, not only in North Africa. Human development is progressing. The least developed regions are those with the highest economic growth, namely West Africa and East Africa (Cf. map below "Human development and economic growth in each African region").
- The continent's levers for change allow it to bypass the traditional stages of the development of advanced countries (such as heavy industry, centralized energy and production, landline telephony, etc.) in order to make a leapfrog directly into the world that is being made (mobile telephony, local solar energy, smart machines, etc.), without being penalized by the conversion of old systems.
- ► This curve of progress might not, however, be fully beneficial to African countries if they did not simultaneously activate the springboards of their autonomy.
- ▶ Indeed, the plundering of natural resources (smuggling of precious wood or ivory, for example), grabbing of arable land, exploitation of the labour force, dependence on exports, the use of borrowings and poverty are all limits to African autonomy that rapid economic growth will not hide for long.

Thinking autonomy

- What does it mean to be autonomous in an increasingly interconnected, interdependent and open world? Being autonomous does not mean being independent. Autonomy is the ability to decide for oneself by oneself, while independence results from the ability to do things alone, without the help of others. Autonomy does not mean isolating oneself from others, but limiting one's dependence in order to really be able to choose.
- Thus, Africa's autonomy is expressed through its capacity for internal development, without depending on third parties and the possibility of making its voice heard in the concert of nations.
- Three strong strategic orientations support the acquisition of this autonomy:
 - Taking into account African human capital in its entirety (migrants, women, youth...).
 - ❖ The development of ubuntu (cf. Africa in motion n°8) which generates new models of human progress through education, innovation or mobility.
 - Reconciliation of the African with himself (cf. chapter 3, Part 1) who, alone, can establish a new governance to maximize his cultural and natural resources.

HE AFRICAN SUB-REGIONS

Human development and economic growth in each African region



■ Source: IRES processing of data from the International Monetary Fund and the United Nations Development Programme

UMAN CAPITAL (1)

Towards new leaders

- ► Faced with multiple problems, post-independence governments have often been compelled to act urgently, responding in a hurry without always finding the resources or the will to make strong structural choices and stick to them.
- ▶ The choice is, however, the only true expression of autonomy. A complex procedure which imposes both a renunciation and a total commitment, any choice is first and foremost a responsibility: that of assuming the consequences of the options that have not been chosen, and that of effectively fulfilling the promise thus made. Hence the preference, sometimes, for the status quo.
- If common sense is the preferred instrument of choice, the complexity of today's world increasingly imposes the use of formal, school and academic education to measure all the issues of a present and future situation, a condition for an informed choice.
- Being a warrior is, therefore, no longer enough to manage postindependence Africa: the new world that is opening up and the levers change that must be activated to enter it call for another profile of African decision-makers, more strategic than tactical, more anticipatory than reactive, more autonomous than independent, as much feminine as masculine.

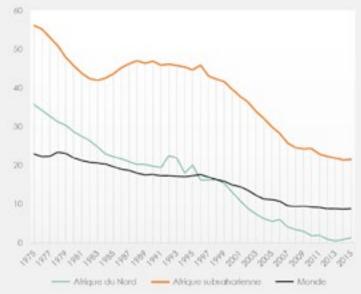
An unused development engine

- ► The unemployed and the poor are not sufficiently taken into account, because of their social status, although they constitute an important reservoir of human capital.
- ► The same is true of nationals residing abroad, who often begin to weaken ties with their country of origin when they no longer feel considered only as suppliers of subsidies:
 - while they are rich in knowledge, especially scientific and technical elites and practical knowledge that can usefully be transposed,
 - hence the importance of giving them the place they deserve to be able to contribute to the development of their country.
- ► The unemployed and migrants without work permits, more and more of them are graduates, constitute both a time bomb and a strong growth potential.

UMAN CAPITAL (2)

- Of course, the informal sector allows them to survive and, despite this precariousness, must continue to offer them this opportunity since economic growth does not keep pace with population growth.
- Many of them, however, would be able to create their own jobs, or even a successful business, if the market were organized (which the digitalization of the economy is beginning to do) and if the regulations were favourable to them: simplification of procedures, abolition of high-cost intermediaries, relaxation of laws on recruitment and dismissal.
- ► The poor constitute the "bottom of the pyramid" both socially and economically.
 - Economic transition (see chapter 1, Part 3) shows the potential they represent for the development of the internal market, thanks to competitive prices, benefiting a large number of buyers ("bottom of the pyramid" model).
 - ❖ Economic poverty does not mean lack of skills. The poor can, therefore, also get out of poverty and contribute to development thanks, for example, to the jugaad principle, such as recycling waste or its modern version as e-cover (83). Following the example of India, specific actions target the poorer populations with an objective of accompaniment rather than permanent assistance.

Rate of out-of-school children of primary school age (in %)



■ Source: IRES processing of data from the Institute of Statistics of UNESCO (ISU)



http://www.un.org/ africarenewal/fr/ magazine/july-2006/ lutter-contre-lesin%C3%A9galit %C3%A9s-en-afrique



FRICA IN FIGURES N°13

Youth employment

Unemployment rate in Africa (en %)

Region (83)	Age group	1991	2015	2022
Africa	15 years and above	9.2	7.5	7.7
	15-24 years	16.9	13.3	13.5
Southern Africa	15 years and above	28.8	24.7	25.7
	15-24 years	50.2	48.2	54.2
Middle Africa	15 years and above	8.8	5.1	5.7
	15-24 years	19.8	10.5	11.7
Western Africa	15 years and above	4.9	4	5.2
	15-24 years	8	7	9.1
Eastern Africa	15 years and above	6.8	6.4	6.5
	15-24 years	12	10.6	11
Northern Africa	15 years and above	14.4	12.4	11
	15-24 years	30.6	30.7	29.2

Key facts by 2030-2050

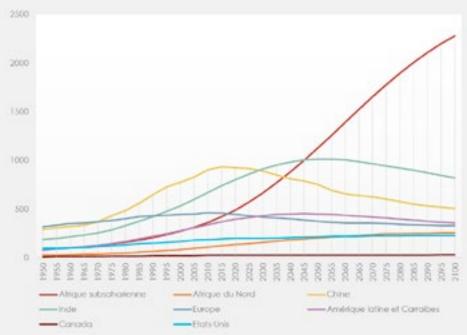
- In Africa, young people aged between 15 and 34 accounted for 456 million people in 2015, or 38% of the African population (50). In 2050, this category of the population could reach 830 million people (84).
- Young people of working age constituted, in 2016, 40% of all African youth (85).
- Between 10 and 12 million young people enter the labour market each year. However, annual job creation on the continent is only 3.7 million jobs. In the absence of urgent and sustained development, the process of clandestine migration could be triggered that no wall or marine force or coastguard can contain (84).
- The working-age population (15-64 years) could number 1.5 billion people (50) of the two billion projected by 2050.
- Employment demand by 2030 could increase by 24.6 million per year in sub-Saharan Africa and 4.3 million in North Africa, or two-thirds of the global growth in employment demand (86).

UMAN CAPITAL (3)

The emergence of new generations

- ▶ Today, people aged between 15 and 24 years are the priority target of several socio-economic programmes. Indeed, they represent 19.2% of the African population and have a double characteristic:
 - ❖ A high unemployment rate (cf. Africa in figures n°13) which is a factor of political instability, both by the weight of young people during elections and by the fact that this situation could possibly lead them to join armed gangs (87). Hence the emergence of specific programmes, such as the African Development Bank's "Jobs for Youth in Africa" and many national programmes.
 - A low qualification, often invoked to justify their unemployability. In reality, multiple factors contribute to this situation, from the limits of mass school education to the inadequacy of university programmes, via trafficking in diplomas or the many small jobs and family constraints to be assumed, in parallel with studies.

Evolution between 1950 and 2100 of working age population (between 20 and 64 years) in some regions of the world (in millions of people)



■ Source : IRES processing of data from World Population Prospects

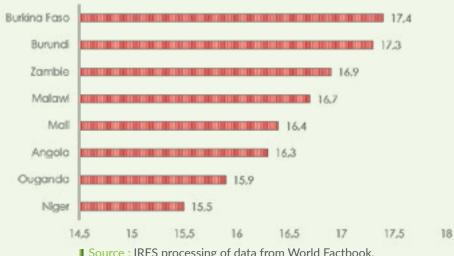
A FRICA IN FIGURES N°14

African women

Female literacy

- ❖ In 2016, 66.5% of people aged 15 and over in Africa (against 51.4% in 1990) are illiterate, including eight out of nine women (88).
- ❖ In 2016, 79.2% of sub-Saharan youth (15-24 years) and 71.6% of sub-Saharan youth are literate (89), 30% more than their elders for boys and 45.8% for girls.
- ▶ Share of women in the employed labour force (90)
 - Less than 35% in North Africa.
 - ❖ Between 40% and 50% in Nigeria, Madagascar, Ethiopia, South Africa, Gabon, Mali and Zambia.
 - Over 50% in Zimbabwe (52.8%), Malawi (52.2%), Gambia (50.8%), Liberia (50.6%) and Tanzania (50.5%).
- Of the ten countries in the world where girls have low access to education, nine are in Africa (91)
 - South Sudan: 15.9%, Central African Republic: 17.7%.
 - Niger: 21.5%, Afghanistan: 23.51%, Chad: 27.16%.
 - Mali: 29.28%, Guinea: 30.35%, Burkina Faso: 33.03%.
 - Liberia: 36.2%; Ethiopia: 36.79%.
- Fertility rate between 2010 and 2015 (92)
 - African women have 4.7 children on average.
 - ❖ 7.4 in Niger (highest fertility rate on the continent), 5.6 in Burkina Faso, 4.6 in Ethiopia.
 - ❖ 2.5 in South Africa, 2.2 in Tunisia and Morocco (93), 2.4 in Libya.
 - 1,5 à l'île Maurice (le plus faible taux de fécondité du continent).

In 2017, the first 9 countries with the youngest female population are in Africa



■ Source : IRES processing of data from World Factbook, Central Intelligence Agency CIA

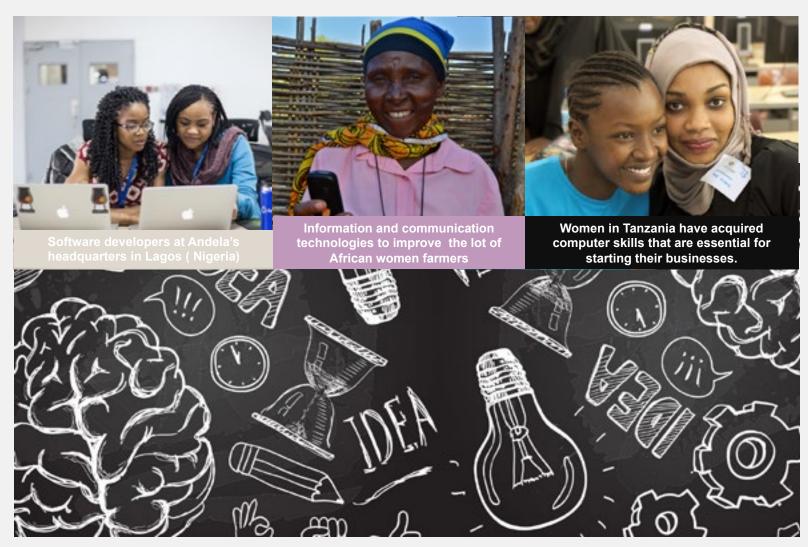
Julius NYERERE, the founding president of Tanzania, once said that "unity" will not make Africa rich, but "it can make it difficult for Africa and the African peoples to be disregarded and humiliated." But, two decades later, **Africa remains divided along a key fault line: gender**. To realize NYERERE's vision of a strong, dignified continent, Africa needs a new era of liberation, one that is fueled by the economic empowerment of the continent's women.

Graça MACHEL, membre de l'Africa Progress Panel (94).

UMAN CAPITAL (4)

- Women and girls, like young people, although more timidly, are beginning to receive some, but uneven, attention from governments. Indeed, they are at the intersection of multiple issues (education, health, employment and human development in general) whose resolution depends on improving their conditions. The awareness that they constitute such a node of the future crystallizes around two aspects:
 - * Women as an economic engine. The proportion of African women working for their own account (agriculture and retail trade) varies between 15% and 50% from one African country to another since it is often the informal sector. The average proportion of sub-Saharan women working for their own account is four times higher than in developed countries (95). Public-private partnership programmes such as "100,000 Women, Horizon 2012" in Cameroon and the South African initiative "Women Advancing Africa" (2017) make a major contribution.
 - Through education alone, developing countries could earn at least \$21 billion a year over the next 15 year if they can ensure the education, well-being and autonomy of all 10-year-olds (96).
 - Women also participate significantly in the culture-nature alliance: in Togo, for example, they play a considerable role in the fight against deforestation and the effects of climate change (97).

- Women, a social reality. Locked into traditional gender roles, many African women have no access to secondary education or property (inheritance, land rights). In the poorest communities, they are only goods, sold as sexual or domestic slaves or forced to marry, which exposes them to health risks, including HIV. The fight takes them to the streets or to host communities, such as the Samburu women's village in Umoja, Kenya.
 - 18 African countries have legally banned child marriage -125 million African women married by force before the age of 18 in 2015 (98)- like Liberia from 2011. but the law is effective only if there is a change in mentality. Following the African Union's campaign for the abolition of child marriage (2014-2017), genuine national strategies have been implemented, as in 2017, the "Zero Tolerance" campaign in Benin where 8.8% of girls in 2014 were married before the age of 15 (99) and the Niger strategic Framework: in 2012, more than 3 girls out of 4 were married before the age of 18 (100).
 - This awareness is supported by the access of African women to political functions, such as the former presidencies of Liberia and Malawi or the parliament of Rwanda, which has the highest percentage of women parliamentarians in the world: 61.3% in 2017 (35).



■ Source: Andela/Rotimi Okungbaye

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UMAN CAPITAL (5)

- The Alien Generation is not only the digital natives who clicked before they could read, write and count, but a whole section of the world's population young and old and less young whose mindset naturally leads them towards a freer and respectful world, a more positive economy, a healthier planet. They spontaneously activate the levers of sustainable development as well as the blue, positive, solidarity economy, x.O... Africa is also the bearer of this new state of mind which accelerates the rapid transformation of the continent, where it can express itself and act. Two characteristics particularly distinguish this generation:
 - ❖ The conscience of oneself and of the world: the "Alien Gen" no longer accept to be considered as pawns to be interchanged in a production line or in administrative work. The novelty is that they want something else. Their desires and aspirations kindle the entrepreneurial dynamism and sometimes lead to deep ruptures, like the young divers of Stone Town (Zanzibar) in a culture hostile to the sea.
 - ❖ A strong level of commitment to change Africa that takes many forms:
 - Joining volunteer corps such as the African Union "Youth Volunteer Corps", which recruits about 100 young professionals each year.
 - Citizens' movements, like Filimbi in the Democratic Republic of Congo, "Y'en
 a marre" in Senegal or "Balai Citoyen" in Burkina Faso.
 - Individual initiatives, led by young people better trained and motivated by an ecological conscience (cf. the interviews "Yoon Wi the way" on africa. makesense.org).

CONCREE

"I had my first entrepreneurial experience at the age of 14 when I was at the military prytaneum of Saint LOUIS. I was selling blank CDs individually within the school. After my higher studies in Grenoble and after a first experience at Airbus TOULOUSE, it seemed obvious to me to launch into entrepreneurship to play a decisive role in the economic development of Africa, Senegal in particular. The impact in terms of innovation is that we bring to the African entrepreneurial ecosystem the possibility of virtual start-up incubation. In terms of employment, given our ambitions to be African, we are going to create fifty jobs within 5 years. But more importantly, we will enable thousands of entrepreneurs to create their start-ups and thus sustainable jobs".

In 2014, Babacar BIRANE founded BAOBAB Entrepreneurship and the Platform Concree "Connect and create" which supports start-ups, from idea to market (101).

OCUS N°18

The Alien Generation



■ Source: http://www.leparisien.fr/espace-premium/air-du-temps/mille-gestes-pour-la-planete-12-11-2015-5267671.php

BUNTU (1)

Ubuntu

- This Bantu concept can be summarized by "I am a human being by and for others" (102), thus emphasizing what constitutes humanity*, that common quality of which everyone should be aware (cf. Africa in motion n°8).
 - In this sense, ubuntu is common to all religions that advocate love of one's neighbour. It brings all cultures together, from Asia to the West via the East, around this fundamental aspiration which is the recognition of humanity as an instrument of sharing and benevolence.
 - Its modernity is illustrated by the eponymous software operating system, free and open, supported by its community of developers and users. It resonates with the world's vision of the Alien Generation world, whose planet is the scale and, more broadly, with all those aware of the deterioration of the cradle of humanity (cf. IRES 2017 Strategic Report).
- Ubuntu is a filigree of public and private, individual or collective experiences that characterize Africa in motion today. It thus shows the springboards of African autonomy: the importance of education, the courage to innovate to "leap-frog", the link and the confidence that must irrigate a continental community of more than one billion people to move forward and free itself from its tensions conflicts.
- To make Africa autonomous, it is necessary to transform it from within and, for this, to mobilize its human potential, which is a considerable asset, by relying on *Ubuntu*.

Education

- Significant progress has been made in education across the continent: Burundi, for example, doubled its net primary school enrolment ratio between 2000 and 2015 (89), but too slowly, given the demographic growth and the current major transition. Education models, inherited from the West, are running out of breath. Moreover, unemployment of graduates leads to the emergence of a movement of university's rejection, perceived as a source of indebtedness without however guaranteeing a job once out of college. Hence the enthusiasm for university scholarships offered abroad.
- ► Complements to this educational system and alternatives are being tested, either within the framework of public policy, or by private actors to prepare young people for the jobs of tomorrow: entrepreneurship, digital, agro-ecology... (see Focus n°19).
- ▶ In a continent badly deprived of the means to rapidly bridge the growing gap between its educated population and the jobs available, any form of external assistance for the improvement of education, both academic and university, is welcome. But it is rarely devoid of commercial or ideological interest, be it Chinese university scholarships or World Bank programmes (103).

A FRICA IN MOTION N°8

Towards Ubuntu

- ▶ **Ubuntu** Education Fund: this non-profit organization promotes a development model dedicated to breaking the cycle of poverty in the townships of Port Elizabeth, South Africa. "Our impact is made possible by trusting those closest to the problem to create the solution. 95% of the **Ubuntu** Campus team comes from the community we serve. These staff members are leaders in their communities, leading the vision of one of the most innovative organizations on the continent" (104).
- ▶ Global Oneness Project: "our aim is to link, through stories, local human experience to global meta-level issues such as climate change, water scarcity, food insecurity, poverty, endangered cultures, migration and sustainability. By showcasing individuals and communities affected by these issues, our stories and lessons allow us to examine universal themes that highlight our common humanity: identity, diversity, hope, resilience, imagination, adversity, empathy, love and responsibility. Our lessons facilitate the development of critical thinking, research, empathy and listening" (105).
- ▶ ADAJA Centre: "thanks to the training in the weaving craft, dressmaking and marketing of Faso Danfani (traditional woven loincloth), the Centre has enabled the professional integration of more than 200 poor women from Ouagadougou" (106).

- Concept of ubuntu: "Unlike the white man, the African sees the universe as an organic whole that progresses towards harmony, where individuals parts exist only as aspects of universal unity" (107). Thus, ubuntu is at the origin of a humanistic vision "blind to colours" [of skin] called colour-blindness, spread by Nelson MANDELA and Desmond TUTU (108).
- "Finally, President Nelson MANDELA understood the links that maintain the human spirit. In South Africa, there is a word, *Ubuntu*, that describes his greatest talent: his recognition that we are all linked together in a way that can be invisible to the eye; that there is unity in humanity; that we realize ourselves by sharing ourselves with others and caring for those around us (...). Not only did he embody this *ubuntu*, but he taught millions of men how to find this truth in themselves". President Barak OBAMA (109).
- ▶ "Someone from *Ubuntu* is open and available to others, devoted to others, does not feel threatened because others are capable and good because he or she has his or her own self-esteem which comes from the knowledge he or she has of belonging to something greater and is diminished when others are diminished or humiliated, when others are tortured or oppressed". Desmond TUTU (107).

OCUS N°19

Education (1)

The new initiatives of African states (110)

Well aware of the magnitude of the educational challenge, African governments are experimenting alternative policies :

- in education :
 - Ethiopia is promoting higher education and building universities; Senegal is betting on virtual universities.
 - Niger offers agricultural training as an alternative to school and teaching in local languages locales; Mauritius has developed a plan to encourage technical and vocational education for young people,
 - South Africa, Botswana and Namibia have chosen to extend the duration of schooling; Ghana targets girls through *Open Learning Exchange*.
- in the area of employment support:
 - Ghana has established a national youth service empowerment programmes to equip university graduates with the skills needed to find a job.
 - Zambia has put in place a national youth policy and a business startup fund to stimulate job creation, while the Nigerian government has established its entrepreneurial development programme and its 'YouWin' entrepreneurship competition,
 - Egypt also relies on entrepreneurship to improve student employment and promotes associations such "Injaz Egypt" which offer complementary entrepreneurship courses (111),
 - Kenya, whose university enrolment doubled between 2012 and 2016, has revived the national youth service that provides education and volunteer employment. The Youth Enterprise Development Fund benefitted 1 million Kenyan youths for an amount of \$106 million (112).

... facing the same problems as the rest of the world

Whatever the local situation or conditions, an analysis of the current shortcomings of the Western education system highlights the following lessons:

- There can be no good university education without a good level of prior education (primary and secondary).
- Quantity cannot prevail over quality, given the dysfunctions observed in the Arab and Asian education systems, for example, based solely on memorization.
- Distance education alone is not enough; it must be based on a mixed (physical and virtual) approach.
- We must put an end to the privilege of intellectualism over manual activities. Every country needs these two forms of intelligence, neither of which is superior to the other.
- ► The improvement of an education system starts with the improvement of the level of teachers, both in terms of knowledge and pedagogical skills, hence the need to invest in their training and motivation.

A challenge that is becoming more and more clearly perceived (113)

▶ The Global Partnership for Education (GPE) Replenishment Conference (1-2 February 2018, Dakar) recognized the urgency of the situation and raised substantial funds, following a sharp decline in support to Africa between 2010 and 2015. Several African countries have committed themselves to increase public spending on education.

OCUS N°19

Education (2)

Voices of youth (114)

- "When you get an internship, the first thing they tell you is to forget everything you learned at school. A university means nothing in real life". Rose, Rwanda
- "Information and communication technologies in schools are only elementary and do not encourage creativity, these courses are not practical". Hassan, Egypt
- "Agro-industry is really exciting and necessary. To be effective, it must emphasize the modernization of agricultural techniques and the development of cooperatives". Rosine, Cote d'Ivoire
- ► "For an industrial apprenticeship programme to be effective, it must be offered before the university application deadline to attract students early before they enter university". Grace, Nigeria
- "Vocational training programmes are only useful if they are closely linked to a firm commitment by employers to offer them jobs, otherwise young people are never attracted to these programmes". Diana, Rwanda

Educating for the global era

"Unfortunately, the education systems that have formed most of the elites (...) have not imagined integrating the need for the emergence of minds capable of grasping global fundamental problems, capable of understanding their complexity in the learning process.

Educational systems continue to fragment and disjoin the knowledge that should be linked, to form one-dimensional and oversimplifying minds that focus on dimension only and ignore the others.

Hence the vital urgency to "educate for the global era", which requires reform of the knowledge system, reform of thought, reform of education, these three reforms being interdependent" (Morin et al. 2003).

Professor Robert KASISI (Democratic Republic of Congo) (115)

A FRICA IN FIGURES N°15

The educational challenge

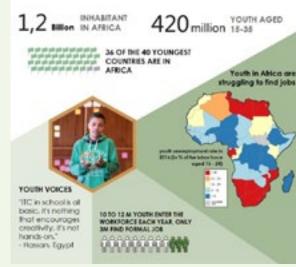
- With 73 children under the age of 15 per 100 people of working age in 2015, almost double the world average, Africa has the highest dependency ratio in the world (116). Indeed almost 47% of Africans are under 18 years. In fifteen African countries, more than half of the total population is under the age of 18.
- → African children are at the centre of the continent's demographic and social transition.
- Education expenditures (2016) (117)
 - > 6% of GDP in South Africa, Ghana, Malawi, Mozambique, Swaziland and Tunisia.
 - < 1% of GDP in Nigeria and Cameroon.

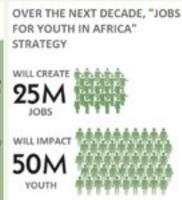
Brain drain

50,000 Africans entered Chinese universities in 2017; 80,000 are expected in 2018 thanks to Chinese government scholarships (118).

Illiteracy

In 2016, 31.8% of the world's illiterate population over the age of 15 lived in Africa (117).



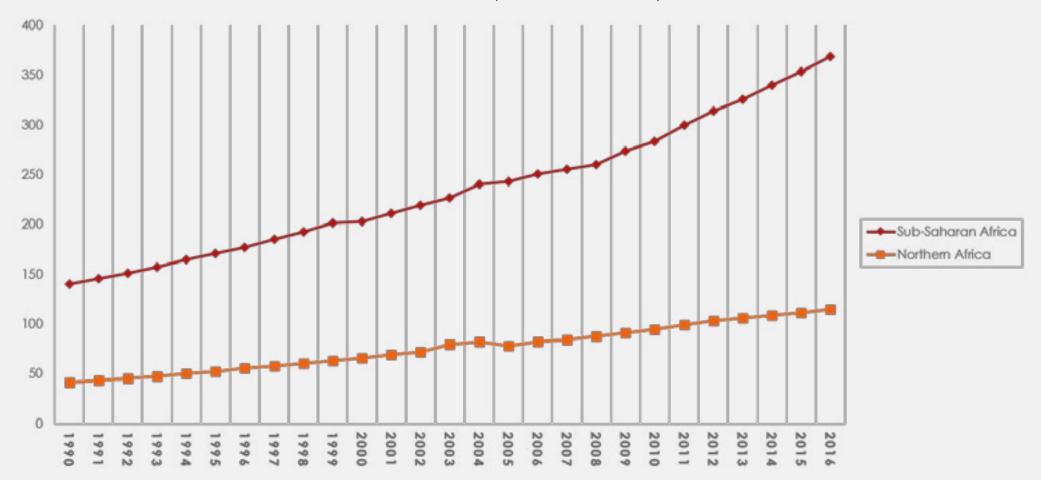


"If current employment policies remain unchanged, less than a quarter of the 450 million new jobs needed over the next 20 years will be created".

2017 Report on competitiveness in Africa.

■ Source : African Development Bank report entitled "Jobs for youth in Africa" and IRES processing of data from the International Labour Organization

Evolution between 1990 and 2016 of the illiterate population in sub-Saharan and northern Africa (in millions of inhabitants)



■ Source: IRES processing of data from UNESCO Institute of Statistics and World Population Prospects

FRICA IN MOTION N°9

Towards another education

Good practices

- ASHESI: founded by Patrick AWUAH of Ghana, recipient of the Wise Prize for Education 2017, this university enables its students to work collectively to solve the country's problems (119).
- Flat6Labs: start-ups accelerator, founded by Ahmed ELALFI, Egyptian venture capitalist who bets on the potential of "tech businesses" to create jobs: "The knowledge economy is the only answer for Egypt. What we need here is a 10-year solution: education, education, education. Our assets are human" (111).
- Moringa: this private school of developers, located in Nairobi (Kenya) claims a placement rate of 95% of its students, especially on the local market. Its success led it to set up other similar schools in Africa. It was co-founded by a Kenyan, Frank TAMRE and an American, Audrey CHENG (120).
- We Think Code: this South African NGO opened the first free school for coders in Johannesburg (121).

To escape poverty in Africa, we must invest in our brains (122)

- Fred SWANIKER is a Ghanaian entrepreneur who is multiplying projects to improve access to education and train the African leaders of tomorrow.
- In 2008, he opened the African Leadership Academy in Johannesburg, a pre-university programme for Africans aged 16 to 19 whose mission is "to transform Africa by developing a powerful network of over 6,000 elites who will work together to address Africa's greatest challenges, create extraordinary impact and accelerate the continent's growth trajectory" (123).
- He then launched the African Leadership University (ALU), a pan-African leadership university with innovative educational methods, to 25 campuses (of 10,000 students) spread across the continent by 2040 (122). The mission of this world-class network of higher education institutions to produce 3 million young African leaders over the next 50 years (124).



■ Source: https://s-i.huffpost.com/gen/3903566/images/n-AFRICA-MAP-628x314.jpg

BUNTU (2)

Innovation

- Innovation is at the heart of this necessary inclusive transformation, in favour of a autonomous development of people and of the continent, whether to change the education system or the economic model or to invent tomorrow's activities (e-education, e-health, fintech, drones).
- ► The various actors of Africa in motion (states, citizens, non-governmental organizations, investors) have understood this well and are seeking to favour both the actors who innovate and the deployment of their innovations.
- Experiments are flourishing and, here again, *ubuntu* is at work, not only for Africa, but for the whole world (125).

Africa: a new generation of innovators

"We have also followed the success of some innovators in Africa coming to challenge what is commonly accepted: they have developed franchises to serve the poorest segments of the population, created markets that exploit the considerable opportunity that non-consumption represents, internalized risk to build solid, autonomous and low-cost businesses and integrated operations to avoid external corruption hubs. Their experience depicts an optimistic picture of an Africa that can deliver on its promise of prosperity. A young entrepreneur summarizes the jolt that local success can create by making the following observation: "When the solution comes from within, you start to believe in yourself. We start to think that we can do it, that we can move forward".

Clayton M. CHRISTENSEN, Efosa OJOMO, Derek Van Beyer, Harvard Business Review, 2017 (126).

BUNTU (3)

Trust

- ▶ The transformation of the education system as a whole and the development of successful innovation are strongly conditioned by **trust in the school**, both as an inter-relational presupposition (trust in the Other), as a principled attitude of institutions (administrations, enterprises, schools) towards human potential (risk-taking, initiative) and as a manifestation of faith in the capacity to change.
- ▶ Confidence in the possibility of doing otherwise: the mode of economic development imposed by developed countries no longer corresponds to the characteristics of the 21st century (cf. previous chapter) nor to the situation of many African countries, as African urbanization shows, for example.
 - The leap-frog logic is imposed in a growing number of fields (economy, technologies, ecology, education). Allowing oneself to do things differently from those who have "succeeded" represents a profound change in the African mentality, the appearance of which is now manifest, as shown, for example, by the debates of the Thought Workshops (Les Ateliers de la Pensée) (Dakar, 2016, 2017).

- ▶ Trust in Africa's human potential: like the many African parents who invest a considerable part of their income in their children's education, more and more investors, entrepreneurs and teachers trust the human potential of the new generations. Women, too, are beginning to emerge in some countries as credible actors.
 - In the field of education, three strong axes for strengthening this potential are emerging today:
 - At least for girls, compulsory schooling up to the age of 16, which protects them from early school dropout and enables them to acquire greater autonomy.
 - Experimentation with disruptive alternatives, such as reverse classes tutoring between students, or even automated homework help (educational apps, tutorials).
 - Popular education for urban adults (illiterate or uneducated).

BUNTU (4)

- Faced with the lack of confidence in the African take-off, manifested by some multinationals that have left the continent or made drastic cutbacks - Nestlé and Barclays Bank in 2016, Coca Cola, Cadbury, Eveready... - (126), the confidence of Africans in their own development capacity proves crucial to ensure their autonomy.
 - Irrigating the continent, trust can act as an accelerator in all areas: citizen expression, the circulation of goods, services and people, employment, entrepreneurship, start-ups... All the more so as information and communication technologies can considerably multiply it (social networks) and make it operational (crowdfunding, innovative ecosystems).
 - Finally, this confidence promotes the brain gain the return of emigrant brains – a particularly effective vector of development if:
 - living conditions (infrastructure, security, basic services) and socio-economic freedom are acceptable,
 - host organizations (universities, business companies, public services) give themselves the means and the openness to benefit from their contribution (new practices),
 - the local system is open to this unconscious practice of ubuntu that is observed among those who return home: the desire to share, to give back a little of what one has received, under a force other than monetary.

Mobility

- ▶ If independence and the overcoming of racial separations (*apartheid*) were the decisive struggle of the 20th century for Africa, that of the 21st century will undoubtedly be the conquest of mobility.
- Indeed, another conception of the movement of persons appears today, the combined fruit of globalization and the demand for freedom. It enshrines the erasing of the notion of migration in favour of that mobility.
- While migration is a rupture, the immigrant and the emigrant, often outcasts, mobility is the newly refound freedom to move, to settle, to move again, to return, to leave, to prosper in the movement. Mobility is a new form of nomadism, transhumance (circular mobility), and expansion of territories.
- As part of the African DNA, throughout the continent's history, mobility has fuelled human progress, spurred innovation, spread ideas and shaped today's world, through the transfer of knowledge, skills and technologies as well as trade in goods and services.

BUNTU (5)

- ▶ Today more than ever, mobility reflects current lifestyles (commuting, student mobility, change of profession) which no longer allow populations and activities to be locked up in specific spaces, such as the peasant in the countryside, for example, overtaken by urban farmers, rural non-farmers and neo-rural dwellers (city dwellers living in the countryside).
 - The case of South African urban dwellers who moved to the countryside to create modern farms illustrates the vigour of the *ubuntu*, when they pass on their technologies (agricultural machinery, irrigation techniques, modified seeds) to neighbouring subsistence farms.
- Exo-African mobility, represented by the diaspora, does not only contribute to the autonomous development of the continent thanks to the 65 billion dollars sent, in 2016, to more than 200 million Africans by 45 million of their fellow countrymen living abroad (127). Their skills (brain gain), their networks (relational economy), their motivation to help the continent emerge, by giving it the best of development constitute a formidable intangible capital necessary for the global transformation mentioned here.

"Our history is not limited to the Atlantic and the Mediterranean. It espouses other transnational beams that go from the Islamic worlds to the Malay, Chinese and Indian worlds. Let us revisit the question of circulation and movement, let us conceive them as structural ingredients from which our cultures have ben forged. It is a way of reacting to the militarization of our borders and the ideologies of difference (...)".

Achille MBEMBE, Cameroonian philosopher (128).

"Let us help Africans move freely and make Africa a more open, prosperous and truly connected continent".

Akinwumi ADESINA, ADB President (129).

BUNTU (6)

- ▶ Endo-African mobility, a factor of cosmopolitanism and development of intra-African trade is still often thwarted, because of the visa requirement for an African to enter more than half of the continent's states in 2016 (130).
 - the isolation of African countries is costly to the continent: it hinders the development of African airlines, impedes trade (the cost of intra-African trade being the highest in the world) and constitutes an obstacle to the development of international tourism (131).
 - Awareness (#VisaFreeAfrica) of the negative effects of this situation led the
 African Union to introduce a common African passport in 2016 that could
 be distributed to all citizens by 2020 (132). Meanwhile, since 2013, the 300
 million ECOWAS citizens (133) have a single Community passport (134) and
 common external tariffs (customs duties) (135).
- ▶ Ubuntu -"I am a human being by and for others" is, therefore, this key that can allow to remain bound, while being dispersed, especially in the context of increased mobility. Combined with *teranga* (a sense of hospitality in Senegal), it leads to the acceptance of the newcomer, no longer as an uprooted one "without ancestors" condemned to solitude but as an intangible asset, rich in its own communities and knowledge, a member of the great African family.



Source: http://pencilsforafrica.com/wp-content/uploads/2012/05/africa-ubuntu.png

A FRICA IN MOTION N°10

Towards the "Bashingantahe"

- Umushingantahe "means man responsible for good order, tranquillity, truth and peace in his environment. And this, not by virtue of an attributed administrative power, but of his very being, his quality of life, which society wants to recognize in his person by conferring an investiture upon him" (136).
 - ❖ A man of integrity and wisdom, in charge of conflict resolution (equity, justice) at all levels (reconciliation, responsibility, truth, reparation), the *Umushingantahe* in Burundi is traditionally in charge of reconciliation (137).
 - ❖ Together, the Bashingantahe constituted a peaceful force and an independent authority, trying to avoid arbitrariness and lack of justice in judgments (137).
- From the warrior to the wise: the age scale in Africa promotes a growing appreciation of the individual according to his age. After the age of the warrior (between about 20 and 40 years), comes the age of leadership (cf. the *qulutala* in Senegal, the *Kiama Kia mathaati* kikuyu in Kenya), during which the responsibility consists in pacifying the community. Finally, when the children have become adults and the wife sterile, the elder (the *sukeba* or the *Kiama Kia maturanguru*) embodies wisdom, self-control and staying away from passions. He is dedicated to the well-being of the community and his advice is carefully listened to (138).

Little by little, Africa is changing generation of leaders. It is no longer a question of age, but of *worldview*.

► The generation of warriors

- The generation that came to power at the time of independence is, by necessity, a generation of warriors. Fighting leaders, they have attained supreme office, the strength of arms, mistrust, clientelism and unfailing authority.
- ❖ Today, certain intellectuals-thinkers of tomorrow's Africa and aware that its autonomy depends on the decolonization of African thought as much as political and economic structures are being established as new warriors, opposing the North and the South, fighting with equal determination all forms of new colonialism.

▶ The generation of pacifiers, the Bashingantahe

- Another vision of the world, however, emerged on the continent, that of wise men, distant from war passions, capable of a far-sighted vision, animated by an *Ubuntu* of universal size.
- * Reconciliation is at the heart of their action, from Nelson MANDELA to Alpha CONDE. They dream of a united continent at peace with itself, with its neighbours and with the whole world. A continent whose African identity could be reconciled with the achievements of the West, as its genetic syncretism allows it naturally to do so...

HE TIME OF THE WISE (1)

The three pillars of African wisdom

African human capital (urban, rural, Africans living abroad, migrants, women, youth, rich and poor) will make the continent of tomorrow, a world of peace or war, drained of blood or prosperous. Everything will depend on the ability of Africans and their government officials to come to terms with themselves, with their identity, based on the positive values of their traditions and getting rid of unfair practices, while embracing universal values. Three pillars of African wisdom support this bridge, built between yesterday and tomorrow.

- **The Ubuntu**, which encourages sharing and relationships with others, is the first of these pillars. By consciously developing it, Africa is renewing its ancestral tradition of solidarity and generosity.
- The second pillar is reconciliation which has different mechanisms depending on the respective cultures. Reconciliation concerns not only the former belligerents of a conflict (cf. chapter 3 of Part 2), but, more broadly, here, the colonizers and the colonized, the African person and the Western person, nature and the one who degraded it.

- The third pillar, **syncretism**, is one of the most striking characteristics of the African world. This hybridization does not only concern religions, but also cultural practices, fashion, political theories... By breaking down barriers between different fields of knowledge or practice, syncretism allows Africans to leap-frog towards a global culture that is more integrative than exclusive.
- That is why these three pillars are essential: their proper functioning conditions the success of truly autonomous development of the continent. Most African governments have already understood this and are moving in this direction. To do this, three paths offering "African solutions to African problems" are being explored: the governance of continental autonomy, the reconciliation of the African with his past and his reconciliation with nature.
- Here comes the time of the Umushingantahe (cf. opposite): a wiser and more just human capital, at peace with itself and with the world.

A FRICA IN MOTION N°11

Towards emergence

Socio-economic emergence

- ▶ Despite its low growth rate of 3.5% in 2017 (139), Africa is still "the second most dynamic region in the world, behind the developing countries of Asia". Within the continent, East Africa has become the most dynamic region, driven by Ethiopia (140).
- Supported by the rise of the middle class (about 350 million people in 2017), domestic demand has become the main engine of growth (140).
- ▶ While North Africa has the highest levels of human development, steady improvements since the beginning of the twenty-first century have been observed in almost all other sub-regions (140). This would help to redress, in the future, the difficult situation in which 35 African countries are currently at a low level of human development.
- In the fight against poverty, Rwanda, Ghana and Liberia have made considerable progress: in 2010, nearly 9 out of 10 Rwandans are covered by community health insurance. Egypt covers 78% of its population and Tunisia provides health coverage for its entire population (100%) (140).
- East Africa is the most efficient sub-region, with an average annual growth of 6% between 2000 and 2016, illustrating the results of economic diversification (fintech, agriculture, services including tourism) and investment in infrastructure (electricity, airspace) (140).

Emergence of political autonomy

- ▶ The African Peer Review Mechanism (APRM), established in 2003, is one of the most innovative aspects of the New Partnership for Africa's Development (NEPAD). Through this voluntary self-assessment mechanism (similar to the OECD self-assessment mechanism), African leaders can submit their policies and practices to African peer review. Four areas of intervention are concerned: democracy and political governance, economic governance, business management and socioeconomic development. Following this evaluation report, a National Action Plan is drawn up. In 2015, half of the 35 member countries of the African Peer Review Mechanism had been evaluated (141).
- The Continental Agenda 2063, adopted in 2015 by the African Union, is both a vision and an action plan that aims to "transform Africa with vibrant and inclusive economies, free from the burden of poverty, an end to conflict and disease, and integrated and connected through transport networks, information and communication technologies". NEPAD is its executive body (141).
- At the African Union Summit in January 2018, it was decided to limit the financial dependence of the continental organization. While more than 68% of its programmes were financed by international donors in 2015 (142), member states should finance, in 2018, 40% of the institution's budget (143).

HE TIME OF THE WISE (2)

Towards governance of autonomy

- If human capital is the very substratum of Africa's autonomous development, global governance is a sine qua non condition. For such a form of development cannot take place without clear paths being defined. Nevertheless, this good governance can only be evaluated in the medium and long term if we do not want to fall into Afropessimism or -optimism. This is the paradox of African development: the need for time to mature politically and economically is thwarted by the urgency of the challenges and the sense of exponential acceleration of change.
- Significant progress has already been made in the development of the continent. It is important to make them known in order to fight against the image, often negative, returned by the media or international institutions. On the one hand, this image has a direct impact on foreign investment, which has been falling since 2012 (144) and which, in turn, has repercussions on African debt. This has shown an average annual growth rate of 5% over the period 2000-2017 (145). On the other hand, analyses centred on Western thinking are often biased by a profound lack of knowledge of Africa and its mechanisms at work.

- * Thus, the indicators used, such as GDP growth rates, are sometimes far from reflecting the reality of a developing country. What matters is not so much the annual rate as the economic structure that generates it. The example of African countries rich in resources (high growth, but subordinated to world prices, low human development index) is enlightening.
- ❖ The West looks at the evolution of Africa all the more complicated because it has difficulty understanding the necessity and effectiveness of the African leap-frog, both because of its own experience (which it projects on others) and because of the risks incurred by a too rapid African autonomy (access to raw materials, questioning of existing markets...).
- Indeed, the instruments of African autonomy are already in place. It now remains to improve its operation and accelerate its deployment without jeopardizing recent achievements. Two pillars characterize the emergence of this strategic autonomy: cooperation and democracy.
- Cooperation enables African states, at the very least, to support each other and, at the most, to enrich each other, by liberalizing intra-African trade and by constituting vast and increasingly integrated trade areas (cf. future continental free trade area, continental airspace, single currency project), to which a unified continental digital territory will have to be added one day (.afr).

A FRICA IN MOTION N°12

The words of autonomy

"Whether we look at it from the angle of the continent's dynamic forces, its resources or its potential, Africa is a great continent. It therefore has to take its destiny in its own hands. Africa is no longer a colonized continent. This is why Africa should learn to trust Africa. Africa needs human and social development projects much more than it needs humanitarian aid." (146)

His Majesty King Mohammed VI, King of Morocco

▶ "Africans problems can only be solved by Africans themselves. We only ask to be accompanied. (...) African states will have to redefine their economic policies in order to promote their development and limit their dependence on the major powers. (...) Africa has missed three industrial revolutions, it is time to recover thanks to African youth. We no longer want to be taught lessons". (147)

Alpha CONDÉ, current African Union Chairman, 30 January 2017-28 January 2018

- "It is about asserting one's economic sovereignty, making choices and taking responsibility for the consequences. Including the consequence of not having access to loans when you think you are defending a good option. Regarding the agricultural question, Botswana was against the World Bank's options. The Bank withdrew its funds. Ten years later, the Bank came back and said: "You were right! And we will advise neighbouring countries to do like you". Felwine SARR, Author of AFROTOPIA (148)
- "We will hardly be able to face the challenges we face, and with us the world we share with others, without new ideas. It is a question of forging a powerful movement of ideas capable of influencing transformations that we can no longer postpone, of changing our imaginations and of opening the way to new social practices. Empowerment of Africa in contemporary conditions requires the production of new ideas, in a gesture that restores a relative autonomy to ideas. The reality is that the indefinite repetition of old ideas will have cost extremely dear". Achille MBEMBE, philosopher and theorist of post-colonialism (149)

T

HE TIME OF THE WISE (3)

- The Regional Economic Communities are making considerable progress, each at its own pace, both in terms of economic consolidation and political harmonization.
- ❖ At the same time, the international organization of African states, the African Union, is working to create the largest territorial entity that humanity has ever known. Both a Council of Elders and a palaver tree under which critical issues can be debated, the African Union aims to be a powerful engine of the continent's autonomy, especially since it has a long-term vision Agenda 2063 "The Africa we want" adopted in 2015.
- In parallel, numerous organizations, often little or little known, are working to strengthen solidarity and autonomy on the continent or in transitional territories, such as the International Consortium for Cooperation on the Nile.
- There is a growing willingness to cooperate within many African states, motivated in particular by the impacts of climate change: "Faced with these new challenges, it is imperative that our states strengthen their systems by adapting them to the new climate context; we must also bear in mind that, taken individually, our countries will find it difficult to meet the challenge and that only international cooperation will enable us to curb these new scourges" (150).

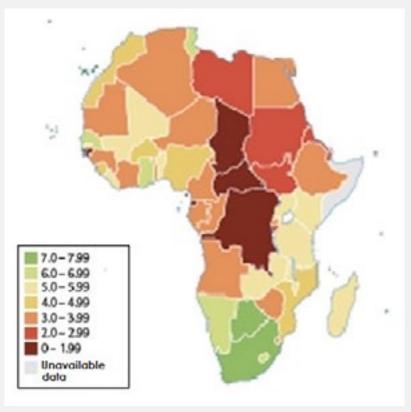
- If intra-African cooperation is a necessity and an obvious evolution for the continent, on the other hand, the difficulty today lies in cooperating with non-African bodies. Indeed, autonomy of the continent is at the cost of an exceptional effort of discernment and prioritization (151).
 - How can we distinguish between foreign countries that are real stakeholders in Africa's development – more particularly because they feel threatened by its migrants and prefer to help them settle at home – and those that are, in reality, the new wave of neo-colonizers? How can we distinguish the donation from the disguised purchase of future favours?
 - And above all, how can we afford the luxury of refusing foreign aid, in whatever form, when needs are so pressing and many lives can suffer?
 - If independence becomes impossible in the interdependent world of the 21st century, how much autonomy is, nevertheless, within reach of the African continent?
- ❖ Finally, once the institutions of the African Union have been reformed in order to strengthen it, it will be time to make the continent's voice heard on the world stage, i.e. where the aid is being played out, which could stimulate sustainable development in the region (World Bank, IMF, G-20, etc.). Beforehand, the representatives of the continent must have clearly defined their priorities and set the price to pay for their autonomy (abandoning the CFA, renouncing certain investments...).

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HE TIME OF THE WISE (4)

- ► The second pillar characterizing the emergence of the political autonomy of the continent consists in the African democratic transition which is under way, at the rhythm of the warriors handing over power to the wise.
 - The hegemony of countries rich in resources (South Africa, Algeria, Nigeria) is gradually giving way to the emergence of middle powers (Kenya, Ethiopia...) which are shaping a multipolar continent. A first level of democracy appears, therefore, at the level of all African states, within the African Union.
 - The second level of democracy concerns both the participation of citizens in the choices of their government officials and respect for their fundamental rights, as ensured by the African Court on Human and Peoples' Rights.
 - Pre-and post-election violence is beginning to decline as free participation in elections and respect for suffrage (see map opposite). More and more successions at the head of African states are taking place peacefully (Nigeria, Burkina Faso, Côte d'Ivoire, Benin, Cape Verde...).
 - These transitions are all the more important as the population's lack of confidence in leaders who would become richer at the expense of the development of their governed, increases the risks of violence and secessionist demands. Certainly, a day could come when the borders inherited from colonialism would be called into question. But by then, the African genius of regional cooperation could have rendered the issue of cleavages futile, if it has succeeded in establishing genuine common spaces and free endo-African circulation.

Democracy Index in 2017 (score from 0 to 10: perfect democracy)



■ Source: Economist Intelligence Unit

A FRICA IN MOTION N°13

Towards African democracy?

"Even if not everything is perfect, Africa has demonstrated its capacity to organize elections and to take its destiny in hand. We no longer accept coups".

Alpha CONDE, Head of state of Guinea, President of the African Union (2017) (152).

- There are many innovations at work in Africa even if most of the time they do not attract attention.
 - Mauritius, for example, is trying an institutional power-sharing arrangement that seems to be working well so far.
 - The Constitutional Court in Benin is not an imitation of a model directly drawn from an established democracy. It was established on the basis of lessons learned from Benin's political history.
 - ❖ The model of separation of powers in Ghana, which lies between the Westminster parliamentary system and a presidential system close to that of Washington, is also relatively unique".

Abdul Tejan COLE, Executive Director of the Open Society Initiative for West Africa (153).



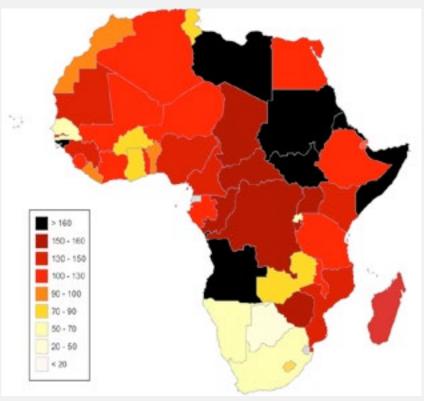
Source: http://www.alimoussaiye.com/uploads/2/2/0/3/22035380/1022805_orig.jpg

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HE TIME OF THE WISE (5)

- * A third level of democracy is being established through multilevel governance. According to the system adopted (poll tax-based, representative or direct, for example), democracy is not necessarily government by the people, but always for the people. Its worst enemy is, therefore, less authoritarianism than the corruption that is practiced to the detriment of the people.
 - Multi-level governance which ensures coordination between the different decision-making levels (supranational, national and territorial authorities, etc.) is an essential instrument. This makes it possible, on the one hand, to reinforce efficiency by avoiding duplication, dispersion, opposed orientations... and, on the other hand, to decentralize powers, by entrusting more responsibility to the territories and their local or regional elected representatives.
 - Indeed, decentralization is progressing in many African countries, including
 highly authoritarian or centralized, facilitating the use of subsidiarity (solving
 problems as close to their source as possible), bringing governing officials and
 governed closer together and local development. It also makes it possible
 to better respond to the specific needs of local populations through the
 territorialization of public policies.

Corruption perceptions index in Africa in 2016 (ranking of countries)

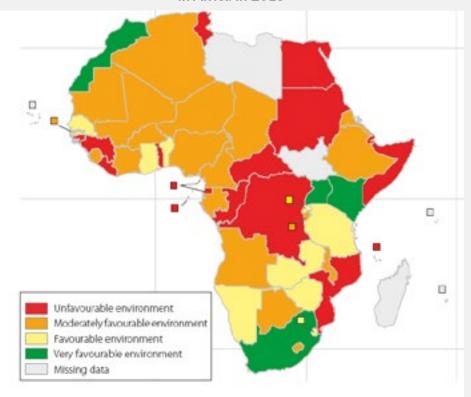


■ Source: IRES processing of data from Transparency International

The situation of decentralization in Africa in 2015

Legal and institutional dimension < 0.6 06-08 08-09 >0.9 Missing data Budgetary and financial dimension <0.25 • 025-05 05-0.75 >0.75

The state of the institutional environment of local government in Africa in 2015



■ Source: "A New Emerging Rural World: An Overview of Rural Change in Africa, NEPAD

HE TIME OF THE WISE (6)

Towards a reconciled identity

- ▶ The combination of the characteristics of those African peace-making leaders, the *ubuntu* and the *Bashingantahe*, and building on the African DNA, makes us **focus on two particularly powerful driving forces** of the autonomous development of Africa: **the reconciliation of the African with himself and with nature**. Once again, leap-frogging is at the heart of these strategies for the future.
- ▶ What does it means for an African to be reconciled with himself, beyond post-conflict reconciliations (cf. chapter 3 of Part 2)?
 - ❖ The African's openness to others is such that he is quick to embrace foreign cultures if he finds them beneficial. To this phenomenon one has to add the colonial domination that imposed its own truth on Africa (20th century) and, nowadays, exercises an intellectual, Western and hegemonic domination (economic models...).
- Adopting enriching external contributions undoubtedly allows progress to be made, provided that this contribution does not come at the expense of a rich indigenous culture. However, the evolution towards flourishing human societies a universal aspiration, the very purpose of economics and politics is not the prerogative of a single path that would be of a Western type. This awareness is increasingly emerging within the pan-African society, bringing together Africans living in Africa or abroad.
- ► The forced march forward, imposed on Africa to catch up with "Western modernity", has long deprived it of a detached reflection on these subjects.
 - ❖ The desire to be a good student has not encouraged Africa to develop its own path. But the transitions evoked in the previous chapters and the imminence of a real change of the world in its entirety represent a "strategic moment", suitable for Africa to build its own path. A syncretic path, drawing the best from both its traditional culture and that of the Western world that formed its elites.

HE TIME OF THE WISE (7)

- In concrete terms, the leap-frogs, that could be generated by this extended identity could be the following:
 - ❖ Strengthen and exploit the advantage of multilingualism : vernacular languages to preserve indigenous concepts and vehicular languages (English and French) to overcome the linguistic barrier between the East and West of the continent.
 - **Develop an entrepreneurial management mode**, based on consultation and recognition of the primacy of aptitude over competence, in line with the "start-up attitude".
 - Anchor the diaspora in the continent, accepting dual nationality for all African nationals, born or not on the continent.
 - Develop a new land law, taking into account both:
 - the establishment of inalienable tribal property (cf. Decree of the African Commission on Human and People's Rights of 26 May 2017 on the Ogiek (154)) and the intangible protection of sacred lands which would constitute de facto sanctuaries of biodiversity.
 - customary rights governing land used by rural populations,
 - the most recent advances in the preservation of ecosystems (ecological corridors, conservatories of natural areas, etc.).

- Create a definitive and enforceable status of indigenous peoples, on the basis of an objective definition, independent of the assessment of states. annexed to the African Charter on Human and Peoples' Rights.
 - This status would make it possible to draw up an exhaustive list of these peoples and map their territory and their sacred lands (a condition for sanctuarization).
 - It would aim to prepare the welcoming of those who want to come to "modernity" in order to avoid mistakes made elsewhere (United States, Australia).
 - It would protect these cultures as so many national treasures, according to conditions of both respect for the human person and consultation, fixed collectively.
 - · It would recognize the right of these peoples not to be imposed another culture, in particular through literacy.
- Organize the training and supervision of African healers, holders of local pharmacopoeial knowledge and a holistic analysis of human functioning (similar to Chinese medicine), particularly in relation to stress and wellbeing, a worldwide concern, today, with regard to the development of mental illnesses (155).

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HE TIME OF THE WISE (8)

- Develop specific urban planning, outside Western models, corresponding to the specificities of infrastructures water reservoirs on Beninese roofs, for example to the nature of climate refreshing architecture (156) to the rhythm of urban growth multipolar cities, food spaces and the necessary mobility between the city and its hinterland intermediate hubs -.
- * Establish a compulsory civil service for all young people, of varying duration depending on the level of education, (1 to 2 years), providing a pool of labour for priority projects of *ubuntu* inspiration (Green Wall, for example) and offering training and temporary employment to an unemployed population: between 27,400 and 33,000 young people enter the African labour market every day, only 8,200 found formal employment in 2015 (157).
- ❖ Systematize the teaching in primary school of a historical corpus of the great thinkers of the continent. Gaston Berger University (Senegal) has already embarked on this path (Faculty of Civilisations, Arts and Cultures, and Department of African Languages).

"in the past, veneration for Africa was considerable, whether for its natural genius, its taste for learning or its religious organization. This continent has nourished a number of men of great value, whose genius and diligence have made an invaluable contribution to the knowledge of human affairs." (158)

> Johannes Gottfried KRAUS, Rector of Wittenberg University, 1734

► "For the world to respect it, Africa must show pride of itself and become aware of its intellectual and cultural treasures."

Cheick Modibo DIARRA, Malian Astrophys, former Prime Minister of Mali

▶ "Since the beginning of this century, Africa has, in this case, begun a cultural turning point on a very large scale, the contours of which are only beginning to take shape and its full importance is not yet fully understood. Everywhere small groups are emerging, determined to tackle the issues have long been left unaddressed. (...) Artistic creation is taking off and, with it, our renewed presence in the world. Diasporas are consolidating and regaining the voice they lost after decolonization." (1)

Achille MBEMBE, a Cameroonian historian and philosopher & Felwine SARR a Senegalese economist and writer

OCUS N°20

The role of sport in Africa

The role of sport in society

Sport plays a particularly important role in Africa, the youngest population in the world. For example, of the 38 countries in the world with a median population age of less than 20 years in 2017, 35 are in Africa (159).

- lt offers multiple advantages within society:
 - A renowned instrument of a country (example: the Atlas Lions Morocco and a factor of union of countries (African Cup of Nations)), it reinforces collective pride.
 - A place of social mixing (clubs) and an instrument to fight inequalities when the places of practice are public and open to all, sport makes it possible to fight against multiple forms of segregation (women, the poor...).
 - A way out of the spiral of systemic poverty for some, and education for all, sport is a tool for channelling aggressiveness and easing individual tensions. It teaches discipline and effort, respect for rules and socialization.
- Conversely, it can quickly become a source of resentment as soon as its access is exclusive and generate an escalation of violence: cheating to access sports facilities, for example, leads to tighter controls that lead, in turn, to scrapping. Hence the reinforcement of accesses (walls, barbed wire...).
- Finally, decolonization has seen the reappearance of traditional sporting practices, such as the Congolese Nzango (present at the African games in Brazzaville, 2015) and the Jukskei (South Africa, Namibia).

Perspectives

- African societies are not excluded from the exponential development of the planet Sports, although their access to codified sports and sports facilities was later than in other countries (160).
- The geopolitical role of sport has been reaffirmed since the boycott of Montreal Olympic Games in 1976 (as part of pan-Africanism) and, more recently, as an accelerator of globalization, through, for example, the holding of the World Football Championship in South Africa in 2010 (160).
- Its economic role is also becoming more and more important :
 - Cairo, Kinshasa, Rabat, Algiers, Lagos, Luanda and Dakar have stadiums with 60,000 seats or more (161). The construction of large stadiums has often been an opportunity to benefit from the windfall of international cooperation; the other sports infrastructures scattered across the continent also contribute to the development of the African construction sector (160).
 - In countries organizing sports events, competitions accelerate urban development and transformation, thanks in particular to international resources within the framework of the African Cup of Nations (160).
 - In addition to infrastructures, it is now necessary, to go further, to professionalize the practice of sport: create teams that have sports schools, move from amateurs to professionals, from associations to limited companies.

T

HE TIME OF THE WISE (9)

- These possible *leap-frogs* show that there are still vast margins for progress in this reconciliation of the African with his origins. However, since the beginning of the 21st century, there has been, a clear movement in this direction that progress in forms as varied as, for example:
 - the use of anthropology to locally adapt prevention and care measures in the event of epidemics thanks to the Anthropology of Emerging Epidemics network (162),
 - The production of fiction films, based on the mythology of the Orishas and a Cameroonian video game (Aurion, the heritage of the Kori-Odan), conceived as a cultural vector for sharing and safeguarding the heritage aimed at educating players (163),
 - the South African Zamani Project (University of Cape Town), by creating digital representations of African historic sites, seeks to provide data for research, teaching, restoration and conservation and to increase awareness of tangible cultural heritage in Africa and abroad (164).

Sport, a microcosm of Africa

The practice of high-level codified sport has enabled Africa to shine on the international scene (running, football...).

But popular sports play a much more important role in society, by promoting mixing and fighting the multiple forms of segregation.

Through its educational and mobilizing role, it constitutes an effective factor of physical and collective autonomy and a place for learning reconciliation between players.

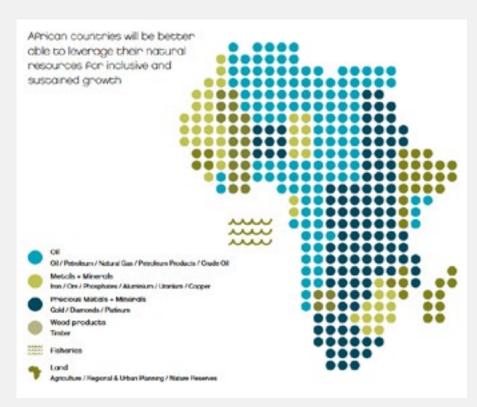
Finally, sport constitutes a means of renewing intergenerational links, as shown by the reappearance of traditional practices, in particular play, the other side of sport (cf. Focus n°20).

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HE TIME OF THE WISE (10)

Towards an African ecology

- Reconciliation with nature is a powerful springboard for the autonomous development of the continent for at least three reasons:
 - African biomes, of exceptional richness, concentrate an abundant biodiversity (cf. chapter 1 of Part 1).
 - The economics of catering (cf. Economic transition (7) Chapter 1 of Part 3) can help improve the situation of many rural populations.
 - ❖ A more ecological agriculture could produce better yields without degrading the soils (cf. Chapter 2 of Part 2).
- An ecological approach, such as that of PAULI's blue economy, for example, would make it possible to induce sustainable development through the rational consumption of natural resources, the contribution of greater added value, bio-mimicry and recycling.
 - ❖ At the same time, the benefit of these new resources would help us to put an end to the exploitation of other resources, such as Malagasy rosewood despite the ban on its marketing in 2010 (165).
- ▶ Several significant *leap-frogs* are emerging, at more or less advanced stages.



■ Source: African Natural Resources Centre: Catalysing growth and development through effective management of natural resources, ADB



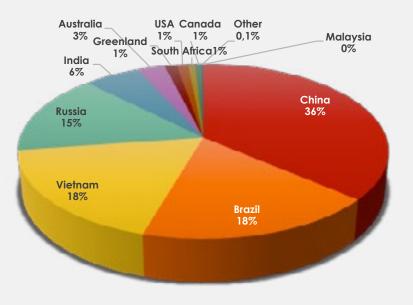
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algerien.html

http://solidaritefsm2011.blogspot.fr/2013/03/technique-du-zai-2e-partie.html https://www.nap.edu/read/11763/chapter/9

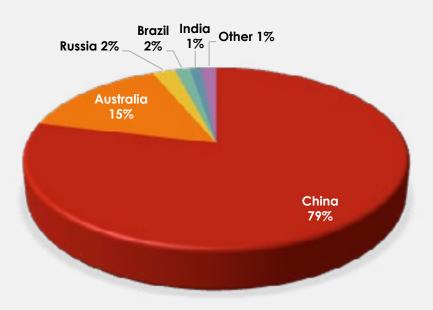


NHANCING THE VALUE OF NATURAL RESOURCES

Distribution of rare earth reserves in 2017



Distribution of rare earth mine production in 2017



■ Source: IRES processing of US Geological Survey Minerals Information: Rare Earths https://minerals.usgs.gov/minerals/pubs/commodity/rare_earths/mcs-2018-raree.pdf

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HE TIME OF THE WISE (11)

- ▶ Biodiversity is too often perceived as a hindrance to development. Yet sustainable exploitation of biodiversity, based on processing and controlled removals, can be a significant source of income.
 - Traditional African medicine is essential in several ways:
 - First, it provides treatments for populations who cannot afford or access other types of medicine (see Bamako's female herbalists)
 - Secondly, it is a precious asset for the development of new pharmaceutical products.
 - Lastly, the popularity of phytotherapy opens up a flourishing market, as the overexploitation of the pygeum (African plum tree) has illustrated.
 - ❖ However, added value is chiefly collected by foreign companies that process such products. Meticulous efforts to compile a list of the rich natural capital have identified nearly 1,000 plants from 8 West African countries (166). This inventory must be scaled up across the continent: it could enable exportation or on-site processing to be subjected to targeted policies (regulation of exploitation, domestic preference, support for onsite processing...), helping to both preserve this capital and reap better profits.

- Another important endeavour is to inventory truly endemic plants and to analyze their nutritional values, in order to select the most nutritious ones and cultivate them as a priority. Their endemic quality maximizes productivity while minimizing farming effort.
- ❖ Lastly, in the context of growing global concern about diversifying protein sources, the continent could quickly, and at little cost, become the world's largest producer of cricket protein. With its high nutritional value, it can be transformed into emergency food during famines and improve the daily diet of poorer populations.
- The continent concentrates about 30% of the planet's mineral resources (167). Here, Africa could leapfrog by developing, first and foremost, future strategic resources (non-fossil), provided that their extraction does not harm the environment. This, therefore, excludes rare earths, but promotes bauxite as in Guinea, the world's third largest producer of bauxite in 2017 (168). Aluminum is about to replace copper in electric wires, which explains why aluminum production has averaged 4% annual growth between 2010 and 2016 (169).

T

HE TIME OF THE WISE (12)

- ► It is possibly in the field of agriculture that the continent is most capable of staying one step ahead of the rest of the world, by drawing on ancestral know-how:
 - ❖ In Somalia, following a disastrous drought, the government launched *Somaseeds*, a plan to revive old types of seeds that are no longer in use, and which are particularly adapted to the arid climate, such as local varieties of sorghum... (170).
 - ❖ The Crop Wild Relatives project aims to hybridize domestic food plants with their wild cousins, in order to improve their resistance to disease and adaptability to climate change. With this project, Côte d'Ivoire was able to develop a new variety of eggplant with better resistance to pests, climate, and disease (171).
 - Enset, one of the oldest species of banana, has always been cultivated in Ethiopia. Because it is more nutritious than cereals and is flood- and drought-resistant, there is renewed interest in this crop, particularly to combat hunger (172).

❖ In 1974, a farmer from Burkina Faso, Yacouba Sawadogo, made it his mission to reintroduce Zaï, a forgotten traditional farming method, in order to rehabilitate agriculture in desertifying areas. In 2014, 3 million hectares of sterile land in Burkina Faso had been restored, and the technique was emulated in 8 countries of the Sahel (173).



■ Source: http://www.courantpositif.fr/wp-content/uploads/ 2013/10/Yacouba-Sawadogo.png

HE TIME OF THE WISE (13)

A change of scale

As it moves forward, Africa increasingly cooperates and innovates, particularly when drawing on its traditional know-how and soft skills and its ancestral relationship with nature.

However, in order to keep up the pace of development needed to lift millions of Africans out of poverty and prevent others from slipping into it, **progress must be generalized and bolstered**, and future progress must be accelerated. The goal is not to rush, but rather to implement a clear, strategic, collegial vision.

Without fully realizing it, the continent is headed toward a visionary future, one that is distant (2050) yet that becomes more attainable each day.

Three game changers, which have the ability to both disrupt and accelerate, can make a considerable difference: Africa, the green future's Living Lab; continental mutualization; and a blue Africa. Ingredients are already present: the only thing left to do is to move to a new scale, both at the continetal and the local one.

- ▶ Toward a continent-wide Living Lab? New problems, whether by their nature or by their magnitude, must be matched with new solutions and new modes of design, centered on end users rather than technique.
 - ❖ Living Labs are "open innovation environments in real life settings, in which users help to create new services, products and societal infrastructure" (174); they place users at the heart of the innovation process (see Focus n° 21).
 - The goal of this large project would be to create a continental body that helps businesses find better testing grounds, establishing a single framework agreement for the entire continent, ensuring local monitoring of proceedings and producing positive impacts for populations and the environment and knowledge dissemination (through open databases)
 - Such a body, an African version of ENoLL (European Network of Living Labs), would promote innovation specifically adapted to the continent's needs and constraints, in line with its strategic choices (sustainable development, environmentalism...). It would provide start-ups with an operational framework that could accelerate their development, and would reassure partners and investors, generating a virtuous cycle.

OCUS N°21

Living Labs

What they are

- A Living Lab can be established in a given area with the purpose of spurring innovation. It is a space for open co-creation and innovation, enabling collaboration amongst users, the public sector, the private sector, associations and researchers in order to test innovative products and services in real-life conditions.
- Living Labs should benefit businesses that wish to offer such products or services just as much as the area in which they have been established and the population's well-being. Memoranda of understanding clearly specify the conditions in which innovations are to be implemented. They are de facto ephemeral, as they are generally drawn up for a specific test.
- ► The best-known example is Helsinki, a city that distinguished itself in this field. Its practice of Living Labs has led it to become one of the world's leading smart cities.
- ▶ In Europe, Living Labs (LL) are organized into an official network, ENoLL, which LL must join in order to be recognized. With time, this network has extended its reach far beyond its borders and has become the leading organization in the matter. The 12th wave of ENoLL membership began in January 2018 (175).

Future outlook

- ► The concept was promoted by the European Union, leading to a period of keen interest (2006-2012). That is the time when Living Labs first arrived in Africa (South Africa, Cameroon, Morocco).
 - One of them was AREMDT (responsible and fair tourism in the Mediterranean area), a Franco-Moroccan Living Lab resting on a Mediterranean network for fair tourism, territorial intelligence, fair entrepreneurship and fair trade.
- ► The global economic slowdown which followed the crisis, and which was particularly acute in European countries, dampened interest in this movement and its media impact.
 - ❖ A number of specific tests had reached their goal, bringing the corresponding Living Lab to an end.
 - Moreover, during hard economic times, businesses are less inclined to open innovation, given current intellectual property law.
 - Lastly, successful experiences generally took on a more perennial form within an association or institution.
- In 2014, over 300 Living Labs were listed around the world (176). In 2017, ENoLL alone included 160 active Living Labs across the globe (175).

HE TIME OF THE WISE (14)

- A second major project toward which Africa is steadily moving: mutualization. The continental scale offers very different prospects from the national scale.
 - With the creation of African sub-regional organizations, the mutualization process has already begun, through economic communities as well as organizations for regional integration.
 - With the liberalization of the community airspace, the gradual lifting of customs barriers and various cooperation agreements within the African Union such as the African Risk Capacity (ARC), the conditions needed to advance mutualization are progressing.
 - In 2017, the issue of migrant slaves in Libya highlighted the urgency of joining forces to tackle the migrant crisis.
 - Africans' natural mobility perhaps most clearly demonstrates the success of such mutualization processes (higher education, emergency stocks) and intra-African preferential agreements (such as food in case of a natural disaster).
 - Continent-wide pooling of resources turns out to both accelerate development (e.g. in research and development) and drive autonomy, especially when it comes to food and financing.
 - ❖ From a global standpoint, this mutualization process will eventually become a system of governance operated across the largest area in the world – a visionary leapfrog.

- The last major project, by its magnitude and consequences : a continent-wide systemic water policy, involving populations, could be born.
 - Access to the continent's water resources has become a pressing need (see Focus n° 22).
 - After Africa's Integrated Maritime Strategy (2050 AIM Strategy), Africa has expanded its conception of water-related issues with the *Policy Handbook* for Africa'a Blue Economy, which highlights the need for a holistic vision and involving populations.
 - Thus, only a joint continental plan implemented at community level could help to face the gravity of the situation. The following ought to be established:
 - · Deterring and protective African water legislation;
 - A joint plan to preserve and develop water resources across the continent, taking into account non-renewable (aquifers) and renewable sources (surface waters, sub-surface waters, precipitation, wastewater), whether freshwater or seawater, drinkable or not;
 - Strong community involvement in novel ways: innovation, jobs, training, financing -eWater tap-, recycling, differentiated uses (irrigation, saving water), reducing consumption and losses, new ways of collecting water (Warka water, Dar Si Hmad) (177).

A FRICA IN FIGURES N°16

Water resources

Geographic data

- Total volume of renewable freshwater: 6.952 km³, of which 80% of surface waters and 20% of renewable groundwater (178).
- Total renewable surface water: 5.532 Km³ (178).
 - Rivers:
 - 4 great hydrological basins: Congo, Niger, Nile, lake Chad (179). The Congo and Nile basins alone represent 23% and 19% of Africa's irrigation potential, respectively (180).
 - About 75% of Sub-Saharan Africa falls within 53 international river basin catchments crossed by multiple borders (86).
 - Rainwaters:
 - Rainfall's seasonality and irregularity is accentuated by the region's dryness. The phenomenon of evaporation is amplified.
 - The continent's wettest area is a strip on the coast west of Mount Cameroon, where Debundscha village averages nearly 10,000 mm of precipitation each year (181).

Social data

- Nearly 3/4 of Africa's population depends on renewable water resources as a primary source of drinking water (35).
- ▶ In 2015, 32,5% of the Sub-Saharan population did not have access to improved sources of drinking water (35).
- In 2011, some 35% of water was stolen or provided through illegal connections to the water network in the South African city of Durban (182).

Economic data

In 2010, the revenue of sea-related activities amounted to €1.5 trillion and could reach €2.5 trillion by 2020 (183).

OCUS N°22

Water, a systemic factor

- Africans lack water and this situation will only worsen, due to demographic pressure, ecosystem degradation (overexploitation, pollution, losses) and climate change. In addition to the impacts of water stress on agriculture, the absence of sewage systems and limited access to drinking water in urban areas constitute ideal conditions for an epidemic outbreak, such as cholera.
- Massive works (dams, pipe networks) are not necessarily the answer. The example of the Great Man-Made River in Libya has shown at the same time water's power to green a desert, the great fragility of pharaonic works (2011 damage) and the irreversible damage caused to unreplenished fossil aquifers. Moreover, many dams have contributed to water salination and disrupted local ecosystems.
- With its multiple forms and uses, water is a sector in its own right. While the indirect jobs it generates are known, in particular in the agri-food sector, treating water or using it for recreational purposes (sports, tourism, leisure) or for energy production (tidal power, thermal power) could create a substantial number of direct jobs.

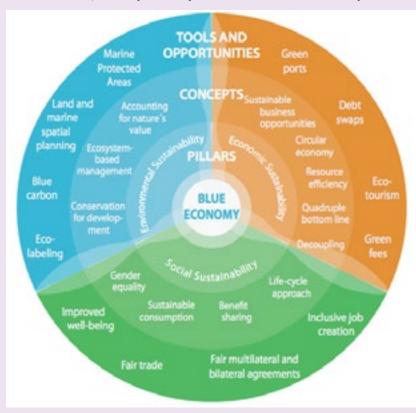
- In fact, the continent is water-rich, in several forms other than surface waters:
 - The ocean cannot directly provide usable water (given the financial and environmental costs of desalination), yet it directly provides nutritive fishery resources. Some of these are overexploited (fish, crustaceans) while others remain almost unexploited (algae).
 - Rechargeable groundwater aquifers are currently exploited beyond their annual replenishment capacity. However, water is present everywhere, including below the ground of the driest regions (Ohangwena and Oshana in Namibia) and the total volume of groundwater in Africa constitutes up to 20 times the continent's freshwater reserves (178).
 - Fossil water levels continue to wane, drying up wells upon which entire populations depend; alternative sources are needed, such as dew or wastewater.
 - ❖ Air moisture already supplies some Moroccan and Ethiopian villages thanks to collecting nets.
 - Lastly, wastewater becomes a significant resource in the context of a circular economy. Once treated, possibly at a reduced cost, it becomes an alternative source of water, helping to save drinking water, as is being done in Ghana, for instance.

A

FRICA IN MOTION N°14

Towards a blue Africa? (1)

Tools, concepts and pillars of the blue economy



■ Source : Africa's Blue Economy: A Policy Handbook, United Nations Economic Commission for Africa

Africa's Blue Economy: a Policy Handbook

- ▶ "Africa's aquatic and marine spaces are an increasingly common topic of political discourse; its natural resources have become largely underexploited but are now being recognized for their potential contribution to inclusive and sustainable development.
- This "Blue world" is more than just a setting of the economy it is part of Africa's rich geographical, social, and cultural canvas. Through a better understanding of the enormous opportunities emerging from investing and reinvesting in Africa's aquatic and marine spaces, the balance can be tipped away from illegal harvesting, degradation, and depletion to a sustainable Blue development paradigm, serving Africa today and tomorrow.
- ▶ If fully exploited and well managed, Africa's Blue Economy can constitute a major source of wealth and catapult the continent's fortunes.
- ► Surely, Africa needs holistic and coherent strategies to harness this full potential".

Carlos LOPEZ, Executive Secretary of the United Nations Economic Commission for Africa (183)

ires

A FRICA IN MOTION N°14

Towards a blue Africa? (2)

Best practices

- ▶ Foggara, a traditional irrigation system (Algeria): this cultural heritage, which is part of the community's identity, is an ingenious traditional system that distributes water (*kesra*) in diurnal or nocturnal mode thanks to a network of furrows (*saguia*) and an accumulation basin (*majen*) (184).
- ▶ WARKA Water: "We bring forgotten and unknown cultural identity to the world". A bamboo tower captures air moisture and transforms it into drinking water, at a rate of 100 liters per day. It can also be equipped with a gravity irrigation system for subsistence farming: Ethiopia, Madagascar (185).
- ▶ Cape Town's map of water usage: This map of the city exposes private meter readings to public scrutiny. Unless residents can cut their daily water use to 50 litres per person, city authorities estimate that the taps will run dry on 21 April 2018 (186).
- ▶ eWater: this community water management system (installed in Tanzania) distributes and charges for water, with prices set collegially by the community. Over 90% of the collected amount is saved to pay for possible repairs. The software, in swahili, also makes it possible to contact professionals trained for this technology (187).



Source: http://www.lexpressiondz.com/actualite/213911-un-moyen-ancestral-d-irrigation.html

https://ambrasser.fr/news/brasser/comment-construire-une-fabrique-de-biere -artisanale-7/

https://medium.com/frontier-technology-livestreaming/using-technology-to-transform-african-rural-water-supply-870eddfd509

A

FRICA IN MOTION N°14

Towards a blue Africa? (3)



■ Source: http://mawdoo3.com/%D9%85%D8%A7_%D9%87%D9%8A_ %D9%85%D9%84%D9%88%D8%AB%D8%A7%D8%AA_ %D8%A7%D9%84%D9%85%D8%A7%D8%A1

Africa's Integrated Maritime Strategy (2050 AIM Strategy)

- ▶ "The time has come for Africa to rethink how to manage her inland water ways, oceans and seas. They are a key pillar for all AU Member States' economic and social development, and are vital in the fight against poverty and unemployment. There is also the urgent imperative to develop a sustainable "blue economy" initiative which would be a marine version of the green economy, one that improves African citizens' well-being while significantly reducing marine environmental risks as well as ecological and biodiversity deficiencies."
- "African Heads of State and Government called upon the African Union Commission at the 13th Ordinary Session of African Union Assembly "to develop a comprehensive and coherent strategy". They also charged the Regional Economic Communities/Regional Mechanisms of Africa to develop, coordinate and harmonize policies and strategies; and improve African maritime security and safety standards as well as African maritime economy for more wealth creation from its oceans and seas, ultimately ensuring the well-being of African people."

Excerpt from 2050 – Africa's Integrated Marine Strategy (2050 AIM Strategy) (2012) (188)

A FRICA IN MOTION N°14

Towards a blue Africa? (4)

The Abidjan Convention

- ▶ "The Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (Abidjan Convention in short) [...] provides an overarching legal framework for all marine-related programmes in West, Central and Southern Africa."
- ▶ "Recognizing the uniqueness of the coastal and marine environment of the region, as well as its economic and technical limitations decades ago, the countries recognized the need for a regional approach to meet transboundary marine environmental challenges [and] the development of an Action Plan."
- ▶ The Plan was adopted by 11 countries at a conference in Abidjan, March 1981. It is designed to link assessment of the quality of the marine environment and the causes of its deterioration with activities for the management and development of the marine and coastal environment of the area. In December 2017, the Convention had been ratified by 19 of its 22 signatories.

Excerpts from "Welcome to the Abidjan Convention Secretariat" (189)

Conference on Africa's Maritime Domain

Mr Abou Bamba, Regional Coordinator of the Abidjan Convention, pleaded especially in favor of :

- ▶ "Better knowledge of the state of maritime and coastal resources and their economic value on the continent's Atlantic coast;
- Ocean governance ultimately aimed at reducing poverty and improving populations' well-being;
- ► Technical and scientific cooperation based on successful experiences in other parts of the world.

Though Africa was late for the agricultural, industrial and information technology revolutions, on no account should it miss the blue revolution, synonymous with development and social and economic progress."

Port Elizabeth (South Africa), November 10th, 2014 (189)

K EEP IN MIND

- ▶ Women, youth, the poor, migrants, and Africans abroad offer potential to tap for Africa's autonomous development.
- ▶ A new state of mind is washing over the planet (Alien Gen) and, combined with Bantu ubuntu, is starting a revolution in education, innovation and entrepreneurship.
- ► Confidence, mobility and new governance foster a broad cultural and economic movement reconciling Africans with their origins and with nature.
- Africa's continentalization is just beginning, as evidenced by its experimentation (Living Labs), its mutualization process and its growing awareness of what a blue Africa could be.

The future we want for Africa

- "A prosperous Africa based on inclusive growth and sustainable development;
- An integrated continent, politically united, based on the ideals of Pan-Africanism and the vision of Africa's Renaissance:
- An Africa of good governance, democracy, respect for human rights, justice and the rule of law:
- A peaceful and secure Africa;
- An Africa with a strong cultural identity, common heritage, values and ethics;
- An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children;
- · Africa as a strong, united and influential global player and partner".

Agenda 2063

Chapter 3

THE KINGDOM OF MOROCCO'S CONTRIBUTIONS



■ Source : Maghreb Arab Press

"This integrated, solidarity-based vision which underpins Morocco's relations with African sister nations requires all the stakeholders that we have invited to take part in this endeavor to shoulder their responsibility and to fulfill their obligations to maintain Morocco's credibility.

For us, Africa is not about goals and objectives; dealing with Africa involves a commitment towards the African citizen, wherever he or she may be."

Excerpt from the Speech by His Majesty King Mohammed VI on 20 August 2016 on the 63rd anniversary of the Revolution of the King and the People

OROCCO AND AFRICA

The Kingdom of Morocco's African identity

- ► The decision of His Majesty King Mohammed VI to join once again the African Union is not just a political gesture. It also bears witness to Morocco's reconciliation with its own African identity.
- ▶ Indeed, the Kingdom has been tightly connected with Africa for millennia, weaving a tight cultural and spiritual fabric between Morocco and many parts of the continent.
- Without denying its close linkages with European countries that host part of its diaspora or with the Arab-Muslim world, with its return to the African Union and its forthcoming accession to ECOWAS, Morocco has finally strengthened the third leg of its composite identity.
- ► The Kingdom can now focus its efforts on the autonomous development of an Africa in motion.

Contributing to the continent's autonomous development

- ► The Kingdom's contribution includes four pillars:
 - Continental governance, without which nothing would be possible to maintain peace, bolster unity and offer a new perspective on the urgent issue of migration.
 - Human development to hone Africa's skills, facilitate reconciliation and preserve religious tolerance.
 - ❖ The economic transition, benefiting the continent's economic integration and investment, with the necessary financial tools and expertise that Morocco can provide in key areas.
 - The environmental transition, i.e. the shift toward an economic model that is more sustainable, inclusive and environmentally friendly, through adaptation to climate change, a transition toward renewable energy, sustainable farming...



Source: Maghreb Arab Press

"Morocco has never engaged in influence peddling. Instead, it has opted to put its expertise and know-how at the disposal of its African brothers and sisters. Money comes and goes, unlike knowledge and skills; it is these that help meet people's needs."

Excerpt from the speech by His Majesty King Mohammed VI on August 20, 2017, on the 64th anniversary of the Revolution of the King and the People

T

HE KINGDOM'S DOCTRINE (1)

Morocco has always been looking towards Africa. Social relations, trade flows, dogmatic and spiritual relationships are all civilizational aspects of the Kingdom's ancestral ties to Africa.

Over the course of the country's history, Morocco's sovereigns have recurrently shown their commitment to the continent's emancipation and development.

His Majesty King Mohammed VI has become a champion of Africa's emergence and leadership in the making. His speeches highlight three imperatives:

- Believing in Africa.
- Rethinking Africa and pleading in favour of the continent.
- Working together and exchanging in a fair way.

Believing in Africa

"Africa should be proud of its resources, its cultural heritage, its spiritual values, and the future should strongly support this natural pride. [...] We, peoples of Africa, have the means and the genius; together, we can fulfill the aspirations of our peoples."

Excerpt from the speech by His Majesty King Mohammed VI at the 28th African Union Summit

Africa holds considerable human potential and abundant natural resources. That is undeniable. The challenge is to tap them in a autonomous manner.

Because the continent is perfectly capable of flourishing and of making its people's aspirations a reality: such is the King's firm belief.

The Sovereign affirms that the "African miracle" is no mirage; it is attainable through willpower, commitment and solidarity. Africa can take charge of its own destiny.

T

HE KINGDOM'S DOCTRINE (2)

Rethinking Africa and pleading in favour of the continent

Africa has long suffered from the torments of colonization and their painful consequences. Today, it cannot, and does not wish to, remain under tutelage. In order to be a fully-fledged player rather than an object of international relations, it must rise to the ultimate challenge: that of unity and cohesion, thereby overcoming conflict and fratricidal wars.

The King advocates moving past old and outdated habits and inventing a new model of groundbreaking development for Africa. He argues for the revision of the Bretton Woods agreements and affirms the urgent need to proceed to an economic transformation of the continent by the continent.

The Sovereign also advocates, as the Kingdom's initiative on the matter has shown, strong and proactive international support and forgiving African debt or converting it into investment.

Africa, breaking the fetters of marginalization, will be able to become a stakeholder of globalization with a human face.

Working together and exchanging fairly

In the Royal Vision, cooperation between Morocco and other African countries can only be mutually beneficial, driven by the exchange of skills, the sharing of expertise and by capital and technology transfers.

Morocco is the first African investor in West Africa and the second in Africa. Moroccan private investors are present, in particular, in banking and finance, agriculture, fisheries, mines, construction, infrastructure and telecommunications...

The size of projects, whether under consideration or completed, matters little: they range from major projects such as the Africa Atlantic Pipeline to local projects for a fishing village in Côte d'Ivoire. Meanwhile, social and human dimensions are always at the heart of Morocco's action for Africa.

Τ

HE KINGDOM'S DOCTRINE (3)

A strong Royal Vision...

- ▶ Under the reign of His Majesty King Mohammed VI, Morocco's relations with Africa have steadily become stronger, as evidenced by:
 - the frequent Royal Visits to the continent's countries (see Africa in Figures n°17),
 - the large number of concluded cooperation agreements,
 - multiple development projects in Africa led by Morocco in several areas,
 - Morocco's promoting stability in African countries and defending their interests in multilateral settings.
- Morocco's strategic position regarding Africa is chiefly driven by considerations relating to the continent's development. These speak to the Kingdom's firm resolve to support the economic, social and institutional convergence process of its African partners, in all of Africa's sub-regions (see IRES' 2016 Strategic Report).

... in favour of targeted, constant and multidimensional South-South cooperation

- Morocco aims to build with its African partners an anchor of stability and to develop a large regional ensemble that preserves populations' cultural and spiritual identity.
- This policy, which was desired, shaped, driven and followed up by the Sovereign, helps to establish cooperation based on the concept of co-emergence and on sustainable human development.
- Morocco is committed to supporting other African countries in building strong economies together, by transferring know-how, training human resources, sharing expertise in various areas, investing in Africa's key economic sectors and pooling resources.
- A delegate ministry in charge of African Affairs was created in 2017, demonstrating the Kingdom of Morocco's commitment to its continent and its attachment to its roots.

T

HE KINGDOM'S DOCTRINE (4)

"It is with no small measure of emotion that I am addressing our great, lofty African family today.

I am doing so as the grandson of **His Majesty King Mohammed V**, who was one of the emblematic figures of the development of Pan-African consciousness as well as one of the most committed architects of the historic 1961 Casablanca Conference – alongside Presidents Jamal Abdel Nasser, Ferhat Abbes, Modibo Keita, Sekou Traore and Kwame N'Krua – a conference which heralded the advent of an emancipated Africa and which paved the way for African integration.

I am also addressing you as the son of **His Majesty King Hassan II**, who, that same year, convened the Conference of Nationalist Organizations of Portuguese Colonies, who patiently contributed to ensuring stability in many regions of our Continent and who strengthened the bonds of brotherhood and friendship with many African countries.

I am also speaking to you as the **King of an African country** – a country whose identity has been shaped as much by geography as by a common history with several defining milestones and by centuries of human intermingling, enriched by time-honoured cultural and spiritual values.

Mine is a country whose commitment to just causes needs no further proof. Indeed, my country has been and always be guided by an unshakeable faith in Africa, in a Continent which derives its strength from its economic riches and potential, which is proud of its cultural and spiritual heritage, and which confidently looks to the future."

Excerpt from the Speech by His Majesty King Mohammed VI at the 27th African Union Summit, Kigali, July 17, 2016

M

OROCCO, AN AFRICAN LAND (1)

Morocco, an African Land - from the 7th to the 19th century (190)

- Morocco has always been a crossroads of civilizations, which has shaped its pluralist cultural identity and nourished it with the convergence of its Arab-Islamic, Berber and Saharan Hassani, African, Andalucian, Hebraic and Mediterranean components.
 - Very early on, migration, trade, and cultural and spiritual exchanges between the northern Sahara and Sub-Saharan regions fostered mutual cooperation between Morocco and Sub-Saharan Africa.
 - ❖ Between the 11th and the 17th century, Moroccan dynasties unified a large portion of West Africa, over an area that extended from the Mediterranean to the vicinity of the Senegal and Niger rivers.
 - ❖ The Sahara was one of Africa's central hubs up until the great maritime discoveries in the 16th century, when Europeans set up trading posts on the African coast and established direct relations with Sub-Saharan peoples.
- ► From the 19th century, the era of colonization, the Sahara became a frontier between the Maghreb and Sub-Saharan Africa, which led Morocco to cease looking in that direction.

- It wasn't until Morocco's independence that it opened up once again to Africa.
 - Since then, the Kingdom, which already in 1961 had a Ministry of African Affairs, supported African liberation movements, in particular the struggle against apartheid in South Africa.
 - Morocco became a founding member of the Organization of African Unity (Casablanca Conference, see Focus n°23) which it left in 1984.
- Whereas, during the second half of the 20th century, Morocco was mainly looking toward Europe and Arab-Muslim countries, at the beginning of the 21st century the Kingdom began to fully embrace its African identity.
 - ❖ The 2011 Constitution officially allowed Morocco to fully embrace the African dimension, as a central component of Moroccan identity.
 - The strong impetus provided by His Majesty King Mohammed VI furthered Morocco's contribution to Africa's economic, social, cultural and spiritual development.

OCUS N°23

The Casablanca Charter and African unity

- ▶ In 1961, the Casablanca Conference gathered African countries to fulfil the continental dream of a united Africa. "The Casablanca Charter" was one of the preludes to the foundation of the core of the African Union.
- ► The purpose of this African conference was to adopt a charter for a new Africa (the Casablanca Charter), drawing up a roadmap for true continental unity.
- This charter advocated "ending the colonial regime, eliminating racial segregation, evacuating foreign forces from Africa, opposing any foreign interference and any nuclear experiments and acting for African unity and consolidating peace and security in Africa and in the world" (Ahmed Balafrej, 1962) (191).
- ▶ The Charter also stipulated that military forces should regularly meet in order to always guarantee "a common African defense in case of an aggression against part of the continent and to safeguard the independence of African states". (192).
- Following the death of His Majesty King Mohammed V on 21 February 1961, the political situation in the Democratic Republic of the Congo, which had divided African states, and the creation of the Monrovia Group (193) in 1961, the dream of continental unity remained unfulfilled and the continental groupings that had formed disbanded in 1962.



■ Source : Agence France-Presse

From left to right: Modibo Keita, President of Mali; Ahmed Sékou Touré, President of Guinea; Mohammed V, King of Morocco; Kwame Nkrumah, President of Ghana.

First African conference held in Casablanca from 3 to 5 January 1961

M

OROCCO, AN AFRICAN LAND (2)

Morocco and Africa, culturally and spiritually interconnected

- It is through Morocco that the Maliki school of Sunni Islam and the Ash'ari doctrine came to West Africa. From the 8th century, Islam spread pacifically through caravan networks, from southern Morocco to West Africa, in particular towards the southern Sahara, the Senegal river, the Niger basin and lake Chad.
 - Morocco has long been a destination of choice for Islamic training of West African and Sahelian students, through Moroccan Sufi brotherhoods. For centuries, students from Timbuktu, Marrakech, Chenguit and Fes have had access to the same Figh manuals (Islamic jurisprudence)
 - ❖ Moroccan Sufi brotherhoods have played a significant role in West Africa. The two most influential brotherhoods were the Qadirya and Tijanniya, founded by scholar and mystic Ahmad Al-Tijani (1737-1815) whose tomb can be found in Fes. Such brotherhoods have in common a spiritual affiliation with Morocco. The city of Fes, which hosts the mausoleum of the spiritual father of the "Sheikh Ahmad Tijani" brotherhood, is a pilgrimage site for millions of adepts. Nowadays, Sufi brotherhoods with roots in Morocco are very present in Africa.
 - Sub-Saharan Africa has enriched Morocco's spiritual culture. This African spiritual influence materializes in the Gnawa's Zawya songs, suffused with a mystical and religious mood. This community is the result of centuries of intermingling of North African and Sub-Saharan populations.

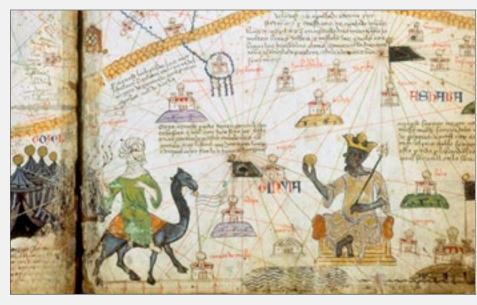
Gnaoua World Music Festival, Essaouira



OROCCO, AN AFRICAN LAND (3)

- ▶ Beyond its religious influence, Islam also represents a world view, a culture, and a language (190).
 - The Kingdom of Morocco has prolifically participated in African culture, through art, writings, and thought. Moroccan thinkers and scholars, such as Hassan Al-Wazzan, Ibn Battuta, Ibn Khaldun, and Al-Idrisi, exchanged knowledge and freely roamed in Sub-Saharan Africa, contributing to the development of African culture and to Moroccans' knowledge of African societies.
 - Moroccan Sufi brotherhoods and books by Moroccan thinkers have enriched cultural life in Africa. In Timbuktu, a "beacon of Arab and Islamic culture", the intellectual sphere had extraordinarily broad reach, in particular during the 16th century, thanks to cultural exchanges with Morocco.
 - ❖ Intellectual exchange was also marked by the migration of Sub-Saharan thinkers to Morocco, such as Ahmad Baba Al Massufi and poet Ibrahim Al Kanimi.

The city of Tembush: a place where continents exchange



Source: National Libary of France

M

OROCCO, AN AFRICAN LAND (4)

- Lastly, the development of architecture and Arab and Islamic art in West Africa finds its roots in Morocco.
 - ❖ Islam's spread to Africa went hand in hand with the development of Islamic architecture to the south of Sahara. In Timbuktu and Djenné, in particular, features of Moroccan Islamic architecture can be found in earthen constructions and, especially, in African mosques. These draw on Moroccan mosques' spatial arrangement and share several commonalities, such as the unsheltered and encircled sahn (courtyard), the shape of the minaret and Moroccan calligraphy on wood and plaster inside the mosques (194).
 - Moroccan culture is also present in arts and crafts (embroidered bubus, silver jewellery, amulets and leatherworking techniques), thanks to the influence of Moroccan artists, painters, metalworkers, weavers and maâlem zlayji who travelled with caravans to pass on their skills throughout the continent.
 - Moroccan building shapes, practices, ideas and calligraphy thus spread to several regions in Africa. African artists drew inspiration from them and modified them according to local flavour.

The Dakar Grand Mosque



Located in the heart of Senegal's capital, this is the city's largest religious edifice. The mosque was inaugurated in 1964 by His Late Majesty King Hassan II and is a symbol of religious cooperation between Morocco and Senegal.



"The Kingdom of Morocco, for whom membership to the Arab and African community is a constitutional commitment and a strategic option, shall spare no effort to remain at the forefront of countries devoted to defending urgent causes that preoccupy our peoples.

It shall continue to resolutely and forcefully act to support Africa's vital interest, in multilateral bodies such as the UN, the OIC, the G77 + China, but also within the Non-Aligned Movement, in open dialogue forum between Africa and a number of influential countries, in particular regarding the implementation of national development plans, and effective contribution to peacekeeping and regional stability in Africa....

I have undertaken to scale up projects and programmes which fall under tripartite Morocco-Africa cooperation, in association with creditors, States and institutions....

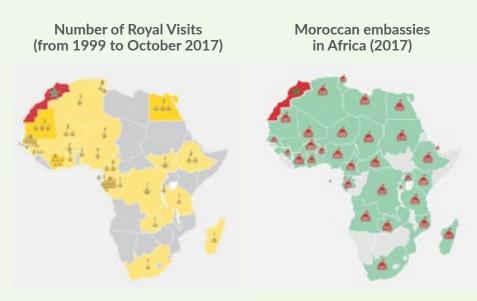
Thus we should reaffirm our resolve to strengthen our role as an active member of the community of Sahel-Saharan states and to act for the promotion of promising African initiatives, in particular the Dialogue Initiative bringing together over 20 African countries facing the Atlantic, an initiative that was launched in Rabat in 2009."

> Excerpt from the Speech by His Majesty King Mohammed VI at the 2nd Arab-African Summit in Sirte, October 10, 2010

A FRICA IN FIGURES N° 17

Political and diplomatic Key figures of Morocco in Africa

- From 1999 to 2017, His Majesty King Mohammed VI made 53 visits to 27 African countries (195). Among those were 8 countries to which the Sovereign went for the first time, including 4 in East Africa (Ethiopia, Tanzania, Rwanda, South Sudan), 2 in Southern Africa (Madagascar and Zambia) and 2 in West Africa (Nigeria and Ghana) (196).
- Over half of the Royal Visits in Africa and cooperation agreements linking Morocco to its continent concern ECOWAS countries – an area where the Kingdom naturally fits in (196).
- Since 2000, 31 visits to Morocco were made by African Heads of State (196).
- Morocco has formed an extended diplomatic and consular network. It has 34 embassies in Africa (195). Morocco's diplomatic network has expanded in the past two years, with several new embassies in Southern and East Africa.
- Currently, the Kingdom hosts 32 embassies of African countries, making Rabat a diplomatic capital par excellence (195).
- ▶ In terms of parliamentary diplomacy, in 2017, there were a total of 30 parliamentary friendship groups between Morocco and other African countries.



■ Source : IRES processing of data available online from the Moroccan Ministry of Foreign Affairs and International Cooperation and of Maghreb Arab Press data

ONTRIBUTING TO AFRICA'S GOVERNANCE (1)

A decisive triptych

For Morocco, the continent's governance rests on three pillars:

- Peacekeeping in an area that has been torn by post-independence conflicts and poverty; without peace, there can be no development for populations or the economy.
- ▶ Collegial governance, reflecting governments' political will and populations' reality for this continent to be united, because only unity can ensure autonomous development and enable African countries to move forward together.
- A new approach to migration: in fact, African migrations (see previous chapters), whether willing or forced, have considerably intensified since 2010 with increasingly dangerous consequences (slavery, forced confinement, shipwrecks).

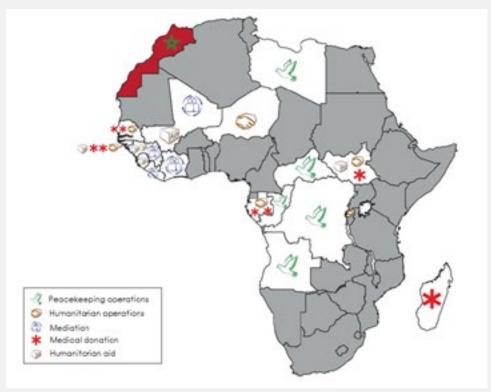
Morocco's contribution to peacekeeping

In 1960, Morocco took part in the first peacekeeping mission in the Congo (ONUC); since then, it has never ceased to help bring peace to the continent.

- Currently, 1,596 Moroccan soldiers are participating in peacekeeping operations in Africa.
 - Since the 1960's, the number of people involved in 6 African peacekeeping operations (Congo, Somalia, Côte d'Ivoire, Democratic Republic of the Congo, Central African Republic) has totalled 60,000 (196).
 - In 2013, Morocco provided critical support to French troops in Northern Mali in their fight against terrorist groups.
- Known for its moderate politics and its role as a mediator of choice on the continent, Morocco has hosted negotiations between Libyan factions in order to break the deadlock and prevent the country from becoming a terrorist hotbed, threatening Africa as well as Europe.

ONTRIBUTING TO AFRICA'S GOVERNANCE (2)

Morocco's participation in peace operations and humanitarian action in Africa between 1999 and 2017



Source: IRES processing of data from the SIPRI - Multilateral Peace Operations Database - and from the United Nations peacekeeping operations database

Morocco's contribution to African unity

- Morocco's contribution goes beyond security, peacekeeping, combating terrorism.
- Thus, Morocco's return to the African Union crystallizes the African vocation of the Kingdom and aspires to a strategic positioning in the continent, without the ambivalence of narrow political agendas. In fact, Africa's major political, security, economic and social issues are at the heart of Morocco's concerns.
 - This is why the Kingdom plans on being highly involved in the African Union's various organs and structures, in particular regarding reform of this continental institution (198).
 - ❖ Hence Morocco's desire to contribute, in particular, to the Agenda 2063 objectives, targeting the sectors and populations in which Morocco's action would be most effective, both for the African Union and for individual countries (198).

OCUS N°24

The reform of the African Union

"...The reform of the African Union is a flagship project, in which Morocco will be actively involved, alongside sister nations..."

Excerpt from the Speech by His Majesty King Mohammed VI at the 29th Assembly of Heads of State and Government of the African Union, Addis Ababa, July 3, 2017

"...There is no doubt in my mind that under the leadership of our Brother, President Paul Kagame, the new AU President for 2018, the great efforts to reform our organization will be maintained, and Africa's voice will be heard in the international arena. I wish to assure him of the Kingdom of Morocco's full support ..."

Excerpt from the Speech by His Majesty King Mohammed VI at the 30th Assembly of Heads of State and Government of the African Union, Addis Ababa, January 29, 2018

Titled "The imperative to strengthen our Union: Report on the Proposed Recommendations for the Institutional Reform of the African Union", the report by His Excellence Paul Kagame, supported by Morocco, delivers a diagnostic and a harsh verdict: "We have a dysfunctional organisation in which member states see limited value, global partners find little credibility, and our citizens have no trust."

- The report urged African countries to overhaul the African Union, with a focus on redefining the priorities to set. The proposed recommendations for the "proposed reforms to further strengthen the African Union" fall into five strategic areas:
 - * "Focus on key priorities with continental scope;
 - * Realign African Union institutions in order to implement those priorities;
 - Connect the African Union to its citizens;
 - Manage the business of the African Union efficiently and effectively at both the political and operational levels;
 - Finance the African Union sustainable and with the full ownership of the Member States."
- From the same perspective as this report, His Majesty King Mohammed VI, in his speech to the 29th African Union Summit, gave an outline of the emergence of a new Africa, one that is able to take on its international responsibilities and to meet the urgent needs of African sustainable development.

ONTRIBUTING TO AFRICA'S GOVERNANCE (3)

- Morocco's request to join ECOWAS also shows its resolve to strengthen the integration of African countries in growing unity, in line with the constitution of the Continental Free Trade Area which the African Union had wanted (44 signatory countries as of 21 March 2018)
 - ❖ ECOWAS, a heterogeneous mix of 15 West-African countries, is a model of regional integration and co-existence (free movement and settlement of people, single currency, peacekeeping), hence its appeal.
 - With Morocco's Mediterranean and northern Atlantic coasts, ECOWAS stands to benefit from better access to North American, European and Arab markets.
 - ❖ Lastly, this new economic area would become the world's 16th largest economy (GDP of USD 745 billion, a single market of 384 million people), ahead of Turkey (199). Increased trade and investment between Morocco and the Community's countries a consequence of free trade could become a driver of development for hydrocarbon-rich economies.

- Leading by example is a deeply ingrained principle in Moroccan culture. Thus the Kingdom is prepared to help any African country that requests it, by transferring its knowledge and practices in its areas of excellence, such as:
 - The progressive Constitution of 2011;
 - Advanced regionalization;
 - Its multi-dimensional security approach that places human safety at the heart of the country's concerns:
 - New security structures and stepping up means of action to face the shifting phenomenon of crime in all its forms (e.g. the Vigilance program)
 - New security departments to face the emergence of new forms of crime including cybercrime, such as regional laboratories providing investigators with technical expertise (analyzing digital traces and electronic devices).

With its experience of pluricultural governance and its access to both north and south, Morocco can significantly contribute to the development and collective and individual governance of African countries.

ONTRIBUTING TO AFRICA'S GOVERNANCE (4)

Morocco's contribution to the migration issue

- When it returned to the African Union, Morocco was immediately put in charge of the migration issue for several reasons:
 - Morocco is highly affected by migration on two accounts, as a country of origin but also as a country of destination for Sub-Saharan migrants.
 - In response to the structural issue of migration, Morocco has always
 - advocated a comprehensive and integrated approach taking into account human considerations as well as security ones.
 - ❖ In 2013, the Kingdom adopted a new immigration and asylum policy, which was well-received by the international community. This policy enabled the regularization of nearly 25,000 immigrants in late 2014, while also providing support for their successful socio-economic integration (200). The regularization operation was performed again following the Royal Speech on 20 August 2016 (25,600 candidates for regularization within this operation in late 2017, according to the National Human Rights Council).
- Aware that the international community has taken on the issue of migration for security considerations more than development ones, on 3 July 2017 in Addis Ababa, Morocco submitted to the African Union a proposed roadmap to tackle migration, focusing on the following points:
 - Introducing national policies to manage irregular migration and combat smuggling in every country.
 - * Regional coordination and harmonized national migration policies.
 - A possible common continental strategy in response to the issue of migration.
 - An international partnership, by adopting a comprehensive and coordinated approach to various negotiation processes.

ONTRIBUTING TO AFRICA'S GOVERNANCE (5)

- On 29 January 2018 in Addis Ababa, at the 30th African Union Summit, His Majesty King Mohammed VI in his capacity as Leader of the African Union on the Question of Migration submitted the African Agenda on Migration. This document, which followed an inclusive and participatory approach, highlighted three key proposals (201):
 - Set up an African Migration Observatory whose terms of reference would be the triad "Understand, Anticipate, Act". Its mission would be to develop observation and information exchange between African countries in order to promote controlled management of migration flows. Morocco proposed to host this Observatory.
 - Create a post of African Union Special Envoy for Migration, who would be tasked with coordinating AU policies in this area.
 - ❖ The African Agenda on Migration can inform the process of developing the Global Compact for Safe, Orderly and Regular Migration.
- Morocco's efforts, commended by the international community, have led to it hosting the last negotiation session of the Global Compact for Safe, Orderly and Regular Migration in December 2018.

Dispelling migration myths

In his Message to the 30th African Union Summit, His Majesty King Mohammed VI emphasized that:

- ▶ "The African Agenda on Migration is based on the idea that we need to know the full range of dimensions involved in the migration phenomenon in order to understand it properly. In this regard, I think the time has come to deconstruct, one by one, the myths associated with migration".
- "Migration is a natural phenomenon which is part of the solution, not of the problem. We should adopt a positive stance on the issue of migration by highlighting the humanistic rationale of shared responsibility and solidarity."
- ► "When one sees migration for what it really is, shedding the myths that convey a shockingly distorted image of the phenomenon, one realizes that this is a global issue one that is crucial for our continent. It deserves a fresh, Africa-centered approach combining realism, tolerance and a commitment to make reason prevail over fear."

ONTRIBUTING TO AFRICAN HUMAN CAPITAL (1)

Humans at the center

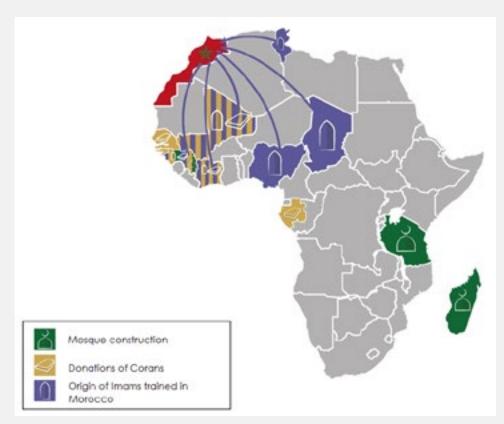
- After governance, a necessary but insufficient driver of peace and development, it is to the continent's human capital that Morocco devotes its attention as, ultimately, "there is no wealth but men".
- This is why Morocco is determined to further contribute to the development of Africa's human potential, in particular regarding two points:
 - ❖ A reconciled identity, in line with the post-independence cosmopolitan mindset advocated by the new generation (see part 1, chapter 3)
 - ❖ Developing human capital through education and by tapping the potential of women and youth (see part 3, chapter 2).

Contributing to national reconciliation

- Morocco is able to contribute to the design and implementation of national reconciliation processes thanks to its novel vision of national identity:
 - Morocco's reconciliation process (2003-2005) was supported by political parties, labour union federations and civil society. Victims of human rights violations were compensated and adequate measures to prevent future violations were introduced.

- The preamble to the 2011 constitution bolstered recognition of Morocco's pluralist identity: Arab-Islamic, Berber and Saharan-Hassani, enriched by its African, Andalucian, Hebraic and Mediterranean influences.
- In the constitution, Morocco is thus defined: "a sovereign Muslim State, attached to its national unity and to its territorial integrity, the Kingdom of Morocco intends to preserve, in its plenitude and its diversity, its one and indivisible national identity."
- Because reconciliation entails freedom of religion and religious tolerance, Morocco combats radicalization in Africa. It shares its experience with African countries in managing the religious field:
 - ❖ The Mohammed VI institute for the Training of Imams Morchidines and Morchidates works to promote the middle way in Islam, an open Islam that allows people to coexist. In 2017, 1,000 imams were trained, of whom 78% came from Nigeria, Mali, Senegal, Côte d'Ivoire, Guinea, Rwanda and Tanzania (196).
 - The Mohammed VI Foundation for African Ulema aims to be "an institution for cooperation, for the exchange of experiences and for the Ulema to make concerted efforts to (...) promote [Islam's] values of moderation, tolerance and coexistence. The aim is to make sure those values help us promote security, stability and development in Africa" (202).

ONTRIBUTING TO AFRICAN HUMAN CAPITAL (2)



Source: IRES processing of data available online from the Ministry of Foreign Affairs and International cooperation and Maghreb Arab Press

Helping to upgrade skills

In order to rise to current and future challenges, Africa must meet the challenge of accelerating human capital development.

With this in mind. Morocco:

- * trains African executives in several areas: aeronautics, finance, railroad network management, agriculture, new information technologies. energy efficiency and renewable energy. Between 1986 and early 2017, 5,000 African administrative executives perfected their knowledge and expertise in Morocco (196).
- ❖ initiated, in April 2017, as part of its Soft Power strategy, an African alliance for the development of vocational training (signatory countries: Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Djibouti, Gabon, Guinea-Bissau, Guinea-Conakry, Mali, Morocco, Mauritania, Niger, Senegal and Togo). This alliance aims to help vocational training actors of these partner countries to establish dialogue and to share know-how, experience and expertise.

ONTRIBUTING TO AFRICAN HUMAN CAPITAL (3)

- ► With regard to education, Morocco is the top French-speaking African country and the 2nd African country (after South Africa) with the highest number of African students.
 - Higher education is one of the areas in which cooperation between Morocco and other African countries is most advanced. During the 2017-2018 academic year, Moroccan higher education institutions attracted 10,000 African students (vs. 1,040 in 1995), of whom over 80% receive a scholarship.
 - ❖ Today, the role of the Moroccan Agency for International Cooperation is not limited to receiving Sub-Saharan students, but has expanded to cooperation among universities. Such cooperation is diversifying, ranging from exchanges of experience and expertise in terms of teaching and institutional governance to developing common research programs.

- ► Lastly, Morocco is prepared to share its expertise on the empowerment of women and youth:
 - ❖ The National Initiative for Human Development, launched in 2005, improved the employability of women from disadvantaged backgrounds, by setting up income-generating activities (e.g. saffron and argan tree farming). The initiative is a major platform which promotes partnerships between Morocco and other African countries.
 - ❖ The 2015-2030 Youth Strategy considers young people to be a "social resource" and an "investment in the future". In particular, it aims to further their participation in Morocco's economic, social, cultural and political development and to create favourable conditions to the full deployment of their potential for innovation and entrepreneurship.

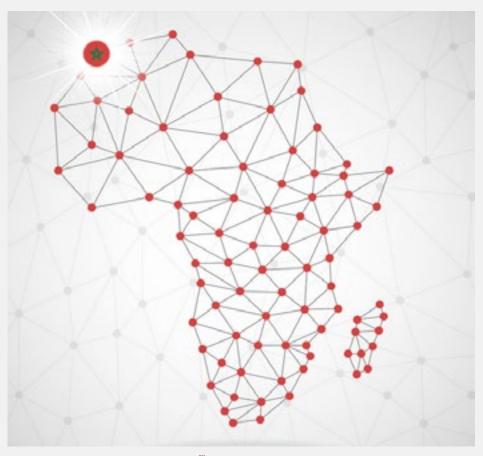
ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (1)

Morocco, a stakeholder in Africa's economic transition

Morocco, as North Africa's most competitive economy and the continent's 5th most competitive after Mauritius, Rwanda, South Africa and Botswana (203), is more than ever a stakeholder in Africa's autonomous development and economic vitality.

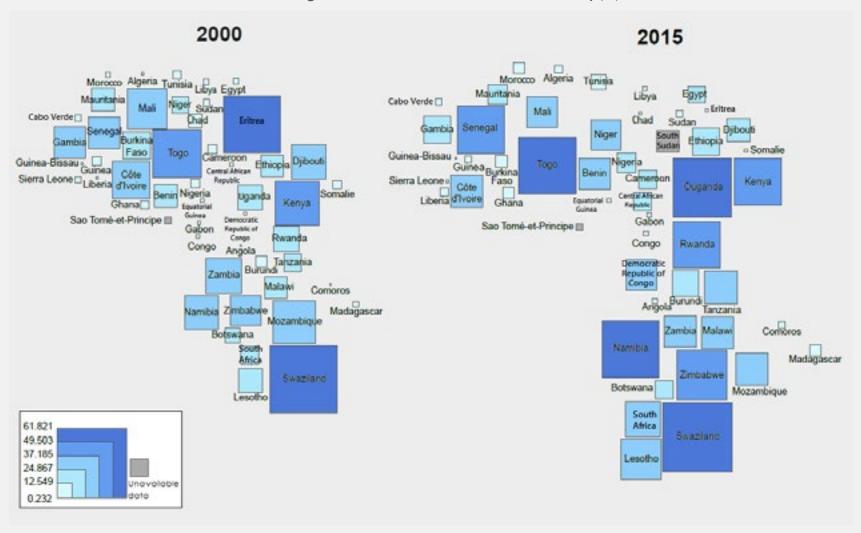
The Kingdom's assets predispose it to play a significant role in securing a prosperous future for the African continent. In addition to partnerships with traditional powers, Morocco has signed cooperation agreements with its Sub-Saharan partners, effectively making it a regional hub for trade, finance, transport...

Morocco's contribution to Africa's economic transition is particularly clear in three areas: economic integration, investment and sectors of excellence.



Source : IRFS

Africa's weight in the total trade of each African country (%)



■ Source: IRES processing of United Nations Conference on Trade and Development data

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (2)

Contributing to Africa's economic integration

Though it is steadily rising, Africa's economic integration remains low in the context of globalization's sharp acceleration over the past years, a phenomenon that tends to center on interdependent regional blocks. **Indeed**, the share of intra-regional trade is below 20% in Africa versus 56% in the Americas, 60% in Asia and 66% in Europe (204).

Morocco believes such integration to be essential and thus wishes to further contribute to it in two regards: macro-economic stability and integrative diversification.

- ► Macro-economic stability provides the necessary background for foreign investment as well as local entrepreneurial development. Reforms carried out in Morocco which could be replicated elsewhere in Africa relate to the following:
 - Strengthening macro-economic stability: controlled inflation, sustainable public debt, investment grade sovereign credit...
 - Territorial management and developing highway, railroad, port and airport infrastructure, improving Morocco's international connectivity

- Implementing sectoral strategies, focused on developing Morocco's global sectors (Métiers Mondiaux du Maroc) through the Emergence plan, the Plan Maroc Vert (agriculture), the 2020 Vision for Tourism, the energy strategy...
- Diversifying drivers of growth for Morocco's economy, in particular in Sub-Saharan Africa.

Integrative diversification

- In order to ensure stable growth, economies must diversify so as to balance out the inherent risks of dominant sectors (cf. rent-based economies) and to include all local players.
- ❖ At the same time, a country's can more easily enter global value chains with integrated industries offering products and services, as is the case in Morocco with the phosphate, automotive or aerospace industries.
- ❖ Lastly, a systemic and transnational development approach, as seen in major projects such as the Nigeria-Morocco pipeline (see Africa in Motion n°15), is a powerful tool for integration.

A

FRICA IN MOTION N°15

Morocco-Nigeria Atlantic pipeline project: a tool for regional integration and development

- This ambitious project, discussed during COP22 in Marrakech in November 2016 between His Majesty King Mohammed VI and the President of the Federal Republic of Nigeria, His Excellency Muhammadu Buhari, was the subject of a strategic partnership agreement and a memorandum of understanding in December 2016 between Moroccan sovereign wealth fund "Ithmar Capital" and Nigerian fund "Sovereign Investment Authority".
- This 5,000 km long gas pipeline is an extension of the West African Gas Pipeline, which since 2010 has connected Nigeria to Ghana through Benin and Togo. The pipeline shall skirt the West African coastline all the way up to Morocco, with a possible extension towards Europe via Spain. This project's ambition is to drive entire sectors of African economies, spurring the development of the energy sector in the entire region. All this should be achieved while delivering clean energy, in line with the continent's commitments on environmental protection.
- ▶ In addition to its positive impact on the entire continent's socioeconomic development, the pipeline should stimulate the emergence of northwest Africa, help to reduce the area's energy dependence and foster electrification in all of northwest Africa.

Unofficial pipeline layout



Source: IRES

Main goals of the pipeline project:

- ▶ Step up electrification projects in the entire West region of Africa, by creating a competitive regional electricity market.
- ▶ Develop integrated industrial hubs in the sub-region in sectors such as manufacturing, agribusiness and fertilizers.
- ▶ Attract foreign capital, improve the competitiveness of exports and encourage local processing of natural resources.

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (3)

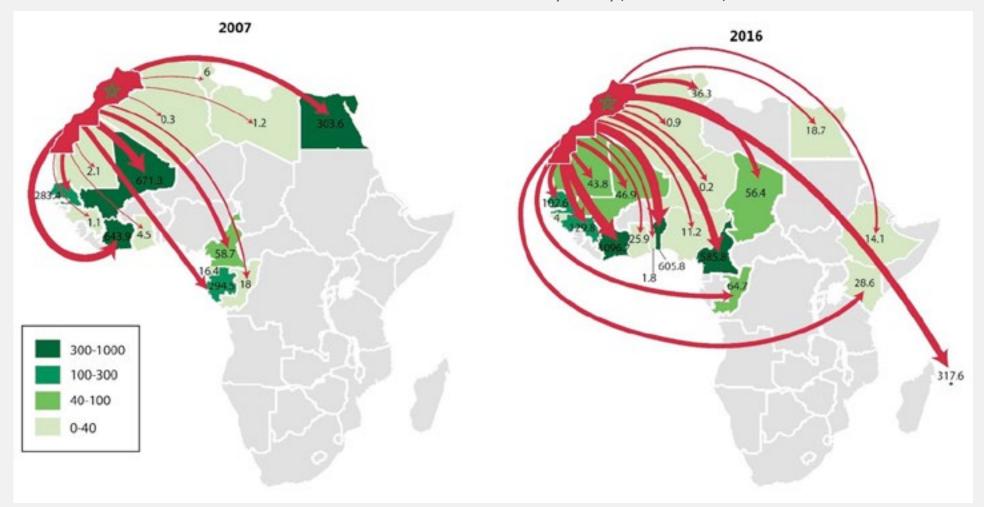
Contributing to the continent's financial health

The development of most African countries is beset by financial problems: debt, lack of liquidity, difficulty issuing debt, lack of a financial hub... This is why the moroccan contribution is particularly significant in this area.

- Development aid to other African countries came in the form of a Royal Initiative, in 2000, by cancellation of Africa's least developed countries' debt to Morocco and to lift all customs barriers on goods imported from those countries.
- ► Today, Morocco is the top African investor in West Africa and the 2nd African investor in Sub-Saharan Africa (see Africa in Figures n°18).
- ▶ With 8 billion dollars of projects announced for 2015-2016, Morocco has become Africa's leading intra-African investor (140).
- As the backbone of Moroccan investment in Africa, the expansion of the Moroccan banking sector has helped to boost trade and facilitated investment from Moroccan entrepreneurs in the continent. The Moroccan banking sector is present in over 26 African countries (196).

- Casablanca Finance City Authority has established itself as the leading financial hub to Africa.
 - This platform, which offers many types of financial services, makes the link between north and south and encourages international investors to do business in Africa, choosing Casablanca as a point of entry towards the continent.
 - In 2014, Casablanca Finance City was chosen by the African Development Bank to host the Africa 50 fund, the largest fund ever created, to finance infrastructure projects in Africa over the next fifty years (205).
- Lastly, as Mohamed Damak, global head of Islamic finance at Standard & Poor, has stated: "In Islamic finance, Morocco has the potential to become the Malaysia of the African continent. The Kingdom has followed in the footsteps of the Asian country, establishing a regulatory framework specific to this activity before authorizing it".

Moroccan direct investment flows to Africa by country (million dirhams)



Source: IRES processing of data from Office des Changes (foreign exchange bureau)

Global Financial Centres Index (2016 international ranking)



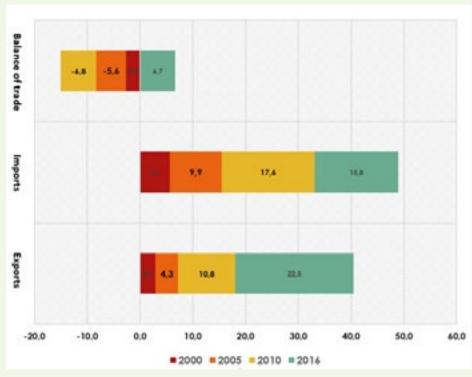
Source : IRES processing of data from Z/Yen Group

A FRICA IN FIGURES N°18

Economic key figures of Morocco in Africa

- Since 2000, Morocco has concluded over 1,000 agreements with over 40 African countries, as compared to only 500 between 1956 and 1999. Nearly 426 agreements have been signed since 2014 with 15 African countries, involving 80 public and private economic operators and 300 African partners (196).
- Moroccan direct investment flows to Africa have nearly tripled between 2007 and 2016, from \$114 million to almost \$326 million (206). In total, over this period, Morocco invested nearly 3 million dollars, or 51.7% of Moroccan direct investment abroad (206).
- Over 1,000 Moroccan operators are present in Africa. From 2008 to 2015, they have invested over 2.2 billion dollars on the continent. (196).
- Despite having risen from \$744 million in 2000 to nearly \$3.7 billion in 2016, trade between Morocco and Africa remains quite limited and its share in Morocco's overall trade did not exceed 6% in 2016 versus 4% in 2000 (204).

Trade between Morocco and Africa



Source : IRES processing of Office des Changes data

A FRICA IN MOTION N°16

Morocco's urban expertise at Africa's service

- Now more than ever, the urban question is a key challenge for Africa's development, given the multiple issues to address in order to ensure social cohesion, make African cities more attractive, and combine urban planning with sustainability using a concerted approach and understanding the complex and dynamic inter-relations between social, economic and ecological systems. The Kingdom of Morocco is committed to sharing its urban planning and development know-how with its African partners.
- Contributing to slums eradication: Morocco has accumulated a great deal of experience in eradicating slums, and is prepared to share its expertise with African countries who request it. In 2004, the Kingdom launched the "Cities Without Slums" program (Villes Sans Bidonvilles). In 2017, after this program was implemented, a total of 58 cities were officially declared free of slums, out of the 85 cities initially targeted. The program resettled 383.557 low-income households, improving their living conditions as a result (207). Morocco has been ranked, according to the United Nations Human Settlements Program, 2nd country in the world for its slum reduction rate over the period 2000-2010.
- ▶ Contributing to the building of a new capital in South Sudan: Morocco will provide assistance to the Republic of South Sudan during the various phases of implementation of this major project, in particular for fundraising, calls for technical partnerships and developing local teams' know-how and expertise.

▶ Contributing to the upgrading of the city of Conakry in the Republic of Guinea: Morocco is committed by launching various major urban development projects with high added value and having direct impacts on local populations.

Model of South Sudan's new capital



Source: https://www.lereporter.ma/zoom/soudan-du-sud-une-nouvelle-capitale-pour-le-pays/

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (4)

Morocco's multiform contribution through its sectors of excellence

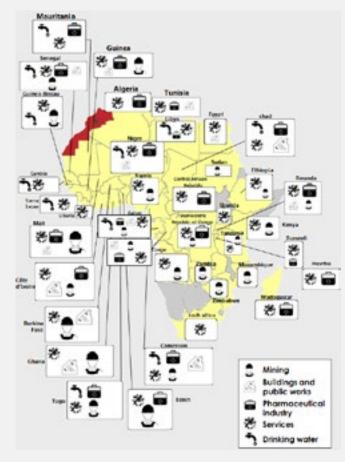
His Majesty King Mohammed VI spurred Moroccan economic diplomacy in Africa from the early 2000s, leading large Moroccan companies to compete in the African market (208).

Today, these new "regional champions" work in the continent's strategic sectors.

Mining, infrastructure and telecoms

- The Kingdom shares its mining expertise with its African partners and attaches particular importance to this sector's development, in the context of South-South cooperation in Africa.
- ❖ Concerning infrastructure engineering, Morocco offers to its African partners solutions which are appropriate for the local context, a clean technology in the construction of dams, sewage and roads, and provides proven expertise in building major infrastructure and urban planning (see Africa in Motion n°16).
- Morocco continues to bolster its position as a major player in telecommunications development in Africa:
 - Morocco contributed to the consolidation of telecom infrastructure and helped to improve the quality of services;
 - Maroc Telecom invested over a quarter of its revenue in the continent (208).

Moroccan business in Africa by sector, 2000-2017



Source: IRES processing of data available online from some Moroccan operators and data from the Ministry of Foreign Affairs and International Cooperation

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (5)

- Agriculture. In the context of its South-South cooperation strategy, Morocco is taking concrete action to help Africa meet the major challenges of food security and a successful green revolution.
 - Morocco, with 75% of the world's phosphate reserves (209), has launched two large fertilizer factories through the OCP Group, one in Nigeria and the other in Ethiopia. These facilities could supply all the Horn of Africa and some countries in the Gulf of Guinea.
 - In response to Africa's low fertilizer use (10% of the global average and nearly 20 times lower than the Asian average (210)), which is partly responsible for insufficient agricultural productivity, the OCP group allocates a significant part of its fertilizer production to the African market (211).
 - OCP Africa, one of its subsidiaries covering the entire value chain, invests in research and development to adapt fertilizers to soil and pastoral crop requirements.
 - Morocco's experience in micro-irrigation and developing agro-industry for exportation could be beneficial to the emergence of modern and competitive African agriculture.
 - Morocco, with its proven experience in agronomic research, is involved in modernizing African agriculture and its adaptation to climate change (see Focus n° 25)

"As we know, basic food needs cannot be met with gas or oil. But is not food security the major challenge facing Africa?"

Excerpt from the speech of His Majesty King Mohammed VI at the 28th African Union Summit, Addis Ababa, 31 January 2017

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (6)

Fisheries sector

- Africa's top fish producer, Morocco introduced the Halieutis plan to ensure the continuity of fishery resources and to optimize their value (see IRES' 2017 Strategic Report). The Kingdom shares its expertise in this area, through capacity-building in the marine fisheries sector and in erecting fishing harbour infrastructure.
- * Thus, the Kingdom has actively contributed to setting up equipped unloading docks in Guinea and Côte d'Ivoire to increase fishery yields.
- Similarly, Morocco and Senegal are exchanging expertise in octopus fishing and industrial fishing units. Cooperation between the two countries translates into synergies of action between Morocco's Institute for Fisheries Research (Institut de recherche halieutique) and the Dakar-Thiaroye Oceanographic Research Center (Centre de recherche océanographique de Dakar-Thiaroye).

His Majesty King Mohammed VI and Ivorian President Alassane Ouattara inaugurate the Mohammed VI unloading dock in Locodiro



Source: Maghreb Arab Press

ONTRIBUTING TO AFRICA'S ECONOMIC TRANSITION (7)

The air transport sector

- ❖ The Casablanca-Mohammed V airport is a regional hub serving Africa's major destinations.
- ❖ The Moroccan airline Royal Air Maroc has expanded in Africa, adding more destinations in the continent. From 2004 to 2014, these have increased from 7 to 32, covering over 30 African countries (212).
- ❖ After the "Open Sky" policy initiated in 2005 to liberalize and open up the aviation sector between Morocco and Europe, Royal Air Maroc is ready to take on the African "Open Sky", which began in January 2018.
- ❖ Lastly, the excellent position of Morocco's aeronautical sector confers the Kingdom cutting-edge skills that could be shared with other African countries.



Source: Royal Air Maroc

ONTRIBUTING TO AFRICA'S ENVIRONMENTAL TRANSITION (1)

The Kingdom's unswerving commitment

At the instigation of His Majesty King Mohammed VI, Morocco has become a champion in the fight against climate change and reducing the ecological footprint, in favor of more sustainable economic, human and environmental development.

This commitment is particularly apparent in two areas that especially impact the continent:

- Climate change and natural resource degradation;
- The environmental transition (213), shifting from the dominant economic model to a model that is friendlier to the planet and to its inhabitants.

"I have taken the initiative to invite you to this Summit so that our Continent may agree on a common approach to fighting climate change as well as on actionable measures for sustainable development.

Bringing large-scale regional and transnational projects to fruition is the challenge I am inviting you to take up.

I suggest that we build an African continent that is resilient to climate change and that commits resolutely to sustainable development; an African continent that will use its resources in an optimal way, while respecting environmental and social balances; a continent that will seek to promote inclusive development, in line with the specific features of its identity, particularly the culture of sharing, of fairness and solidarity.

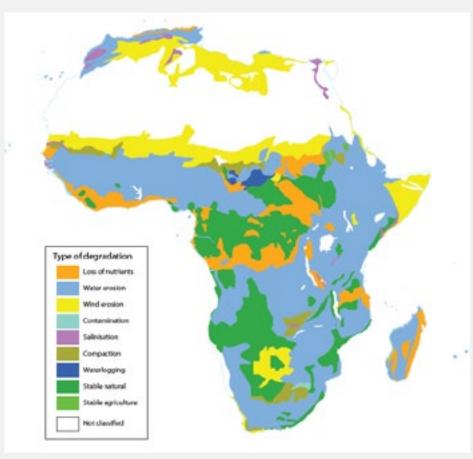
(...) It is important that our continent speak with one voice, demand climate justice as well as the mobilization of the necessary resources and submit concerted proposals in connection with the fight against climate change".

Speech by His Majesty King Mohammed VI at the opening of the "Africa Action Summit" in Marrakech a side event at the 22nd Conference of Parties to the United Nations Framework Convention on Climate Change (COP22), 16 November 2016

ONTRIBUTING TO AFRICA'S ENVIRONMENTAL TRANSITION (2)

Contributing to climate change adaptation

- Morocco is very active in the international debate on climate and the environment; it organized and hosted COP22 in November 2016, attracting the attention of countries of the North on the damage caused to countries of the South.
- During this conference, Morocco launched the AAA Initiative (see Focus n°25) and initiated the first Africa Action Summit. This has allowed the continent to:
 - speak with one voice to demand climate justice;
 - define the pillars of sustainable co-emergence, by proposing to African countries to:
 - · harmonize their action to fight climate change,
 - collectively combat desertification and deforestation and take actionable measures for the continent's adaptation, resilience and food security,
 - seize the opportunities of low-carbon development in energy and technological innovation and by promoting "green jobs".
- Furthermore, Morocco's new integrated coast management mechanism could be used by other African countries to reduce the ecological footprint on the continent's coasts (214).
- Lastly, the Kingdom oversees an African network to spread climate change skills, the Climate Change Competence Center (4C Maroc), a platform to share the expertise of public and private sector players, academics and civil society.



Source: Africa Soil Atlas, European Soil Data Centre (JRC)

OCUS N°25

The AAA Initiative

- Ahead of COP22, Morocco launched the Triple A initiative (Adaptation of African Agriculture), which aims to adapt African agriculture to the effects of climate change, advocating a new role for agriculture in international climate discussions.
- This initiative seeks to:
 - improve soil quality through sustainable management,
 - sustainably manage farm water, in particular for irrigation,
 - build capacity in climate risk management,
 - introduce financing solutions designed for small projects (215).
- These issues are rendered all the more pressing by the fact that 60% of the African population works in agriculture, and that the continent's agricultural production will have to double by 2030 and triple by 2050 if it is to feed the entire African population.

- Official discussions at the COP22's scientific and technical body ended on a deadlock regarding the balance between mitigation and adaptation. Morocco expressed its position (adaptation) in IRES' 2017 Strategic Report, which was disseminated on this occasion.
- Nevertheless, it is clear that there is growing awareness of Africa's agricultural dilemma. One of the participants, Djigo Bagna, a Nigerien farmer, summarized it as follows: "African States want intensive agriculture that destroys the land. The damage it causes is well-known, while our practices prove that it is possible to sustainably produce abundant, quality crops" (216).
- The AAA Initiative has now garnered the support of 33 African countries, the United Nations Framework Convention on Climate Change and the United Nations Food and Agriculture Organization. In December 2017, the Agence française de développement (French Development Agency) and the World Bank also pledged to support this initiative (217).

ONTRIBUTING TO AFRICA'S ENVIRONMENTAL TRANSITION (3)

Contributing to the environmental transition

- Morocco does not simply urge other national and international powers to take measures in order to adapt to climate change and combat resource degradation. It also leads the way, by gradually shifting to a more sustainable economic model.
 - The National Charter for the Environment and Sustainable Development (Charte nationale de l'environnement et du développement durable), developed in 2009, mainstreamed sustainable development into sectoral strategies, and provided for the implementation of the environmental upgrade strategy, the national environmental protection strategy...
- Public-Private Partnerships play a key role in this transition. The Cities Without Slums program clearly illustrates this; another example is the fact that Morocco's employer federation (Confédération générale des entreprises du Maroc), as well as 42 other employer organizations from around the world, endorsed the Marrakech declaration at COP22 (218).

- In addition to helping to implement electrification projects in rural Africa, Morocco is developing its expertise in renewable energy, in particular solar power (see Ouarzazate solar power station), an expertise that could be shared with other African countries.
- ► The Blue Belt Initiative offers innovative solutions for the adaptation of fisheries sectors to climate change and for the resilience of oceans.
- ▶ In the context of the African Sustainable and Responsible Tourism Charter signed by 24 African countries Morocco has committed to promote Zambia as a tourist destination, and vice versa (219). This reference framework for sustainable tourism in Africa is a tool that helps to preserve each country's environment and cultural diversity (220).

A FRICA IN MOTION N°17

Morocco goes "green"

Best practices (221)

- ▶ GoEnergyless: Created by two students at the University of Mohammedia, this start-up sells "Fresh'lt", a fruit and vegetable cooling system which, instead of power, uses artisanal pottery and sand. Two other systems are being designed, one for medication and another for meat.
- ▶ AveoEnergie: this start-up turns farm waste (biomass) into thermal energy. It also provides support to firms wishing to operate an energy transition.
- ▶ **Kilimanjaro Environnement**: this young firm has developed a local network to collect used cooking oil and turns it into bio-fuel. The company, which employs 70 people, is now expanding to also collect ordinary industrial waste.

- ► Espace Bidaya, Casablanca: North Africa's first social green tech incubator helps start-ups active in the social and solidarity economy. Among them:
 - Cleanzy, an environmentally friendly dry-cleaning franchise;
 - Maroc Plastics Recycling, a plastic recycling ecosystem;
 - STEPMOBILE, the first mobile unit that reduces water pollutant emissions, reducing greenhouse gas emissions "at the source".
- Solar E-Cycles: this solar vehicle firm (11 models created as of January 2018) designs small solar-powered 4- or 3-wheel cars for Africa's most remote rural populations. In 2016 (at COP22), it was awarded the Initiative Climate pour l'Afrique Francophone (Francophone Africa Climate Initiative) trophy (222).

A FRICA IN MOTION N°18

The Cocody Bay development plan

- ▶ The large-scale project to protect and develop Cocody Bay in Abidjan, Côte d'Ivoire's economic capital, is a perfect example of a successful South-South partnership. Jointly launched by His Majesty King Mohammed VI and Ivorian President Alassane Ouattara in early June 2015, this project embodies the Royal Vision for a autonomous Africa which taps its own potential for sustainable development.
- ► This project seeks to protect the environment and improve traffic fluidity in the area, which is often congested.
- Under this plan a viaduct, a marina, a park, recreational and commercial facilities and a wastewater treatment facility will be built. It will improve the landscape and have positive environmental, urbanistic and socio-economic impacts.

Cocody Bay protection and development plan



■ Source : Maghreb Arab Press

K EEP IN MIND

- ▶ Morocco is fully committed to the continent's autonomous development, driven by a strong Royal Vision and a firm resolve to further South-South cooperation.
- ► Continental governance is a necessary, but not sufficient, condition for its development: Morocco is working towards more active and solidary unity.
- ► The African Agenda on Migration, which the Kingdom put forward to the African Union, aims to be the prelude to a fresh perspective on the migration issue and a key enabler of free movement of people in Africa.
- ► The continent's economic transition rests on two major pillars to which Morocco contributes: developing African human potential, and a shift towards an economic model that is more sustainable, climate-resilient, circular and environmentally friendly.



S ELECTIVE BIBLIOGRAPHY

- (1) SARR, Felwine et MBEMBE, Achille (2017). Ateliers de la pensée : "Pour une Afrique qui pense par elle-même et parle au reste du monde". Le Monde, [en ligne] 09 novembre 2017 : http://www.lemonde.fr/afrique/article/2017/11/09/ateliers-de-dakar-pour-une-afrique-qui-pense-par-elle-meme-et-parle-au-reste-du-monde 5212585 3212.html#EwHtMFPqxMXVX0Uu.99>
- (2) The Economist (2017). How the taxman slows the spread of technology in Africa. The Economist, [online] 9th November 2017: https://www.economist.com/news/middle-east-and-africa/21731206-if-youwant-less-something-tax-it
- (3) ANNAN, Kofi (2017). Kofi Annan: "Nous devons accélérer la transition énergétique de l'Afrique!". Le Monde, [en ligne] 13 mars 2017: http://www.lemonde.fr/afrique/article/2017/03/13/kofi-annan-nous-devons-accelerer-la-transition-energetique-de-l-afrique_5093776_3212.html#d5ZgZyaupt5234Sf.99>
- (4) IEA-ETSAP, IENA. Hydropower. Technology Brief. 2015
- (5) REVEILLARD, Marie-France (2017). Akon Lighting Africa: "Partout où se manifestera une volonté politique, nous interviendrons". La Tribune Afrique, [en ligne] 10 novembre 2017: https://afrique.latribune. fr/think-tank/entretiens/2017-11-10/akon-lighting-africa-partout-ou-se-manifestera-une-volonte-politique-nous-interviendrons-757500.html>
- (6) Akon Lighting Africa official website: http://akonlightingafrica.com/?lang=fr
- (7) The Barefoot Approach: Women Barefoot Solar Engineers of Africa. 2012. Site web de Barefoot college: https://www.barefootcollege.org/women-barefoot-solar-engineers-a-community-solution/
- (8) WOLF, Martin (2016). Negative rates are a symptom of our ills. Financial Times, [online] 13 April 2016. URL: https://www.ft.com/content/9b1d8b04-0007-11e6-ac98-3c15a1aa2e62
- (9) Fondation Energies pour le Monde. La pérennité du service électrique, preuve de succès d'un projet, à quoi servent vos dons? Entretien avec Jean-Louis Borloo. Infos, n° 40, novembre 2016.
- (10) BYENKYA, KIZITO and HUMPHREY, ALEX (2017). Freeing Africa's Internet. Project Syndicate, [online] 6 November 2017. URL: https://www.project-syndicate.org/commentary/africa-internet-censorship-resistance-by-kizito-byenkya-and-alex-humphrey-2017-11
- (11) Trend Micro, INTERPOL. Cybercrime in west Africa: poised for an underground market. 2017
- (12) Internet World Stats. Online database: < https://www.internetworldstats.com/ >
- (13) Wa Are Social, Hootsuite. Digital, social, mobile. 2017.
- (14) SERIANU. Africa cyber security report 2016. Achieving cyber security resilience: enhancing visibility and increasing awareness. 2016
- (15) In Côte d'Ivoire, transport start-up mTick links Abidjan to the provinces with just a few clicks. TechAfrique website: http://techafrique.startupbrics.com/cote-ivoire-startup-transport-mtick-abidjan/#.

 WoKpMnwwvcs

S ELECTIVE BIBLIOGRAPHY (2)

- (16) Société d'Exploitation des Eaux du Niger official website : www.seen-niger.com/fr/activites/relation-clientele/nos-solutions-de-paiement
- (17) FANUCCHI, Bruno (2017). Faire de l'urbanisation de l'Afrique une opportunité. Algérie ECO, [online] 24 September 2017. URL: https://www.algerie-eco.com/2017/09/24/faire-de-lurbanisation-de-lafrique-opportunité.
- (18) M-Pedigree: Une application pour lutter contre la contrefaçon des médicaments (2015). Site web Tech of Africa: https://www.techofafrica.com/m-pedigree-une-application-pour-lutter-contre-la-contrefacon-des-medicaments/
- (19) Njorku official website: <www.njorku.com/welcome/about>
- (20) World Bank. ICT in agriculture: Connecting smallholders to knowledge, networks and institutions. 2011
- (21) Safaricom. Where will we go next? Safaricom annual report and financial statements. 2017
- (22) BROULARD, Laure et ANDERSON, Mark (2017). Mobile banking: une success-story nommée M-Pesa. Jeune Afrique, [online] 03 April 2017. URL: http://www.jeuneafrique.com/mag/421063/economie/mobile-banking-success-story-nommee-m-pesa
- (23) VERRIÈRE, Patricia et QUENEDEY, Caroline. L'industrie 4.0 : la 4ème révolution industrielle sauvera-t-elle l'industrie française ? 2017
- (24) Accenture, Gordon Institute of Business Science. Industry X.0: Combine and conquer, unlocking the power of digital. 2017
- (25) Aigroup Workforce Development. The emergence of the gig economy. Thought leader paper: education & training policy team. 2016
- (26) ASKWONDER. What is the global market-size (TAM) for the Gig freelancer economy industry?
- (27) Site web Talent2Africa. Pensez aux alternatives au salariat en Afrique. 2017. URL: https://talent2africa.com/pensez-aux-alternatives-au-salariat-en-afrique/
- (28) GILES, Chris (2017). How a West African lab made a 3D printer from toxic e-waste. CNN, [online] 28th November 2017 : <edition.cnn.com/2017/11/28/africa/3d-printer-electronic-waste/index.html
- (29) World Bank. Africa's pulse. 2017
- (30) Deloitte. Prédictions TMT 2017 Afrique Francophone : Pensez à l'avenir. 2017
- (31) World Bank. Exploring the relationship between broadband and economic growth. 2016
- (32) GSMA Intelligence. The mobile economy Africa. 2016
- (33) Eaglestone Securities. Inside Africa, now is the time to invest in Africa. 2017
- (34) AU, NEPAD and AfDB. Créer des emplois à travers le développement d'infrastructures régionales. 2016.

S ELECTIVE BIBLIOGRAPHY (3)

- (35) African Development Bank official website. Programme for Infrastructure Development in Africa (PIDA). < https://www.afdb.org/fr/topics-and-sectors/initiatives-partnerships/programme-for-infrastructure-development-in-africa-pida/ > et The Programme for Infrastructure Development in Africa: Transforming Africa through Modern Infrastructure
- (36) The Programme for Infrastructure Development in Africa: Transforming Africa through Modern Infrastructure
- (37) Economic Commission for Africa. PIDA Model Law for infrastructure development in Africa endorsed at 2017 PIDA Week in Namibia.
- https://www.uneca.org/fr/stories/la-loi-type-du-pida-pour-le-d%C3%A9veloppement-des-infrastructures-en-afrique-%C3%A9t%C3%A9-approuv%C3%A9e-lors
- (38) African Development Bank, African Economic Outlook, 2018.
- (39) World Bank database. Online database. < https://data.worldbank.org/ >
- (40) World Wide Web Foundation. Artificial intelligence: starting the policy dialogue in Africa. 2017
- (41) Official IBM website. Ethiopia Commodity Exchange. Case study: http://ecc.ibm.com/case-study/us-en/ECCF-IMC14990USEN
- (42) SOPHiA GENETICS official website. African hospitals adopt SOPHiA artificial intelligence to trigger continent-wide healthcare leapfrogging movement. 2017. https://www.sophiagenetics.com/news/media-mix/details/news/ladoption-de-lintelligence-artificielle-sophia-par-les-hopitaux-africains-promet-un-bond-en-avant-dans-la-sante-sur-le-continent.html
- (43) Zipline. Tanzania announces world's largest national drone delivery network. 2017
- (44) Université de Pretoria, Department of Mining Engineering. SA GeoTech 2017. The use of immersive technology in mining: the mine of the future. 2017
- (45) World Telecommunication/ICT Indicators database. 2017. Online database. International Telecommunication Union. < https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>
- (46) Global Health Observatory data. Online database. World Health Organization. < http://www.who.int/gho/database/fr/ >
- (47) WAKEFIELD, Jane (2017). TEDGlobal: The computer that can smell explosives. BBC, [online]: 28th August 2017: http://www.bbc.com/news/technology-40935771>
- (48) World Bank. Economic Growth in Africa is on the Upswing Following a Sharp Slowdown. Press release. 2017.
- (49) World Economic Outlook Database. 2018. Online database. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx. Calcul IRES
- (50) World Population Prospects database. Online database. United Nations. https://esa.un.org/unpd/wpp/>. Calcul IRES

S ELECTIVE BIBLIOGRAPHY (4)

- (51) African Development Bank. Annual Development Effectiveness Reviews. Accelerating the pace of change. 2016.
- (52) PRAHALAD, C. K. The Fortune at the bottom of the pyramid, revised and updated 5th anniversary edition: eradicating poverty through profits. New Jersey: Pearson FT Press, Revised, Updated, 2009.
- (53) PAULI, Gunter. L'économie bleue: 10 ans, 100 innovations, 100 millions d'emplois. Lyon: Caillade Publishing, 2011
- (54) World resources institute official website. New restoration economy. http://www.wri.org/our-work/project/new-restoration-economy>
- (55) Technology Adoption In Nigeria Dr. Angel Adelaja, Fresh Direct
- (56) Songhaï official website: http://www.songhai.org/index.php/en/
- (57) Cyclifier.org website: https://www.cyclifier.org/project/tunweni-beer-brewery/
- (58) Green Pot Entreprises official website http://greenpotenterprises.com/about-us/>
- (59) UNDP official website. A legacy of private sector engagement in Africa. <www.undp.org/content/undp/en/home/blog/2016/6/21/A-legacy-of-private-sector-engagement-in-Africa.html>
- (60) Official website of the Pan-African Agency of the Great Green Wall: http://www.grandemurailleverte.org/
- (61) World Bank. Climate smart agriculture: successes in Africa. 2017.
- (62) Royal Botanic Gardens KEW, ECFF. Coffee farming and climate change in Ethiopia: impacts, forecasts, resilience and opportunities. Summary report. 2017.
- (63) Royal Botanic Gardens KEW. State of the world's plants. 2017
- (64) FRANKEL DAVIS, Kyle et al. Increased food production and reduced water use through optimized crop distribution. Nature geoscience 10, 2017. p. 919–924. URL: https://www.nature.com/articles/s41561-

017-0004-5>

- (65) FAO. Regional overview of food insecurity: Africa. 2015
- (66) World Future Council Foundation. Lutte contre la désertification et la dégradation des terres, les meilleures politiques au monde. 2017
- (67) CommodAfrica website. South African Philafrica Foods to conquer sub-Saharan Africa. 2017. : <a href="http://www.commodafrica.com/02-11-2017-le-sud-africain-philafrica-foods-la-conquete-de-lafrique-sub-afri

saharienne>

- (68) African Development Bank. Feed Africa: strategy for agricultural transformation in Africa 2016-2025. 2016
- (69) World Cocoa Foundation. Cocoa market update. 2012

S ELECTIVE BIBLIOGRAPHY (5)

(70) Jeune Afrique. Maroc : plus de 420 tonnes de sacs plastique saisies en moins d'un an. Jeune Afrique, [online] 26 April 2017. URL: http://www.jeuneafrique.com/432883/societe/maroc-plus-de-420-tonnes-de-sacs-plastique-saisies-dun-an/; Kouagheu, Josiane. Au Cameroun, on fabrique des pavés « écolos » à partir de déchets plastiques. *Le Monde*, [online] 17 August 2016 :

(71) FILOU, Emilie. The African water companies serving the poorest and staying afloat. The guardian, [online] 4th October 2016: https://www.theguardian.com/global-development-professionals-network/2016/ oct/04/urban-africa-water-companies-poorest-profit<

(72) African Development Bank. Africa tourism monitor: sustainable tourism through innovation, entrepreneurship, and technology. Volume 4, issue 1. 2016; Sustainable Tourism website. Case studies: Africa. URL:

< http://sustainabletourism.net/case-studies/austrailianz/africa/>

http://sustainabletourism.net/case-studies/austrailianz/africa/

(73) France24. Une tour en bambou transforme l'humidité en eau potable. [Onligne] : http://observers.france24.com/fr/20160425-ethiopie-tour-transforme-humidite-eau-potable-climat

(74) RSE Maroc magazine. L'ONG Dar Si Hmad récompensée à Bonn pour son projet de récolte d'eau de rosée. [Onligne] : http://www.rsemarocmagazine.com/long-dar-hmad-recompensee-a-bonn-projet-de-recolte-deau-de-rosee/

(75) Widoobiz website. Crowdfunding: Liter of Light compte réduire la pauvreté énergétique en Afrique. 2016: https://www.widoobiz.com/entrepreneurs-startups/crowdfunding-liter-of-light-lance-campagne-de-crowdfunding-indiegogo/71011>

(76) BBOXX. The solar revolution. Product brochure. 2015

(77) MemoFin website. Lexique: http://www.memofin.fr/glossary/terms/Gouvernance

(78) Clean Gov Biz. The rationale for fighting corruption. Background brief. 2014

(79) https://www.africafintechforum.net/

(80)Gro Intelligence website. Planting Dollars: The Growing Pace of Global Investment in Agriculture, 2016. URL: https://gro-intelligence.com/insights/planting-dollars-the-growing-pace-of-global-investment-in-agriculture; Les clés de demain. Une levée de fonds d'1 million de dollars pour sponsoriser des agriculteurs au nigéria, [en ligne] 19 décembre 2017. URL: http://lesclesdedemain.lemonde.fr/economie/une-levee-de-fonds-d-1-million-de-dollars-pour-sponsoriser-des-agriculteurs-au-nigeria_a-90-6468.html

(81) Official website of the International Islamic Trade Finance Corporation. http://www.itfc-idb.org/en>

(82) Oikocredit official website: https://www.oikocredit.coop/what-we-do/partners/partner-detail/39705/zigoti-coffee-works-ltd

S ELECTIVE BIBLIOGRAPHY (6)

- (83) AfricaNews website. Sénégal: E-Cover une start-up au service de l'environnement. 2017. URL http://fr.africanews.com/2017/01/23/senegal-e-cover-une-start-up-au-service-de-l-environnement/
- (84) African development bank. Jobs for youth in Africa strategy for creating 25 million jobs and equipping 50 million youth, 2016-2025. 2017
- (85) ILOSTAT. Base de données en ligne. Organisation internationale du travail. http://www.ilo.org/global/statistics-and-databases/lang--fr/index.htm
- (86) United Nations World Water Assessment Programme. Water and jobs: facts and figures. 2016
- (87) Results for Development, Skoll Foundation. Pan African leadership and entrepreneurship development models: a rapid ecosystem analysis. 2016
- (88) UNESCO Institute for Statistics. Online database. UNESCO. < http://uis.unesco.org/ >; World Population Prospects 2017. Online database. United Nations. < https://esa.un.org/unpd/wpp/>. Calculs IRES.
- (89) UNESCO Institute for Statistics. Online database. UNESCO. < http://uis.unesco.org/ >
- (90) FETTEROLF, Janell. In many countries, at least four-in-ten in the labor force are women. 2017 In: Pew Research Center website.
- (91) ONE. The Toughest Places for a Girl to Get an Education. 2017.
- (92) United Nations, Department of Economic and Social Affairs. World population prospects: the 2017 revision. 2017
- (93) Haut-Commissariat au Plan. Recensement général de la population et de l'habitat. 2014
- (94) MACHEL, Graça. Empowering the other half of Africa's economy. Project Syndicate, [online] 9th August 2017. URL: https://www.project-syndicate.org/commentary/african-growth-economic-opportunities-

women-by-graca-machel-2017-08

- (95) International Labour Organization. Equality at Work: Tackling the Challenges. 2017.
- (96) UNFPA. The state of world population 2016.
- (97) World Bank official website. WhatsApp-ening with Forests and Climate in Togo?. 2018. : http://www.banquemondiale.org/fr/news/feature/2018/01/18/whatsapp-ening-with-forests-and-climate-in-togo
- (98) UNICEF. A profile of child marriage in Africa. 2015
- (99) UNICEF. Campagne nationale: tolérance zéro au mariage des enfants. 2017
- (100) UNICEF Data. Online database. UNICEF. https://data.unicef.org/topic/child-protection/child-marriage/
- (101) CONCREE official website: http://www.concree.com/fr/aboutus

S ELECTIVE BIBLIOGRAPHY (7)

(102) WABERI, Abdourahman. Etes-vous « ubuntu » un peu, beaucoup, passionnément ? Le Monde, [en ligne] 03 août 2015. URL : http://www.lemonde.fr/afrique/article/2015/08/03/etes-vous-ubuntu-un-peu-beaucoup-passionnement_4709614_3212.html#15fdm0Pq6X7rK6Ls.99>

(103) KLEES, Steven J. Financing universal education. Project Syndicate, [online] 3th august 2017. URL: https://www.project-syndicate.org/commentary/financing-universal-education-by-steven-j--klees-2017-08

(104) Ubuntu Pathways Official website: https://ubuntupathways.org/about

(105) Global Oneness Project Official website: https://www.globalonenessproject.org/about-project>

(106) La Fabrique website. Le Centre ADAJA participe au 4ème Forum mondial de développement économique local à Praïa : https://www.lafabrique-bf.com/le-centre-adaja-participe-4eme-forum-mondial-de-developpement-economique-local-a-praia/>

(107) SCHWARZ, Fernand. Ubuntu, l'idéal d'humanité. Revue Acropolis, [en ligne] 28 janvier 2015. URL : < http://www.revue-acropolis.fr/ubuntu-lideal-dhumanite/>

(108) Nobel Prize official website. Nelson Mandela and the Rainbow of Culture. 2001. URL: https://www.nobelprize.org/nobel_prizes/peace/laureates/1993/mandela-article.html>

(109) SALADIN, Jean-Christophe. L'éloge funèbre de Mandela par Barack Obama: Ubuntu et tolérance humaniste. HuffPost, [Onligne] 05 octobre 2016. URL : https://www.huffingtonpost.fr/jeanchristophe-saladin/ubuntu-nelson-mandela b 4480121.html>

(110) Ighobor, Kingsley. Africa's youtth: a "ticking time bomb" or an opportunity? Africa Renewal, May 2013. http://www.un.org/africarenewal/magazine/may-2013/africa%E2%80%99s-youth-%E2%80%9Cticking-time-bomb%E2%80%9D-or-opportunity

(111) SALEH, Heba. Egypt's nascent tech scene could rescue a generation. Financial time, [online] 21 April 2017. Youth employment. Special report. URL: https://www.iyfnet.org/sites/default/files/library/FT-Youth-Employment_Special-Report_2016.pdf

(112) AGLIONBY, John. Joblessness is an 'existential threat' to Kenya's future. Financial time, [online] 21 April 2017. Youth employment. Special report. URL: https://www.iyfnet.org/sites/default/files/library/

FT-Youth-Employment_Special-Report_2016.pdf>

(113) http://www.lemonde.fr/afrique/article/2018/01/19/la-classe-africaine-notre-serie-consacree-a-l-education 5243976 3212.html#D0zQsyd4hDiwlYwt.99

(114) African Development Bank. Jobs for Youth in Africa. 2017.

(115) KASISI, Robert. Les perspectives de la biodiversité en Afrique subsaharienne : repenser collectivement le modèle de gestion. *VertigO - la revue électronique en sciences de l'environnement*, [Onligne], volume 12, n° 2, septembre 2012. URL : http://journals.openedition.org/vertigo/12263 ; DOI : 10.4000/vertigo.12263>

(116) UNICEF. Fact Sheet: Generation 2030. Africa Report. 2014.

(117) UNESCO Institute for Statistics. Online database. UNESCO. < http://uis.unesco.org/ >. Calculs IRES

ELECTIVE BIBLIOGRAPHY (8)

(118) LE BELZIC, Sébastien. La Chine, nouvelle destination phare des étudiants africains. Le Monde, [en ligne] 18 septembre 2017. URL: http://www.lemonde.fr/afrique/article/2017/09/18/la-chine-nouvelle-2017. Le Monde, [en ligne] 18 septembre 2017. URL: http://www.lemonde.fr/afrique/article/2017/09/18/la-chine-nouvelle-2017. Le Monde, [en ligne] 18 septembre 2017. URL: http://www.lemonde.fr/afrique/article/2017/09/18/la-chine-nouvelle-2017. Le Monde, [en ligne] 18 septembre 2017. URL: http://www.lemonde.fr/afrique/article/2017/09/18/la-chine-nouvelle-2017. destination-phare-des-etudiants-africains_5187402_3212.html>

(119) ASHESI Foundation official website: http://www.ashesi.org/blog/wise-prize-for-education-2017-presented-to-patrick-awuah/

(120) Moringa School official website: https://moringaschool.com/

(121) We Think Code official website: https://www.wethinkcode.co.za/

(122) EL HASSANI, Jamal. Fred SWANIKER: Pour sortir de la pauvreté en Afrique, il faut investir dans nos cerveaux! Les clés de demain, [en ligne] 05 avril 2016. URL: http://lesclesdedemain.lemonde.fr/economie/

fred-swaniker-pour-sortir-de-la-pauvrete-en-afrique-il-faut-investir-dans-nos-cerveaux-_a-90-5604.html>

(123) African Leadership Academy official website: http://www.africanleadershipacademy.org/about/our-model/

(124) African Leadership University official website: https://www.alueducation.com/about/our-leadership/

(125) CNN website. African innovations that could change the world. 2018. URL: https://edition.cnn.com/2017/11/16/africa/gallery/africa-innovations-that-could-change-the-world/index.html

(126) CHRISTENSEN, Clayton M. Afrique: une nouvelle génération d'innovateurs. Harvard Business Review, [en ligne] 13 juillet 2017. URL:

(127) IFAD. Remittances at the post office in Africa: serving the financial needs of migrants and their families in rural areas. 2016

(128) KODJO-GRANDVAUX, Séverine. L'avenir du monde se joue en Afrique. Entretien entre Felwine Sarr et Achille Mbembe. Le monde, [en ligne], 21 octobre 2016. URL:http://www.lemonde.fr/afrique/ article/2016/10/21/l-avenir-du-monde-se-joue-en-afrique_5017948_3212.html#krd8dGFhRLPc5AKU.99

(129) African development bank. Africa Tourism Monitor, Sustainable Tourism through Innovation, Entrepreneurship, and Technology

(130) African Development Bank. Africa visa openness report 2017. 2017

(131) EL-HOURY, Hassan (2018). Africans need the freedom to travel in their own continent. Here's why. [Online], 21th January 2018. Available at World economic forum website's. URL: https://www.weforum. org/agenda/2018/01/africans-need-the-freedom-to-travel-in-their-own-continent-heres-why>

(132) EL-HOURY, Hassan (2018). Africans need the freedom to travel in their own continent. Here's why. [Online], 21th January 2018. Available at World economic forum website's. URL: https://www.weforum. org/agenda/2018/01/africans-need-the-freedom-to-travel-in-their-own-continent-heres-why; Official website of the Economic Community of West African States. History. URL: http://www.ecowas.int/about-need-the-freedom-to-travel-in-their-own-continent-heres-why; Official website of the Economic Community of West African States. History. URL: http://www.ecowas.int/about-need-the-freedom-to-travel-in-their-own-continent-heres-why; Official website of the Economic Community of West African States. History. URL: http://www.ecowas.int/about-need-the-freedom-to-travel-in-their-own-continent-heres-why; Official website of the Economic Community of West African States. ecowas/history/>

(133) Official website of the Economic Community of West African States. History. URL: http://www.ecowas.int/about-ecowas/history/

S ELECTIVE BIBLIOGRAPHY (9)

- (134) Economic Community of West African States official website. Travel. http://www.ecowas.int/life-in-the-community/education-and-youth/>
- (135) European union, Economic Community of West African States. The Common External Tariff (CET): structure, benefits, challenges and the way forward of the CET. 2016
- (136) NTABONA, Adrien. Itinéraire de la sagesse : les Bashingantahe hier, aujourd'hui et demain au Burundi. Bujumbura : Editions du CRID, 1999.
- (137) IDEA. Justice traditionnelle et réconciliation après un conflit violent : la richesse des expériences africaines. 2009
- (138) THOMAS, Louis-Vincent, 1983. La vieillesse en Afrique noire. Communications, numéro thématique: Le continent gris. Vieillesse et vieillissement. p. 69-87.
- (139) World Economic Outlook Database. 2018. Online database. International Monetary Fund. https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx
- (140) AFDB, OECD, UNDP. African Economic Outlook 2017: Entrepreneurship and Industrialization. 2017.
- (141) NEPAD. Les perspectives du mécanisme africain d'évaluation par les pairs (MAEP) à la lumière de treize années d'expérience : relever les défis majeurs de la gouvernance dans le cadre de l'agenda 2063 de l'Union africaine. Keynote address. 2015
- (142) African Union official website: https://au.int/en/financingau
- (143) APIKO, Philomena and AGGAD, Faten. Analysis of the implementation of the African union's 0.2% levy progress and challenges. Briefing note no 98. 2018
- (144) United Nations Conference on Trade and Development.
- (145) AFDB Socio Economic Database. 1960-2016. Online database. African Development Bank. < ttp://dataportal.opendataforafrica.org/bbkawjf/afdb-socio-economic-database-1960-2019 >
- (146) Speech by His Majesty King Mohammed VI at the opening ceremony of the Morocco-Ivory Coast Forum in 2014.
- (147) Speech by Guinean president Alpha Condé at the official opening of MEDays 2017.
- (148) LE GROS, Julien, 28 juin 2016. Felwine Sarr: "Parler de développement, c'est mettre l'Afrique à la remorque". The Dissident. URL: http://the-dissident.eu/felwine-sarr-developpement-cest-mise-a-remorque de-lafrique/>
- (149) KODJO-GRANDVAUX, Séverine. Les Ateliers de la pensée #2: "L'émancipation de l'Afrique passe par des idées neuves". Entretien entre Felwine Sarr et Achille Mbembe. Le monde, [Onligne], 31 octobre 2017.
- URL: URL: <
- (150) Declaration of Burkina Faso's Minister of civil defense at the first African meeting of heads of civil defense of Member States of the International Civil Defence Organization (ICDO). URL: http://news.aouaga.com/h/17996.html>

S ELECTIVE BIBLIOGRAPHY (10)

(151) FISHER, William and PONNIAH, Thomas. Another world is possible: world social forum proposals for an alternate globalization. Chicago. University of Chicago press. 2015. 365 p.

(152) BENSIMON, Cyril. Alpha Condé: "La lutte contre le terrorisme en Afrique ne peut être faite que par des Africains". *Le monde*, [en ligne], 16 novembre 2017. URL:

(153) NDIAYE, Amadou. Corruption en Afrique, le grand défi. Entretien réalisé avec Abdul Tejan COLE, Directeur exécutif d'Open Society Initiative for West Africa. *Le monde*, [en ligne], 21 juillet 2016. URL: http://www.lemonde.fr/afrique/article/2016/07/21/corruption-le-grand-defi_4972893_3212.html#PsUBxGozGyxP9iy3.99>

(154) Official website of the International Network for Economic, Social and Cultural Rights. tLa Cour africaine confirme les droits fonciers des Ogiek du Kenya (2017). URL: https://www.escr-net.org/fr/caselaw/2017/commission-africaine-droits-lhomme-et-peuples-c-republique-du-kenya-cafdhp-requete-no

(155) MDLULI, Nokwanda Tina. Recalling African healing and the use of uMuti. Vuka Darkie, [online] 15th November 2017. URL: < http://www.vukadarkie.com/recalling-african-healing-and-the-use-of-umuti/>

(156) Houzz website. Architecture: 6 techniques ancestrales pour une maison fraîche en été. 2015. URL: https://www.houzz.fr/ideabooks/30202606/list/architecture-6-techniques-ancestrales-pour-une-maison-fraiche-en-ete

(157) United Nations Development Programme website. Promise or Peril? Africa's 830 Million Young People by 2050. 2017. URL: http://www.undp.org/content/undp/fr/home/blog/2017/8/12/Promesse-ou-p-ril-D-ici-2050-l-Afrique-comptera-830-millions-de-jeunes.html

(158) Johannes Gottfried Kraus: https://aeon.co/amp/essays/yacob-and-amo-africas-precursors-to-locke-hume-and-kant

(159) Central Intelligence Agency. World Factbook. URL: https://www.cia.gov/library/publications/the-world-factbook/fields/2177.html>. Calculs IRES

(160) AUGUSTIN, Jean-Pierre. En Afrique aussi, le sport n'est pas qu'un jeu : Not just a game. Les Cahiers d'Outre-Mer, [en ligne], n° 250, avril-juin 2010. URL: http://journals.openedition.org/com/5920#quotation;

AUGUSTIN, Jean-Pierre. Eléments géopolitiques du sport africain. Les Cahiers d'Outre-Mer, [en ligne], n°250, avril-juin 2010. URL : http://journals.openedition.org/com/5922

(161) TéléDakar website. Le Top 10 Des Plus Grands Stades En Afrique, 2017. URL: https://www.teledakar.net/2017/11/28/top-10-plus-grands-stades-afrique/

(162) Réseau Anthropologie des Epidémies Emergentes website: http://shsebola.hypotheses.org/

(163) Les observateurs website. Rendre hommage aux mythes africains, le pari d'un jeu vidéo camerounais, 2016. URL: http://observers.france24.com/fr/20160426-jeu-video-cameroun-aurion-heritage-koriodan-mythes-africains-culture

(164) Zamani Project website: http://www.zamaniproject.org/index.php/home.html

(165) Ministry of the Environment and Forests (Madagascar). Décret n° 2010-141 portant interdiction de coupe, d'exploitation et d'exportation de bois de rose et bois d'ébène à Madagascar. 2010

S ELECTIVE BIBLIOGRAPHY (11)

- (166) EKLU-NATEY, Raphaël D. et al. Pharmacopée africaine : Dictionnaire et monographies multilingues du potentiel médicinal des plantes africaines : Afrique de l'Ouest. Genève : Ed. Traditions et médecine. Lausanne: Ed. d'en bas, 2012.
- (167) African Development Bank. African Natural Resources Center: Catalyzing growth and development through effective natural resources management. 2016
- (168) U.S. Geological Survey. BAUXITE AND ALUMINA. 2018.
- (169) World Bank. Commodity markets outlook. 2017
- (170) EU Delegation to Somalia, 2016. EU and FAO extend support to long-term seed production in Somalia. The Nigerian Voice, [online] 25th March 2016. URL: https://www.thenigerianvoice.com/sports/210875/ eu-and-fao-extend-support-to-long-term-seed-production-in-so.html>
- (171) Crop Wild Relatives website: https://www.cwrdiversity.org/development-of-eggplant-materials-for-adaptation-to-climate-change/
- (172) FAO, Institute of Biodiversity Conservation. Ethiopia: third country report on the state of plant genetic resources for food and agriculture. 2012
- (173) Efficycle. 2013 en 365 initiatives pour réinventer notre monde. 2013
- (174) European Union, ALCOTRA innovation. Les Living Labs: définitions, enjeux, comparaisons et premiers retours d'expériences. 2013.
- (175) European Network of Living Labs. 12th wave of membership. Brochure. URL: http://www.openlivinglabs.eu/sites/enoll.org/files/12th%20Wave%20Brochure.pdf
- (176) UMVELT. Ou'est-ce qu'un Living Lab? 2014
- (177) Site web la Dépêche.fr. Au Maroc, on "moissonne" le brouillard pour fournir de l'eau aux villageois, 2015. URL: https://www.ladepeche.fr/article/2015/06/16/2125734-maroc-moissonne-brouillard-fournir-eau-villageois.html
- (178) Food and Agriculture Organization. 2016. Aquastat website. FAO: http://www.fao.org/nr/water/aquastat/main/index.stm >
- (179) Institut de recherche pour le développement. Les grands bassins fluviaux (Exposition réalisée en partenariat avec : Aix-Marseille Université, l'IRSTEA, le CNRS et la Zone Atelier Bassin du Rhône). 2015
- (180) FALL, Abdou Salam, L'Afrique, le continent de l'avenir : une économie en devenir. Laboratoire de recherche sur les transformations économiques et sociales. 2016
- (181) LEFEVRE, Robert. Aspect de la pluviométrie dans la région du mont Cameroun. Cahiers ORSTOM. Série Hydrologie, 1967, 4 (4), p. 15-43.
- (182) FELBAB-BROWN, Vanda. Water theft and water smuggling: growing problem or tempest in a teapot?. Brookings, 2017
- (183) Economic Commission for Africa. Africa's Blue Economy: a policy handbook. 2016.
- (184) SENOUSSI A. et al. La Foggara: un système hydraulique multiséculaire en déclin. Revue des bioressources, volume 1, n°1, juin 2011.
- (185) WARKA Water official website: http://www.warkawater.org/fag/

S ELECTIVE BIBLIOGRAPHY (12)

(186) City of Cape Town official website: <a href="http://coct.co/water-dashboard/?ca_source=Website&ca_medium=affiliate&ca_campaign=Home%20page%20trends%20-%20Day%20Zero%20Dashboard&ca_term=Day%20Zero%20Dashboard&ca_content=Day%20Zero%20Zero%20Dashboard&ca_content=Day%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero%20Zero

(187) Medium.com website. Using technology to transform African rural water supply, 2017. URL: https://medium.com/frontier-technology-livestreaming/using-technology-to-transform-african-rural-water-supply-870eddfd509; Site web "ewater.org": https://ewater.org.au/>

(188) African Union. Stratégie africaine intégrée pour les mers et les océans - horizon 2050. 2012

(189) Abidjan Convention official website: http://abidjanconvention.org/index.php

(190) Institut Royal pour la Recherche sur l'Histoire du Maroc. Chronologie de l'Histoire du Maroc : des temps préhistoriques à la fin du XXème siècle. 2013

(191) BALAFREJ, Ahmed, 1962. Le Maroc au seuil de l'indépendance économique : La charte de Casablanca et l'unité africaine. Le Monde Diplomatique, [en ligne] juin 1962, p.11-12. URL : https://www.monde-diplomatique.fr/1962/06/BALAFREJ/24768

(192) SEBTI, Abdelahad. La conférence de Casablanca. Zamane, [en ligne], 30 novembre 2012. URL: http://zamane.ma/fr/la-conference-de-casablanca/

(193) ZERBO, Yacouba. La problématique de l'unité africaine. (1958-1963). Guerres mondiales et conflits contemporains, 2003/4 (n° 212), p. 113-127. URL : https://www.cairn.info/revue-guerres-mondiales-et-conflits-contemporains-2003-4-page-113.htm

(194) Ministry of Habous and Islamic Affairs. Seminar: "Les Spécificités architecturales des Mosquées au Maroc", held on 18 June 2007. Aperçu sur l'organisation spatiale des mosquées marocaines by MM. A. Touri, A. Tahiri and A. Elkhammar.

(195) Data available online from the Ministry of Foreign Affairs and International Cooperation, and from Maghreb Arab Press. IRES calculations.

(196) Speech by Mr Nasser BOURITA, Moroccan Minister of Foreign Affairs and International Cooperation, Africa Day, 8 June 2017.

(197) Data from the official website of the Moroccan Chamber of Representatives. IRES calculations.

(198) IRES. Morocco's return to the African Union. 2017.

(199) BARMA, Aboubacar Yacouba. Adhésion du Maroc à la CEDEAO : la véritable étude d'impact officiellement lancée. *La tribune Afrique*, [en ligne], 02 février 2018. URL: https://afrique.latribune.fr/politique/integration-regionale/2018-02-02/adhesion-du-maroc-a-la-cedeao-la-veritable-etude-d-impact-officiellement-lancee-document-766990.html

(200) Data from the Ministry in charge of Moroccans Residing Abroad and Migration Affairs

(201) Message of His Majesty King Mohammed VI at the 30th African Union Summit, Addis Ababa, 29 January 2018.

(202) Excerpts from His Majesty the King's Speech at the Inauguration Ceremony of the Higher Council of the Mohammed VI Foundation for African Ulema, Fes, 14 June 2016.

S ELECTIVE BIBLIOGRAPHY (13)

- (203) The Global Competitiveness Report 2017-2018: URL: http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf
- (204) IRES processing of data from the United Nations Conference on Trade and Development.
- (205) Casablanca Finance City. Newsletter. Novembre 2014. http://www.casablancafinancecity.com/wp-content/uploads/2016/files/newsletter_cfc_nov_2014.pdf
- (206) Office des changes
- (207) OUCHAGOUR, Leila. Al Omrane: Le programme "Villes sans bidonvilles" réalisé à hauteur de 83%. Aujourd'hui le Maroc, [en ligne], 07 février 2018. URL: http://aujourdhui.ma/economie/immobilier/alomrane-le-programme-villes-sans-bidonvilles-realise-a-hauteur-de-83
- (208) IRES, 13 April 2017. Seminar: "Quels leviers de renforcement des opérateurs marocains en Afrique, à l'aune du retour du Royaume à l'Union africaine?".
- (209) U.S. Geological survey.
- (210) Website of UNECA. Stakeholders make case for increased use of fertilizers in Africa, 2017. URL: < https://www.uneca.org/stories/stakeholders-make-case-increased-use-fertilizers-africa>
- (211) OCP Group. 2014 Sustainability Report. 2014.
- (212) Royal Air Maroc. RAM conforte sa métamorphose. 2014
- (213) Création Développement des Eco-Entreprises website. Les concepts de l'eco-transition : < http://www.cd2e.com/concepts-eco-transition>
- (214) BENTAK, Mostafa. Développement du littoral : le premier plan national pour janvier 2018. Les Eco.ma, [Onligne] 22 avril 2017. URL: < http://www.leseco.ma/economie/56718-developpement-du-littoral-le-premier-plan-national-pour-janvier-2018.html>
- (215) Initiative for the Adaptation of African Agriculture to Climate Change (AAA) White Paper: http://www.aaainitiative.org/files/AAA_livre_blanc_FRA.pdf
- (216) BARROUX, Rémi. A la COP22, les négociateurs échouent à sauver l'agriculture africaine. Le Monde, [en ligne], 19 novembre 2016. URL : http://www.lemonde.fr/cop22/article/2016/11/19/a-la-cop22-les-negociateurs-echouent-a-sauver-l-agriculture-africaine_5034275_5025028.html

S ELECTIVE BIBLIOGRAPHY (14)

(217) Moroccan Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests. Initiative Triple A: signature avec l'Agence française de développement (AFD) et la Banque mondiale qui s'engagent aux côtés du Maroc par un financement d'un million d'euros au profit des agriculteurs africains. [Online], 12 December 2017. URL:: http://www.agriculture.gov.ma/pages/actualites/initiative-triple-signature-dun-accord-avec-l%E2%80%99agence-française-de-developpement-afd

(218) Chaudier, Julie. "Déclaration de Marrakech" du patronat mondial: pas d'action climatique sans les entreprises privées. L'usine Nouvelle [online], 17 November 2016 : https://www.usinenouvelle.com/article/declaration-de-marrakech-du-patronat-mondial-pas-d-action-climatique-sans-les-entreprises-privees.N465278>

(219) Portal of the Kingdom of Morocco. Official visit of His Majesty the King to Zambia, 2017. URL: http://www.maroc.ma/fr/actualites/visite-officielle-de-sm-le-roi-en-republique-de-zambie

(220) African Development Bank official website. La charte africaine du tourisme durable et responsable voit le jour à la COP22, à Marrakech, 2016. URL: https://www.afdb.org/fr/news-and-events/la-charte-africaine-du-tourisme-durable-et-responsable-voit-le-jour-a-la-cop22-a-marrakech-16562/>

(221) https://www.usinenouvelle.com/article/comment-le-maroc-passe-au-vert-1-10-avec-goenergyless-la-poterie-se-mue-en-refrigerateur-du-desert.N398877

(222) https://www.linfodurable.fr/technomedias/la-societe-solar-e-cycles-lance-un-tricycle-alimente-lenergie-solaire-1598

ONCLUSION (1)

- There are many reasons to be afro-pessimistic. Sexually transmitted diseases, corruption, chaotic urbanization, lacking infrastructure, etc., converge to fuel growing reluctance by multinationals as well as public and private investors to fund projects in Africa.
- However, these aspects are just the tip of the African iceberg and the focus of the media, but they obscure another more structural fact: Africa is moving forward! In all areas of human activity, from philosophy to entrepreneurship, to multi-level governance, to decentralization, experiments are taking place, new ways of operating and thinking are being found, innovation is flourishing...
- ► However, the metrics for this kind of progress are not those that are favoured by international fora, such as GDP and other short-term economic indicators.

- More structural criteria, such as education, innovation... reveal that a new world is emerging, one that is friendlier to the planet and its humblest inhabitants, a world that is more optimistic and solidaritybased.
- As it moves forward, Africa does not conform to Western historical linearity. On the contrary, it is leapfrogging over steps like landline telephones, centralized electricity networks, and perhaps even labour-intensive industry. The very fact that Africa is behind in many areas allows it to adopt new solutions much more easily, such as decentralized water and energy, distance learning, micro FinTech...
- ▶ Given the torments imposed by History and colonization on Africa and its evolution, its political, economic and human emergence is occurring at an unparalleled pace in the history of other continents.

C ONCLUSION (2)

- ► To bolster this emergence, Africa must regain confidence in itself in order to face current and future major challenges. It is becoming urgent to invent a new African model of:
 - Urban planning, in response to the continent's specific challenges, in particular in Sub-Saharan countries;
 - Agricultural development, in order to produce quickly and in sufficient quantities, while also regenerating biomes and taking advantage of traditional agriculture;
 - Security, taking into account African specificities rather than just relying on universal doctrine.
- Similarly, Africa's continentalization should be regarded as a solution rather than a denial of the historic transcendance of individual African countries.

- ► The present 2018 Strategic report sought to display the exceptional wealth of African diversity and to show what African countries have to gain by considering Africa as a continent in its own right, a specific coherent reality across the continent.
- Indeed, this approach is the best way to put aside internal rivalries that could still be aggravated, to allow a united political front to put an end to the interference of external powers in African countries and, lastly, to facilitate the integrated economic and human development of a continent that only seeks to flourish, relying on itself.

ONCLUSION (3)

- As a country that was, throughout history, at the crossroads of civilizations, looking towards the Mediterranean and the Atlantic, Morocco has now reached a great political, economic, and human maturity that allows it to recognize and choose where it belongs.
- Morocco's choice in the matter was expressed very clearly by His Majesty King Mohammed VI when the country returned to the African Union. It is being reaffirmed as Morocco undergoes the process to join ECOWAS.
- An African land, Morocco believes in Africa, advocates in its favour and is determined to offer support to its African partners in the process of economic, social and institutional convergence.
- ▶ Its continental contribution today is multifaceted and is based on peacekeeping, collegial governance, a fresh approach to migration, but also training African students and managing the religious field, are some of the Kingdom's key areas of action.

- From an economic perspective, Morocco shares its experience in ensuring macro-economic stability and integrative diversification. Through its major companies, it operates in sectors such as banking, telecommunications, agriculture, fishing, mines, infrastructure, air transport...
- The Kingdom contributes to Africa's eco-transition and adaptation to climate change. It carries out major projects in partnership with other African countries to spur the energy transition and improve food security.
- Morocco is working towards a climate-resilient Africa and a continent that permanently embraces the United Nations Sustainable Development Goals.

"Sankofa" (a word in Twi language) teaches us that we must go back to our roots in order to move forward. That is, we should reach back and gather the best of what our past has to teach us, so that we can achieve our full potential as we move forward (*).



(*) Officiel website UNESCO: http://afrikhepri.org/le-sankofa/

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