

Sahel to Come

What today tells us
about tomorrow



Authorised for publication by Laurent Bossard, Director, SWAC/OECD Secretariat.

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The Sahel and West Africa Club

The Sahel and West Africa Club (SWAC) is an independent international platform. Its Secretariat is hosted at the Organisation for the Economic Co-operation and Development (OECD). Its mission is to promote regional policies that will improve the economic and social well-being of the people in the Sahel and West Africa. Its objectives are to produce and collect data, draft analyses and facilitate strategic dialogue in order to nurture and promote public policies in line with rapid developments in the region. It also promotes regional co-operation as a tool for sustainable development and stability. Its current areas of work are food dynamics, cities and territories, security and gender.

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INDEX

- 5 **Facing up to reality, preparing for the future**
- 8 Livelihood zones
José Luengo-Cabrera
- 9 Pastoralists and farmers in the Sahel
and cyclical movements
SWAC/OECD, 2014
- 10 Transhumance patterns
Anne Bacheré & José Luengo-Cabrera
- 11 Metals and minerals
José Luengo-Cabrera
- 12 **Changing societies**
- 16 Sahara-Sahel empires and their routes
SWAC/OECD, 2014
- 17 West African languages spoken
by more than one million native speakers
SWAC/OECD, 2009
- 18 Mental maps by locality
SWAC/OECD, 2017
- 19 Population growth in West Africa
Jennifer Sheahan
- 20 Projections of population growth
Jennifer Sheahan
- 21 Fertility and school enrolment
Jennifer Sheahan & Julia Wanjiru
- 22 Evolution of country population
and median age
Inhoi Heo
- 23 Change in population
José Luengo-Cabrera
- 24 Population pyramid in the Sahel
Jennifer Sheahan
- 25 Protests and riots
José Luengo-Cabrera
- 26 Informal employment rate
José Luengo-Cabrera
- 27 Share of the food economy
in West African GDP and employment
Léopold Ghins
- 28 Share and number of people employed
in the food economy
SWAC/OECD, 2018
- 29 Share of women's employment
by food economy segment
SWAC/OECD, 2018
- 30 Mobile cellular subscriptions
Anne Bacheré & José Luengo-Cabrera
- 31 Population using the internet
Anne Bacheré & José Luengo-Cabrera
- 32 Facebook subscribers
José Luengo-Cabrera
- 33 Access to electricity
Anne Bacheré & Jennifer Sheahan
- 34 Electricity Transmission Network
in West Africa
José Luengo-Cabrera
- 35 **Interconnected vulnerabilities**
- 38 Climate change in Africa
SWAC/OECD, 2009
- 39 Precipitation anomalies in the Sahel
José Luengo-Cabrera
- 40 Changes in Lake Chad's surface area
Anne Bacheré
- 41 Fatalities by location
José Luengo-Cabrera
- 42 Reported fatalities in Western Sahel countries
José Luengo-Cabrera
- 43 Reported fatalities in Lake Chad Basin countries
José Luengo-Cabrera
- 44 Jihadi attacks against security forces
José Luengo-Cabrera
- 45 Jihadi attacks against military forces
where more than 20 soldiers were reportedly killed
José Luengo-Cabrera

- 46 Violent events and fatalities in Mali and Central Sahel
SWAC/OECD, 2020
- 47 Civilian fatalities by attributed perpetrator in the Liptako-Gourma
José Luengo-Cabrera
- 48 Internally Displaced Persons (IDPs) in Burkina Faso
José Luengo-Cabrera
- 49 Internally Displaced Persons (IDPs) within Nigeria and reason for displacement
José Luengo-Cabrera
- 50 Food insecurity and violence
José Luengo-Cabrera
- 51 Biomass
José Luengo-Cabrera
- 52 Food and nutrition situation
RPCA
- 53 Food and nutrition trends in the Sahel and West Africa
SWAC/OECD, 2021
- 54 **Reconfigured territories**
- 58 Least connected urban agglomerations
Inhoi Heo
- 59 Evolution of urbanisation
Inhoi Heo
- 60 Urban population growth
Inhoi Heo
- 61 Share of urban population in the Sahel
Anne Bacheré & Jennifer Sheahan
- 62 Emergence of new agglomerations
Inhoi Heo
- 63 Vegetation cover in Tchadoua (Niger)
SWAC/OECD, 2019
- 64 Places of residence of Sahelian emigrants
Julia Wanjiru
- 65 Dead or missing migrants
José Luengo-Cabrera
- 66 Working of border markets
SWAC/OECD, 2003
- 67 Population potential of West African border markets
SWAC/OECD, 2017
- 68 Gender disparities in trade networks
SWAC/OECD, 2019
- 69 Integrated Territorial Development Project (PATI)
José Luengo-Cabrera
- 70 **Fragile governance**
- 72 General government revenue
José Luengo-Cabrera
- 73 Compensation of government employees
Anne Bacheré & Jennifer Sheahan
- 74 Health workers
Jennifer Sheahan
- 75 Health expenditure
Jennifer Sheahan
- 76 Public expenditure
José Luengo-Cabrera
- 77 Military capacity
José Luengo-Cabrera
- 78 Country Programmable Aid (CPA)
José Luengo-Cabrera
- 79 Net Official Development Assistance (ODA)
José Luengo-Cabrera
- 80 Personal remittances
José Luengo-Cabrera
- 81 Tax-to-GDP ratio
Anne Bacheré & Jennifer Sheahan
- 82 Coups d'État by type since independence
José Luengo-Cabrera
- 83 **Sahel to come**
- 85 The Sahel to come
Anne Bacheré
- 86 Data caveats
José Luengo-Cabrera

Facing up to reality, preparing for the future

Sahelian consultations

The word “Sahel” is derived from the Arabic term for edge or shore. Geographically, it is a transitional region between the Sahara desert and the Sudanian savannah with its more substantial rains. The boundary with the Sahara is often considered to follow the isohyets of 200 mm annual precipitation, or the northern limit to the area where the annual grass *Cenchrus biflorus* (“cram-cram”) grows.

Although this line is generally considered a border, in reality the Sahelian strip is a hub for interaction and trade. The northernmost belt is an area of sub arid steppes where herders raise their livestock. To the south, there is a belt of wooded savannah where rain-fed agriculture is practised. Southern farmers expand their land under cultivation northwards after several wet years, while northern herders move south to find pasture in times of drought. The strip formed by the Sahel thus constitutes a traffic corridor where regular exchanges between herders and growers creates longitudinal displacements.

The Sahel is commonly understood to cover the countries immediately south of the Sahara, from the Atlantic (southern Mauritania and Senegal) to the Red Sea (Horn of Africa). In a political sense, it refers to the G5 Sahel countries (Burkina Faso, Chad, Mali, Mauritania and Niger). For the purposes of this exercise, we refer to the Sahel as defined by the Sahel and West Africa Club (SWAC): the bridge between the Maghreb and the coastal countries of West Africa. This area stretches from Pointe des Almadies to Lake Chad and covers seven countries: Burkina Faso, Chad, Mali, Mauritania, Niger, Nigeria and Senegal.

This booklet was written as part of a pilot foresight exercise, the Sahelian consultations. This exercise will provide a platform to those in the region who are rethinking the complex equation of development, governance and stability, and who are outside governmental and international arenas. By involving actors from civil society, academia, professional organisations and think tanks, it is hoped that these consultations will generate new ways of developing

and implementing public policy in the Sahel.

From both a spatial and a temporal perspective, the SWAC proposes a retrospective and prospective analysis of the Sahel. This booklet highlights current realities and inexorable trends that must be taken into account when developing a regional project that is both realistic and attainable for communities in the region. These foreseeable factors, along with current vulnerabilities, will shape *trans-Sahelian* dialogue on the region’s future within the next generation.

From the outset, it is important to clarify the data used and the figures presented in the texts and visualisations. These figures are difficult to obtain, often incomplete and always open to improvement (see caveats at end of the booklet). The informed reader must therefore take this into account to fully appreciate the content of the analysis offered.

State of play

After independence, the vast majority of West African countries proactively adopted policies

to industrialise their economies, while pursuing the development and export of agricultural cash crops to world markets. However, these ambitious policies were hampered by narrow internal markets that undermined the emerging industrial composition. Moreover, climate hazards such as the great drought of the early 1970s were already complicating industrial emergence at the time.

In the 1980s, the fall in the price of raw materials on world markets had a severe impact on economies that were already experiencing structural difficulties. This fall paved the way for the structural adjustment programmes that the Bretton Woods institutions imposed on governments on the verge of bankruptcy. The emphasis on economic liberalism resulted in the state withdrawing from certain core sectors, and in de-industrialisation. In 1994, the devaluation of the CFA franc boosted exports but affected people's standard of living, halving wages overnight.

From 1995 onwards, there was a desire to revive industrialisation processes, particularly through the Regional Economic Communities (RECs) founded to form an economic and monetary union that would increase trade within Africa and integrate economies into global value chains. The Economic Community

of West African States (ECOWAS) and the West African Economic and Monetary Union (UEMOA) took regional measures to promote coordinated industrialisation and diversified manufacturing capacities.

Nowadays, despite the harsh climate, the availability of arable land, surface water (Lake Chad, the Niger and Senegal rivers and their tributaries) and groundwater provide the region with good potential for agro-sylvo-pastoral and fisheries sector. Cotton, groundnuts, rice, livestock and fisheries are value chains with high potential for the productive transformation of Sahelian agricultural economies. The Sahelian countries are ranked among the world's leading producers of shea and cashew nuts, sesame, fonio, cowpeas, yams, cassava, gum arabic, millet and sorghum.

The subsoil is rich in natural resources, including oil, bauxite, gold, uranium, iron, limestone and phosphate. However, exploiting them leads to strong dependency on world prices for raw materials – particularly for oil and uranium – and can cause environmental disasters. The Sahara has huge gold deposits, which attract millions of artisanal gold miners. According to the International Crisis Group, artisanal production now accounts for almost half the volume of industrially produced gold.

However, the agricultural sector as a whole remains by far the primary source of employment. The economy is largely dominated by the primary and tertiary sectors, where most operation is informal. Industry contributes only 20% of gross domestic product (GDP).

The strong economic growth since the turn of the century has not led to real socio-economic transformation for the majority. Human development indices are still extremely low. The emergence of a middle class that has, nevertheless, been observed is a cause for optimism because of the purchasing power it represents. However, this phenomenon remains difficult to pin down as its definition varies depending on the methodologies used. The African Development Bank (AfDB) estimated that 34% of the African population was middle class in 2011, while this figure was estimated at 3% by the Organisation for Economic Co-operation and Development (OECD) in 2009, 14% by the *Compagnie française de l'Afrique occidentale* (CFAO) in 2015, and 22% by McKinsey Global Institute in 2008 (study published in *Futuribles International* in 2019). Despite improved access to basic services and a decline in the poverty rate since 1990, the absolute number of poor people has increased. The Covid-19 pandemic has aggravated this situation and plunged several tens of

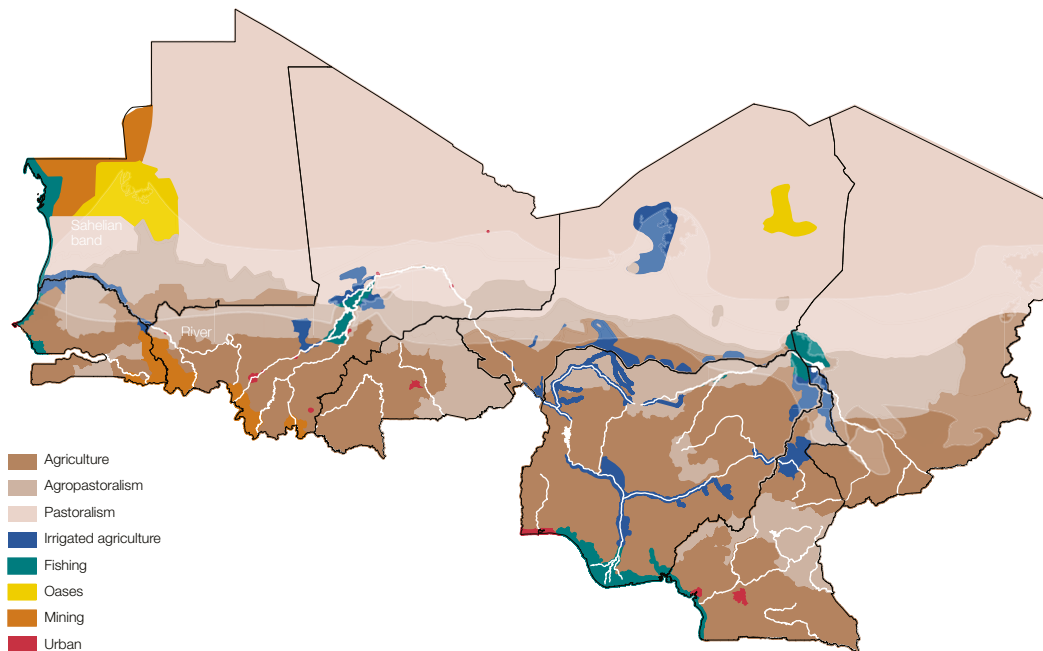
millions more Sahelians into poverty – up to 9% of the population according to the United Nations Development Programme (UNDP). The rise in poverty has also seen a rise in inequalities.

Table 1. Statistical data

Country	Population *(thousands), 2020	Area in km2	GDP in USD (millions), 2019	GDP (Purchasing Power Parity) per capita, USD, 2019	GDP growth (%), 2019	% of population in extreme poverty (\$1.90 per day, most recent measure)	Ranking in UNDP Human Development Index 2020 (out of 189)	Literacy rate (%) in female population aged 15+ years (most recent measure)
Burkina Faso	20 903	274 220	15 746	2 282	5.7	43.8	182	33
Mali	20 251	1 240 190	17 324	2 508	5.1	50.3 (2009)	184	26
Mauritania	4 650	1 030 700	7 600	6 036	5.9	6.0	157	43
Niger	24 207	1 267 000	12 912	1 276	5.9	45.4	189	27
Nigeria	206 140	923 770	448 120	5 353	2.2	39.1	161	53
Senegal	16 744	196 710	23 579	3 536	5.3	38.5	168	40
Chad	16 426	1 284 000	10 934	1 654	3.0	38.1	187	14

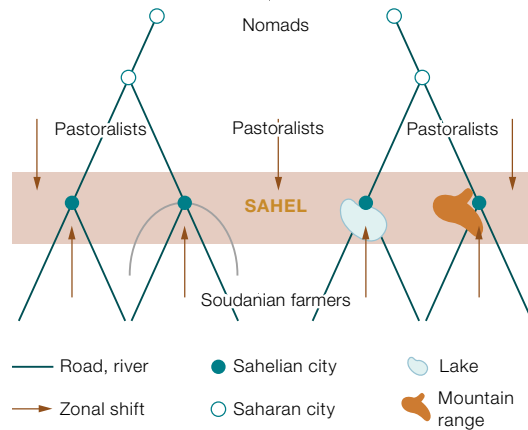
Sources: United Nations Department of Economic and Social Affairs, Population Division (2019); World Bank data; *Africa's Development Dynamics* 2021, Statistical Annex; UNDP, 2020

Livelihood zones



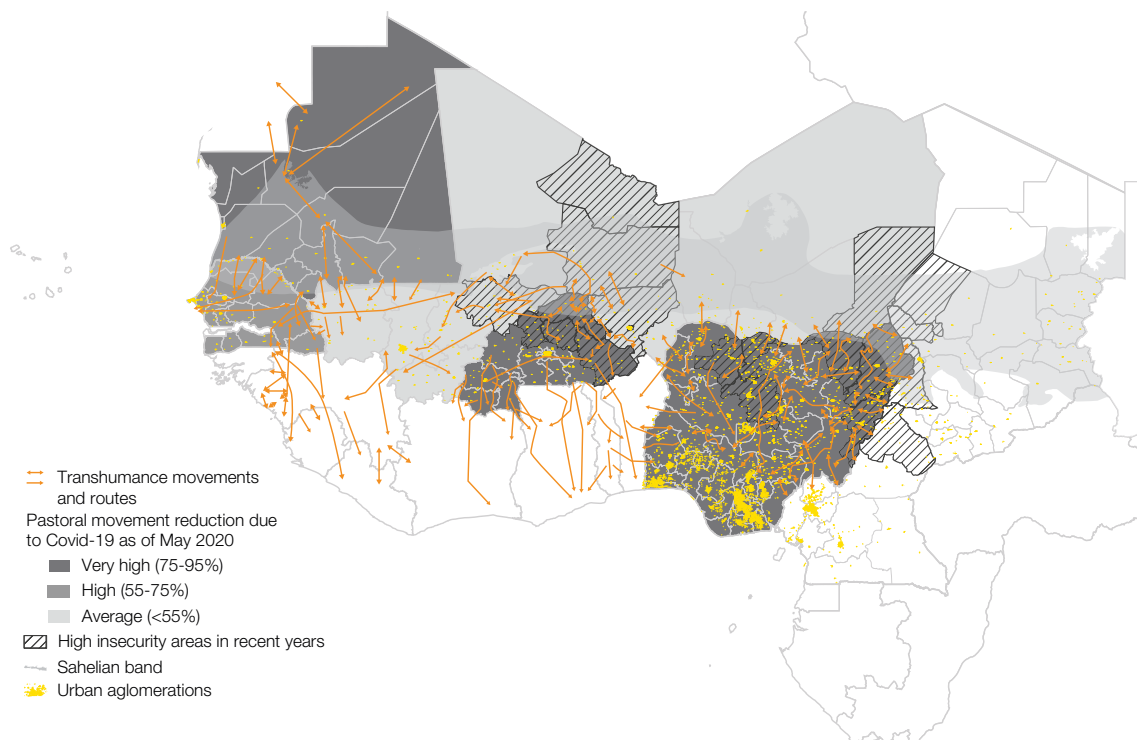
Note: categorisation of zones as last updated per country
Source: FEWS NET; OCHA; Natural Earth

Pastoralists and farmers in the Sahel and cyclical movements



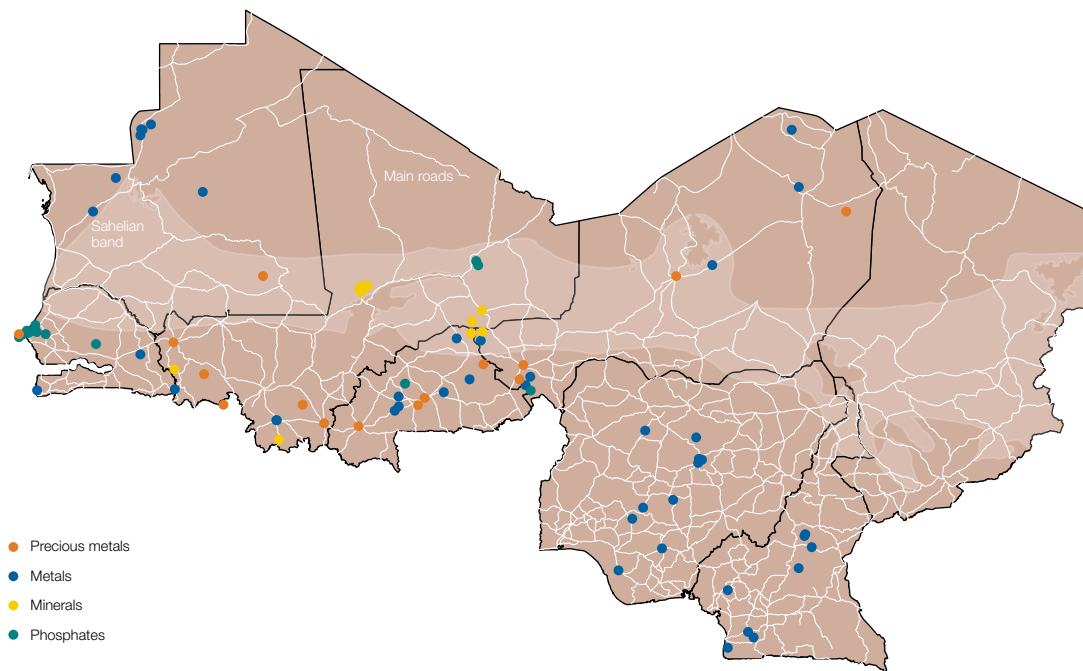
Source: Retaillé D., *Comment lire le contact Sahara-Sahel* 1989
Extract: © SWAC/OECD, *An Atlas of the Sahara-Sahel* 2014

Transhumance patterns



Source: UNOWAS, *Pastoralism and Security in West Africa and the Sahel* 2018; ACF and RBM

Metals and minerals



Source: USGS, MRDS

Changing societies

Transnational spaces

West African countries have a long history of cross-border links, culture, trade and mobility. These links underpin the common destinies between neighbouring countries.

Although they are officially English-, French-, Portuguese- or Arabic-speaking, these countries are predominantly characterised by indigenous languages and cultures. Nearly 1 200 of the continent's 2 000 languages are spoken here. Hausa, Mossi and Bambara are more widely spoken than English or French.

Lingua francas create cross-border ethno-linguistic areas. For example, Fulah is spoken in 15 countries in West and Central Africa; Hausa and Kanuri unite Niger and Nigeria inseparably; Senufo is spoken in Côte d'Ivoire and Mali; Gourmantché is used in Benin, Burkina Faso, Niger and Togo; and Tuareg languages are spoken in Algeria, Libya, Mali and Niger.

Culture plays a memorial, symbolic and emotional role on both sides of borders, encouraging transmission, reflection and criticism. It

consolidates identities within the group but also in relation to the outside world. As such, it is a core aspect of co-existence, of the social bond that unites communities, and of democratic consensus. Culture also connects the region's collective imagination to a globalized world.

In Sahelian countries, 80% of the population declares religious affiliation. A blend of traditional beliefs and those imported through trans-Saharan trade or by European missionaries acts as a powerful cohesive factor for groups that are now separated by borders (Sahelian countries and those in the Gulf of Guinea). Religions widely shape many aspects of public and private life.

This cross-border societal landscape will continue in the decades to come. After 60 years of independence and nation building, community allegiance formed by common languages, cultures and beliefs is deeply rooted in the collective psyche. We cannot consider the future of the Sahel without taking this duality into account.

Youth

West Africa is the most populous region in Africa. Improved health conditions have triggered a population boom. The rapid population growth of around 3% per year is due to a combination of high fertility and a decline in infant mortality.

The population is therefore predominantly young, with nearly 60% of the population of the Sahel region under 25 years old. The countries are thus largely populated by young people and children. The number of young people (15–24 year olds) is expected to continue to rise until 2035, making it difficult to absorb all the new entrants into the labour market. The lack of employment opportunities is causing many of these young people to migrate within and beyond Africa.

Younger generations outnumber their elders and are better educated. Better informed and more demanding, they assert their right to a say over the management of public affairs, without necessarily entering political circles. They are

steadfast urbanites who get involved in social movements that often have origins in civil society or student circles. These citizen uprisings address issues around governance (mismanagement, bribery, civic engagement, constitutional change, presidential third terms, road improvements, government officials' salaries, police violence, insecurity, etc.) and have an effect on democratic processes. They include the *Y'en a marre* movement in Senegal, *Balai citoyen* in Burkina Faso, pro- and anti-Tazartché (meaning "continued rule") movements in Niger, and the *An tè a bana* platform and *Mouvement du 5 Juin - Rassemblement des forces patriotiques* (M5-RFP) in Mali. Social networks, which are increasingly used, relay and amplify the campaigns, such as the now famous #BringBackOurGirls or more recently #EndSARS in Nigeria.

Over the past 20 years (2000–2020), the population of West Africa has increased by a factor of 1.7, from 244 million to 418 million. Over the next two decades, it is expected have a slightly lower multiplier (1.6), reaching nearly 700 million by 2040. By then, Nigeria could have a population of 330 million and be the fourth most populous country in the world after China, India and the United States.

The population of Sahelian countries will double within a generation (20 to 25 years). These

are the average United Nations projections. The low projection (which assumes more proactive policies and a rapid decline in fertility) does not diverge from the medium projection within this timescale.

The Sahelian countries will see their combined population increase by 3 million per year from 2020, and by 4 million per year by the end of 2030. Landlocked countries started their demographic transition later than coastal countries and will face the greatest challenges. They will experience stronger population growth between now and 2040: by a factor of 1.68 in Burkina Faso and Chad, 1.73 in Mali and 2 in Niger (which, although it currently has only a third of the population of France, could match its population by 2050). By contrast, Mauritania will experience a relatively steady and limited increase, albeit large in relation to its population.

Informal

There is a clear correlation between the size of the informal sector and the rate of population growth. This type of economy is integral to communities undergoing demographic transition. It is not driven by capital accumulation, but by a necessary sharing of work that allows for the constant arrival of new operators. It seeks to provide for the

basic needs of the greatest number of people: food, shelter, clothing, transportation, health care and entertainment. In the Sahelian countries, a large share of the population lives in this social and economic space, which is overwhelmingly dominated by self-employment and family employment.

Formal and informal economies are closely intertwined. The formal sector relies on the informal, especially for retail sales (of phone cards, for example). The informal sector is a "shock absorber" for the formal sector – in the event of an economic crisis, many employees switch to the informal sector to survive (as did many employees of tourism companies due to the Covid-19 pandemic). The informal sector thus fulfils a dual role as a reservoir of employment and a social buffer in the event of a crisis.

The informal economy naturally shrinks as population growth slows down and economy develops, as can be seen in Cabo Verde and Mauritania. Over the next 20 years, the informal sector is expected to remain the largest sector in Sahelian countries, where it currently accounts for more than 80% of the population. This does not preclude strong growth in the population involved in the formal sector. Even if the number of people in the formal sector were to double by 2040, the proportion of the population in the informal sector would remain similar.

Food economy

The food economy (from farm to fork) is the cornerstone of West African economies. It accounts for a total of USD 263 billion or 35% of regional GDP – much more than cash crops or oil and gas exports. It is the main source of employment in West Africa, employing two-thirds of the working population, or 98 million people. By 2030, the food economy could reach USD 480 billion and generate 131 million jobs.

Two-thirds of working women are employed in the food sector, where they represent 51% of the workforce and tend to have the most precarious jobs. They account for more than 40% of the agricultural labour force but have difficulty accessing land ownership. This is due to legal or traditional norms, particularly customary law, which places women under the guardianship of their father or husband. In Nigeria, women make up more than one-third of the agricultural labour force but account for only 4% of landowners.

In Sahelian countries today, the food economy is predominantly agricultural and rural. Agro-sylvo-pastoral and fisheries productions account for 80 to 90% of all value creation. However, the share of non-agricultural activities (trade, processing, street food) is increasing rapidly. This trend is due to rapid urbanisation,

which is driving market development and an increase in demand for processed products. Between 1960 and 2020, the West African region saw its urban population multiply by 100, while its total population multiplied by five.

The food economy will still be highly dominant in 2040 in landlocked Sahelian countries. Half of downstream agriculture activity, which is still an underdeveloped sector, takes place in urban areas. With the urban population growing twice as fast as the rural population, the food economy will diversify rapidly and the non-agricultural and urban share will grow significantly and faster than the agricultural and rural share.

Digital technology

West Africa has skipped the stage of landline telephones, thus leapfrogging technology. The number of individual mobile phone subscribers in West Africa increased by 80 million between 2002 and 2020. This increase is driven by the number of young consumers who are acquiring a mobile phone for the first time. The mobile phone penetration rate is growing faster than the population (currently around 50%, up from 28% at the beginning of the decade). According to the GSMA (the Global System for Mobile Communications), it should continue to grow to

reach 248 million subscribers by 2025. Sahelian countries, with the exception of Chad and Niger, are following the same trend.

In 2018, mobile technology and services contributed USD 52 billion to the West African economy (or 8.7% of GDP). At the time, this ecosystem directly employed over 200 000 people.

Mobile phones are still the main platform for Internet access, with the GSMA recording 100 million mobile Internet users in 2018. However, the region still suffers from a connectivity gap: only one in four West Africans had access to the Internet in 2018, according to the Gallup World Poll. In addition to being limited, digital coverage remains expensive and of poor quality.

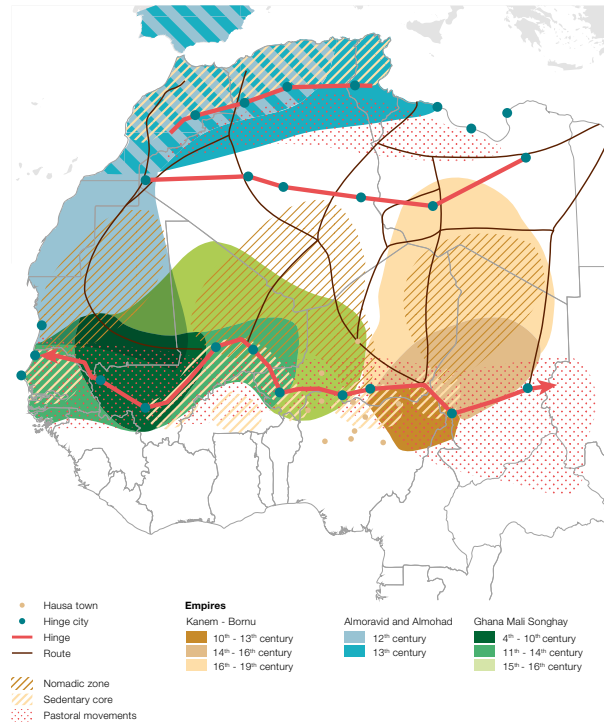
Despite these limitations, the digital ecosystem is booming, with facilities such as Jokkolabs in Ouagadougou, Bamako and Dakar, the *Centre Incubateur des Petites et Moyennes Entreprises du Niger* (CIPMEN) in Niamey and the Co-Creation Hub (CCHUB) in Lagos. These centres provide collaborative workspaces and incubate ideas into viable commercial products or services by accelerating innovation processes and technology transfer. Attracted by this creativity, Silicon Valley giants are considering strategic deployments in the region. According to the 2021 edition of *Africa's Development Dynamics* (African Union Commission / OECD), West

Africa now has 129 active startups that have raised at least USD 100 000 – five times more than five years ago.

The digital transformation is opening up new opportunities to digitalise administrative services (such as civil records) and to develop smart solutions for rural communities (such as the Niger 2.0 Smart Villages project) and for the informal economy. Mobile money services are scaling up significantly, making it easier to send money or pay bills. E-commerce platforms are emerging, along with home-delivery systems. Mobile phones are changing market operations through price sharing and can even help herders guide their animals to available pasture. Digital water management systems are emerging here and there.

Digitalisation will have a profound effect on the Sahelian economy and societies, which are currently mainly informal and dominated by the food industry. This trend is already producing important structural changes, and will continue to do so. However, this transformation is reliant on the creation of new digital infrastructures, starting with access to electricity, which will require considerable investment in a region that is currently suffering from a severe shortage of energy. It will also entail training people in these new tools (digital literacy) to ensure that they are properly used.

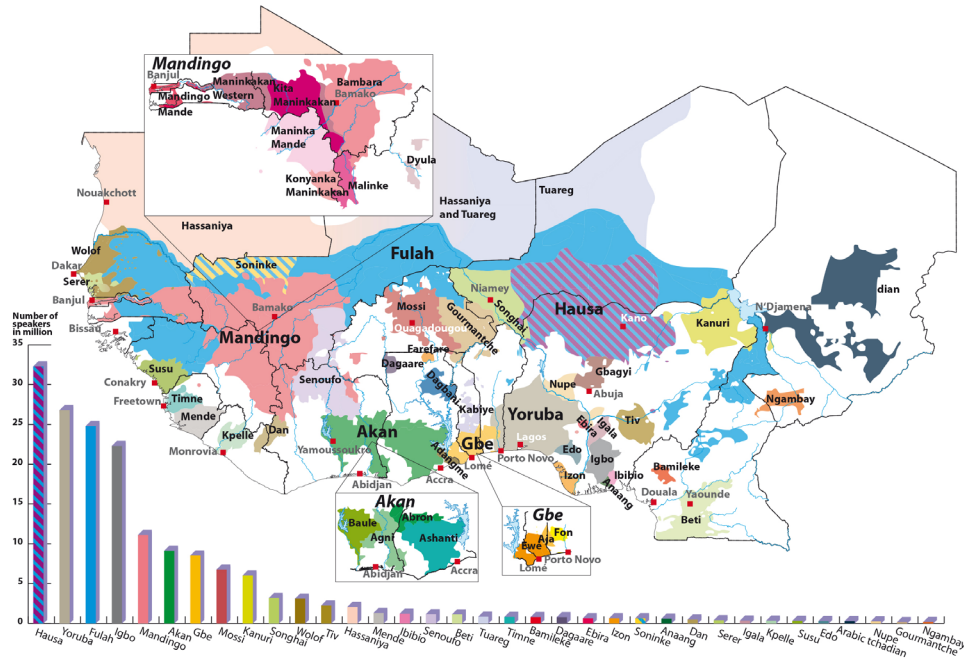
Sahara-Sahel empires and their routes



Source: Retaillé D., *Comment lire le contact Sahara-Sahel* 1989; Retaillé D., *Le contrôle de l'espace : les États sabélo-sahariens* 1989; Retaillé D. et O. Walther, *Guerre et terrorisme au Sahara-Sahel : la reconversion des savoirs nomades* 2011
 Extract: © SWAC/OECD, *An Atlas of the Sahara-Sahel* 2014

West African languages spoken by more than one million native speakers

2005

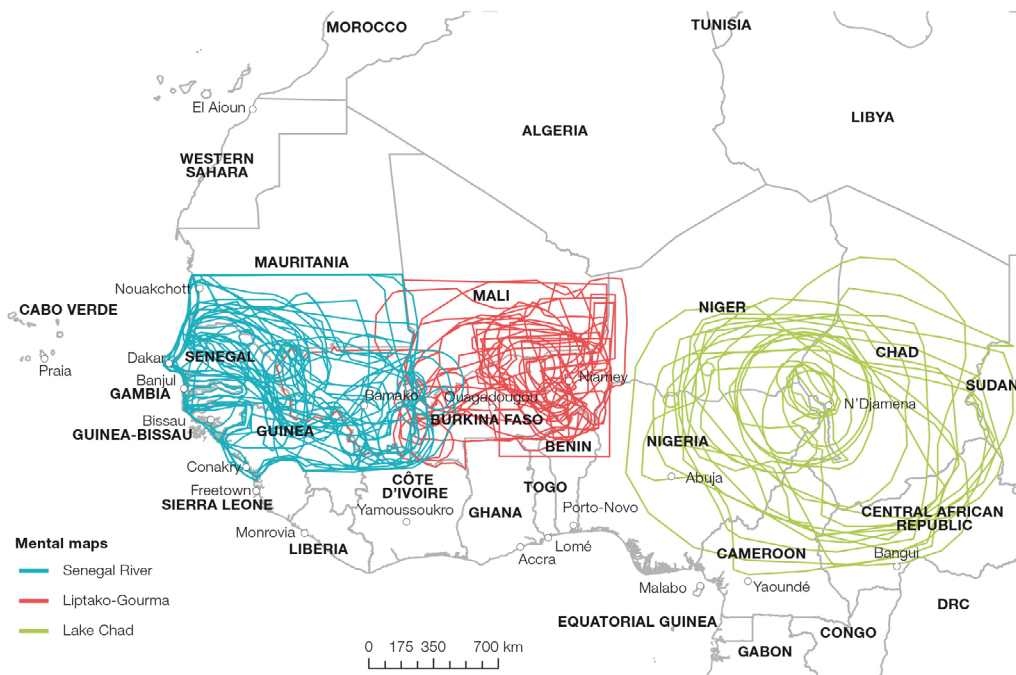


Source: SWAC/OECD; Vienna University; S.I.L. 2005

Created by: Frédéric Ocrisse-Aka

Extract: © SWAC/OECD, *Regional Atlas on West Africa* 2009

Mental maps by locality



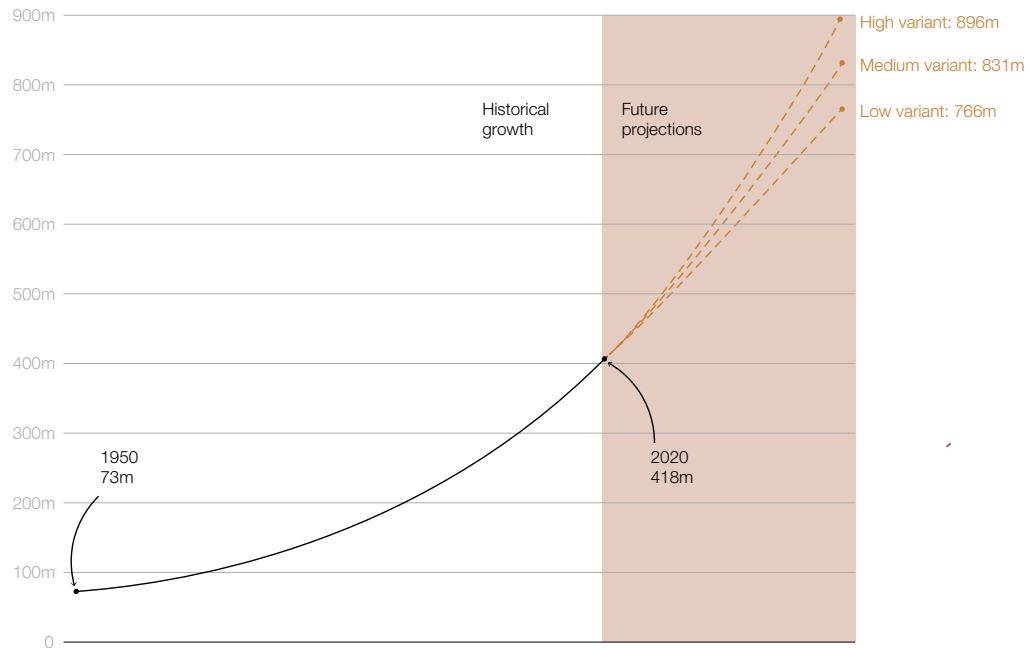
Note: each interviewee draws the boundaries of what they consider to be the priority space for cross-border co-operation

Source: SWAC/OECD

Extract: © SWAC/OECD, *Cross-border Co-operation and Policy Networks in West Africa* 2017

Population growth in West Africa

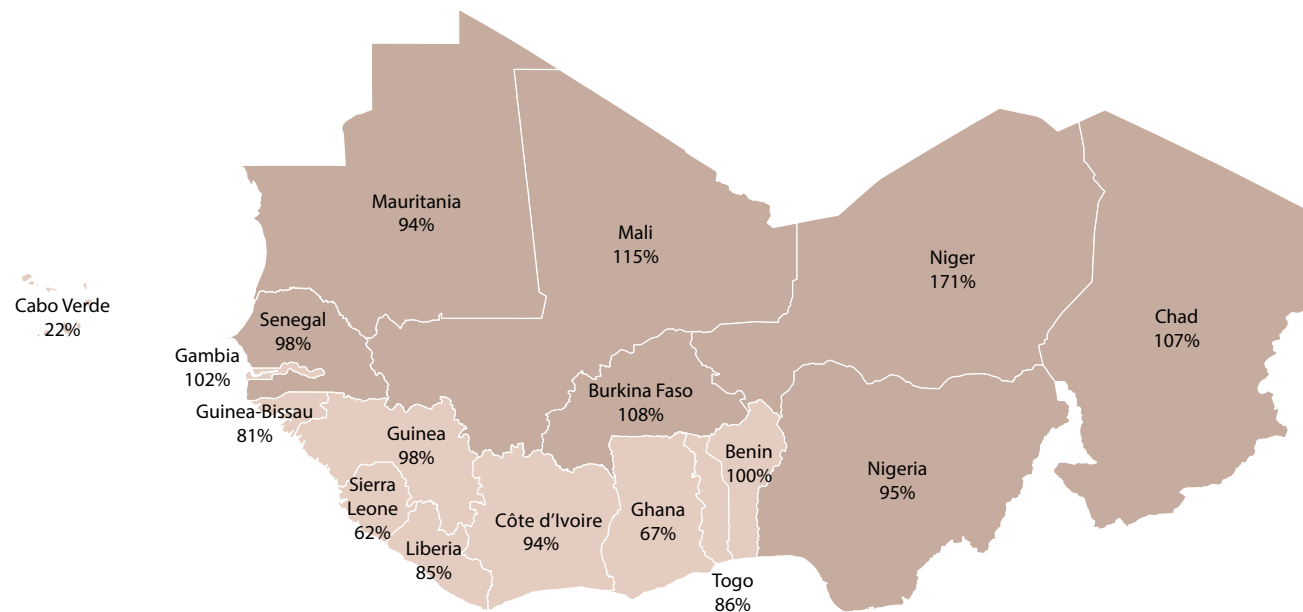
In million



Note: countries included: Benin, Burkina Faso, Cabo Verde, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo
Source: UNDESA, Population Division, World Population Prospects 2019 Revision

Projections of population growth

2020-2050



Source: UNDESA, Population Division, World Population Prospects 2019 Revision

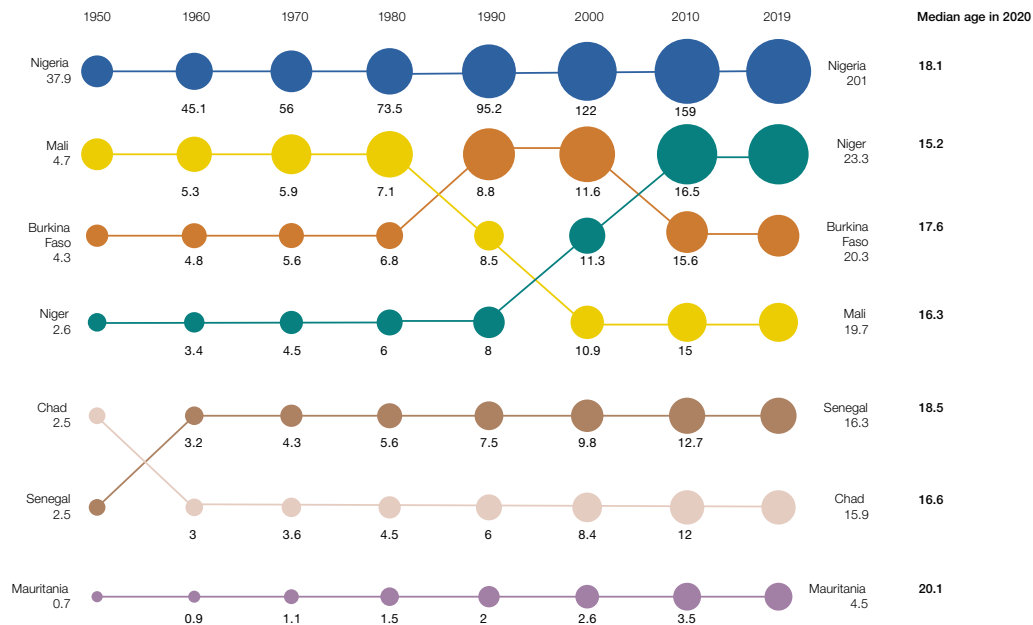
Fertility and school enrolment

COUNTRY	FERTILITY RATE % (2015-20)	BIRTH RATE FOR GIRLS (15-19 YEARS) PER 1 000	PRIMARY SCHOOL NET ATTENDANCE RATE FOR GIRLS % (2010-18)	LITERACY RATE FOR GIRLS (15-24 YEARS) % (2014-18)
CABO VERDE	2.3	73.8	-	98.7
GHANA	3.9	71.8	73.1	92.2
SIERRA LEONE	4.3	112.8	64.9	62.7
TOGO	4.4	89.1	76.4	78.4
LIBERIA	4.4	136.0	32.5	45.6
GUINEA-BISSAU	4.5	104.8	25.7	49.8
MAURITANIA	4.6	71.0	49.3	56.8
CÔTE D'IVOIRE	4.7	117.6	53.2	53.0
GUINEA	4.7	135.3	39.1	37.2
SENEGAL	4.7	72.7	51.5	63.5
BENIN	4.9	86.1	44.1	51.9
BURKINA FASO	5.2	104.3	29.5	54.7
GAMBIA	5.2	78.2	69.3	64.4
NIGERIA	5.4	107.3	70.9	68.3
CHAD	5.8	161.1	23.7	22.4
MALI	5.9	169.1	42.3	43.3
NIGER	6.9	186.5	22.7	35.6

Source: UNDESA, Population Division, World Population Prospects 2019 Revision; UNESCO Institute for Statistics (September 2020 data update)

Evolution of country population and median age

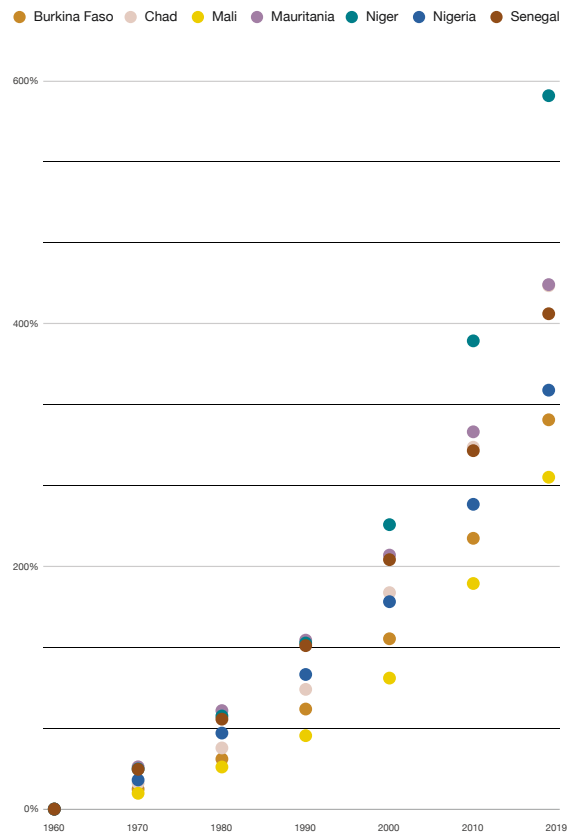
In million



Source: UNDESA, Population Division, World Population Prospects 2019 Revision

Change in population

In % of the population in 1960

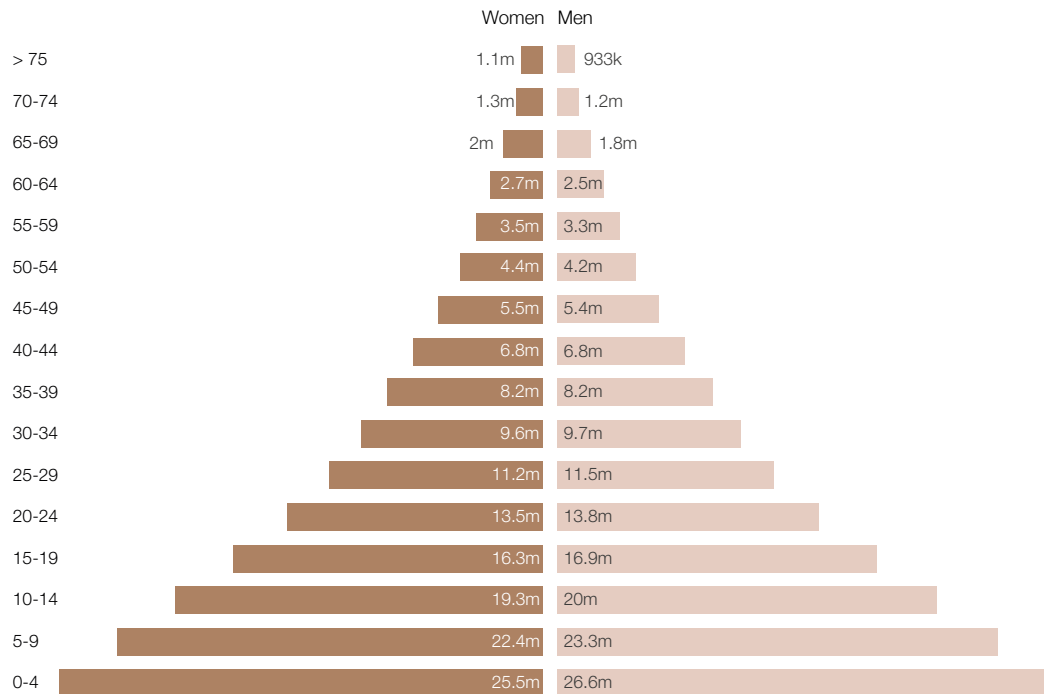


Source: World Bank

Population pyramid in the Sahel

2020

In million



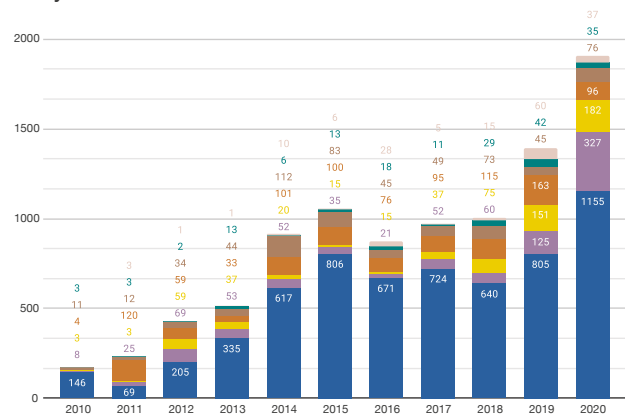
Note: countries included: Burkina Faso, Chad, Mali, Mauritania, Niger, Nigeria and Senegal

Source: UNDESA, Population Division, World Population Prospects 2019 Revision

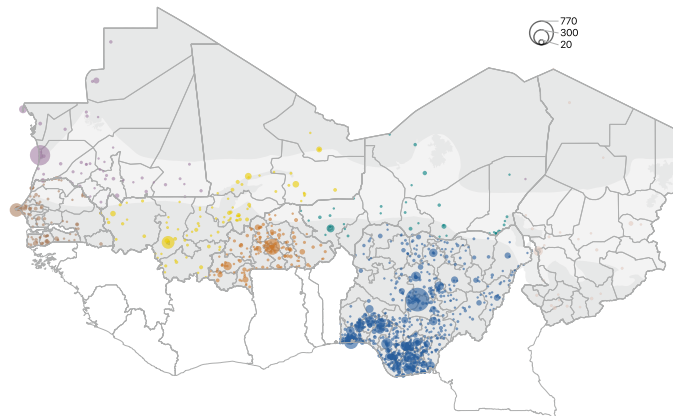
Protests and riots

Chad Niger Senegal Burkina Faso Mali Mauritania Nigeria

Per year



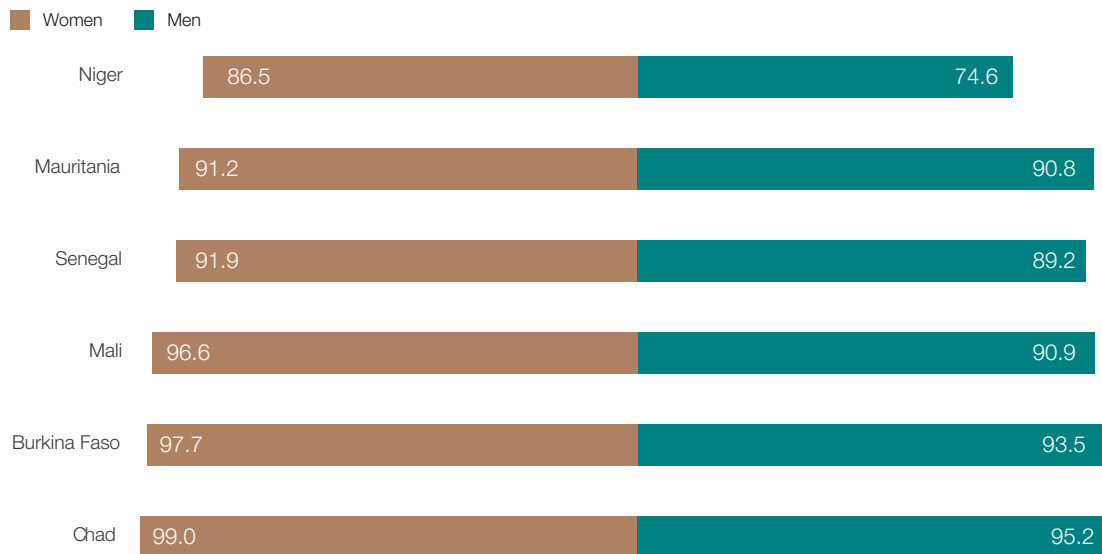
By location (2020)



Source: ACLED

Informal employment rate

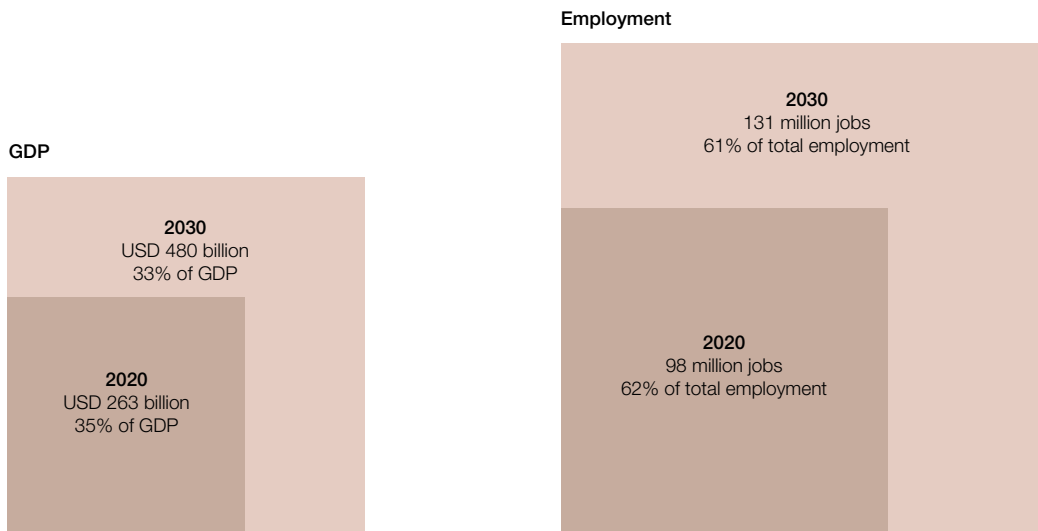
In % of the total employment



Note: latest data available

Source: ILO, ILOSTAT Database, 2021

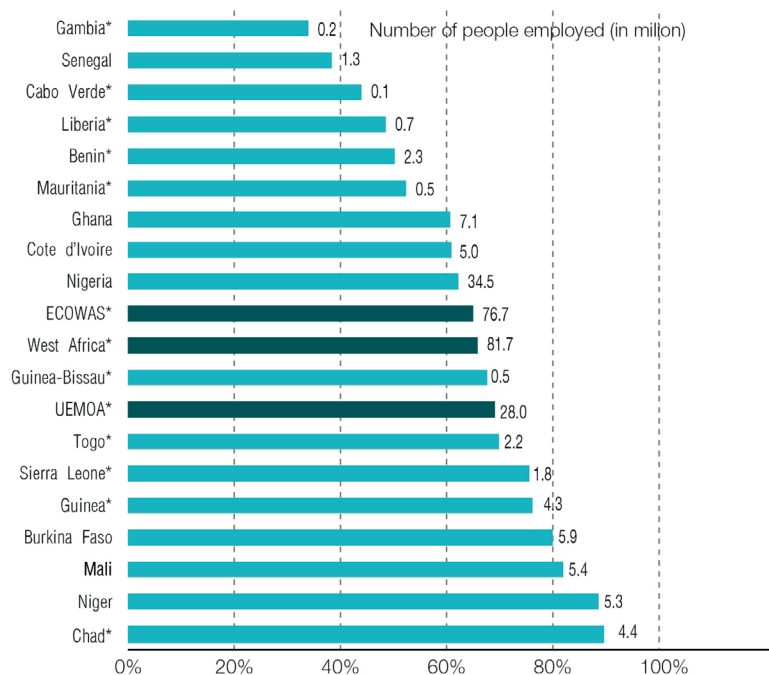
Share of the food economy in West African GDP and employment



Source: SWAC/OECD, 2020

Share and number of people employed in the food economy

2015



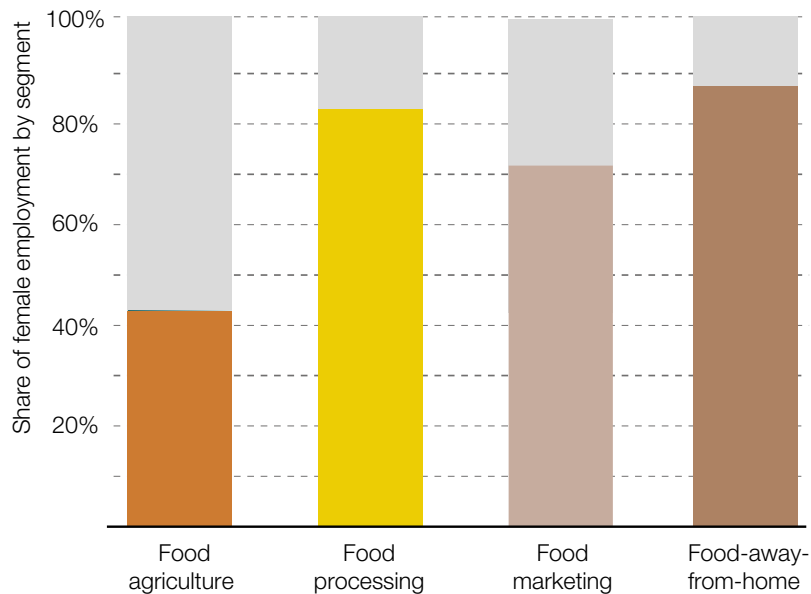
Note: *modelled data; ECOWAS and UEMOA

Source: Allen, T et al.

Extract: © SWAC/OECD, *Agriculture, Food and Jobs in West Africa* 2018

Share of women's employment by food economy segment

2012-2015



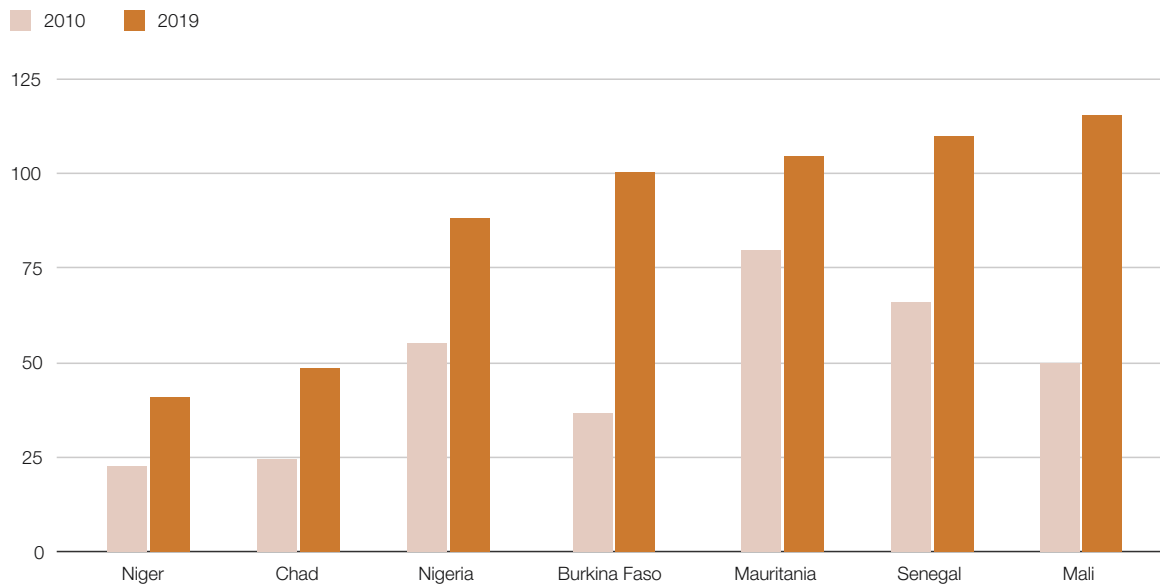
Note: countries included: Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, Nigeria and Senegal

Source: Allen, T et al.

Extract: © SWAC/OECD, *Agriculture, Food and Jobs in West Africa* 2018

Mobile cellular subscriptions

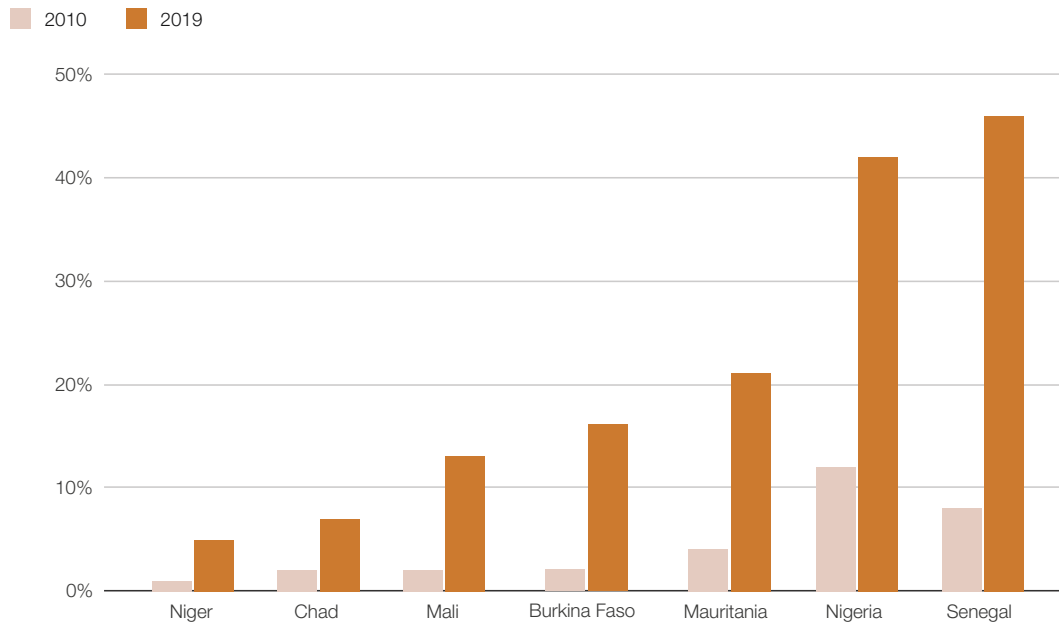
Per 100 people



Note: values over 100 could be indicative of degree to which users have multiple mobile subscription accounts
Source: ITU, World Telecommunication/ICT Indicators Database (via World Bank portal)

Population using the internet

In % of the population

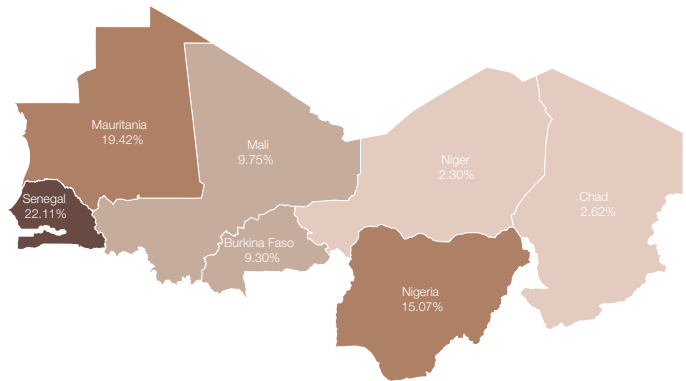
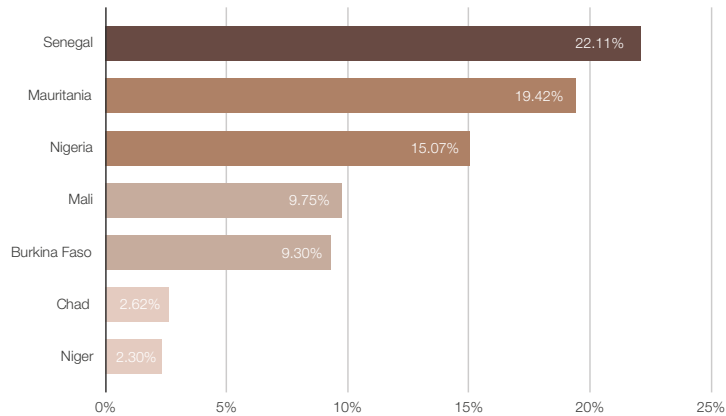


Source: ITU

Facebook subscribers

2021

In % of the population

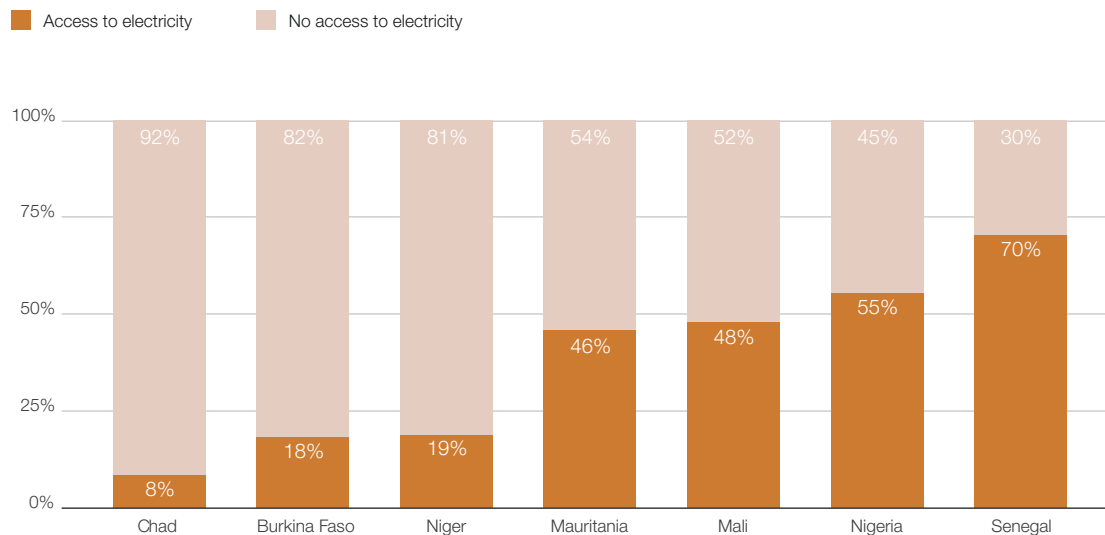


Source: Internet World Statistics (IWS)

Access to electricity

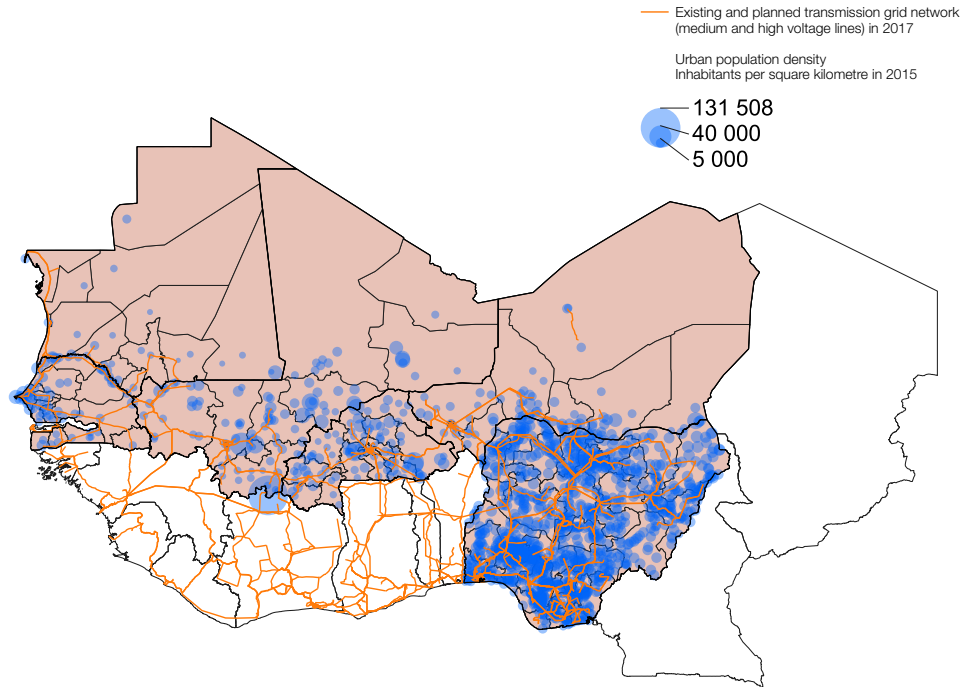
2018

In % of the population



Source: World Bank

Electricity Transmission Network in West Africa



Source: ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE),
WAPP GIS Database; SWAC/OECD; Natural Earth

Interconnected vulnerabilities

Climate

The Sahel is on the list of global hot spots highly sensitive to climate change. Delta areas and semi-arid regions are particularly affected. Projections suggest that, by 2040, climate change could result in annual losses equivalent to 2–4% of GDP in Sahelian countries.

There is almost certain to be a significant rise in temperature. According to the IPCC (Intergovernmental Panel on Climate Change), it could be around 4°C – much higher than the global average – and probably focused on inland areas in the western Sahel.

It is currently difficult to predict the magnitude and duration of changes to rainfall. Although it appears that the western Sahel is becoming drier and the eastern Sahel wetter, forecast models do not agree. On the contrary, the IPCC and Agrhymet / Permanent Interstate Committee for Drought Control in the Sahel (CILSS) state that it is inevitable there will be increased rainfall variability with alternating wet and dry years and an increase in the frequency

and intensity of extreme hydroclimatic events. The succession of unpredictable and intense weather events is expected to have a negative impact on the livelihoods and food and nutrition security of the most vulnerable. Women responsible for “reproductive labour”, managing supplies of water, fodder and timber, could be particularly affected.

Climate change could also affect migration trends and contribute to social unrest and political instability.

Violence

Between 2011 and 2019, the number of violent events in West Africa increased from 581 to 2 617 and the number of victims from 3 360 to 11 900. In 2020, the number of victims of violent attacks in Burkina Faso, Mali and Niger increased by 30% over the previous year, reaching record levels.

Violence is driven by many socio-political, economic and cultural factors. It also feeds on feelings of injustice (real or perceived) specific to

each country and, in many cases, specific to local, often cross-border, areas. The inability of states to control their territory has allowed violent extremist organisations, militias and secessionist rebel groups to flourish. Few countries are spared from these waves of violence that know no borders. Cross-border areas, such as Liptako-Gourma and the Lake Chad Basin, are particularly affected: 40% of violent events and deaths are recorded within 100 km of a land border; 10% of victims of political violence recorded since 1997 were within 10 km of a national border.

Military interventions have resulted in only short-lived respite. After a decrease in the intensity of violence, these interventions have generally been followed by a resumption of more intense but also more diffuse insurgent activity. This is the case in Mali, the theatre of Operation Serval (Operation Barkhane since 2014) and of the G5 Sahel Joint Force. It is also the case in the Lake Chad region, where the Multinational Joint Task Force involving Nigeria and its neighbouring countries has been operating since 2015.

While it is impossible to predict the future of violence and conflict, we can nevertheless be sure that some of the underlying causes of current insecurities will persist over the coming decades. In particular, there will be much greater strain upon natural resources and the means of accessing them, due to population growth. At the same time, states are unlikely to have significantly more human and financial resources available to enforce law and order than they do now.

Humanitarian aspects

Growing insecurity in rural areas is affecting already vulnerable populations. There is now more violence against civilians than there is due to fighting between the government and armed groups. This violence is also affecting local economies and therefore livelihoods. For the past six years, the Diffa region of Niger has been under a state of emergency with a curfew, a ban on motorcycle traffic and on growing and exporting peppers and fish, the closure of some weekly markets, and the rationing of oil and chemical fertilisers. Since 2017, this has also covered some departments in the Niger regions of Tillabéri and Tahoua.

The deteriorating security situation makes life particularly difficult for women. In conflict zones,

they are explicitly targeted for attacks, abduction, rape and sexual exploitation. They are also used by certain extremist organisations to promote their objectives and to recruit new members.

The number of refugees and displaced persons is rocketing. In the space of one year (2019–2020), there has been a fourfold increase in the number of people displaced in the central Sahel due to armed violence. In Burkina Faso, nearly 1 million people were internally displaced in 2020 – 1 in 20 or 5% of the country's population. Mali recorded 332 957 internally displaced persons at the end of 2020, a level comparable to June 2013 (the year France began its military engagement and the United Nations mission was deployed to Mali). In 2019, the Diffa region of Niger recorded 461 323 persons in need for humanitarian assistance out of a total population of 738 000, according to figures from the *Direction régionale de l'état civil* (DREC). These included 120 000 refugees, mostly Nigerians, 104 000 displaced people and 26 000 returnees, as well as a significant number of host populations. In Nigeria, the Boko Haram insurgency has displaced nearly 2 million people. The Nigerian refugee crisis, now a regional crisis, is entering its seventh year. In 2019, the Lake Chad Basin was accommodating 3.4 million displaced people. At the end of 2020, the Office

of the United Nations High Commissioner for Refugees (UNHCR) estimated that there were 304 000 Nigerian refugees in the three neighbouring countries of Cameroon, Chad and Niger.

As a result, the humanitarian situation is deteriorating. In the short term, the Sahelian countries and their partners will have no choice but to make considerable efforts to respond to the emergency and avoid an increased sense of frustration and abandonment among a growing segment of society. Currently, with half the population already living in deprivation, 29 million Sahelians – the highest number ever recorded – are in need of humanitarian assistance and protection, according to the United Nations. This is 5 million more than in 2020. Between 2016 and 2020, the average funding gap for the Humanitarian Response Plans of Sahelian countries stood at 43%, even including partner support. At the end of 2020, at a ministerial round table on humanitarian aid for the central Sahel, 24 donors pledged a total of USD 1.7 billion, out of the USD 2.4 billion requested by the United Nations.

Nutrition

For many decades, the number of people suffering from malnutrition – chronic or circumstantial

– has been increasing, even if as a proportion of the total population it is decreasing. Since the famines of 1972–73 and 1984–85, the prevalence of undernutrition has declined overall in West Africa, from 24% in 1990–92 to 14.7% in 2017–19. Fast population growth is masking the efforts made and the positive achievements in this area.

Since the 2010s, the security factor has been added to the complex equation of hunger and malnutrition. Civil insecurity is a major reason for Sahelian populations experiencing the most severe food crisis in decades. People in need of food assistance are concentrated in the cross-border regions of Liptako-Gourma and the Lake Chad Basin, which are particularly affected by insecurity. In the tri-border zone (between Burkina Faso, Mali and Niger), more than 2.7 million people are currently in crisis and beyond (phases 3-5) and one in four are dependent on food aid. Northern Nigeria alone has an estimated 12.8 million people in need of immediate food assistance – 47.4% of the total in West Africa.

At its meeting in April 2021, the Food Crisis Prevention Network (RPCA) announced that the region must prepare, for the second year in a row, for another major food and nutrition crisis that could affect nearly 27.1 million people in

the next lean season (June to August 2021), if appropriate measures are not taken – representing 3 times more people than in 2019. According to the World Health Organization (WHO), the prevalence of global acute malnutrition already exceeds the high threshold of 10% in several Sahelian countries. An additional 67 million people, currently under food pressure (phase 2), could fall into crisis during this lean season – a new peak for the region.

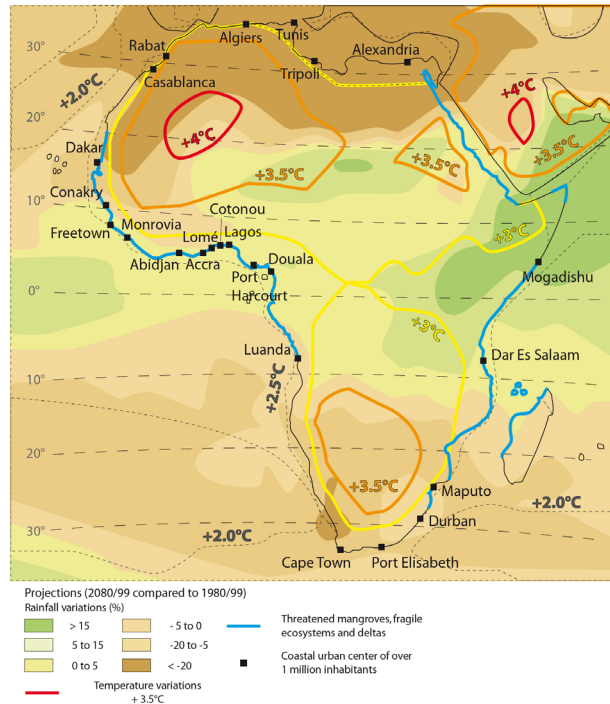
Yet, the region regularly sets records for agricultural production. West Africa recorded a good agropastoral season in 2020/21, with increased production of cereals (estimated at 74.3 million tonnes) and tubers (194.9 million tonnes), and surplus production of fodder. However, this performance is likely to be undermined by several factors: insecurity hindering access to fields and pastures; economic shocks, notably inflation, which leads to higher prices; Covid-19 measures preventing markets from functioning and restricting pastoral mobility; and climate variability affecting harvests, such as the heavy floods during the 2020 and 2021 rainy seasons.

Food and nutrition insecurity, which is more prevalent and better recorded in rural areas, is gaining ground in cities. In 2018, 110 million people in West Africa did not have a good diet, including 52 million who were overweight or

obese (mostly in cities). In Burkina Faso, the obesity rate has risen by 1 400% over the past 36 years. This dietary imbalance, caused by new eating habits and a sedentary lifestyle, is causing an epidemic of diabetes and cardiovascular disease. The latest figures from the Global Nutrition Report show anaemia in 50% of women of reproductive age, and obesity in 13% of women in West Africa, resulting in a double burden of malnutrition.

There is great uncertainty as to how the food and nutrition situation will develop in the future. There may be peaks or lulls, depending on factors such as climate events, insecurity level, world agricultural prices, locust invasions or health crises. Population resilience, i.e. the capacity to bounce back from a shock and adapt to change, must be a key focus of long-term public policies. In the short and medium term, we are likely to see a continuation of the trends over the past decades (a relative reduction or absolute stagnation in undernutrition along with an increase in obesity and overweight).

Climate change in Africa

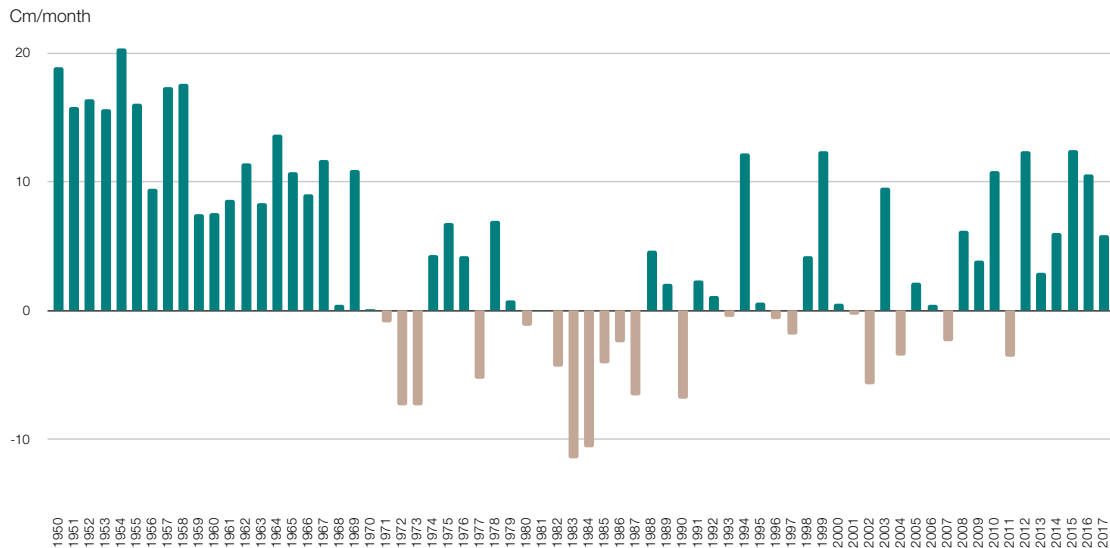


Source: IPCC, *Atlas de l'environnement* 2007

Extract: © SWAC/OECD, *Regional Atlas on West Africa* 2009

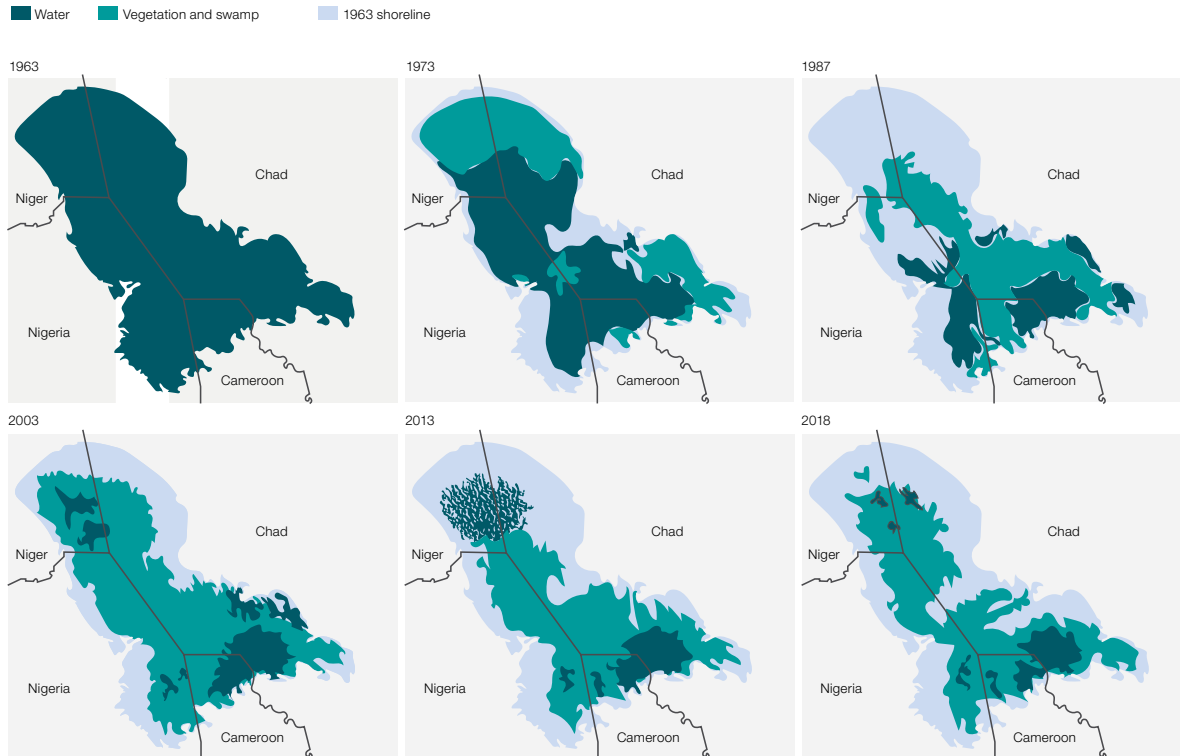
Precipitation anomalies in the Sahel

1950-2017



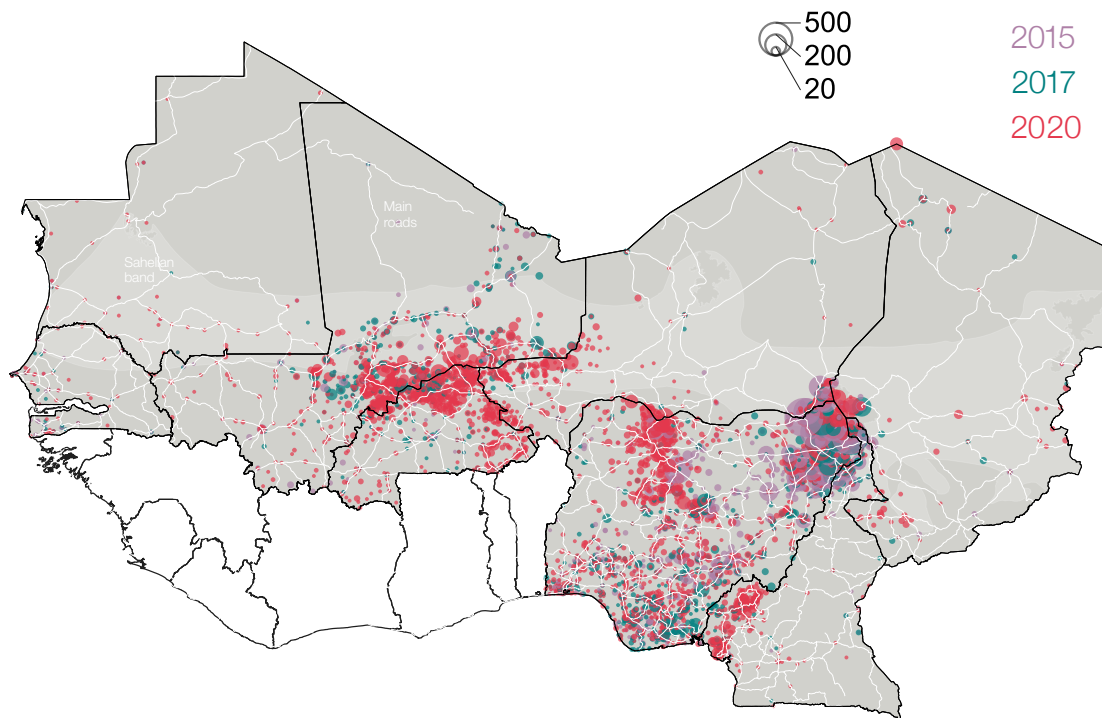
Note: averages are in 0.1 mm, so “-5” is -0.05 cm precipitation anomaly with respect to 1980-2009;
here Sahel corresponds to the geographic region 20-10°N, 20°W-10°E
Source: JISAO (University of Washington)

Changes in Lake Chad's surface area



Source: USGS, EROS Center (Argon and Landsat satellite imagery)

Fatalities by location

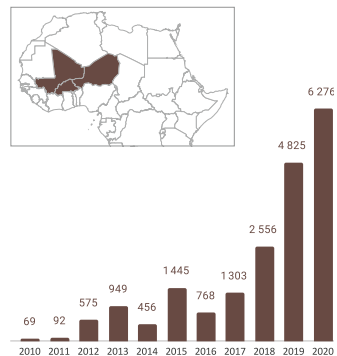


Note: fatalities from politically-motivated violence
Source: ACLED; Natural Earth

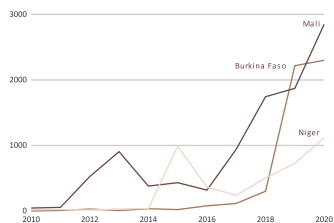
Reported fatalities in Western Sahel countries

2010-2020

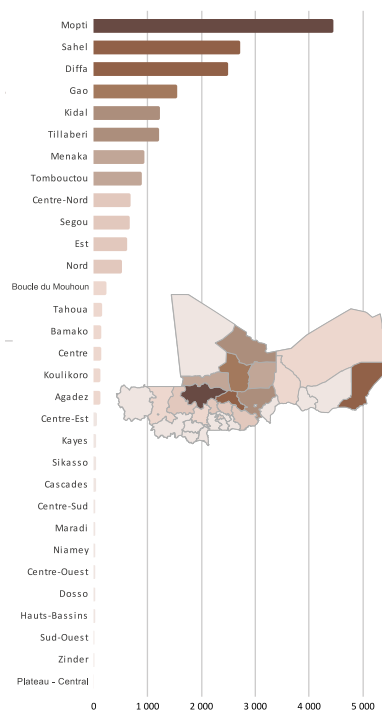
Regional



Country



Subnational (Admin 1)



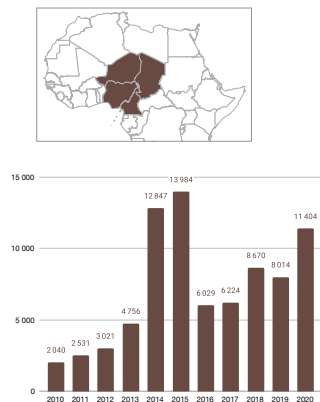
Note: fatalities include state and non-state combatants as well as civilians

Source: ACLED

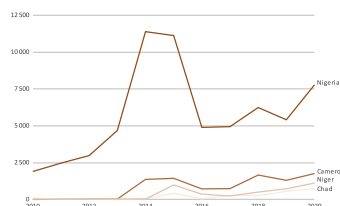
Reported fatalities in Lake Chad Basin countries

2010-2020

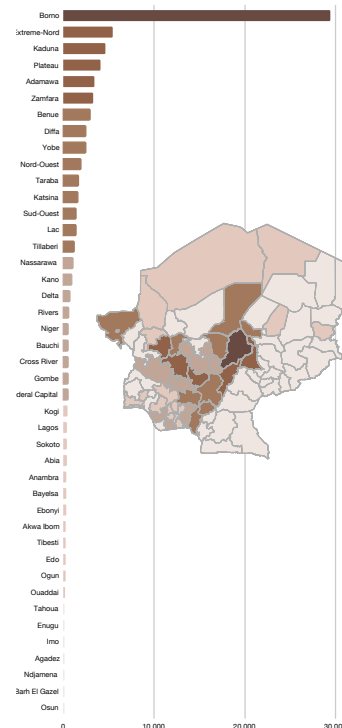
Regional



Country



Subnational (Admin 1)



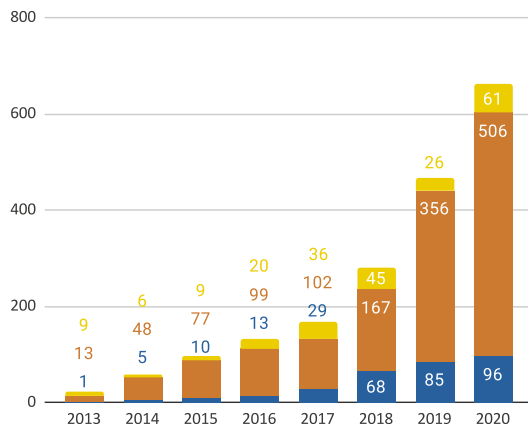
Note: fatalities include state and non-state combatants as well as civilians
Source: ACLED

Jihadi attacks against security forces

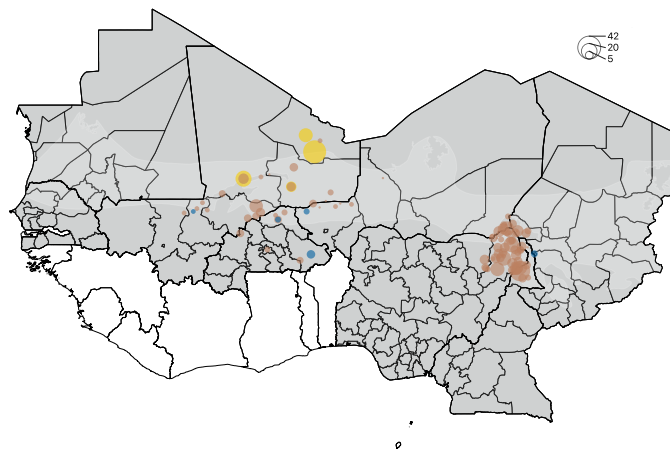
2013-2020

Military forces Police forces International military forces (MINUSMA, France, US)

Per year



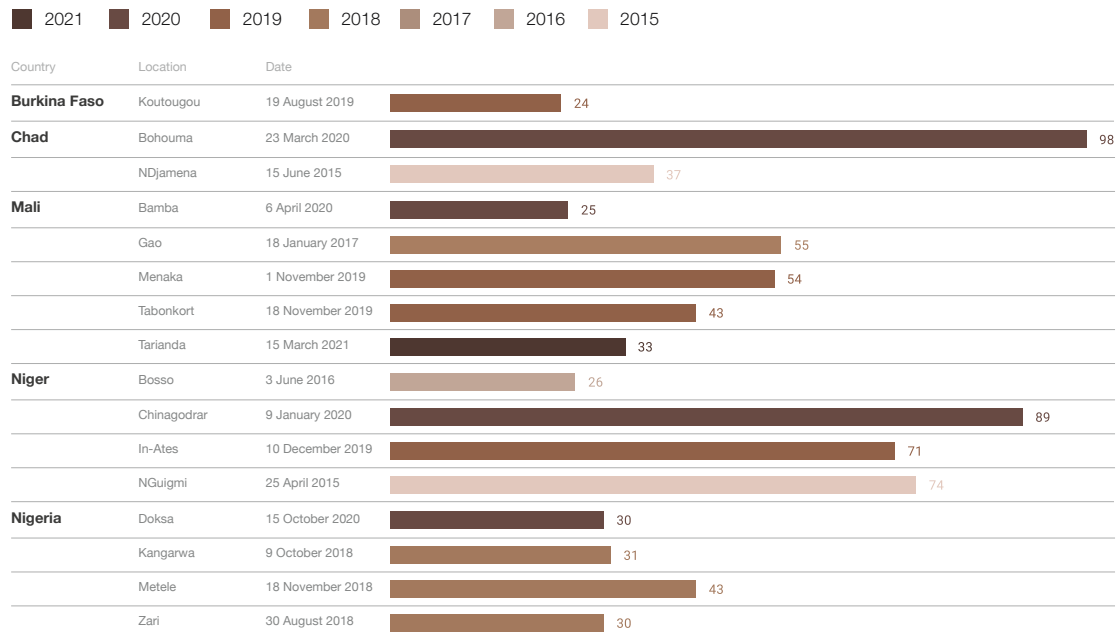
By location



Note: one-sided attacks on security forces attributed to jihadi groups

Source: ACLED

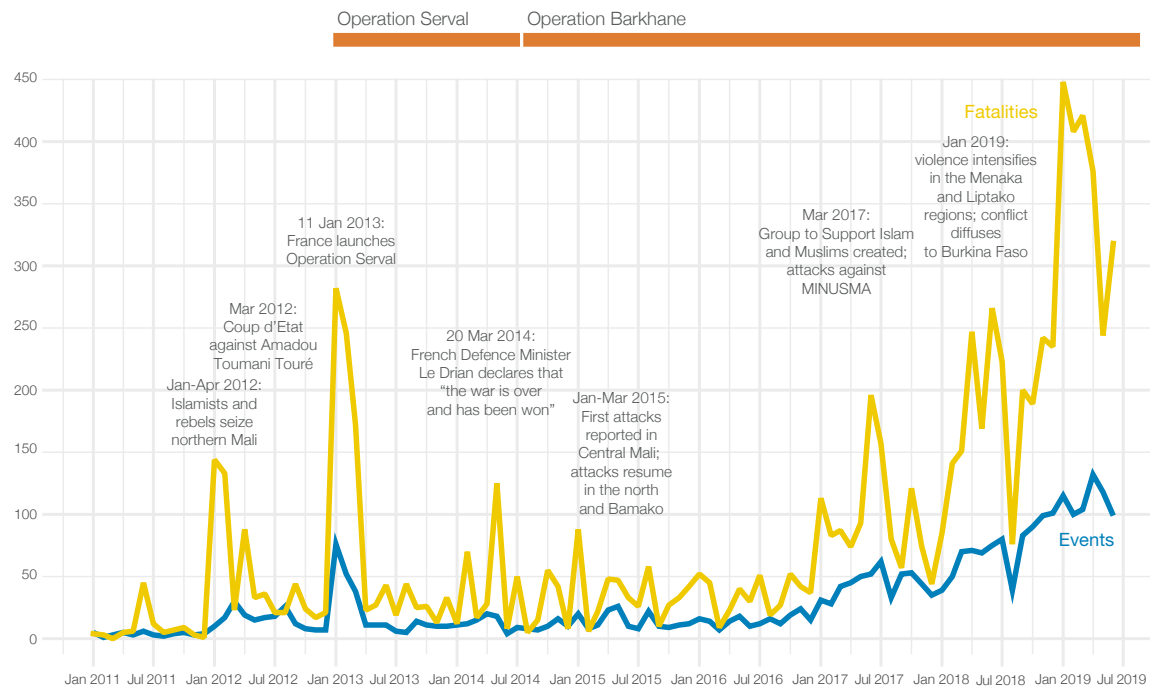
Jihadi attacks against military forces where more than 20 soldiers were reportedly killed



Source: ACLED

Violent events and fatalities in Mali and Central Sahel

2011-2019



Source: SWAC/OECD based on ACLED

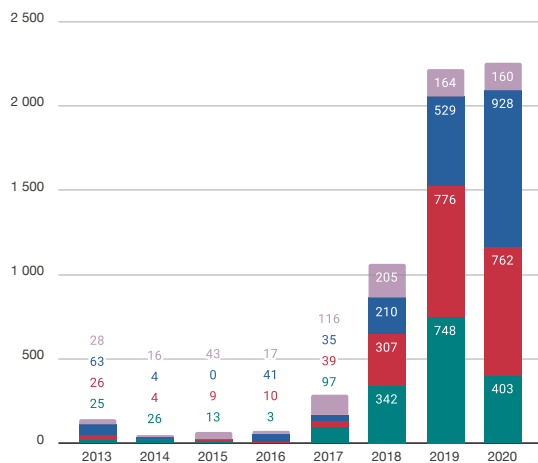
Extract: © SWAC/OECD, *The Geography of Conflict in North and West Africa* 2020

Civilian fatalities by attributed perpetrator in the Liptako-Gourma

2013-2020

Unidentified Communal militias Jihadi groups State security forces

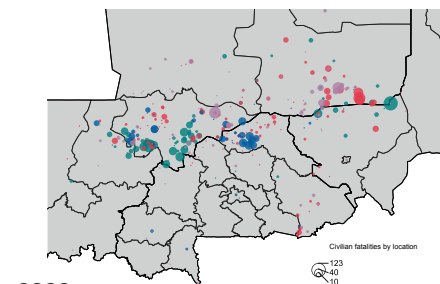
Regional



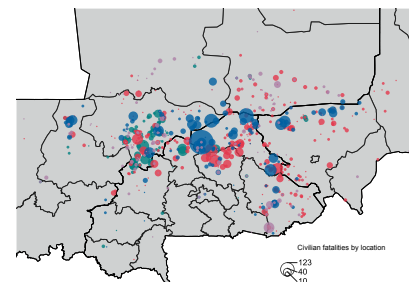
Note: civilian deaths from direct and indirect (i.e. explosives) violence; bar chart is countrywide for Burkina Faso, Mali and Niger; maps display only the area known as Liptako-Gourma

Source: ACLED

Liptako-Gourma zoom-in



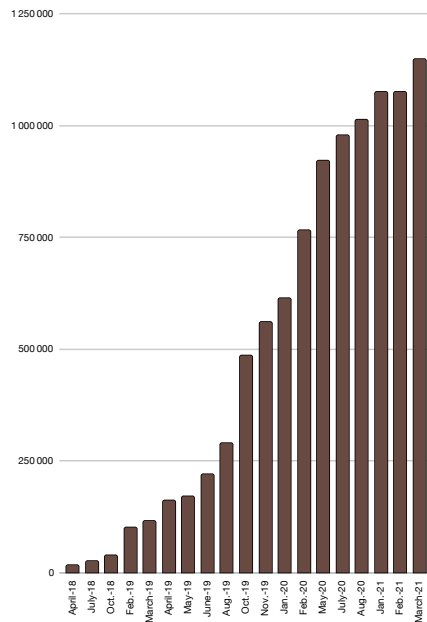
2020



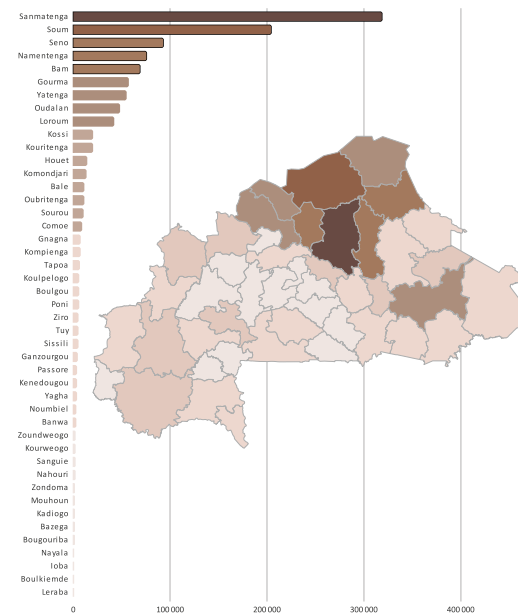
Internally Displaced Persons (IDPs) in Burkina Faso

2018-2021

Nationwide



By province (Admin 2) in March 2021



Source: UNHCR (trend data); CONASUR/OCHA (province-level data)

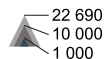
Internally Displaced Persons (IDPs) within Nigeria and reason for displacement

2021

Total IDPs

2 184 254

IDPs by site



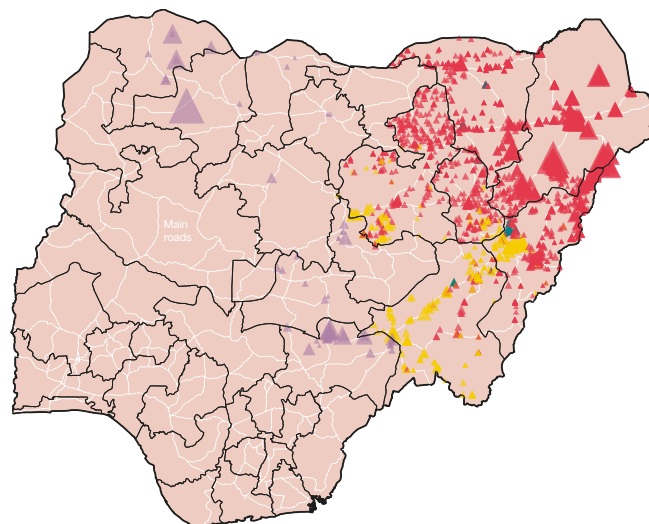
Main reason for displacement by site*

Insurgency

Communal clash

Armed banditry and kidnapping

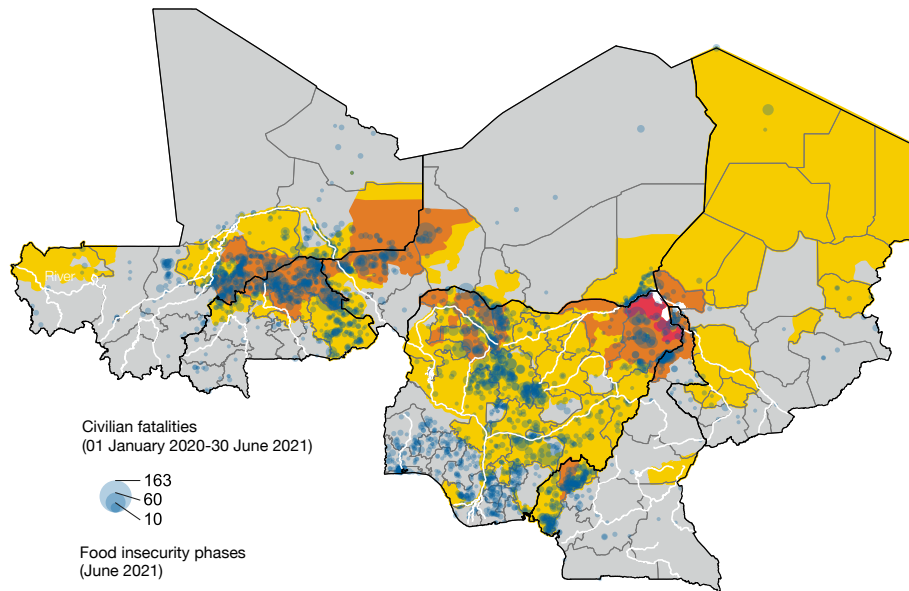
Natural disaster



Note: *as reported by surveyed IDPs interviewed and categorised by IOM
Source: DTM IOM (May 2021)

Food insecurity and violence

2020-2021



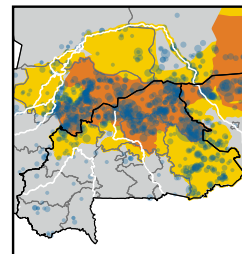
Civilian fatalities
(01 January 2020-30 June 2021)



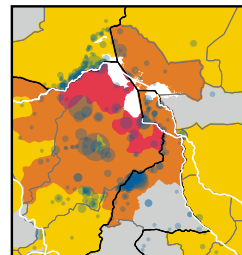
Food insecurity phases
(June 2021)



Liptako-Gourma zoom-in

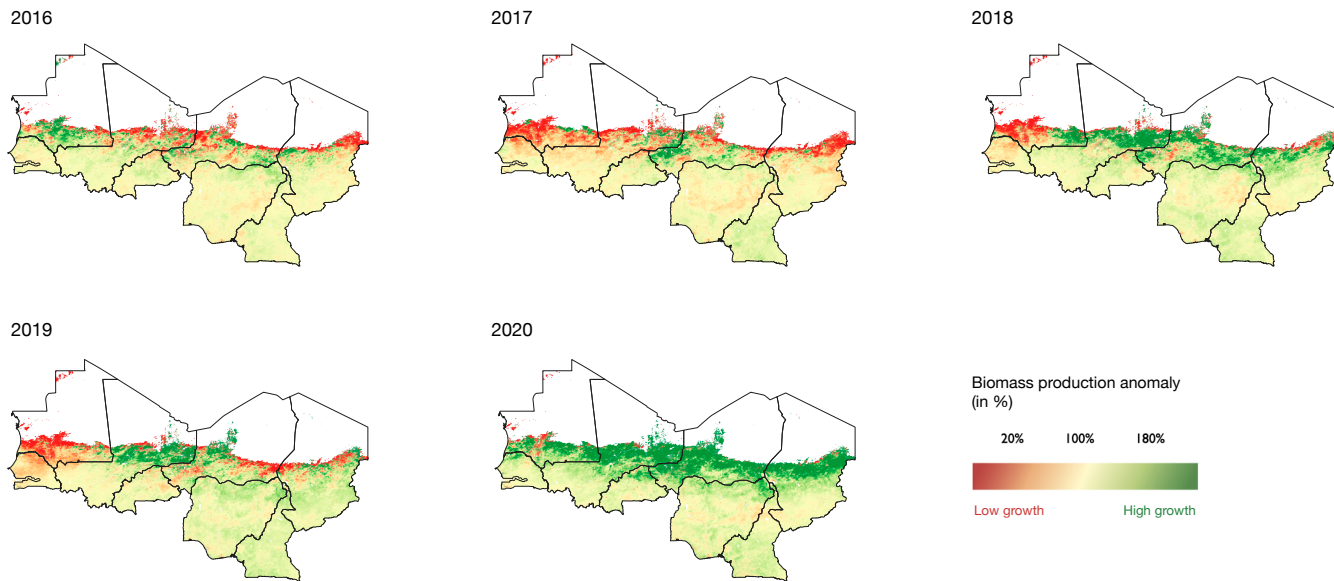


Lake Chad Basin zoom-in



Source: ACLED; FEWS NET

Biomass

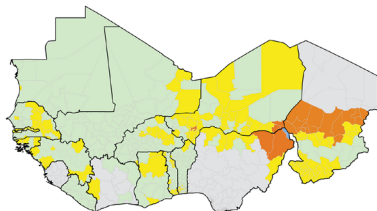


Note: biomass production anomaly is the difference between the biomass productivity of the year and the mean value calculated for the whole period (in this case 1999-2020)

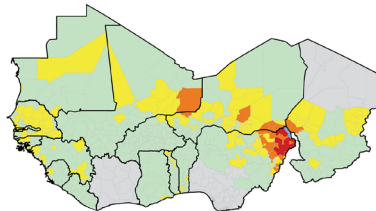
Source: Copernicus Land Service, Earth Observation Programme of the EU; ACF

Food and nutrition situation

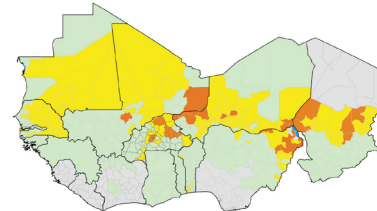
2016



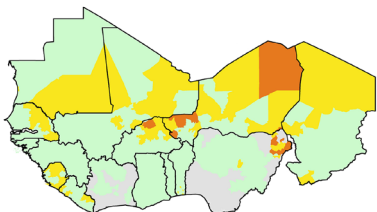
2017



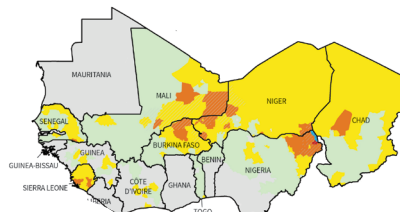
2018



2019



2020



Food insecurity phases (March-May)

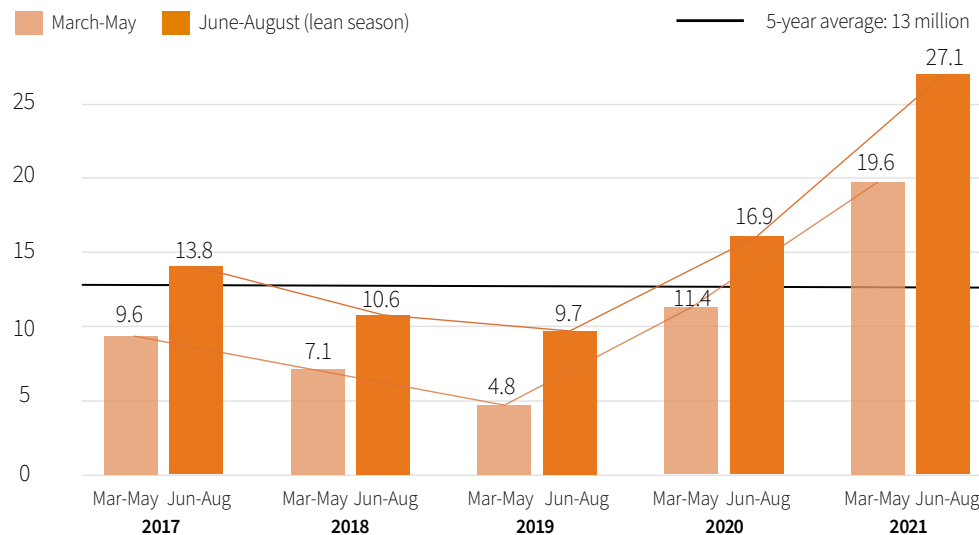
- Minimal
- Stressed
- Crisis
- Emergency
- Not analysed

Source: *Cadre harmonisé*
Created by: CILSS/AgPhymet
Extract: © RPCA

Food and nutrition trends in the Sahel and West Africa

2017-2021

In million



Note: number of people in “Crisis” or worse situation (phases 3-5); countries included: Benin, Burkina Faso, Cabo Verde, Chad, Côte d’Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo

Source: *Cadre harmonisé*

Created by: © SWAC/OECD, 2021

Reconfigured territories

Urbanisation

Nearly 50% of West Africans now live in cities. Twenty years ago, this proportion was 35%, and in 1960 it was less than 20%. Within the next two decades, this is expected to rise to 60%.

Within a generation, Mali, Mauritania and Senegal will become predominantly urban and Burkina Faso will approach rural/urban parity, whereas Niger and Chad will remain predominantly rural. The combined urban population of these countries is expected to increase by a factor of 2.3 between 2020 and 2040. In Nigeria, 65% of the population will live in urban areas by 2040 and almost 70% by 2050.

Agglomerations have developed as a result of migration to cities and natural population growth. Population growth is now by far the main driver of urbanisation. This is particularly true in the Sahelian region where, according to the Africapolis database, the rapid growth of villages is giving rise to many small agglomerations. Where there is little or no rural exodus, urbanisation is instead happening in situ.

Small and medium-sized towns are growing faster than capitals and other large cities. In 2015, Niger had 143 rural towns with populations ranging from 5 000 up to 10 000. By 2020, 29 of these had passed the 10 000 population threshold – an average of six per year between 2015 and 2020. This can be seen in the rapidly developing network of cities that are increasingly close together.

These new agglomerations are both rural and urban in character. Their economy is predominantly agrifood-based and they drive activity in their rural hinterland, providing both a market and a service centre. They create a market for the agrifood economy, along with increasingly long value chains that generate non-agricultural activities and jobs. Within these new agglomerations, women's empowerment and the fertility transition are accelerating, while costs for accessing basic social services are reducing.

In addition, the rapid development of small agglomerations is effectively creating a network across the territory, which could make these services more accessible to the majority of the rural

population who are far from the major urban centres. Moreover, contrary to popular belief, the presence of dense human agglomerations does not preclude the presence of vegetation. In the Sahel, urban areas are those recording the highest levels of vegetation (for example, Tchadoua in Niger, where the population more than doubled between 2000 and 2015).

The urban shift in the Sahel – one of the strongest anywhere in Africa or the world – will be accompanied by ongoing growth in the rural population, although at a slower rate than the overall population (an increase of around 50% by 2040).

For decades, the densification of rural settlements has been observed to take place mainly in the vicinity of urban centres. This will doubtless continue, resulting in increased pressure on natural resources.

If public policies are to respond effectively to the needs of the population, they will have to adapt to this rapid reconfiguration of the people and territories, as well as to the resulting changes in power.

Table 2. Changes in number of agglomerations with more than 10 000 inhabitants in Sahelian countries

Country	1960	1970	1980	1990	2000	2010	2015
Burkina Faso	4	6	16	30	53	77	101
Mali	5	14	18	24	42	79	94
Mauritania	0	4	7	15	12	20	23
Niger	4	6	10	24	37	48	68
Nigeria	210	310	478	583	784	1 013	1 236
Senegal	9	13	27	36	45	59	74
Chad	4	9	14	25	36	70	93

Source: Africapolis, Geopolis, 2018

Mobility

West Africa has always been an area of high human mobility and cultural mixing. In the Sahel, mobility is a resilient response to the harsh environment. For thousands of years, there has been trading across the Sahara and towards the coast, seasonal migration of agricultural workers during the dry season, and engagement in transhumant pastoralism. In 2015, livestock trade and exports in the ECOWAS region were officially worth USD 800 million.

This mobility is also manifested in migration towards coastal countries. Over time, migration pairings have developed between, for example, Burkina Faso and Côte d'Ivoire, Côte d'Ivoire and Mali, Niger and Nigeria, and Mauritania and Senegal. These pairings are based in particular on cross-border ethnolinguistic similarities: Hausa

(Niger and Nigeria), Senufo (Burkina Faso, Côte d'Ivoire and Mali) and Mandingo (Burkina Faso, Côte d'Ivoire, Guinea, Mali and Senegal).

This type of migration is poorly understood in official statistics, although they do show it taking place mainly within the region, and accounting for 90% of total migration.

International migration from Sahelian countries will continue unless politically constrained (such constraints would be in conflict with the Protocol on the Free Movement of Persons, Right of Residence and Establishment in the ECOWAS region). It may increase at least as fast as the population (at least doubling in 20 years). Migration is expected to continue to grow mostly within West Africa and the wider African continent, although since 1990 the proportion migrating to

other destinations (America, Asia and Europe) has continued to increase.

As regional mobility is part of the DNA of the Sahel and West Africa, it will remain a key economic and policy issue. In Sahelian countries that are still predominantly rural and agricultural, regional mobility will continue to be a vital necessity. This was demonstrated by the recent disastrous impact that border closures due to the pandemic had on transhumance, food trade and seasonal migration. In dialogue between Africa and Europe, these issues will continue to be discussed in terms of illegal migration to Europe. They will be at the heart of the debate between those who believe that a perfectly integrated and fluid West African space will be more prosperous and those who advocate short-termist policies based on a fear of mobility.

Integration

In the Sahel, communication and exchange are vital links that have been driving regional integration for decades and have formed a basis for many institutional initiatives.

In 1975, the countries of West Africa joined together to form a Regional Economic Community (REC), ECOWAS, with a view to creating an economic and monetary union that would increase their trade and integrate them into global value chains. This community now has 15 member states (it excludes Chad and Mauritania). Africa's RECs are designed to facilitate policy harmonisation and form a bridge between the national and continental levels. They are essential players in intra-African trade, by allowing for economies of scale and ensuring better access to domestic markets. In 2016, only 11.5% of ECOWAS trade was officially conducted on an intraregional basis. These figures seriously underestimate the true picture for informal trade, which is the real engine of economic integration. The Africa Regional Integration Index (ARII) gives ECOWAS a good score in terms of free movement of people and trade between member countries, despite its low score in terms of productive and infrastructural integration.

The seven Sahelian countries considered here all belong to the Community of Sahel-Saharan States (CEN-SAD), which was established in 1998. This regional organisation is officially recognised by the African Union (AU) as one of the continent's eight RECs. After a few years of inactivity, CEN-SAD intends to relaunch, having moved its executive body from Tripoli to N'Djamena in early 2020.

The African Continental Free Trade Area (AfCFTA), which entered into force in 2019 at an Extraordinary Session of the AU Heads of State and Government in Niamey, hopes to become the largest free trade area in the world. It represents 1.3 billion consumers and over USD 3 trillion in combined GDP. Following delays due to Covid-19, the operational launch of the AfCFTA was finally announced in early 2021. The AU is counting on the help of the RECs to achieve this ambitious continental integration. Other existing regional and sub-regional bodies and initiatives could provide valuable assistance based on their specific expertise: the Lake Chad Basin Commission (established 1964) for sustainable and equitable management and preservation of lake ecosystem resources; the Permanent Interstate Committee for Drought Control in the Sahel (CILSS, established 1973) for food security and natural resource management; the West African

Economic and Monetary Union (UEMOA, established 1994) for economic and monetary union; and the G5 Sahel (established 2014) for the security-development nexus, among others.

Driven by the relentless densification of regional and border settlements and by cross-border trade and migration, there will be even greater need for interstate cooperation than there is today. It will also be even more important to rationalise the institutional landscape.

Borders

West Africa has 32 000 km of land borders. Of its land surface, 45% is within 100 km of a border (55% if we exclude desert areas with few or no inhabitants), and these areas are home to 43% of the population. In the Sahel, this rises to 45% in Mali, over 50% in Burkina Faso, Mauritania and Senegal, and nearly 60% in Chad.

Certain highly populated cross-border areas have strong integration through their communities, history and commercial trading. These include the river valley between Mauritania and Senegal, the Liptako-Gourma area where Burkina Faso borders Mali and Niger, the border between Niger and Nigeria, and the Lake Chad Basin between Cameroon, Niger, Nigeria and Chad.

These areas are driven by a dense network of border towns (there are more than 800 located within 100 km of a border, housing more than 80 million people, compared with 1.6 million people before the 1960s). These hubs link West African countries to each other and to global markets. The (mostly informal) trade that develops there relies on local, regional and international market networks.

Women in these towns are continuing a long tradition of cross-border trade, yet they remain marginalised in terms of wealth creation. Men tend to occupy the most profitable positions within the trading networks (for example, in marketing rice in the Dendi region between Benin, Niger and Nigeria).

Since the mid 20th century, border towns have almost always grown faster than other towns in the region. This rapid growth is particularly apparent within 50 km of national borders, where the most active markets are found. However, these towns and the cross-border zones they serve are suffering both from a glaring lack of public investment, particularly in infrastructure, and from barriers to the free movement of people and goods, linked to road and border controls and regulatory red tape.

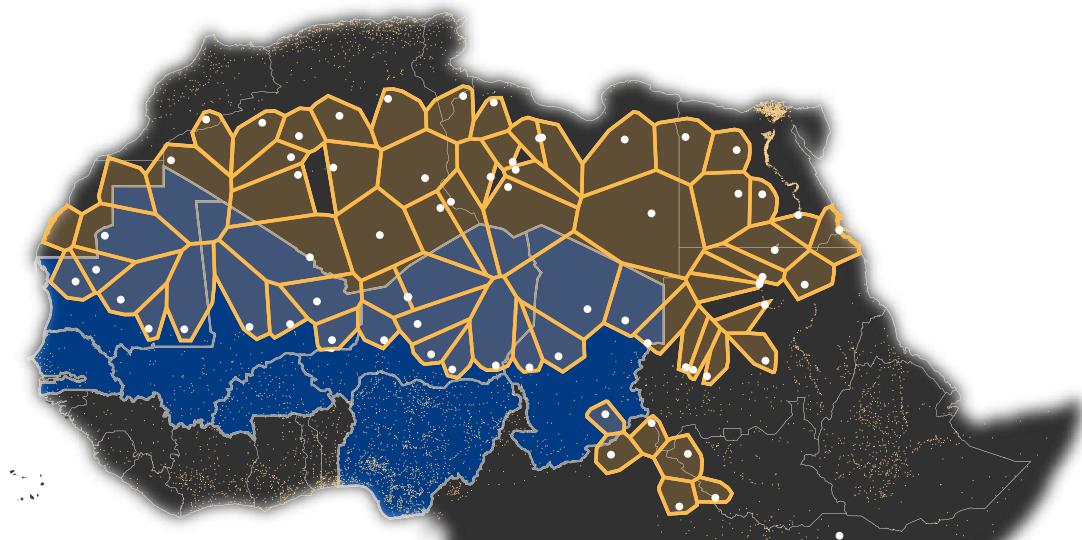
Cross-border basins will continue to densify and there will be a very rapid increase in trade

and interdependencies, simply because of population growth. Regional integration at “grass-roots” level will therefore go on and intensify. At the intersection between regional integration and local development, cross-border cooperation has been driving West African trade for many years. There have been many institutional initiatives to recognise and open up borders to support the vitality of these cross-border hubs. In 2004, cross-border cooperation was included in the integration strategy of first UEMOA and then CILSS. In 2005, ECOWAS created what became the Cross-Border Cooperation Programme (CBCP). In 2007, the Heads of State of the African Union launched the African Union Border Programme (AUBP). The AUBP led to the adoption in 2014 of the Niamey Convention, which provides a framework for cross-border cooperation with a view to continental integration and conflict resolution.

More recently, there has been renewed interest in integrated territorial development strategies. The G5 Sahel has set up the *Programme d'aménagement territorial intégré* (PATI) with the aim of helping to improve economic and social conditions for populations in the Liptako-Gourma cross-border area through better access to infrastructure and economic services. The G5 Sahel is supported in this programme by

the *Cellule de coopération transfrontalière décentralisée entre les collectivités territoriales du Sahel* (C3 Sahel), comprising the communes of Dori, Gorom-Gorom, Sebba and Djibo in Burkina Faso, the Timbuktu Regional Council and the communes of Gao and Timbuktu in Mali, and the communes of Téra and Tillabéri in Niger. The plan is that PATI will subsequently also support the populations of the Lake Chad Basin and the western Sahel zone.

Least connected urban agglomerations

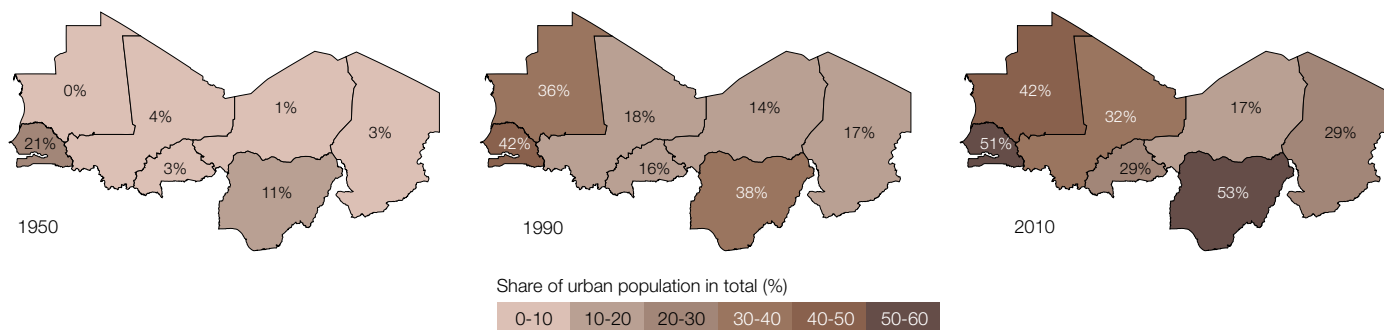


Note: 80% of the least connected urban agglomerations in Africa are in the Sahara and the Kalahari Desert

Source: SWAC/OECD 2018, Africapolis (database)

Based on: © SWAC/OECD, *Africa's Urbanisation Dynamics* 2020

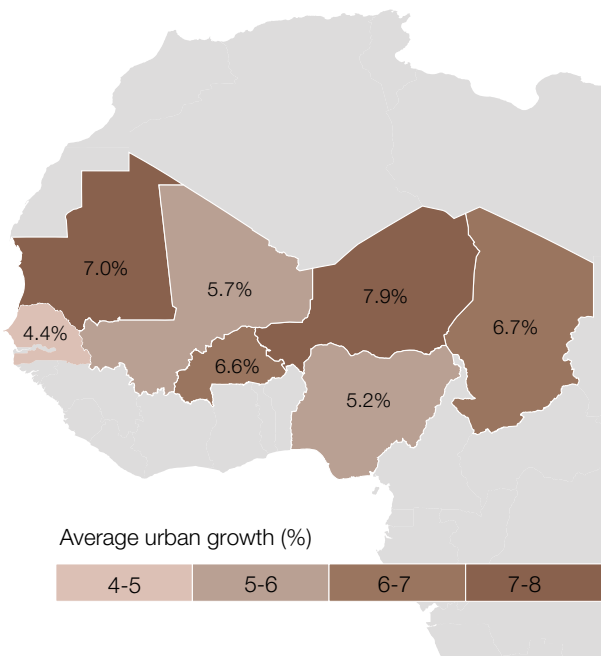
Evolution of urbanisation



Source: SWAC/OECD 2018, Africapolis (database); Geopolis 2018
Based on: © SWAC/OECD, *Africa's Urbanisation Dynamics* 2020

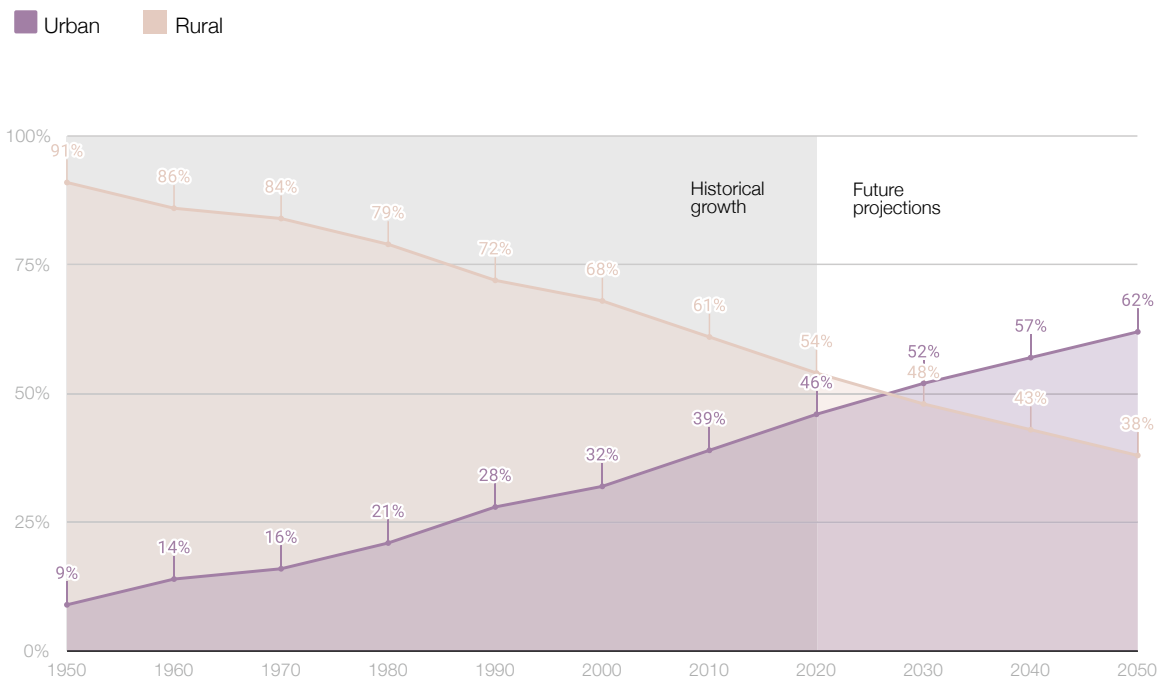
Urban population growth

1950-2015



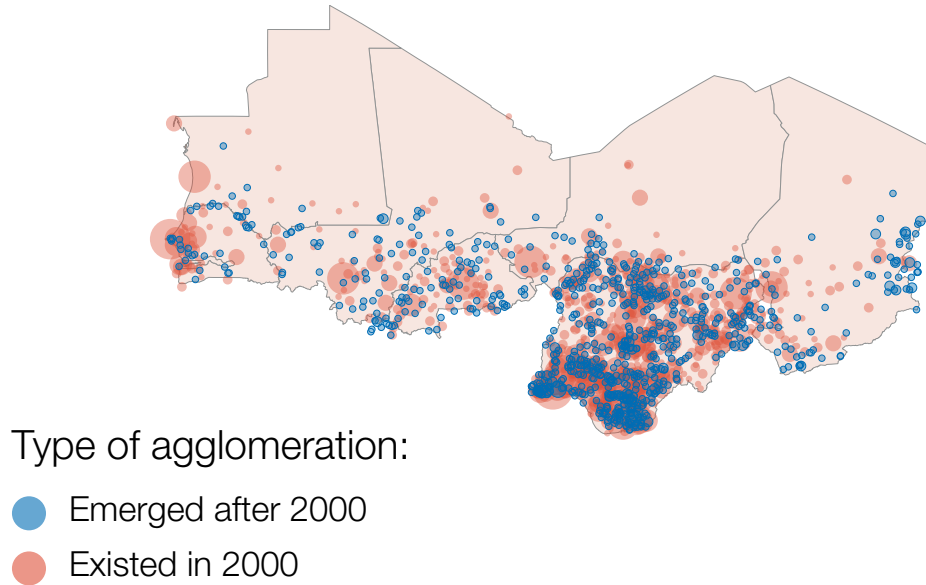
Source: SWAC/OECD 2018, Africapolis (database); Geopolis 2018
Based on: © SWAC/OECD, *Africa's Urbanisation Dynamics* 2020

Share of urban population in the Sahel



Note: countries included: Burkina Faso, Chad, Mali, Mauritania, Niger, Nigeria and Senegal
Source: UNDESA, Population Division, World Population Prospects 2019 Revision

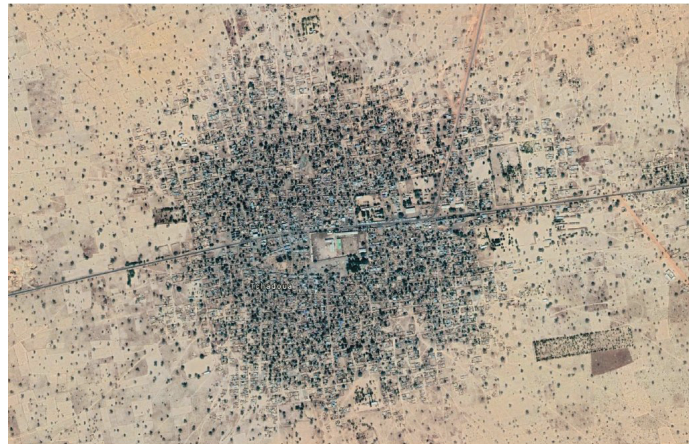
Emergence of new agglomerations



Source: SWAC/OECD 2018, Africapolis (database); Geopolis 2018
Based on: © SWAC/OECD, *Africa's Urbanisation Dynamics* 2020

Vegetation cover in Tchadoua (Niger)

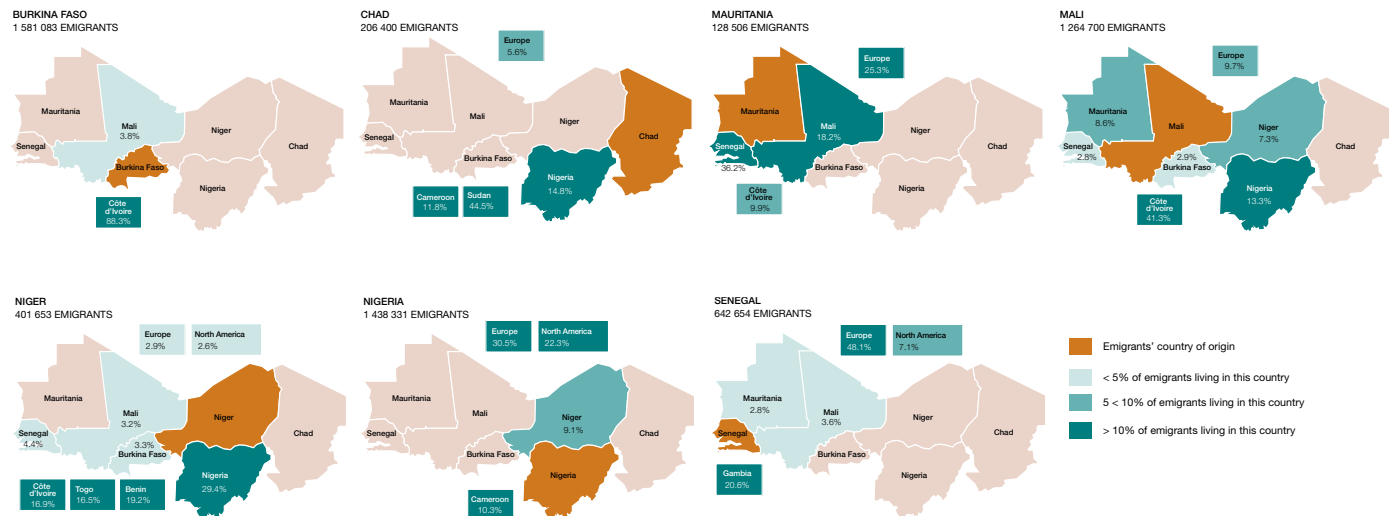
25 000 inhabitants in 2015



Source: GoogleEarth 2014; SWAC/OECD, 2019

Places of residence of Sahelian emigrants

2019



Note: only values greater than 2% are represented

Source: UNDESA, Trends in International Migrant Stock 2019

Dead or missing migrants

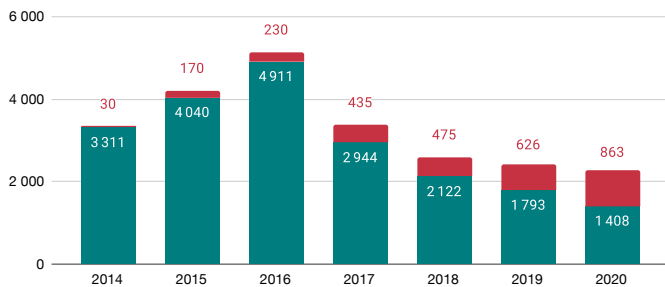
2014-2020

Per year

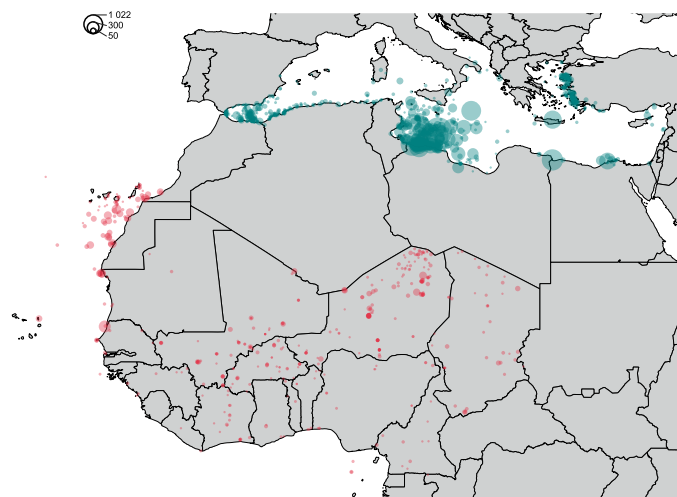
Migration route

West African

Mediterranean

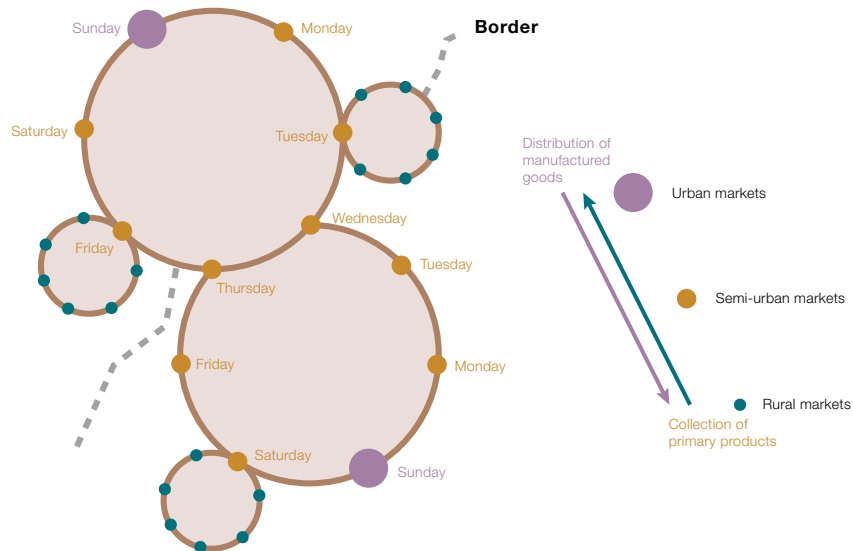


By location



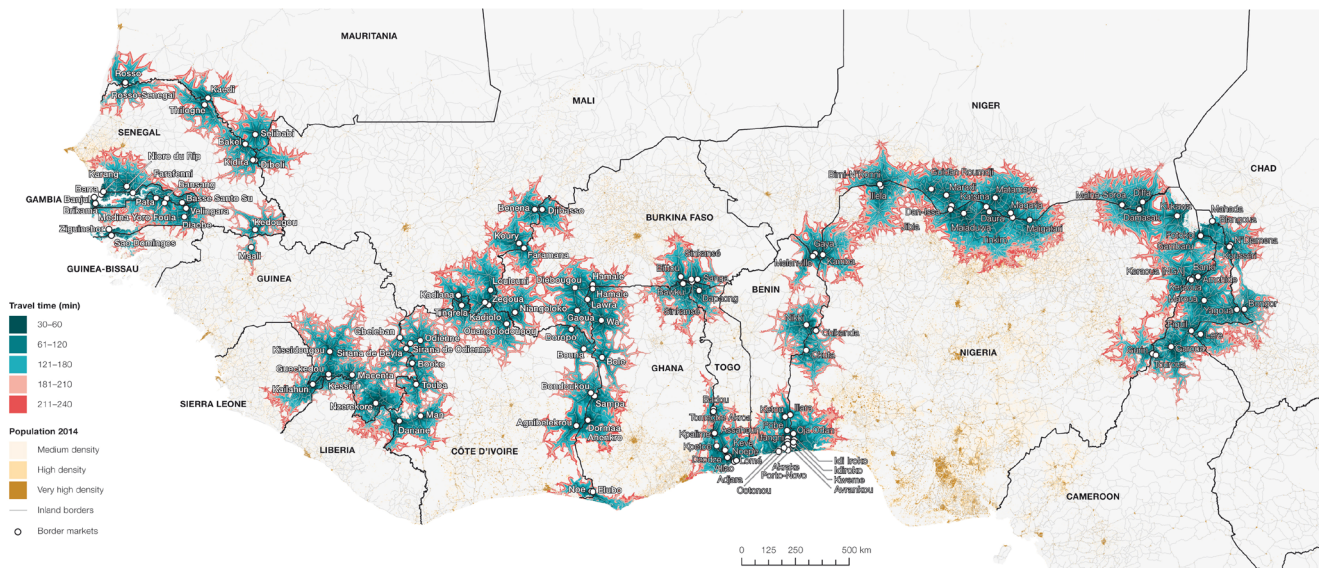
Source: IOM

Working of border markets



Source: SWAC/OECD, 2003

Population potential of West African border markets

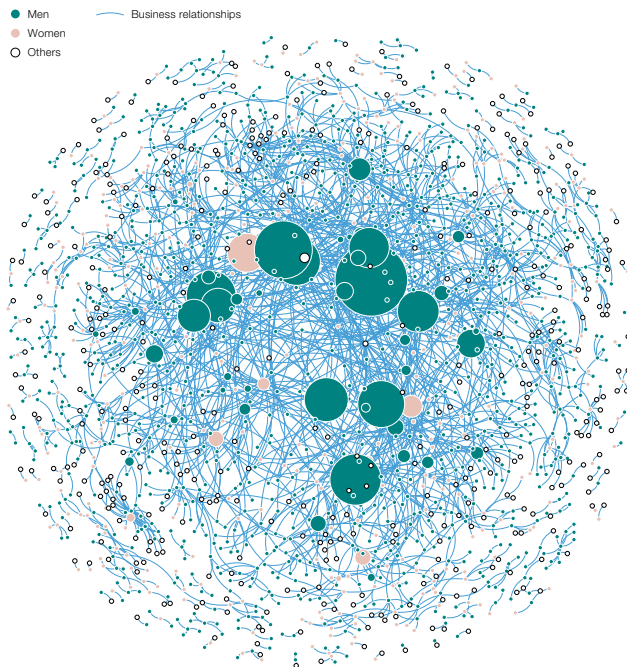


Source: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre et P. Heirings 2016; Open Street Map 2014; Global Roads OpenAccess Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database
 Created by: Alterra Research Institute (University of Wageningen)
 Extract: © SWAC/OECD, *Cross-border Co-operation and Policy Networks in West Africa* 2017

Gender disparities in trade networks

2018

Betweenness centrality by gender, 2018



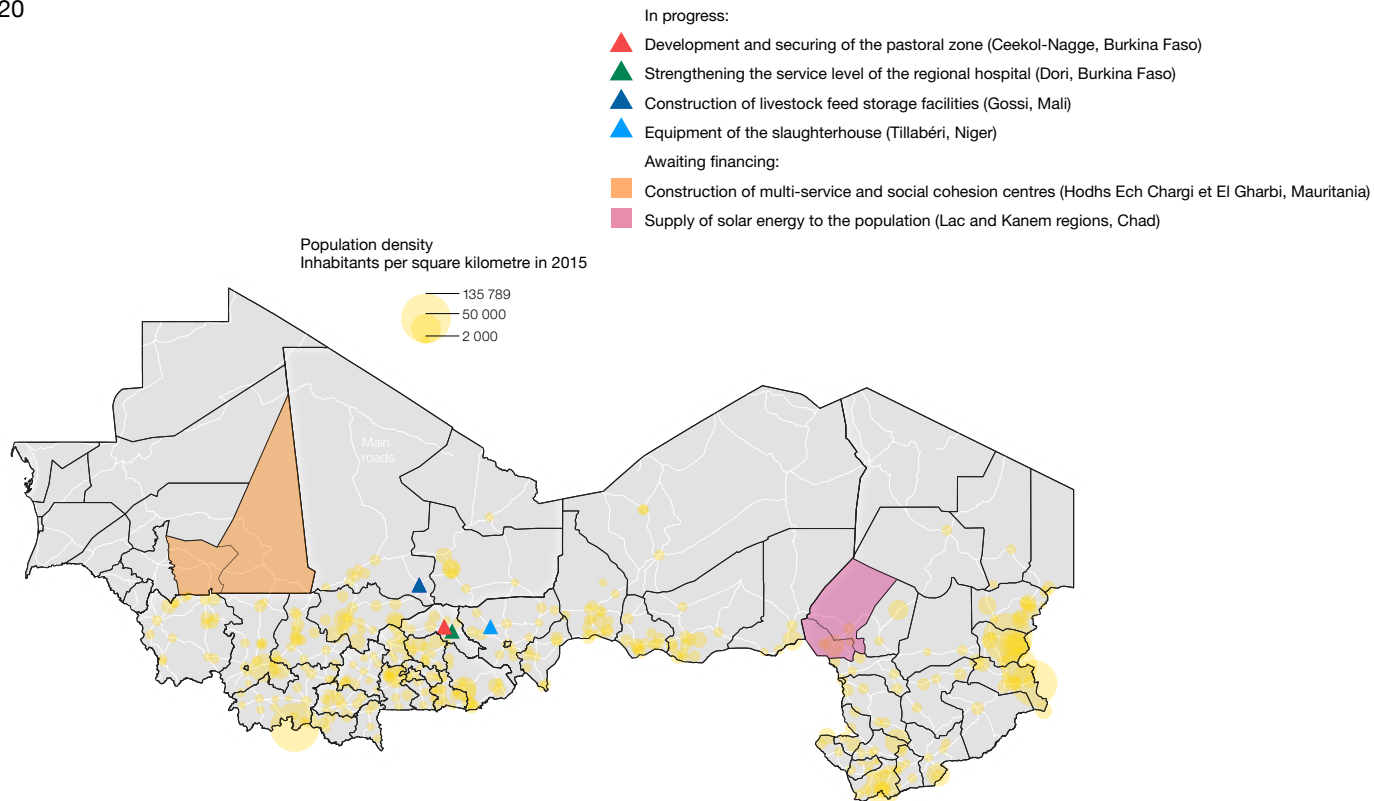
Note: the size of the circles is proportional to the brokerage capacity of actors (betweenness centrality)

Source: SWAC/OECD

Extract: © SWAC/OECD, *Women and Trade Networks in West Africa* 2019

Integrated Territorial Development Project (PATI)

2020



Source: G5 Sahel; SWAC/OECD; OCHA/HDX

Fragile governance

Public policies

The Covid-19 pandemic has exposed extreme weaknesses in health systems. There is a shortage of well-equipped hospitals and other health centres. Those that do exist are unevenly distributed across the country. Mali has only one hospital per 500 000 population and one doctor per 10 000 population, compared with an average of one per 35 in OECD countries. The country's annual public health expenditure was USD 35 per capita in 2018, compared with USD 4 690 in France and USD 8 239 in Norway.

In Niger, in order to meet the basic education needs of a growing school-age population, the government decided in the 2000s to recruit large numbers of contract and temporary teachers, many of whom had no prior teacher training. Meanwhile, the priority given to primary education has had a negative impact on secondary and especially higher education, research and development. To meet the demand, the number of private technical and vocational training institutions has increased, but they cater only

to a privileged minority and are not necessarily a guarantee of quality.

Similar observations can be made for the legal system, water and energy infrastructure, rural roads, telecommunications, urban development, etc. States must not only keep pace with population growth but also ensure the quality of the basic social services they provide. This is all playing out against a backdrop of increasing and interconnected food, security, humanitarian, health, socio-economic, socio-political and climate crises. States are being called on to achieve a lot, quickly, with little resources. Their only room for manoeuvre lies in trade-offs.

In the countries of the central Sahel, instability has significantly increased the share of spending on security over the past decade. Despite this, major failings are regularly observed, such as misappropriation of public funds and human rights abuses. Inadequate budgets and defence forces are resulting in the formation of communal militias. This delegation of a sovereign role is sometimes initiated by the state itself, as in the recruitment of “volunteers to defend the

homeland” in Burkina Faso. However, there is a risk of untrained volunteers committing atrocities. This is all happening in a context of inter-ethnic tensions, exacerbated by conflating groups perpetrating armed violence with the origin of some of the fighters in their ranks.

In the landlocked Sahelian countries, general government revenue (the government's own income excluding aid) is now between USD 200 and USD 450 per capita per year (compared with about USD 4 000 in Algeria and USD 25 000 in France). There are also very few civil servants (e.g. six civil servants per 1 000 population in Mali, compared with 70 in the United States and 90 in France). Nevertheless, the civil service wage and salary bill represents about 40% of public expenditure in the Sahelian UEMOA member states. In Europe, the share allocated to this budget is between 5% and 15%.

Sahelian governments therefore currently have insufficient resources for designing, financing and implementing public policies. The budgetary resources and the number of civil servants would need to double in the next 20 years to

cope with the doubling of the population, just to maintain these low levels of government expenditure and staff.

The same calculation applies to international aid. Total aid to the G5 Sahel countries over the decade 2006–16 amounted to USD 34 billion. Country Programmable Aid (CPA) is a better proxy for assessing the actual aid available to recipient countries than the concept of Official Development Assistance (ODA), which also includes expenditure such as student scholarships, debt relief and receiving migrants. In absolute terms, CPA to Sahelian countries has not significantly increased when compared with the difficulties the region has encountered over the last ten years. Nevertheless, aid in any form (including humanitarian aid) highlights the limited absorbing capacity of recipient countries, as well as the limited measurement of its structural impact above and beyond the amounts disbursed.

There are, however, legitimate avenues for increasing state capacity, starting with eradicating corruption, widening the tax base, taxing multinational companies fairly, and digitalising tools for managing and implementing public policies. Public-Private Partnerships (PPPs) have proven to be particularly popular instruments for unlocking finance, especially in the area of infrastructure. To avoid privatising profits and

nationalising losses, the use of PPPs calls for capacity-building and institutional strengthening to ensure these contractual agreements are based on solid legislative footing and projects well prepared in advance.

There are also opportunities for optimising action and impact under international cooperation, notably through better coordination of the many actors to ensure greater coherence and transparency. In 2019, the United Nations identified no less than 19 different Sahel strategies, and more than 23 missions to the region by Special Envoys of international cooperation and development agencies.

Within a generation, the states will have insufficient resources and capacity to develop public policies that will enable them to provide basic public services and manage their territories, both overall and in areas of specific need. Despite some successful efforts to address this, Sahelian countries will need to be creative and go beyond currently tested solutions in order to prepare for the future.

Local dynamics

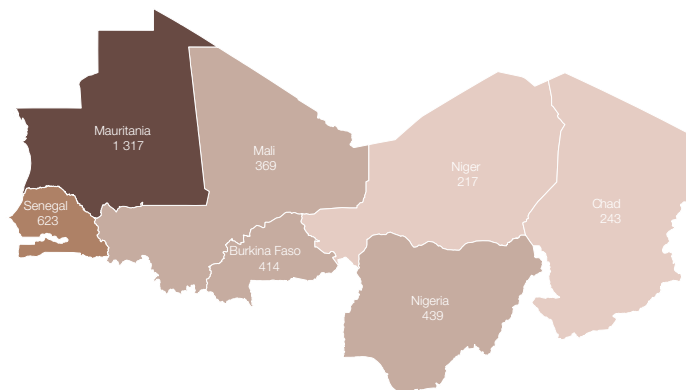
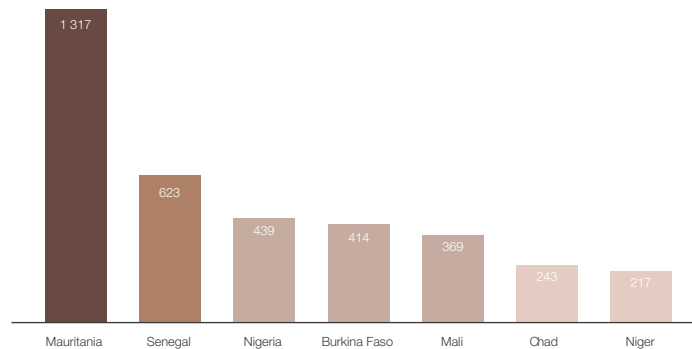
Sahelian societies are taking organisational matters into their own hands at an increasingly local level to ensure a bare minimum of public services. In taking this alternative approach, these societies are showing their willingness to invest and contribute financially, provided they receive a service in return. Various arrangements have already been tested in countries in the region, such as health centres managed by residents, community schools, mobile courts, farmers training farmers, civil self-defence groups, citizen initiatives to make Covid-19 facemasks, local dialogue for peace and reconciliation, and festivals to bring together growers and herders.

Given the strength and speed of current and future trends, as well as the trajectory for state human and financial resources, these types of local initiatives will continue to develop and grow.

If this forecast proves accurate, the debate about the future of the Sahel could well hinge on the role of local initiatives and local actors (local authorities, customary powers, traditional practitioners, civil society, the private sector and think tanks) in public policy.

General government revenue

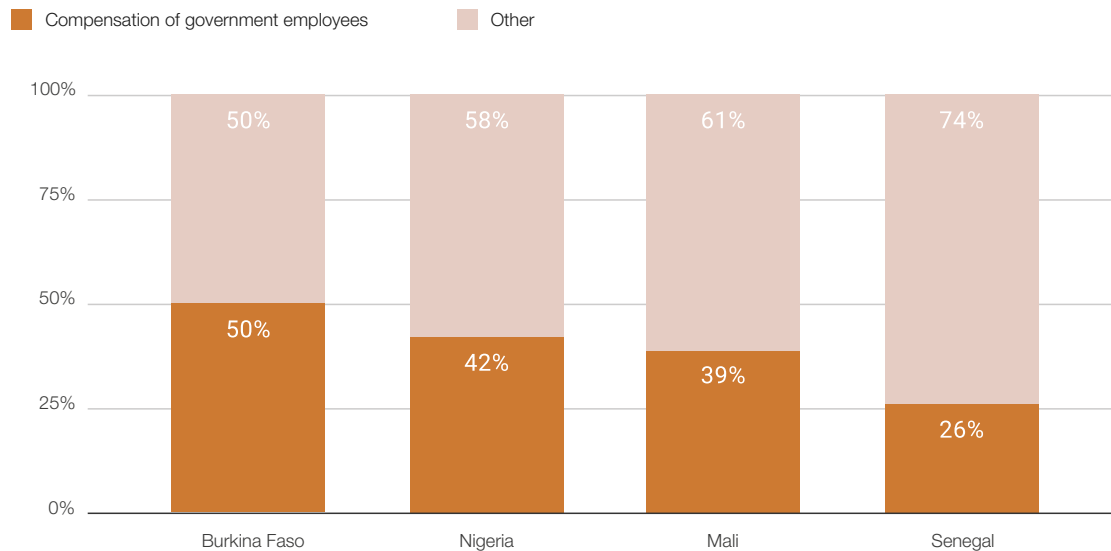
2018
Per capita in USD



Source: Authors, based on IMF data estimates

Compensation of government employees

In % of government expenditure

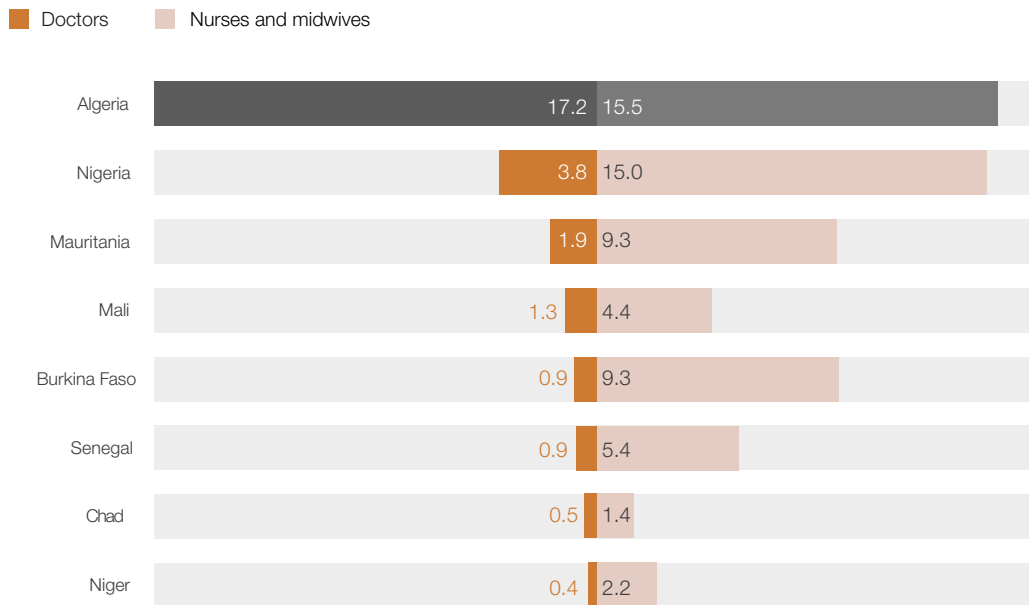


Note: latest available data (2016 for Burkina Faso, Mali and Senegal & 2013 for Nigeria); compensation of employees consists of all payments in cash, as well as in kind (such as food and housing), to employees in return for services rendered, and government contributions to social insurance schemes such as social security and pensions that provide benefits to employees

Source: IMF, Government Finance Statistics Yearbook and data files; Our World in Data

Health workers

Per 10 000 people



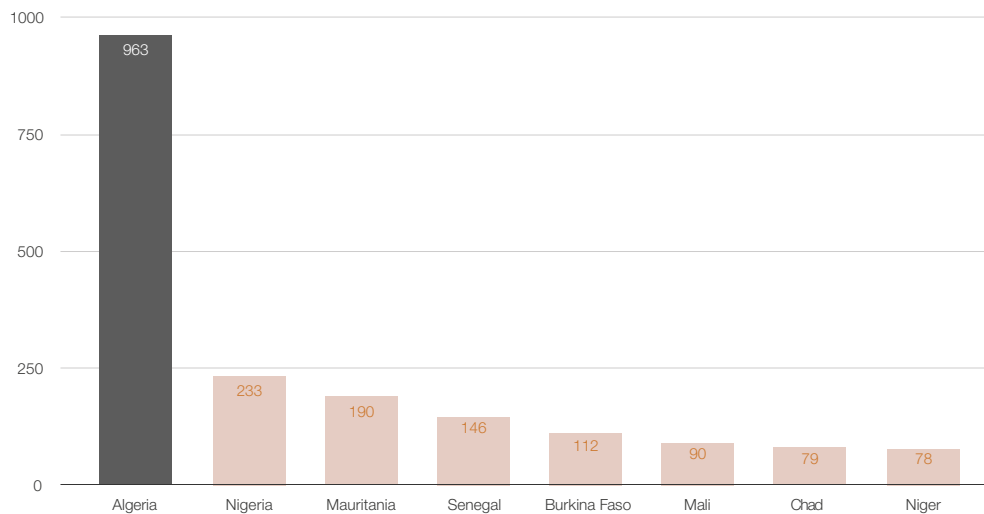
Note: latest available data (2018 & 2019)

Source: WHO, Global Health Workforce Statistics 2019

Health expenditure

2018

Per capita in USD PPP

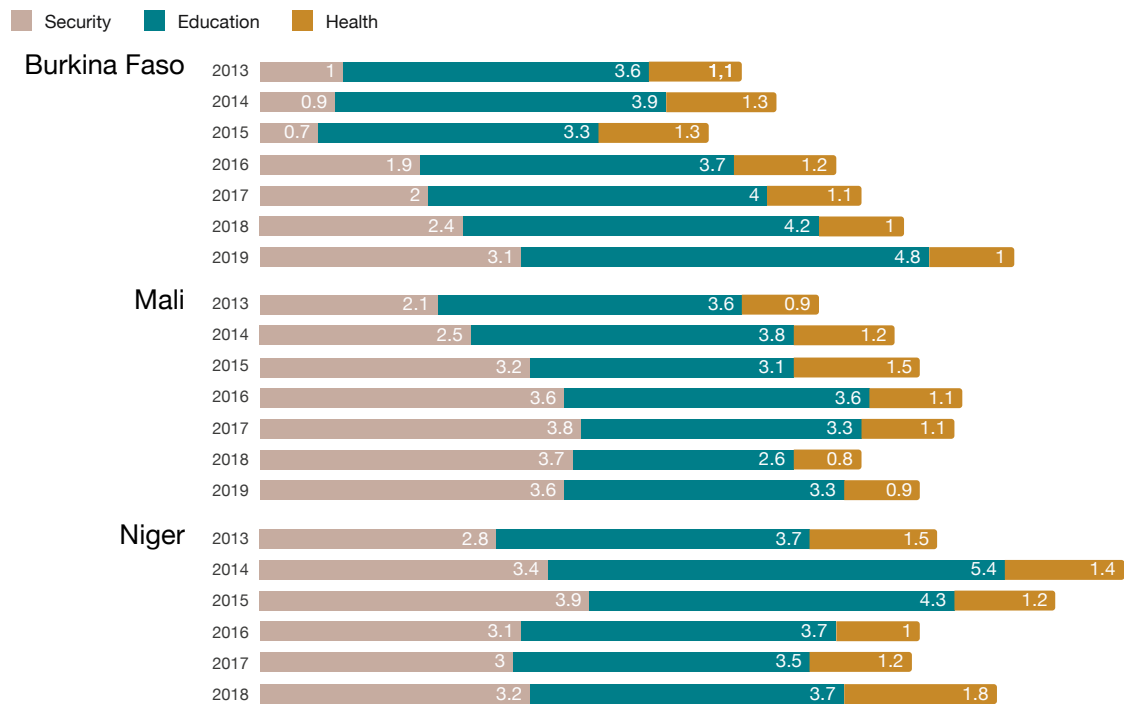


Note: current health expenditure includes healthcare goods and services consumed, it does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks

Source: WHO, Global Health Workforce Statistics 2019

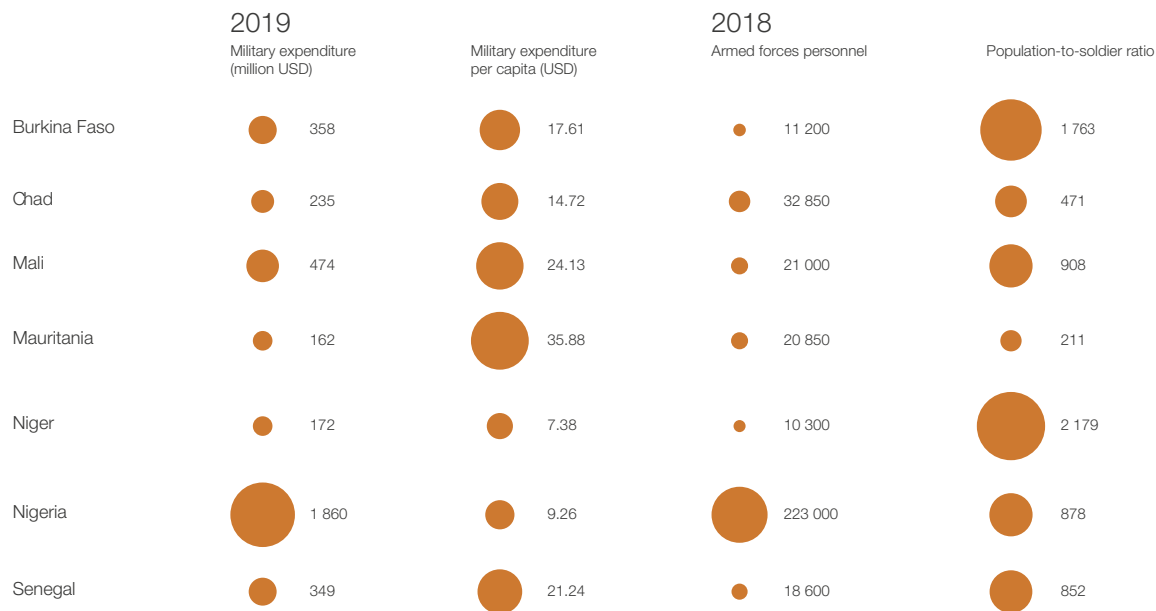
Public expenditure

In % of GDP



Source: IMF, UEMOA Country Report No. 21/50, 2021

Military capacity



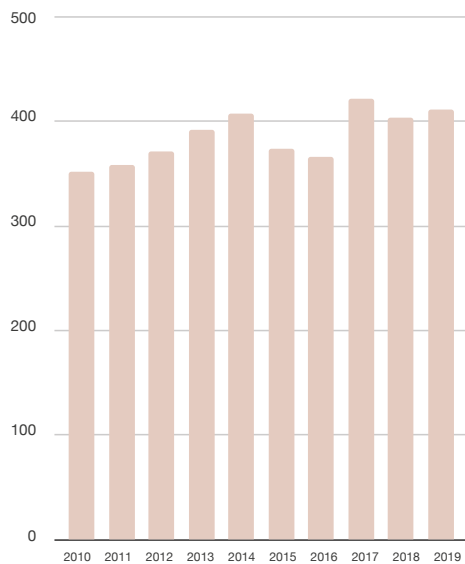
Opération Barkhane (France) in 2020
Military expenditure: EUR 911 million
Active personnel: 5 100

Source: SIPRI; IISS; Chef d'État Major des Armées françaises (public hearing at the National Assembly)

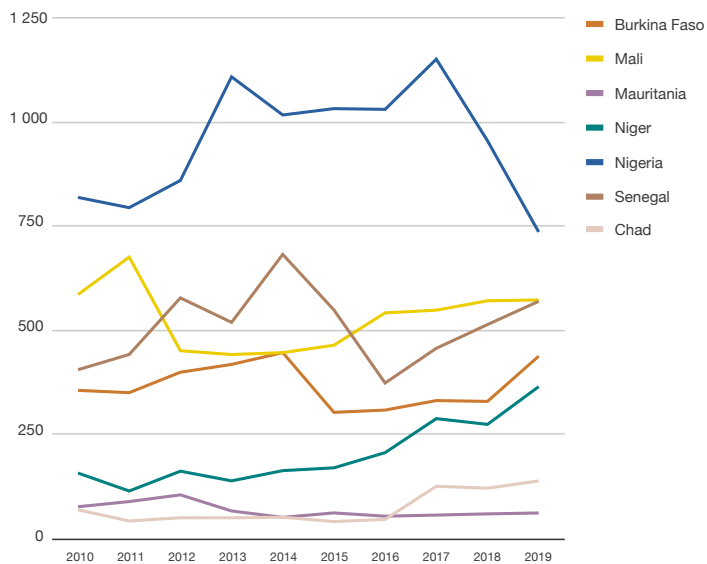
Country Programmable Aid (CPA)

In million USD (2019 constant)

Regional average



By recipient country

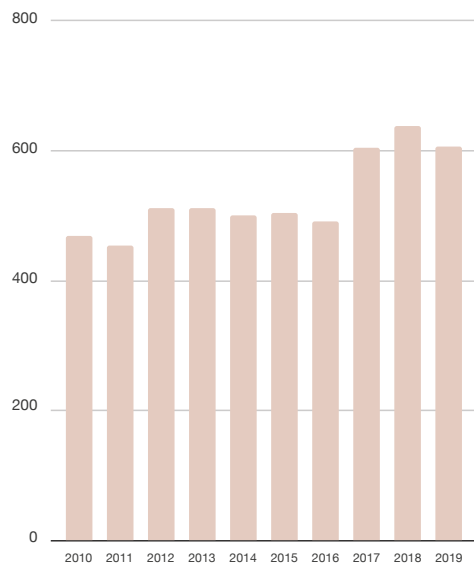


Note: aid from the OECD Development Assistance Committee (DAC) members
Source: OECD, DAC, 2021

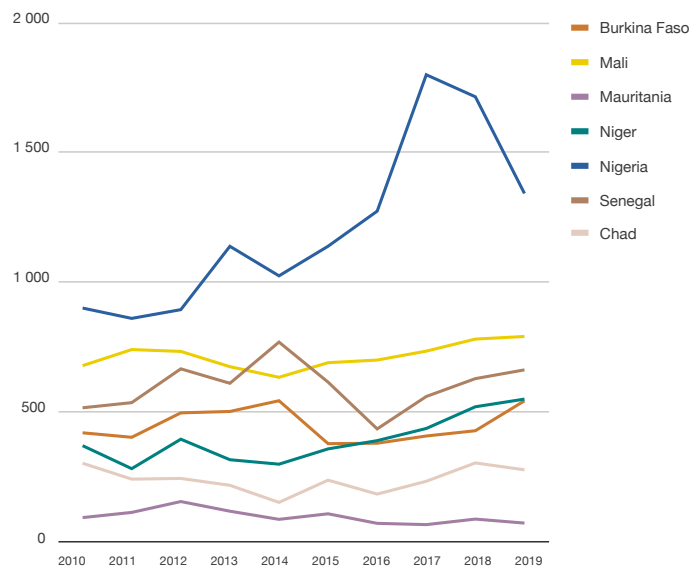
Net Official Development Assistance (ODA)

In million USD (2019 constant)

Regional average



By recipient country

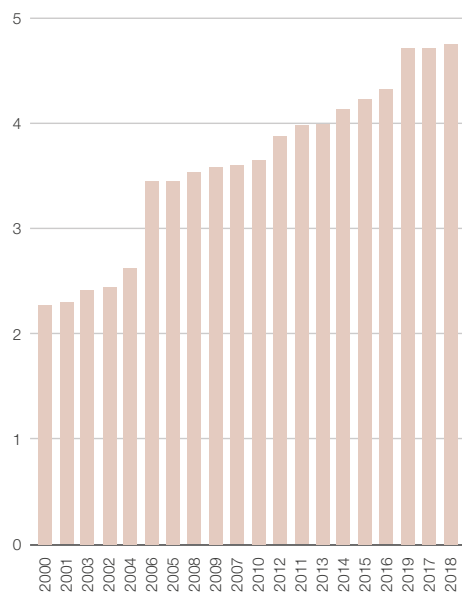


Note: aid from the OECD Development Assistance Committee (DAC) members
Source: OECD, DAC, 2021

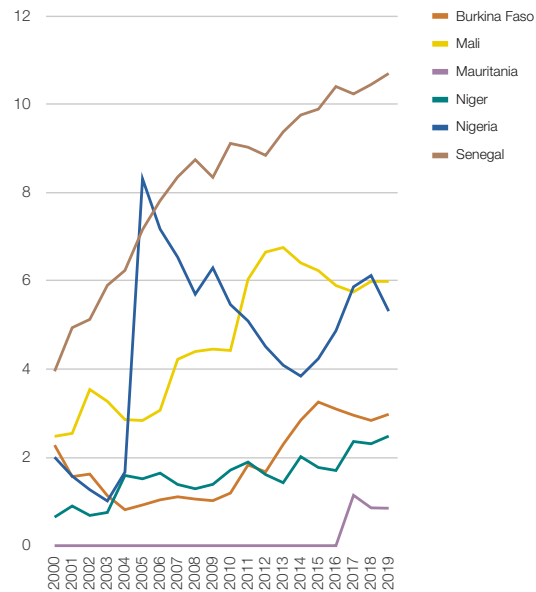
Personal remittances

In % of GDP

Regional average



By country

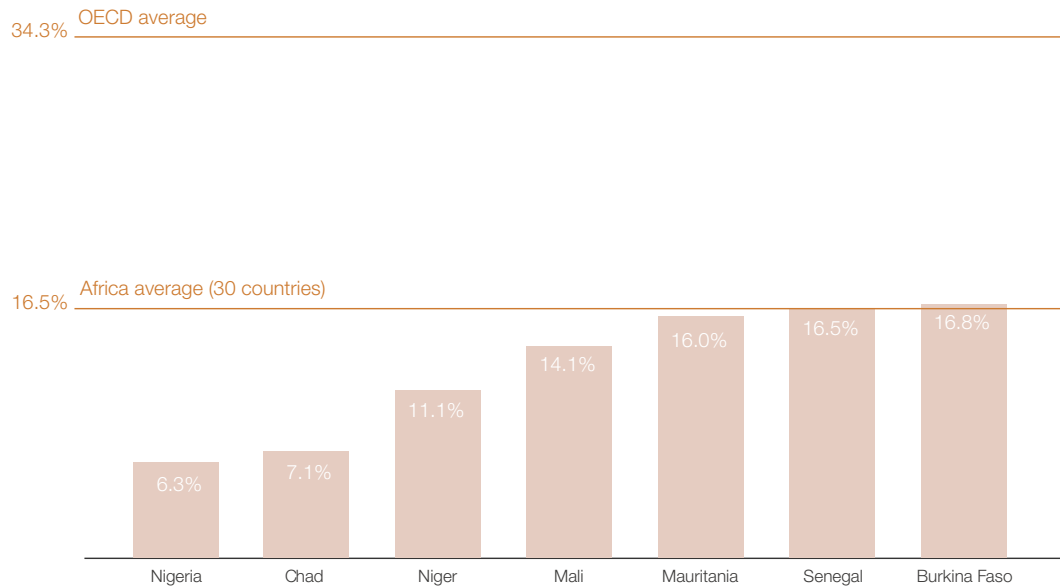


Source: World Bank

Tax-to-GDP ratio

2018

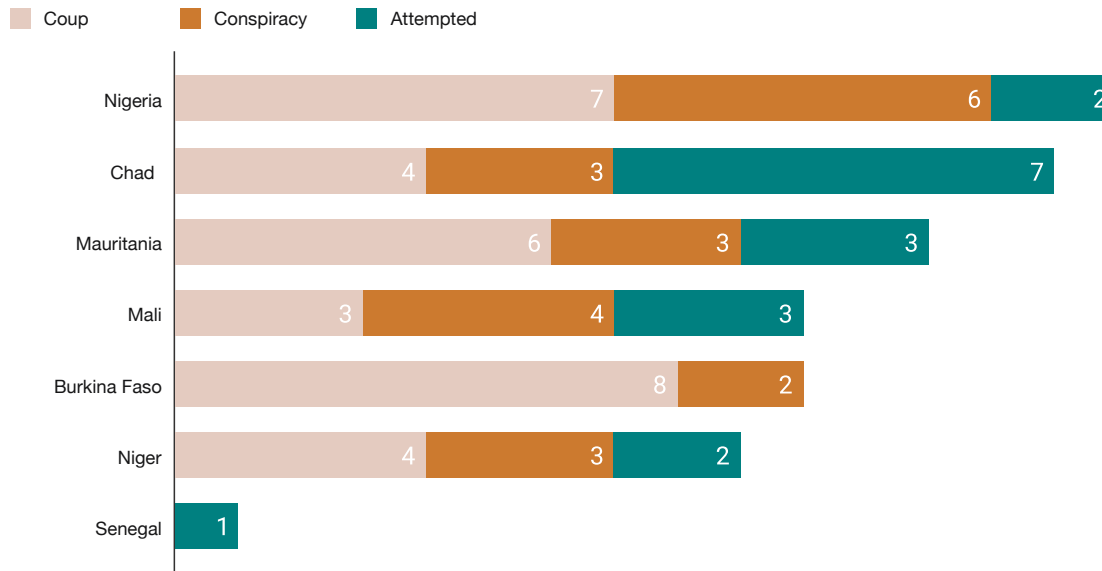
Total tax revenue in % of GDP



Source: OECD/ATAF/AUC(2020), *Revenue Statistics in Africa 2020*

Coups d'État by type since independance

As of 31 December 2019



Source: Cline Center Coup d'État project dataset

Sahel to come

What today tells us about tomorrow

All of the above indicates a number of certainties about the future of the Sahel within the next generation (around 20–25 years):

- The total population will double.
- The vast majority of the population will still live in the “informal space”. The popular economy will still be by far the main provider of employment and will still be heavily dominated by agri-food activities. Within this food economy, the relative share of agricultural production will decrease, in favour of downstream activities (such as trade, transport and processing). The very strong growth of cities and their hinterland will drive these changes.
- The informal sector (agricultural and non-agricultural) will be significantly different from today, due to digitalisation. It is expected that 60% of the population will have a mobile phone, and almost half will have access to the Internet.

- Temperatures will rise, extreme weather events (such as droughts and floods) will be more frequent, and there will be increased pollution and greater pressure on natural resources.

- The urban network will be twice as extensive as it is today and several hundred new small towns will emerge. Rural areas will be much denser than they are today, especially those near to towns.

- There will be an increase in international migration. Cross-border areas will be much more densely populated and will see much higher levels of activity than they do now. Population-driven regional integration will increase the need for cooperation between states.

- States will have no greater human and financial resources per capita than they do now; local initiatives will continue to develop to compensate for weak state authority; there will be increasing emergence of local actors who are more demanding in terms of rights, freedoms and accountability.

In addition to these predictable factors, there are many unpredictable factors to consider for the future of the region. It is impossible to predict the future role of fossil-based raw materials in the world economy; the trajectory of demand for other raw materials; the international economic and geopolitical environment; and long-term trends in rainfall (very uncertain), technological revolutions and international solidarity. In addition, other unforeseen events are bound to occur, such as the global Covid-19 pandemic. The security outlook is also uncertain. By definition, the future remains essentially unpredictable: the unknowns are greater than the knowns.

The Sahel to come will be shaped by interactions between the predictable and the unpredictable. It will also be determined by the way in which Sahelian societies manage these interactions, which comes down to methods of governance.

How a country develops and implements public policy is a matter of sovereignty. There is no trend or projection that can help calculate the probability of any particular form of

governance emerging. However, we can discuss a number of underlying assumptions derived from what is known about the future of the Sahel, as outlined above. This is what the Sahel consultations will cover.

The Sahel to come

In 2050



Source: your vision

Data caveats

Data is another word for stored information. It can be organised and coded in ways that make it easier to analyse, especially large quantities of it. When coded in numbers, quantitative data has the power to provide a better sense of the scale, frequency and spatial distribution of any given phenomenon. But when dealing with issues that require contextual nuancing, data can only tell us so much. For this reason, data analysis should be envisaged as a complementary tool to qualitative analysis.

Because of the high frequency nature of crisis situations, attempting to quantify their drivers can provide a more tangible way of gauging their occurrence, magnitude and geographical nature, notably so as to identify trends or patterns – and tailor policy responses accordingly. With the use of statistics becoming increasingly popular in recent years, the growing salience of what has been dubbed as “evidence-based” policymaking has resulted in a greater demand for “data-driven” analyses.

Broadly speaking, Sahelian countries are recurrently portrayed as being in a state of

political instability, albeit to different degrees across the region. It is, however, often difficult to make sense of the multiplicity of disruptive events being reported. For this reason, the use of quantitative data has an added-value by way of making information more digestible. In other words, analysing and visualising data can be a valuable communication tool, one that provides a general audience with snapshots of the major drivers of political disruption.

While the quantitative approach has its notable advantages, data is however often taken at face value, sometimes creating the illusion that they are unquestionably reliable. However, because of the hazardous – and indeed often-times politicised – nature of collecting and disseminating information in countries undergoing crisis situations, data must always be consumed with caution, especially when considering the underlying methodological discrepancies and varying statistical outputs across different data providers. Moreover, when dealing with issues requiring contextual nuancing – especially in the realm of politics – data has its limitations.

The visuals presented here are sourced from a range of different data sources. Given the aforementioned imperfections in the use of data, the information presented in the visuals should be taken as indicative rather than as definitive. We recommend any reader to revert to the methodological documents and codebooks of different data providers to get a sense of the sort of caveats that are important to bear in mind when analysing such data.

CONCERTATIONS
SAHÉLIENNES

