

# MAPPING 17 SDGS

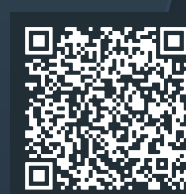
## Advocating for Sustainable Development Goals with Cartography

**Data**  
to understand  
our world

**Technology**  
to visualize  
the challenges  
of our time

**Knowledge**  
to act for  
our Goals



 **Create Your Own SDG Map!**  
Find our book on cartography online.

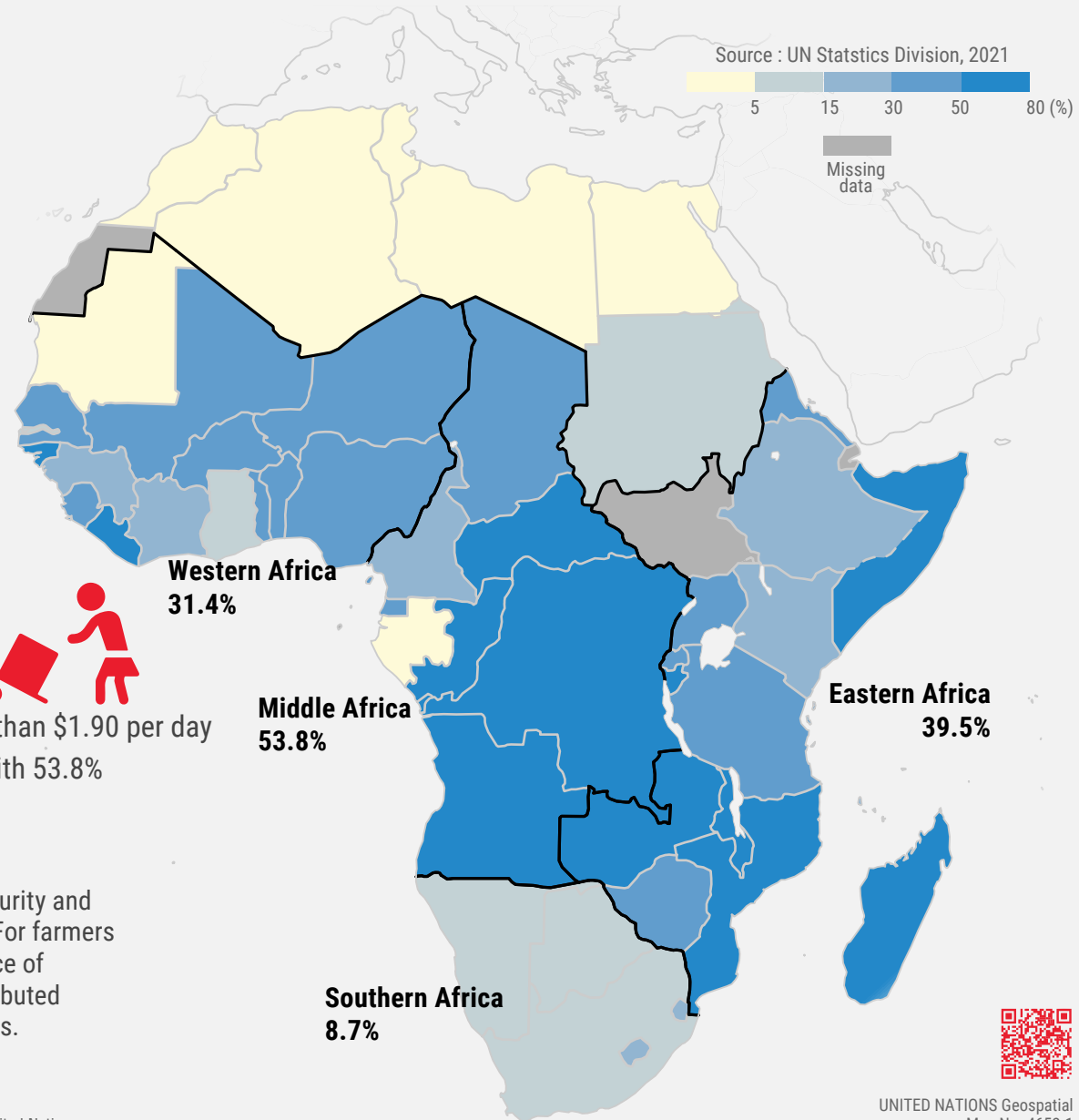
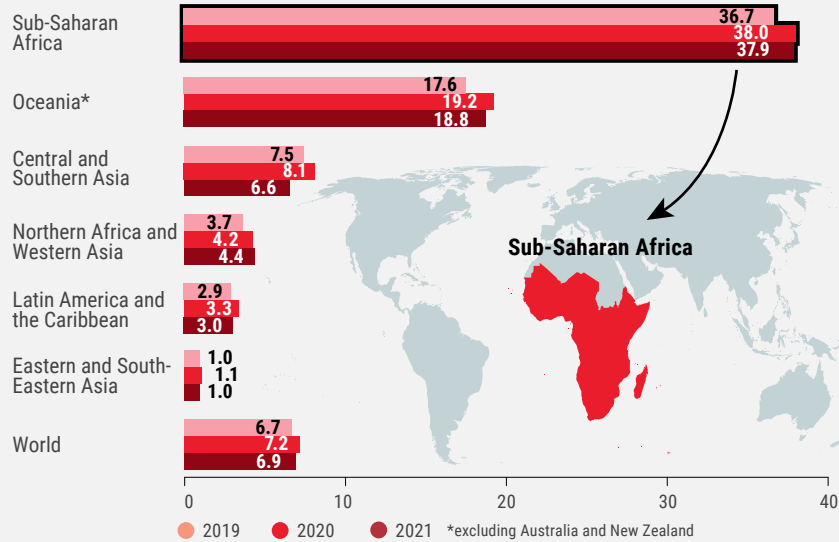
Scan respective QR codes to look into the maps on each Sustainable Development Goals.



## By 2030, eradicate extreme poverty for all people everywhere

Employed population living on less than \$1.90 per day (%)

Proportion of the employed population living on less than \$1.90 a day, 2019-2021 (Percentage)



The world is **not on track to eradicate poverty by 2030**

For the first time in two decades, the rate of workers in extreme poverty rose from 2019 to 2020, pushing an additional **8 million workers into poverty**



In **Sub-Saharan Africa**, the rate of the employed population living on less than \$1.90 per day now reaches **37.9%** overall while Middle Africa shows highest proportion with 53.8%



◀ Poverty is often caused by food insecurity and affects the most vulnerable households. For farmers in Ethiopia, the meher season is the chance of growing food through the year using distributed seeds that allow the farmers to plant crops.

UN FAO Photo - Tamiru Legesse, 2016



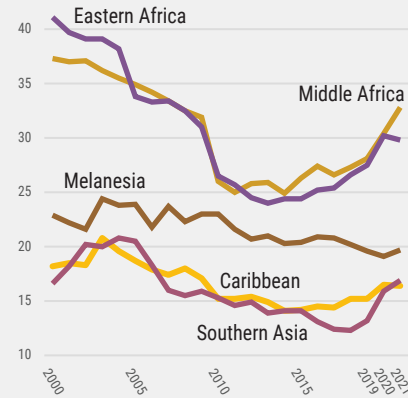


## By 2030, end all forms of malnutrition

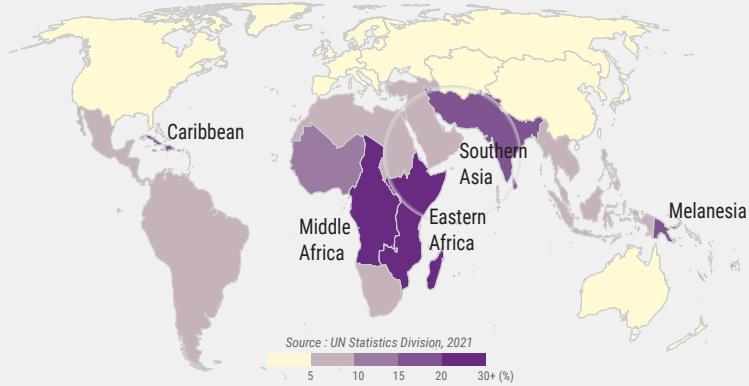
The world is on the verge of **a global food crisis**

Global food supply systems are affected by combination of factors from climate-related shocks, conflict related crisis and rising food prices

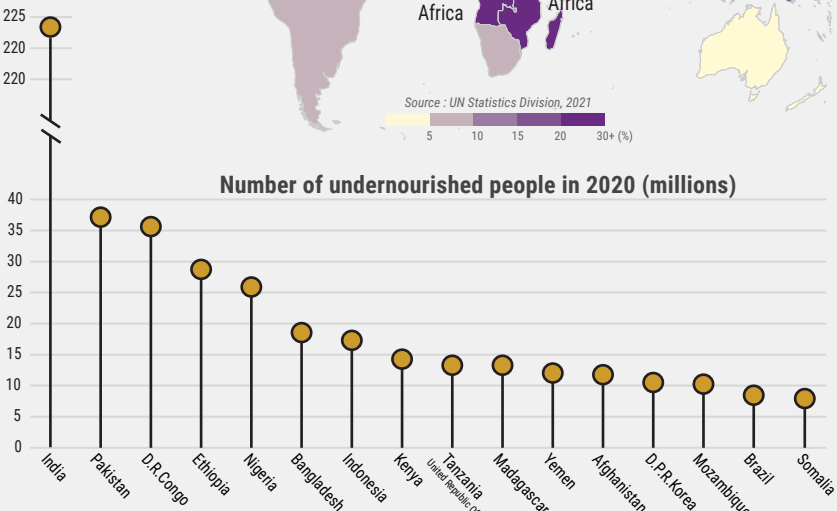
As many as **828 million people** may have suffered from hunger in 2022



Undernourishment prevalence in 2021 (map below) and from 2000 to 2021 (above), in percentage

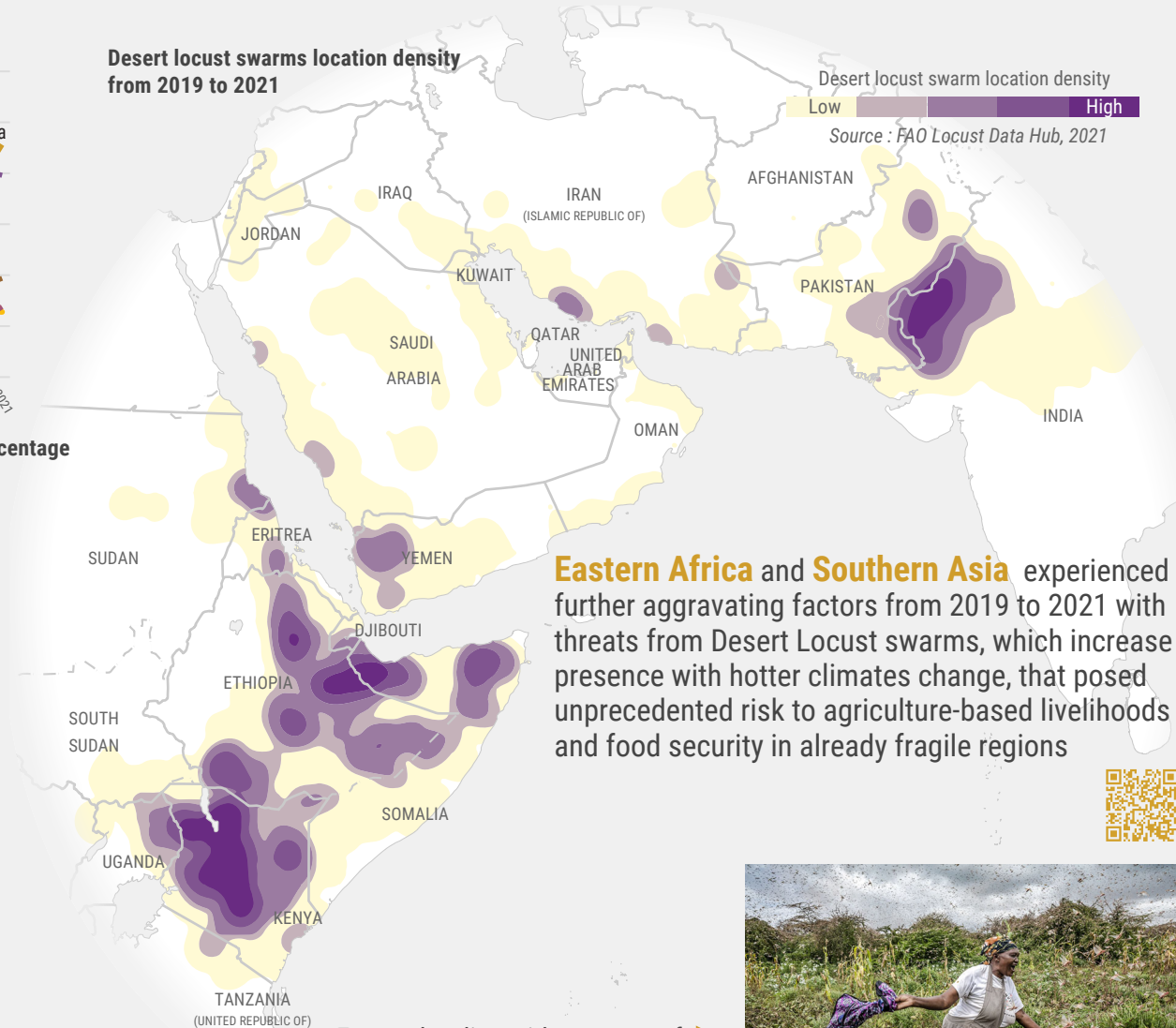


Number of undernourished people in 2020 (millions)



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

Desert locust swarms location density from 2019 to 2021



**Eastern Africa** and **Southern Asia** experienced further aggravating factors from 2019 to 2021 with threats from Desert Locust swarms, which increase presence with hotter climates change, that posed unprecedented risk to agriculture-based livelihoods and food security in already fragile regions

Farmer battling with a swarm of desert locusts feeding on crops in Katitika village, Kenya

UN FAO Photo - Sven Torfinn, 2020



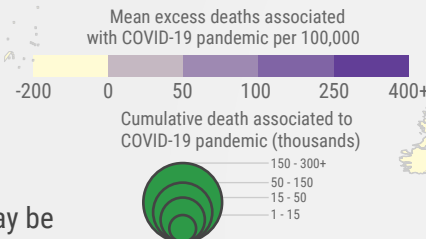
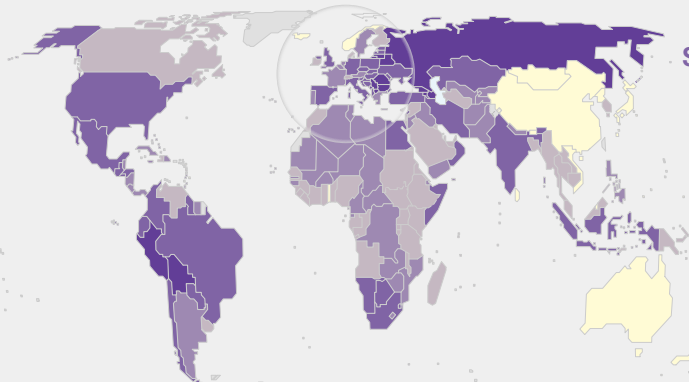


## By 2030, ensuring healthy lives and well being of all ages Effects of the COVID-19 pandemic threatens progress in global health

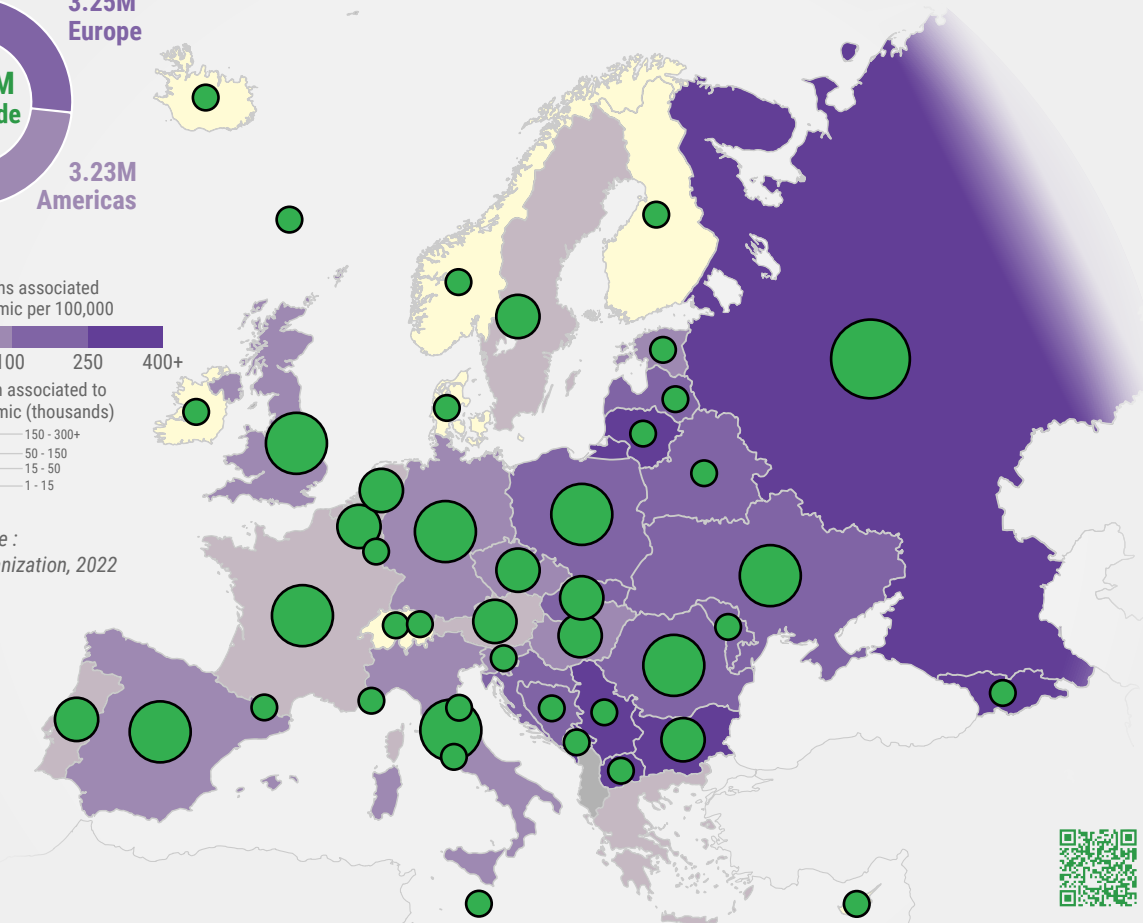
Between beginning January 2020 and end December 2021, the global excess **mortality related to the COVID-19 pandemic** was **14.91 million** worldwide

Death associated with the COVID-19 pandemic in Europe from 01 Jan 2020 to 31 Dec 2021

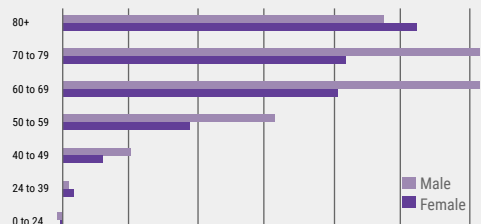
Map of the World of Mean Excess Death associated with COVID-19 pandemic per 100,000



Source : World Health Organization, 2022



Mean Excess Death by Age and Sex (Average of 2020 to 2021)



▲ Negative values may be related to health measures (as lockdown, remote work, social distancing...) reducing deaths from other causes than COVID-19

◀ Mean excess death for men is higher than woman and higher for older adults

◀ A mother and doctor tend to a young girl with COVID-19 at an intensive care ward in the western region of Chernivtsi, Ukraine

UNICEF Photo - Evgeniy Maloletka, 2020



▲ Currently, **COVID-19 is the fifth leading cause of death** over the Europe region. **Europe** and **Asia** have some of the world's oldest populations which explains the severity of the impact of the COVID-19 pandemic in these regions. Southern Europe is the oldest region in the world with 21 percent of the population aged 65+



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Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

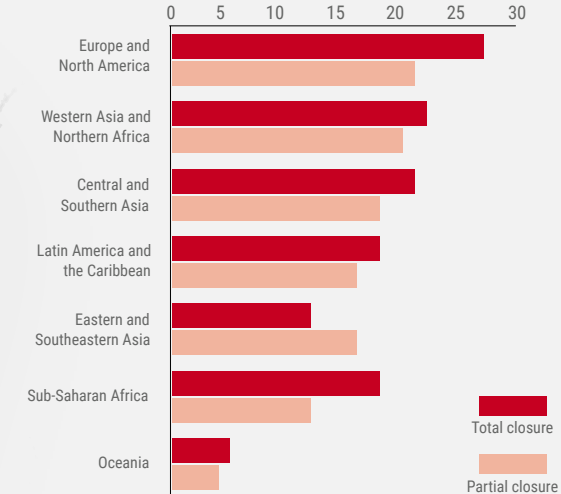
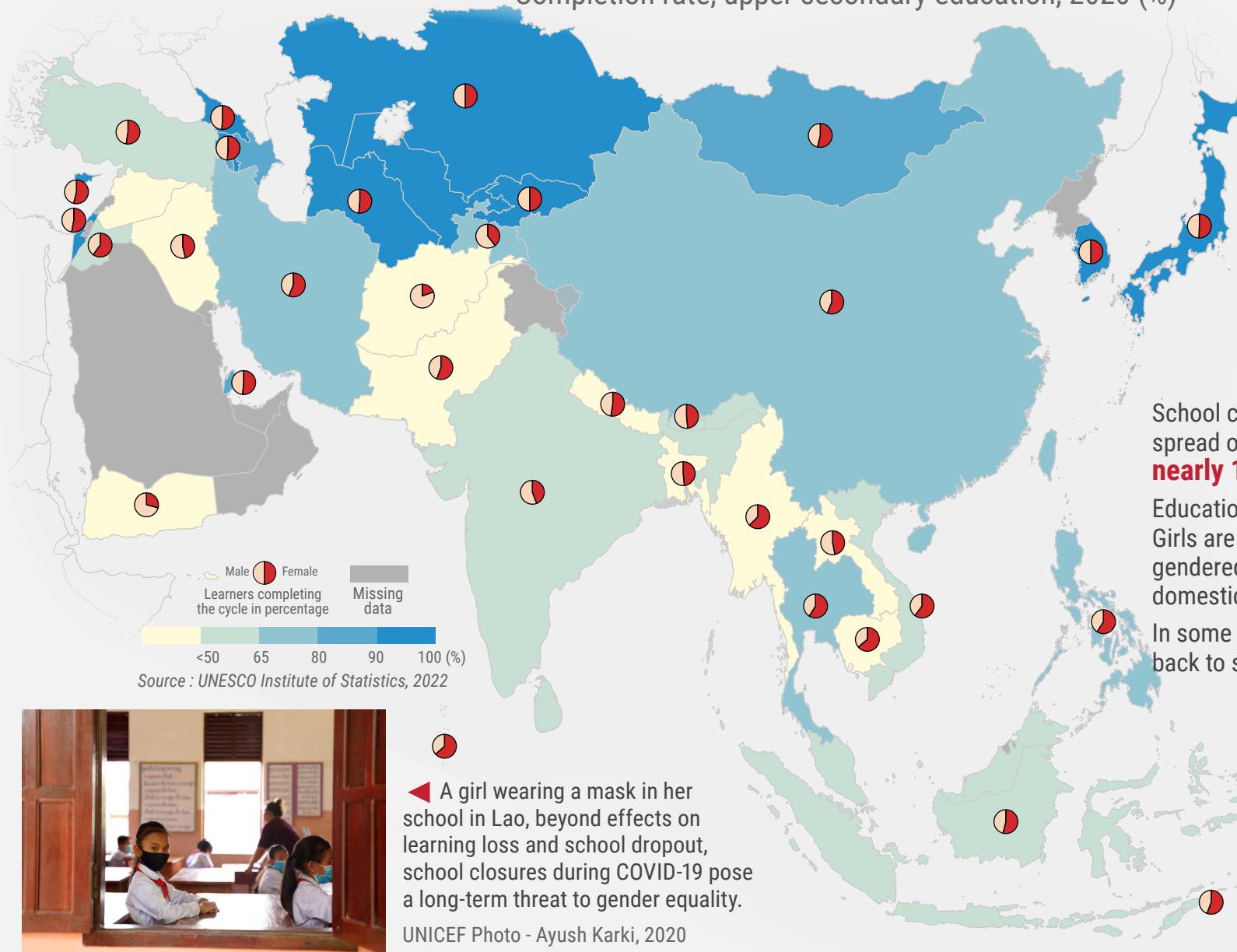
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).



By 2030, ensure that all girls and boys complete free, equitable and quality education

Completion rate, upper secondary education, 2020 (%)

Weeks of school closures (2020)



School closures related to the efforts to limit the spread of the **COVID-19 pandemic have affected nearly 1.6 billion** learners in over 190 countries

Educational disruption has far reached consequences. Girls are more at risk of not returning school due to gendered responsibilities including financial, health, domestic, or transition to adulthood

In some countries in Asia, **1 girl** out of ten did not go back to school after re-opening



◀ A girl wearing a mask in her school in Lao, beyond effects on learning loss and school dropout, school closures during COVID-19 pose a long-term threat to gender equality.

UNICEF Photo - Ayush Karki, 2020



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## Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making

### Proportion of seats held by women in national parliaments in 2022 (%)

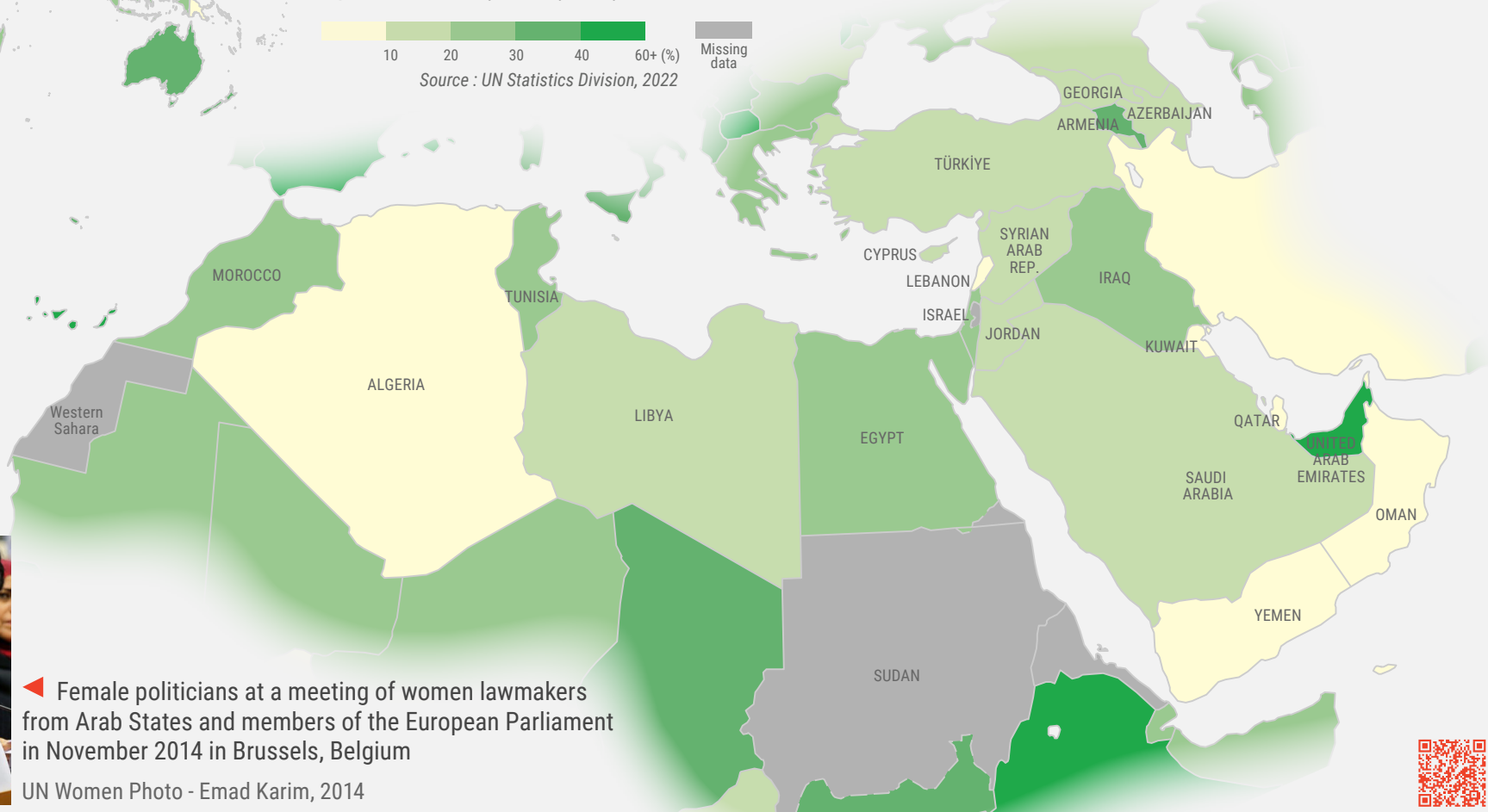
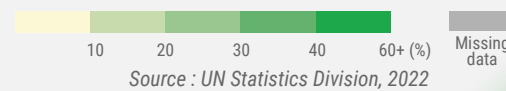
Proportion of seats held by women by sub-region



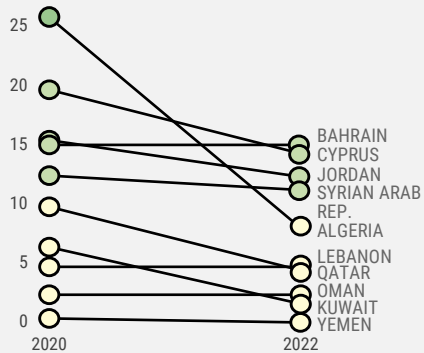
**Only 26%** of parliamentary leaders were women globally in 2022. Although women's share in national parliaments have increased since 2020, it would take **40 years** for women and men to be equally represented.

In **Northern Africa** and **Western Asia**, 30% of countries have **below 10% representation of women** in national parliament ▼

Proportion of seats held by women by country Northern Africa and Western Asia



Changes of 10 lowest representative countries in Northern Africa and Western Asia in national parliaments since 2020



Female politicians at a meeting of women lawmakers from Arab States and members of the European Parliament in November 2014 in Brussels, Belgium

UN Women Photo - Emad Karim, 2014



# ENSURE ACCESS TO WATER AND SANITATION FOR ALL

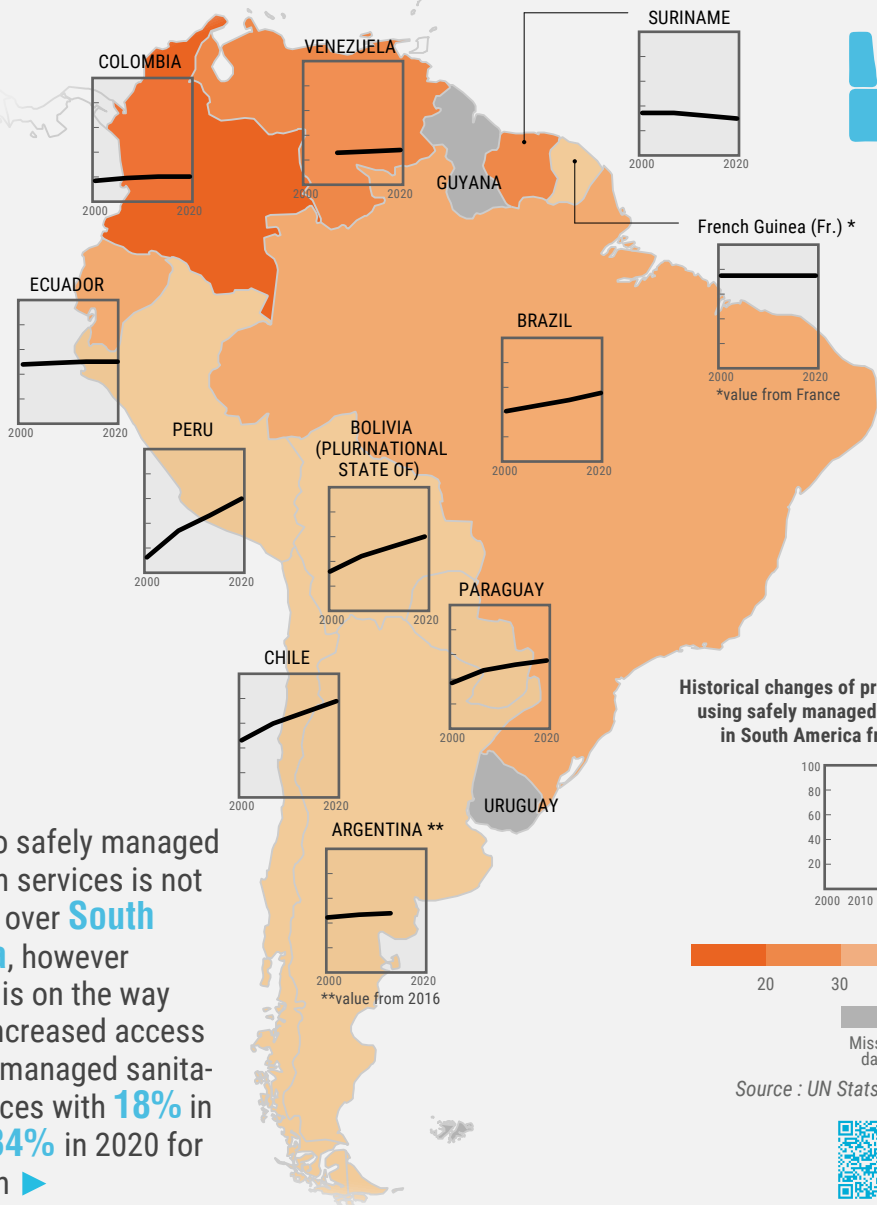


By 2030, ensure availability and sustainable management of water and sanitation for all

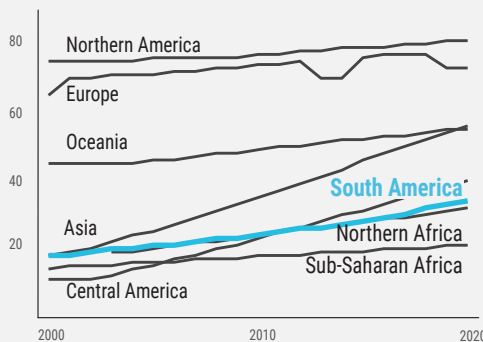
Proportion of population using (a) safely managed sanitation services (%)



Meeting drinking water, sanitation, and hygiene targets by 2030 requires **4x increase** in the pace of progress  
**2.8 billion** people will lack safely managed sanitation in 2030 at current rates



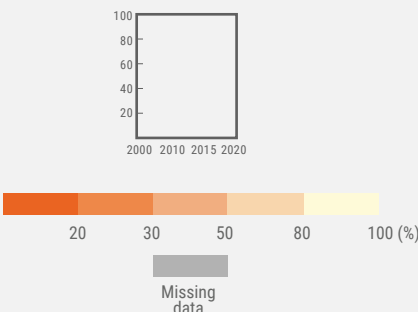
Temporal trend of proportion of population using safely managed sanitation services by sub-regions from 2000 to 2020 (Percentage)



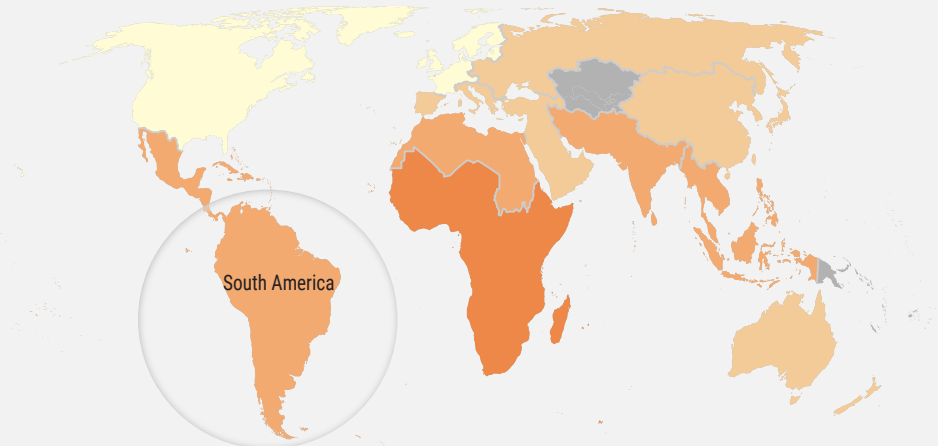
▲ Safe reopening of schools in Serrinha, in the northeastern state of Rio Grande do Norte, in Brazil

UNICEF Photo-Potter 2021

Historical changes of proportion of population using safely managed sanitation services in South America from 2000 to 2020



Proportion of population using safely managed sanitation services by sub-regions in 2020



Access to safely managed sanitation services is not universal over **South America**, however progress is on the way with an increased access to safely managed sanitation services with **18%** in 2000 to **34%** in 2020 for the region ▶

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 A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).



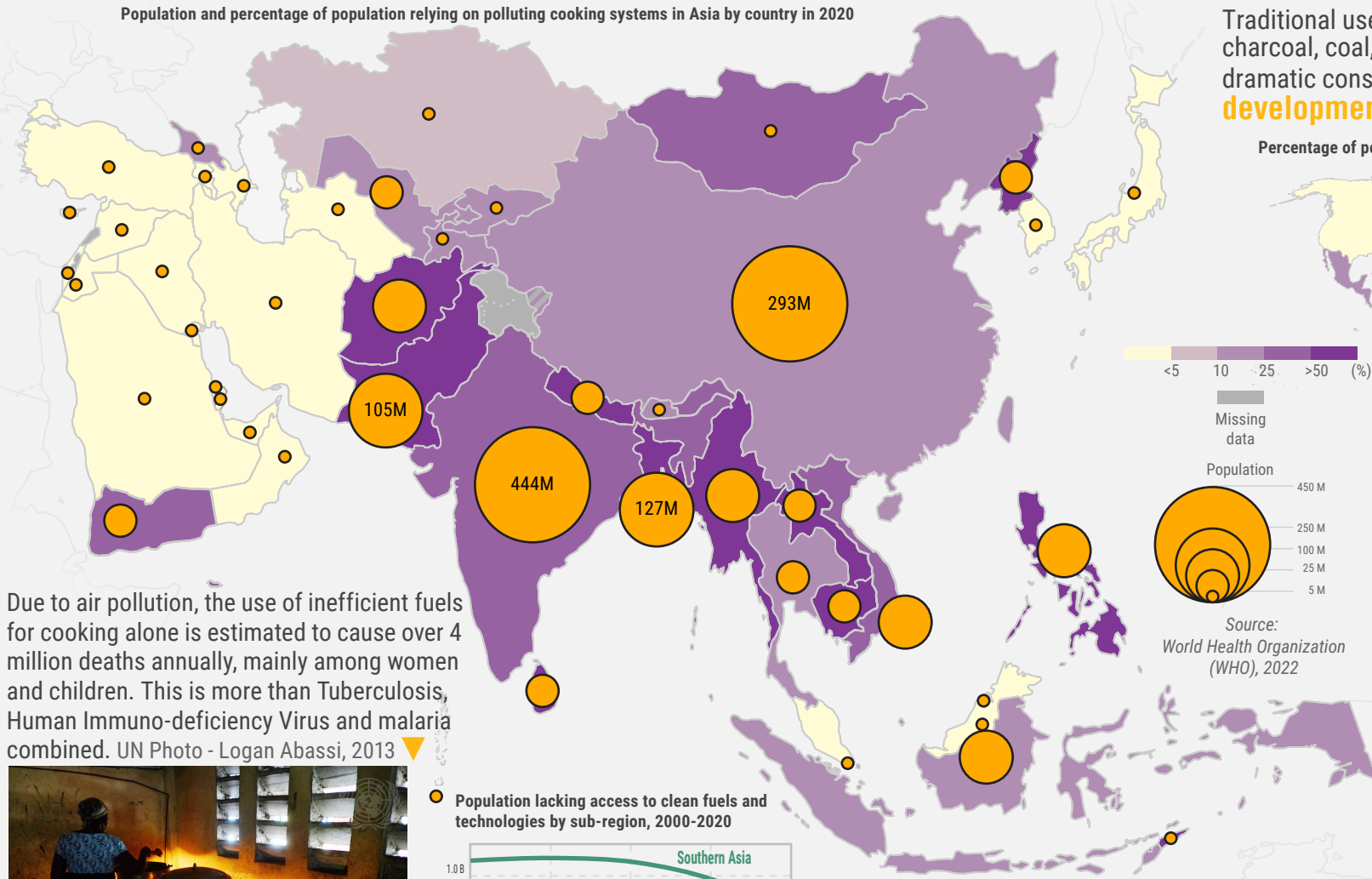
# ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL



By 2030, ensure universal access to affordable, reliable and modern energy services

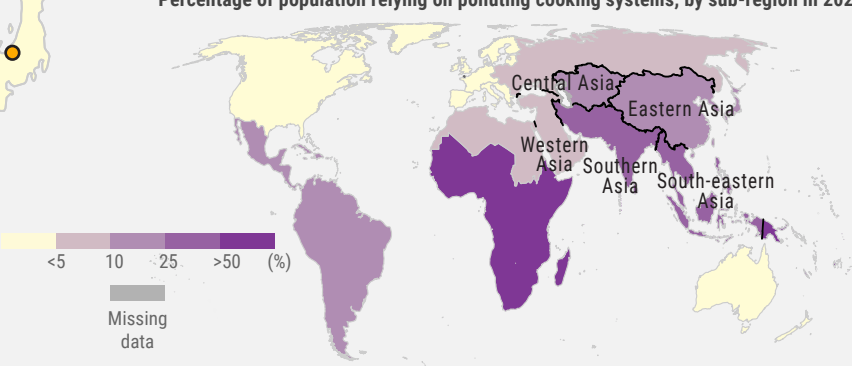
Population relying on polluting fuels and technologies for cooking

Population and percentage of population relying on polluting cooking systems in Asia by country in 2020



Traditional uses of polluting fuels for cooking – such as charcoal, coal, crop waste, dung, kerosene and wood – have dramatic consequences for the **environment, economic development and health**

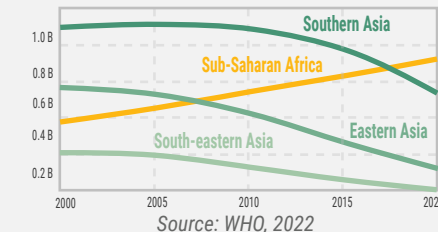
Percentage of population relying on polluting cooking systems, by sub-region in 2020



Due to air pollution, the use of inefficient fuels for cooking alone is estimated to cause over 4 million deaths annually, mainly among women and children. This is more than Tuberculosis, Human Immuno-deficiency Virus and malaria combined. UN Photo - Logan Abassi, 2013



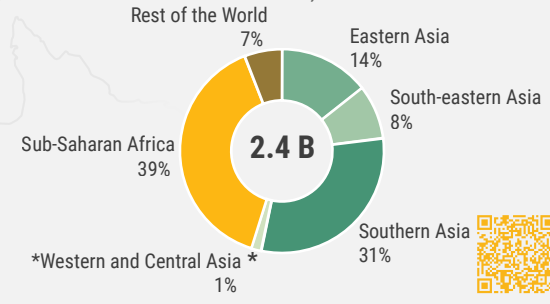
Population lacking access to clean fuels and technologies by sub-region, 2000-2020



Population lacking access to clean fuels **decreased consistently in Asian** regions in the last years **Sub-Saharan Africa** remains the only region in which this number **is rising**

**2.4 billion** people, mostly in low and middle-income countries, still lacked access to clean cooking fuels and technologies in 2020  
Only about **one in five** people in **Sub-Saharan Africa** has access to clean cooking  
In total, **more than half** of those having to rely on polluting cooking systems **live in Asia**

Global distribution of people lacking access to clean fuels  
Source: WHO, 2022



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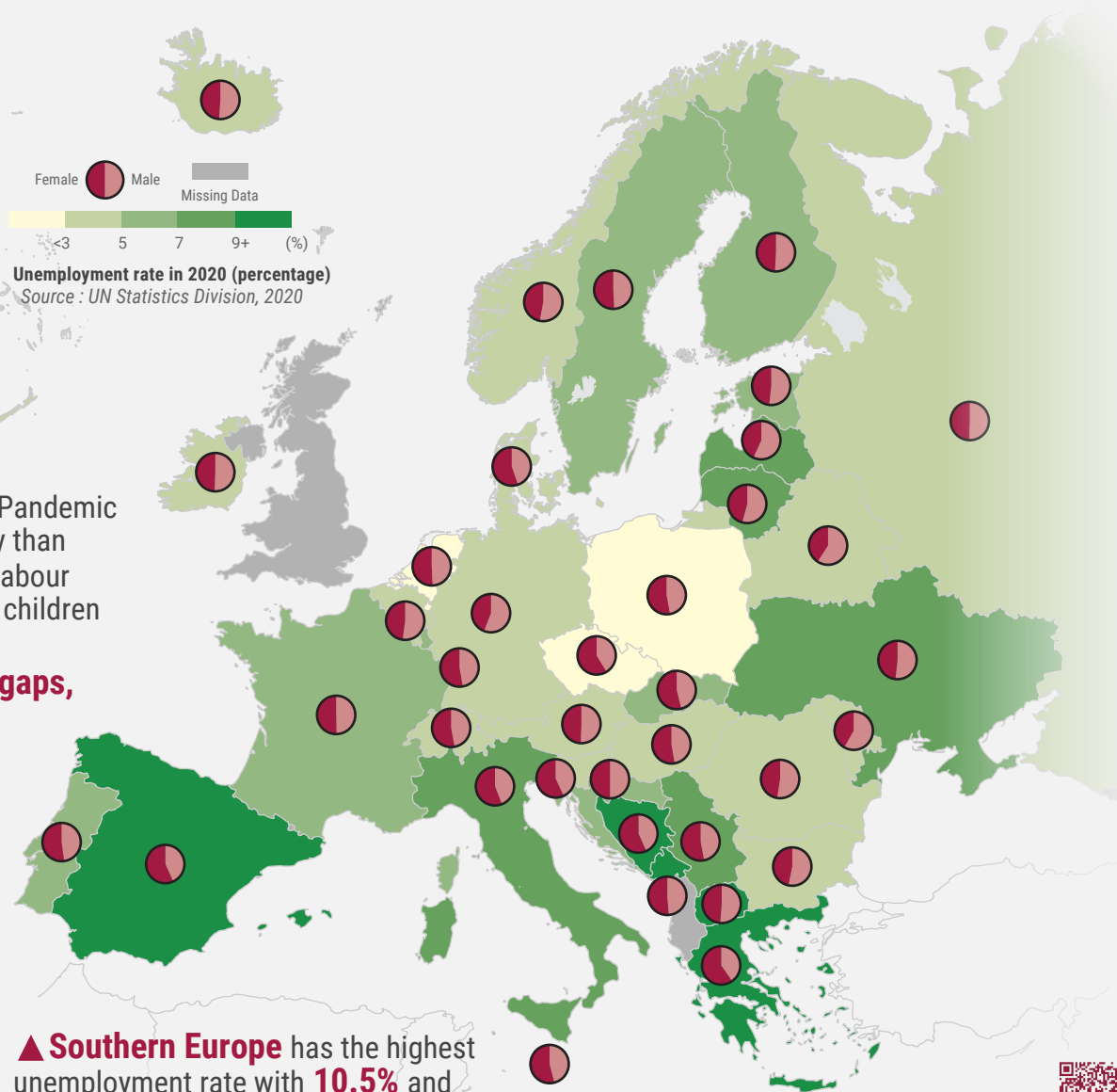
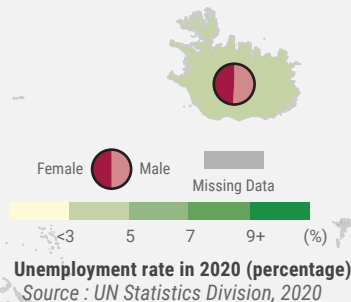
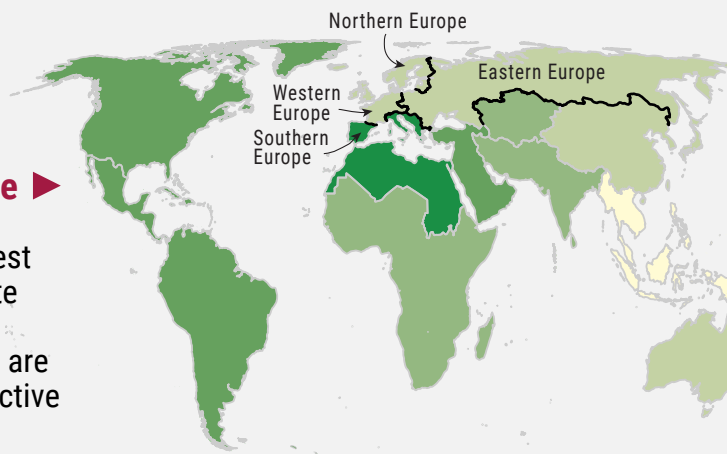




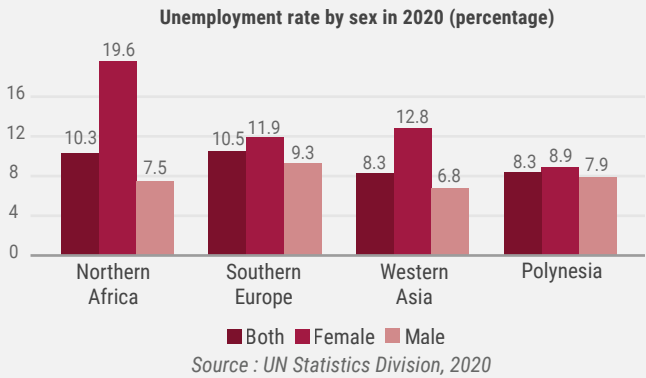
# PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL



By 2030, achieve full and productive employment and decent work for all women and men  
Unemployment rate, by sex and age (25+).



**Southern Europe** and **Northern Africa** have highest unemployment rate. Beyond general trends, disparities are **high** within respective subregion.



During the COVID-19 Pandemic **women** were more likely than men to **drop out** of the labour force in order to care for children. This further **increased longstanding gender gaps**, particularly visible in **Northern Africa**.



Agriculture and collection of non-wood forest products is a primary source of income for many families as berry picking in the Sharr/Sar mountain range in southern Kosovo.  
UNDP Eurasia - Arben Lllapashtica, 2016

**Southern Europe** has the highest unemployment rate with **10.5%** and reaches as high as **11.9%** for **women**.



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## Upgrade infrastructure and retrofit industries to make them sustainable

### Manufacturing value added per capita (constant 2015 US dollars)

In 2021, global manufacturing rebounded from the pandemic, although the **recovery remains incomplete and uneven**. After **dropping 1.3 percentage** in 2020, global manufacturing production **grew by 7.2 percentage** in 2021, surpassing its pre-pandemic level.

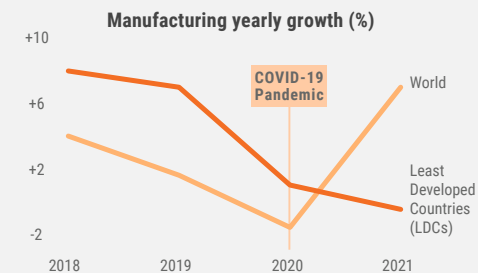
High-income countries benefited from massive policy support to firms and households and the rapid roll-out of effective vaccines.

In contrast, recovery in Least Developed Countries (LDCs) has been sluggish, due to subdued and volatile global demand, global trade disruption and tighter domestic economic policies.



▲ Ladies working in a textile and clothing industry in Bangladesh. Asian countries graduating from the LDC category need to bolster their textile and clothing sectors, particularly in the wake of COVID-19

ILO Photo - Marcel Crozet

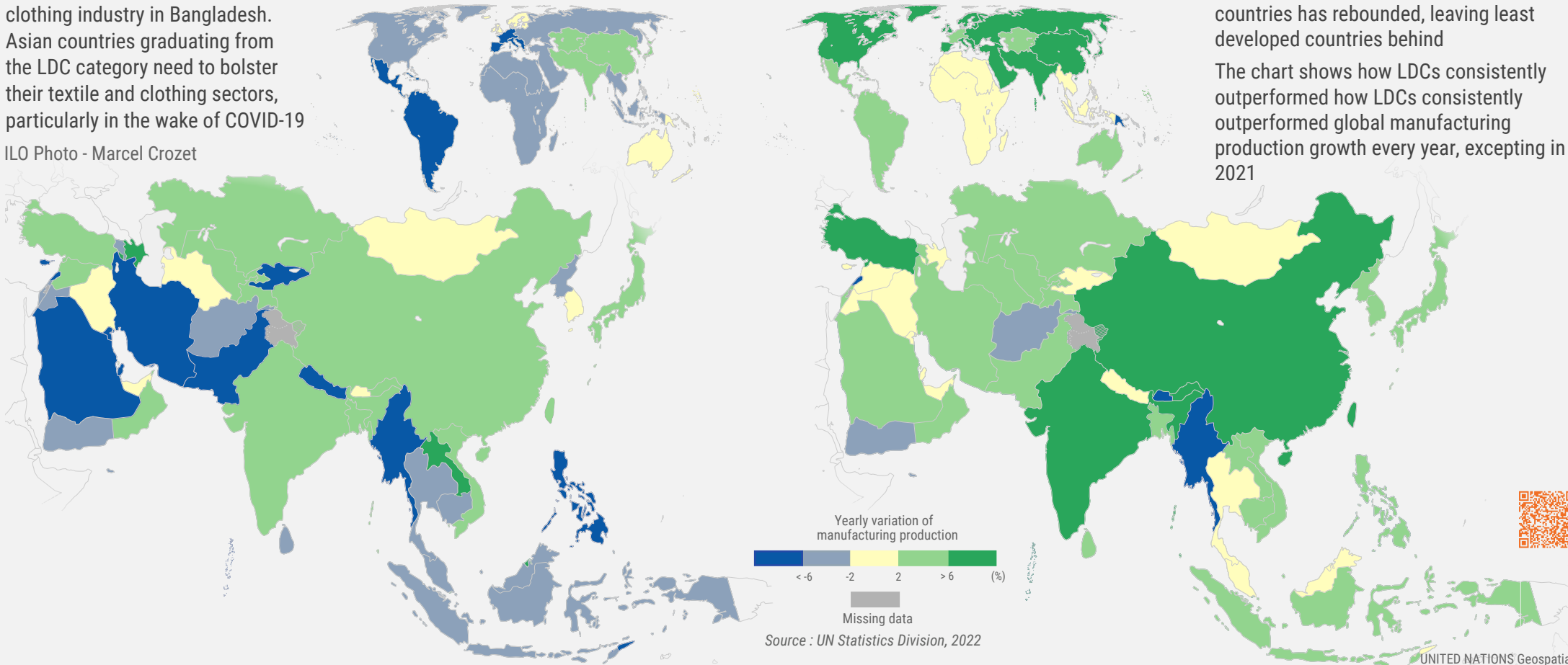


▲ Manufacturing in more developed countries has rebounded, leaving least developed countries behind

The chart shows how LDCs consistently outperformed how LDCs consistently outperformed global manufacturing production growth every year, excepting in 2021

Manufacturing during pandemic (2020)

Manufacturing post pandemic (2021)

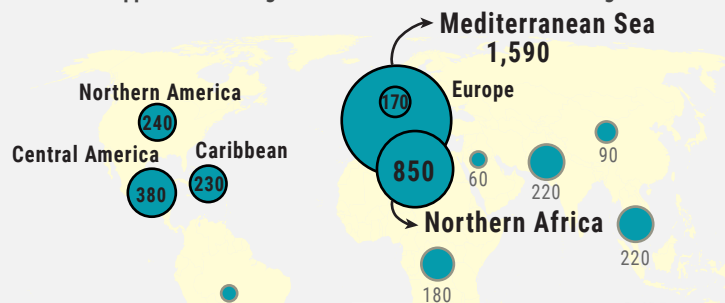




## Facilitate orderly, safe, regular and responsible migration and mobility of people

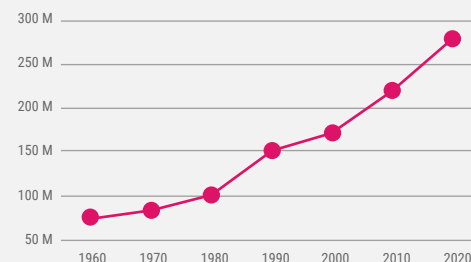
### Total number of dead and missing migrants in 2022

Death and disappearance of migrants in different sub/intermediate regions in 2022



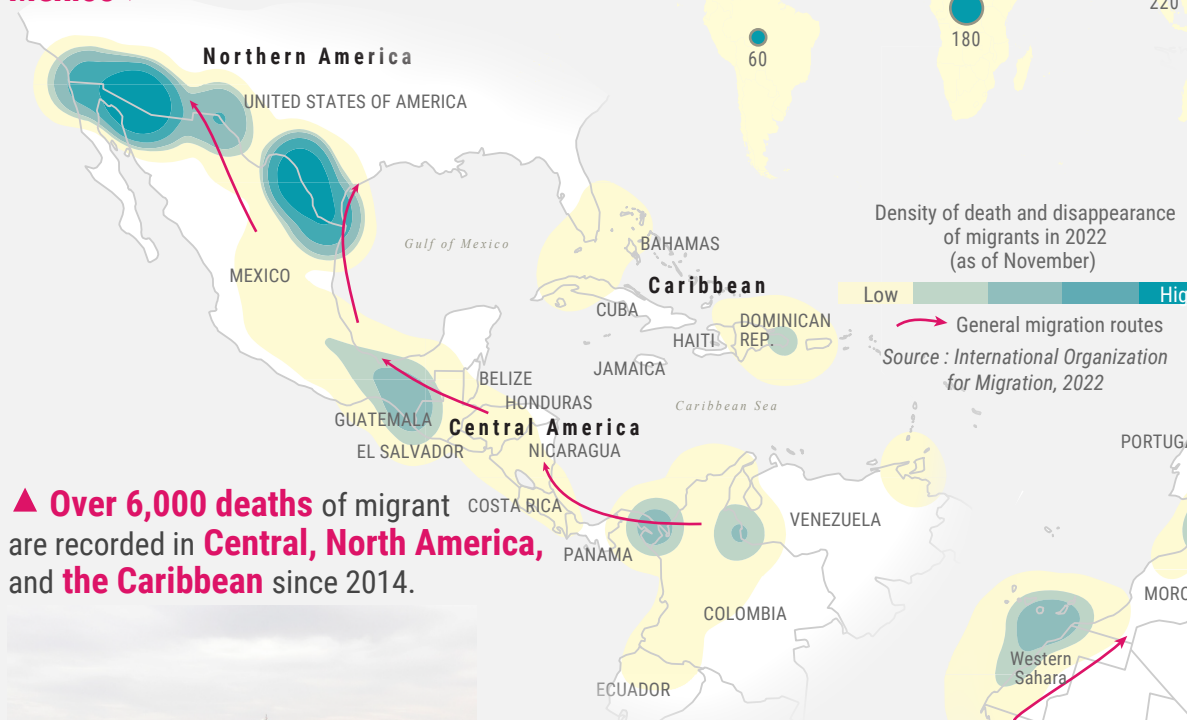
Number of international migrants, 1960-2020

Source : UN DESA, 2021



◀ The number of migrants is growing globally, reaching **281 million** international migrants in 2020, this represents **3.6 %** of the world's population.

In **2022**, the death and disappearance of **migrants** is over **4,000 persons**. The majority of these deaths and disappearance occur in or around the **Mediterranean Sea** and in or around the **Caribbean Sea** and **Gulf of Mexico** ▶



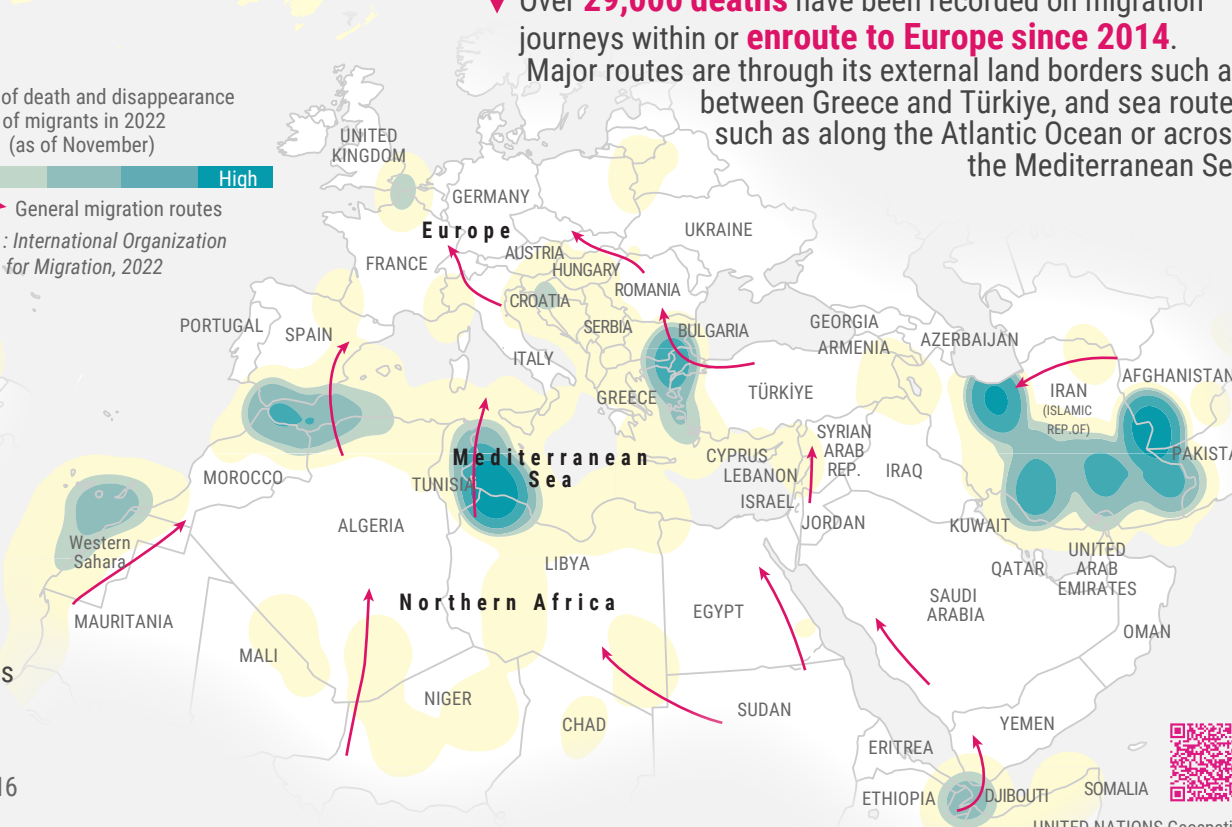
▶ Over **29,000 deaths** have been recorded on migration journeys within or **enroute to Europe** since **2014**. Major routes are through its external land borders such as between Greece and Türkiye, and sea routes such as along the Atlantic Ocean or across the Mediterranean Sea

▲ Over **6,000 deaths** of migrant are recorded in **Central, North America, and the Caribbean** since 2014.



◀ Asylum-seekers and migrants aboard a dinghy in international waters off the coast of Libya in November 2016

UNHCR Photo - Giuseppe Carotenuto, 2016





# MAKE CITIES AND HUMAN SETTLEMENTS FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL



By 2030, reduce the adverse per capita environmental impact of cities, including special attention to air quality

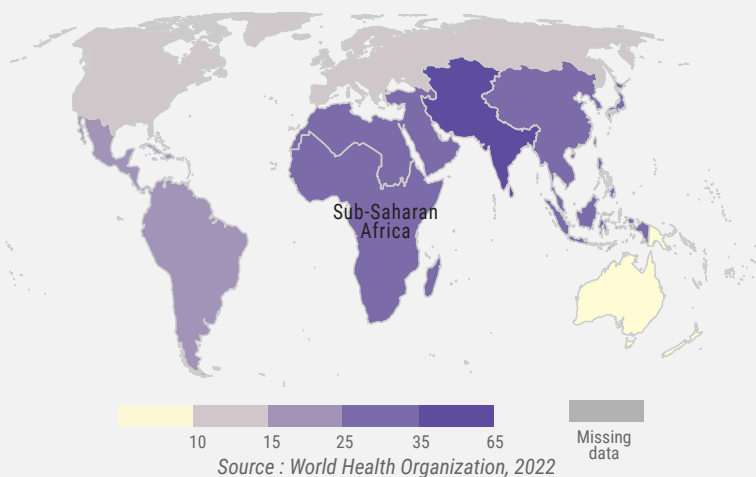
Monitoring annual mean levels of fine particulate matter (PM<sub>2.5</sub>) in cities (population weighted)

Since 2007, **more than half** of the world's population live in cities. Although cities are drivers of economic growth, contributing more than **80%** of global GDP, they also account for more than **70%** of global greenhouse gas emissions

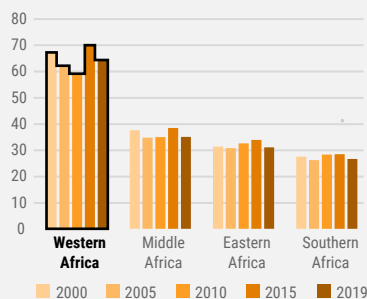
**99%** of the world's population live in places where air pollution levels exceed WHO guideline limit for fine particulate matter (PM<sub>2.5</sub>) of **5 microns** or less in diameter, with **Central** and **South Asia** showing highest values ▼

▼ In **Sub-Saharan Africa**, rapid and poorly planned urbanization leads to many challenges, including unsafe levels of air pollution. With a three-year, **2017-2019**, mean PM<sub>2.5</sub> level of **32.6**, Sub-Saharan Africa has some of the worst air pollution in the world, more than the global average

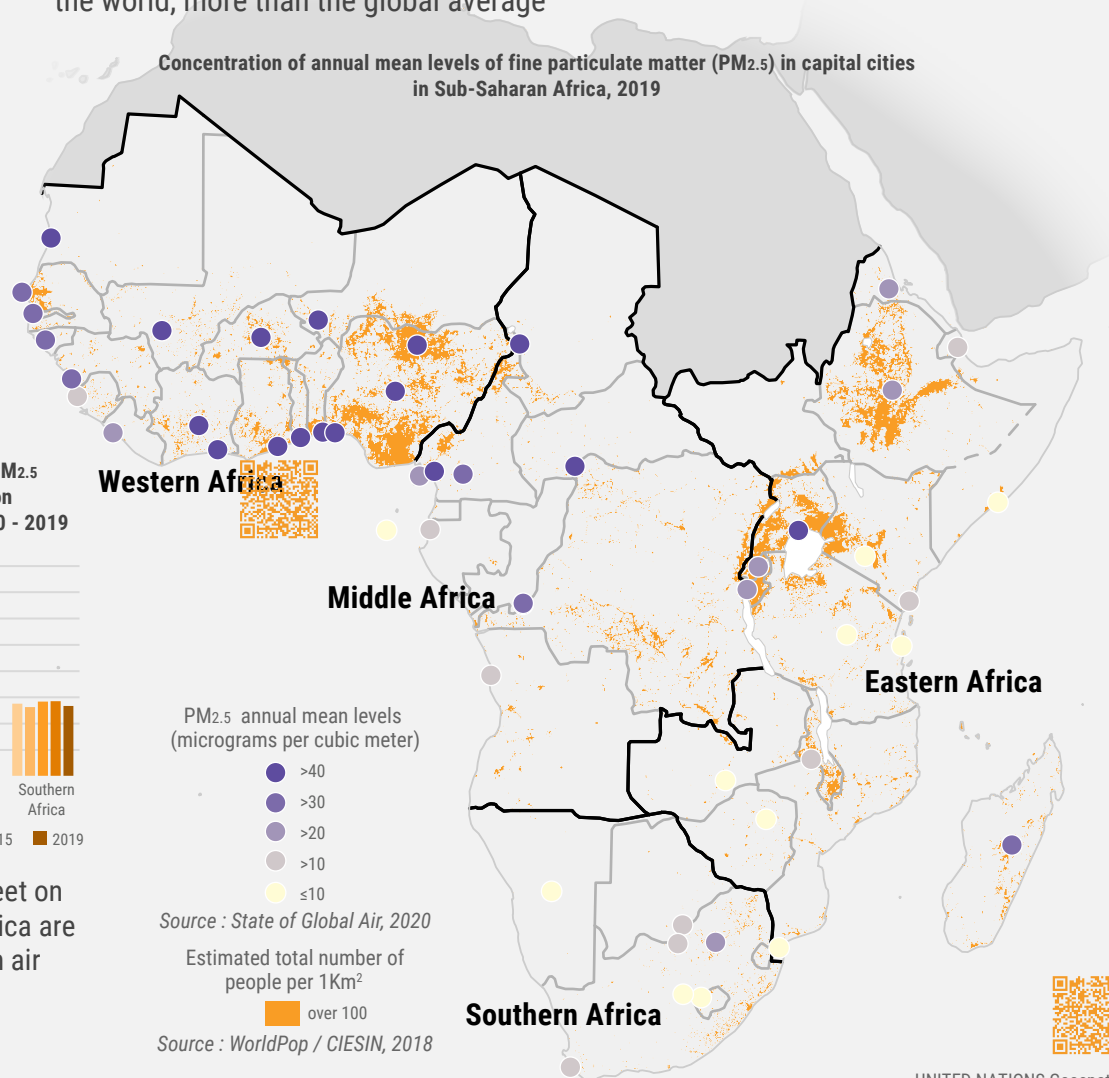
Global annual mean levels of PM<sub>2.5</sub> in urban areas by regions, 2017-2019



Annual mean levels of PM<sub>2.5</sub> by intermediate region in Sub-Saharan Africa, 2000 - 2019



Concentration of annual mean levels of fine particulate matter (PM<sub>2.5</sub>) in capital cities in Sub-Saharan Africa, 2019



Source : State of Global Air, 2020

Estimated total number of people per 1Km<sup>2</sup>

Source : WorldPop / CIESIN, 2018



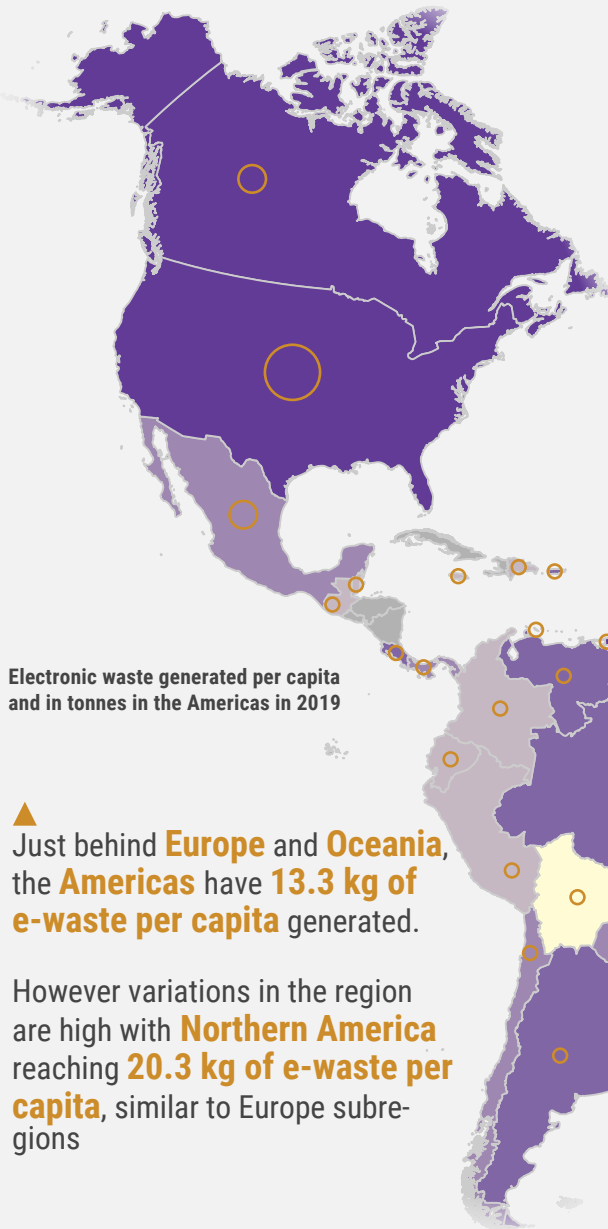
◀ Residents of Kigali, Rwanda walking in a street on a car-free day. Several cities in Sub-Saharan Africa are adopting monthly car-free days to combat urban air pollution and promote healthy living

WHO photo - 2021



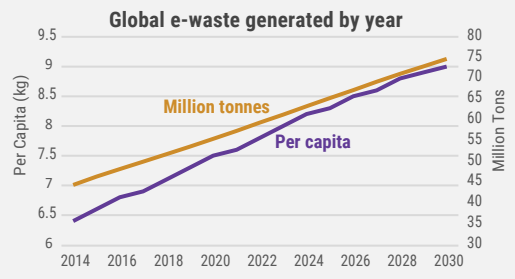
By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle

## Reducing electronic waste generated

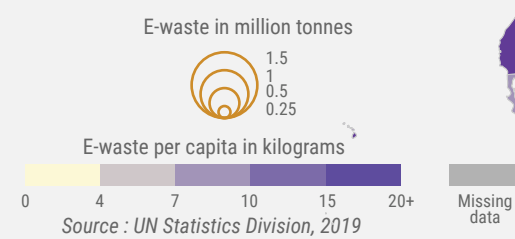


▲ Just behind **Europe** and **Oceania**, the **Americas** have **13.3 kg of e-waste per capita** generated.

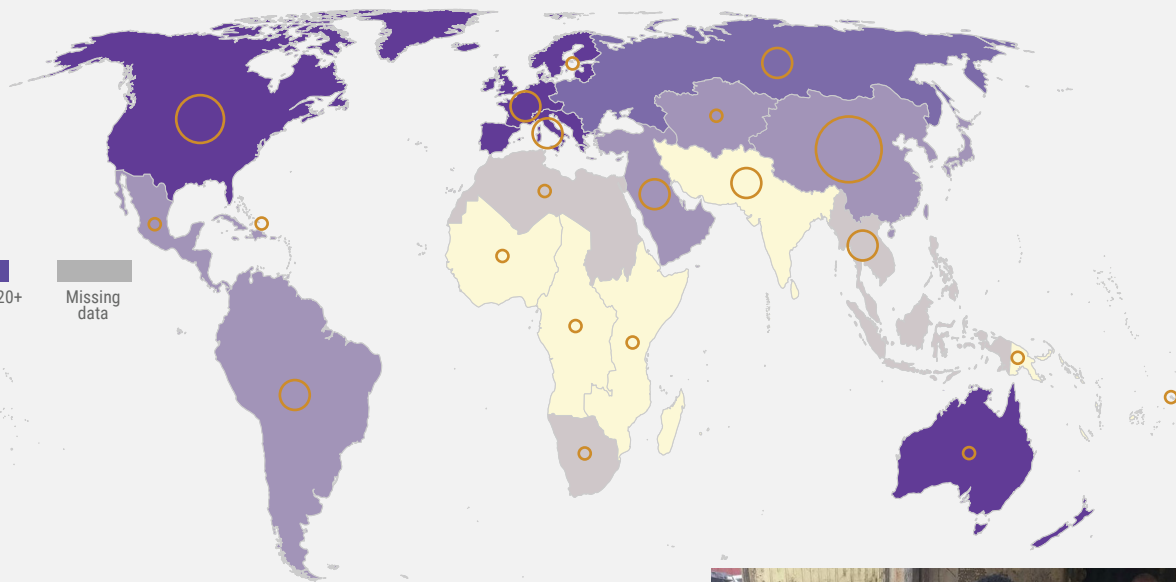
However variations in the region are high with **Northern America** reaching **20.3 kg of e-waste per capita**, similar to Europe subregions



Global electronic waste, or “e-waste”, production is currently on track to reach **120 million tonnes per year by 2050** if current trends continue, developed countries account for the highest values per capita in **Northern America, Europe subregions, Australia and New Zealand** ▼



**Electronic waste generated per capita (in kg) and in tonnes by subregions in 2019**



▶ While developing countries are not the largest producers of electronic waste, or “e-waste”, the e-waste is often dumped illegally to them, resulting from increased threats to health from the illegal processing of old electrical or electronic devices, here, an e-waste worker disassembles items in Ghana.



WHO Photo - Abraham Thiga Mwaura, 2021



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# TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE

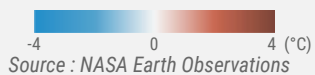
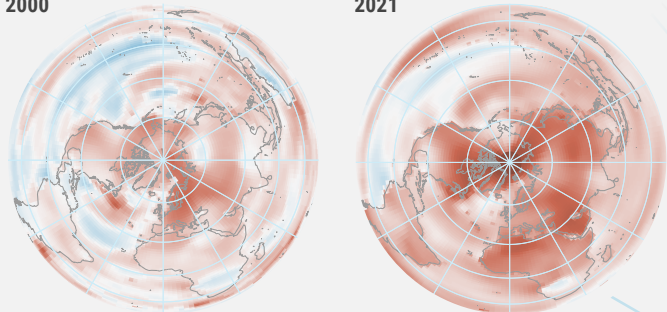
## Integrate climate change measures into national policies, strategies and planning

### Change of Arctic ice sheet extent over 40 years, 1979 - 2022

Global surface temperature anomaly over 20 years (Base period : 1951 - 1980)

2000

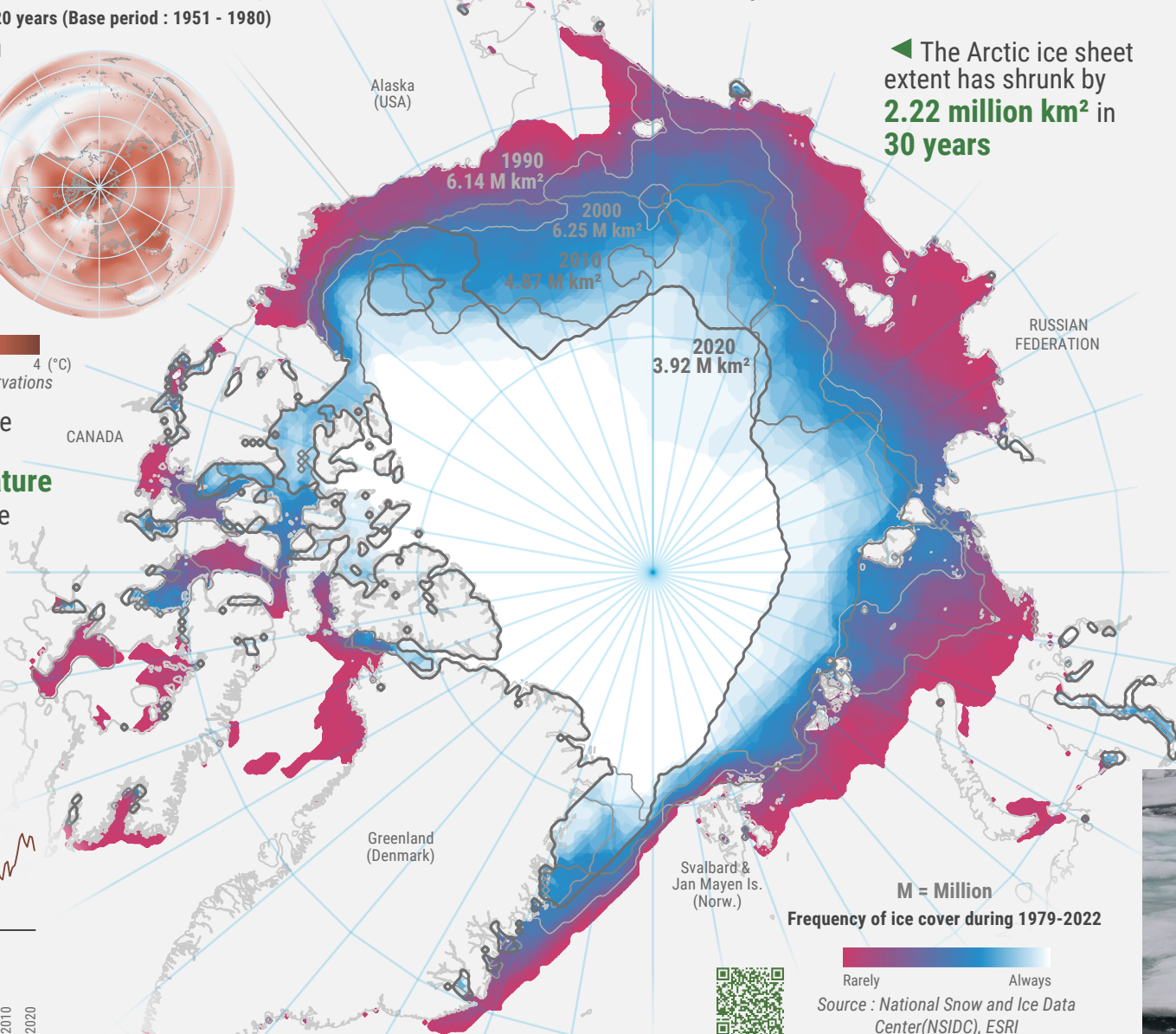
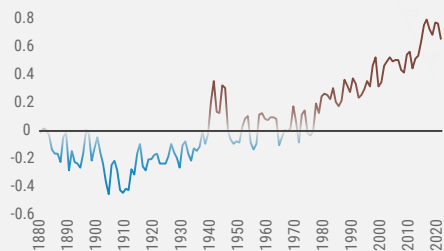
2021



▲ Comparing the global surface temperature in 2000 and 2021 shows a **significant temperature increase**, especially around the **Arctic Sea**

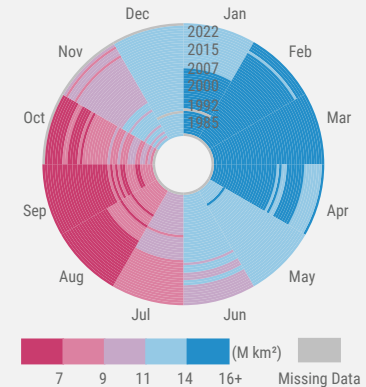
▼ In **2020**, the global ocean surface temperature was **0.76°C warmer** than the 20th century baseline temperature

Global ocean temperature anomalies (Base period : 1901- 2000)  
Source : National Oceanic and Atmospheric Administration (NOAA)



◀ The Arctic ice sheet extent has shrunk by **2.22 million km<sup>2</sup>** in **30 years**

Monthly mean of ice sheet extent, 1979 - 2022



▲ **September** has the **smallest ice sheet** on Arctic Sea (September is the month after summer's melting and before winter's refreezing)  
The average extent of the Arctic ice sheet has **decreased** since **1990s**

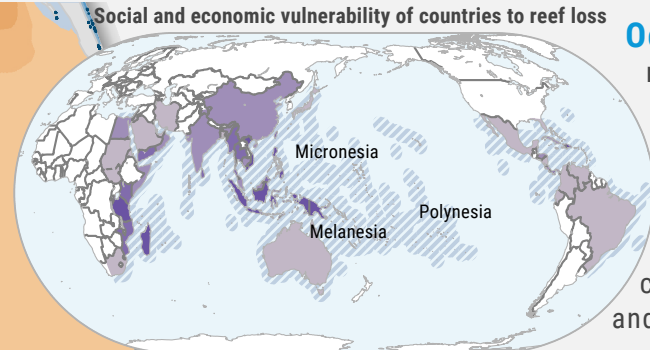
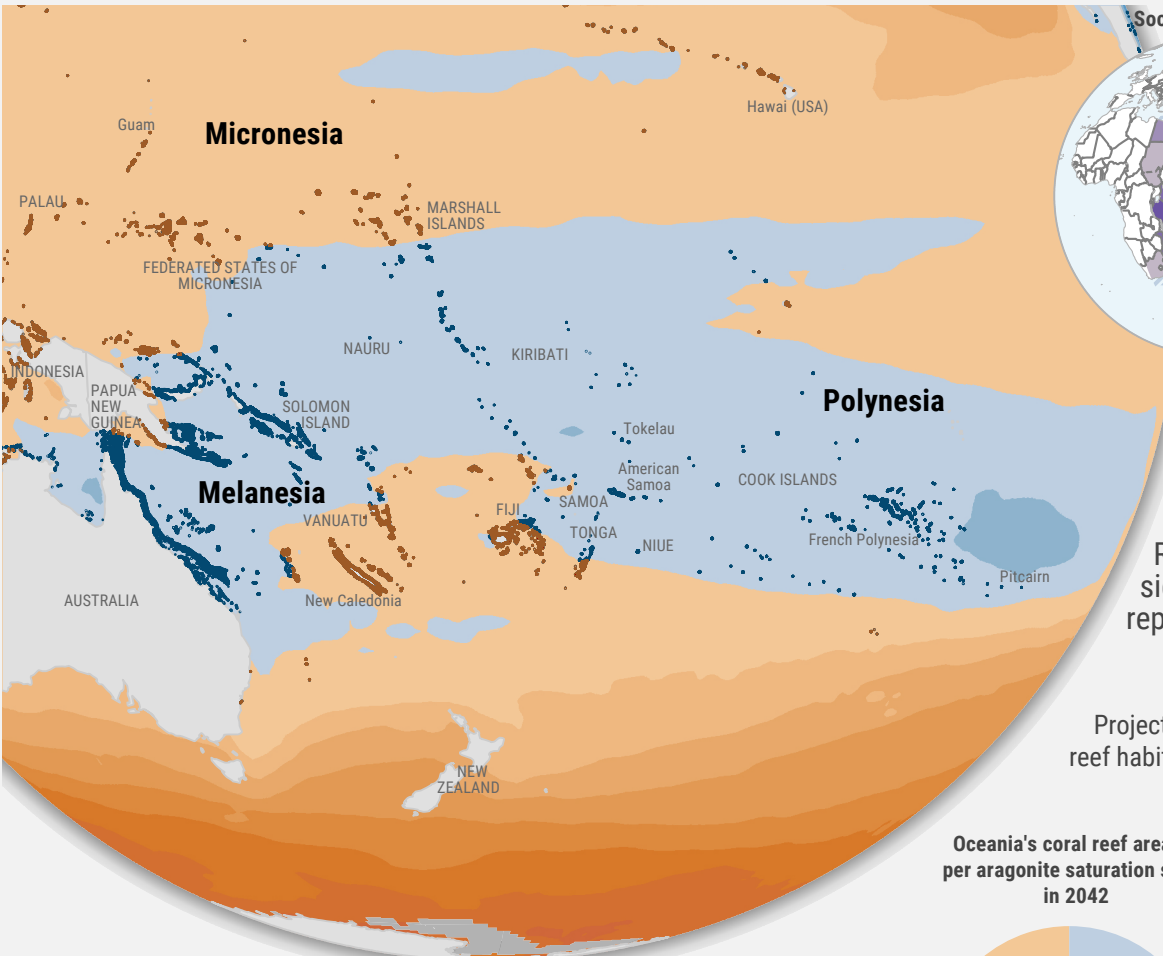
▼ Polar bear stands on the melting ice due to the climate change WMO Photo - Karolin Eichler



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Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels  
 Estimated aragonite saturation state in 2042, under a "business-as-usual" scenario (RPC8.5, IPCC)

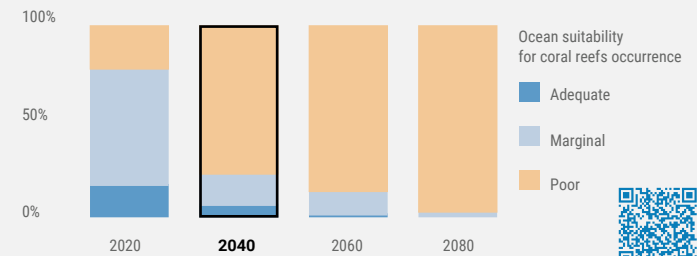


**Oceania**, particularly the Tropical Pacific region, holds about **25% of the global coral reefs**  
 Coral reefs provide **375 billion USD** per year around the world in **goods and services**  
 At least **500 million people** rely on coral reefs for food, coastal protection, and **livelihoods**

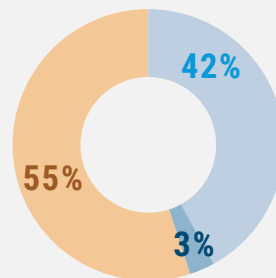
Source: Water Resources Institute, 2011

◀ The ocean absorbs about **25% of the CO<sup>2</sup>** (carbon dioxide) we emit. By taking up extra CO<sup>2</sup>, the **ocean has acidified by 30%** since the start of the Industrial Revolution, faster than any rate in the past 300 million years. Ocean acidification significantly reduces the availability of aragonite for corals' skeleton building and repair.

Projected suitability of global coral reef habitat (%) in terms of acidity ▶



Oceania's coral reef area (%) per aragonite saturation state in 2042



Source: Water Resources Institute, 2011  
<http://onesharedocean.org/?q=data>

▶ The Sea Women of Melanesia program raise awareness and help indigenous women create and manage marine protected areas on their own coral reefs. They have been named Champions of the Earth in the Inspiration and Action category, the UN's highest environmental honour



UNEP Photo - Roa Paul



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 Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.  
 Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

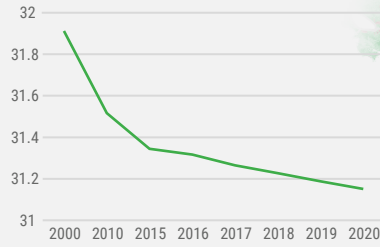


## Progress towards sustainable forest management

Global forest loss during the period 2000–2021, defined as a stand-replacement disturbance, or a change from a forest to non-forest state

The world's forest area continues to **decrease** but at a slightly **slower rate** compared with previous decades. The proportion of forest area fell from **31.9 per cent** of total land area in 2000 to **31.2 per cent** of total land area in 2020

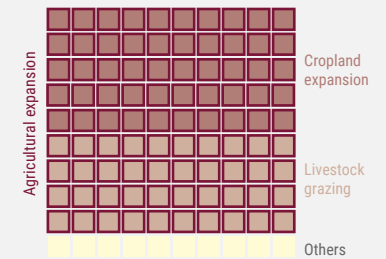
Change of global forest area as a proportion of total land area, 2000 - 2020 (per cent)



Source: UN Statistics Division, 2022

▼ **South America** has lost **80 million ha** of forest area during last two decades, which accounts for **80 per cent** of global forest lost

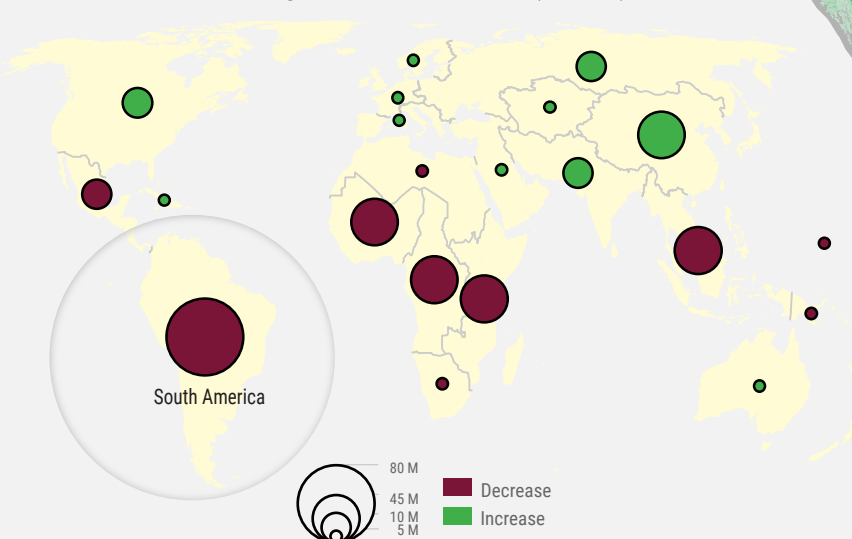
Major driver of global deforestation



Source: UN Statistics Division, 2022

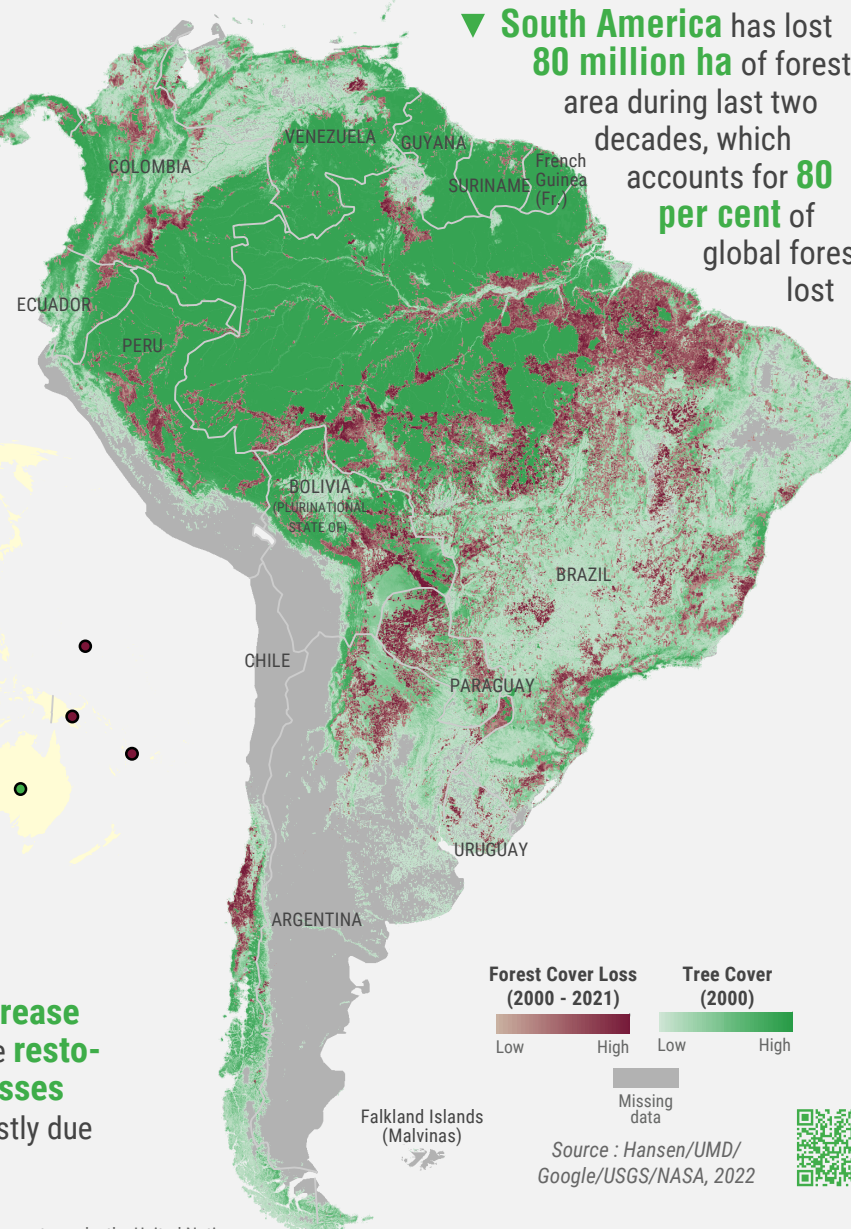
▲ **Agricultural expansion** is driving almost **90 per cent** of global deforestation, including 49.6 per cent from expansion for cropland and 38.5 per cent for livestock grazing

Forest area change between 2000 and 2020 (hectares)



Source: UN Statistics Division, 2022

▲ **Asia, Europe** and **Northern America** showed an overall **increase** in forest area from 2000 to 2020 due to **afforestation**, landscape **restoration** and the natural expansion of forests, while **significant losses** were observed in **Latin America** and **Sub-Saharan Africa**, mostly due to the conversion of forests into **agricultural land**



Forest Cover Loss (2000 - 2021) Tree Cover (2000)  
 Low High Low High

Source: Hansen/UMD/Google/USGS/NASA, 2022

▼ UNDP, the Peruvian Ministry of Culture, and the Confederation of Amazonian Nationalities of Peru (CONAP) have created “Respira Amazonía” (Amazon’s Breath), a series of 50 short radio messages in indigenous languages

UNDP Photo-Monica Suárez Galindo, 2020



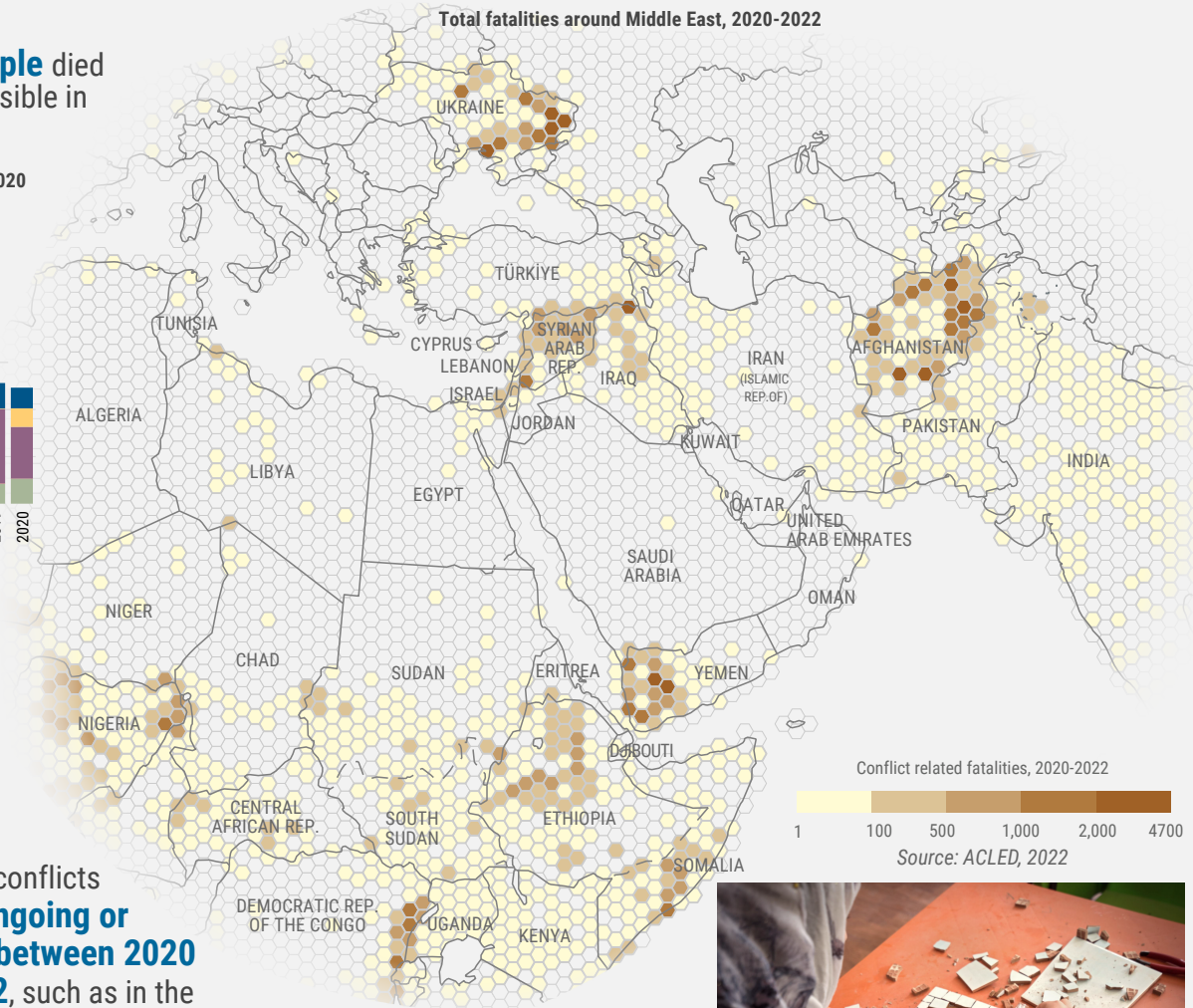
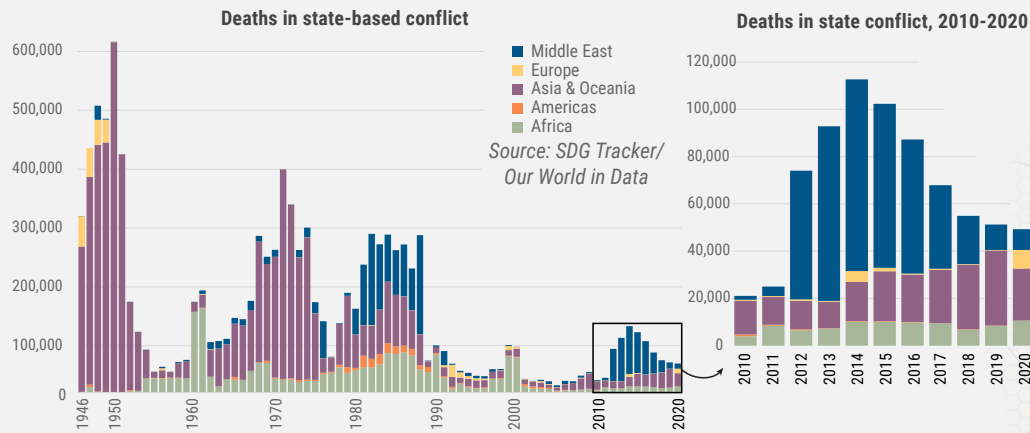




# Significantly reduce all forms of violence and related death rates everywhere

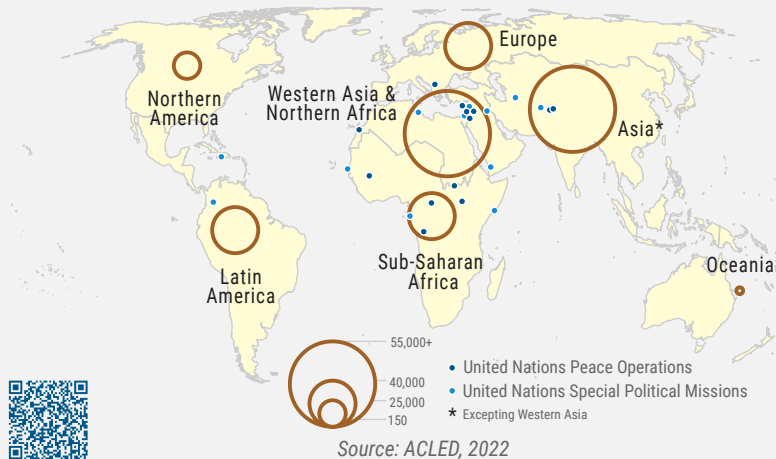
## Conflict-related deaths, 1946-2020

Since **1946**, the overall amount of deaths in state-based conflict has steadily **decreased** worldwide. Still, **from 2010 to 2020**, around **half a million people** died through direct violence in wars. During this period, the increase is particularly visible in the **Middle East** ▼



Since **2020**, **incidents** related to battles and conflicts keep on occurring within and at the crossroads of **Africa, Asia, and Europe** ▼

Battle related incident occurrences, 2020-2022



► Many conflicts are still **ongoing or erupted between 2020 and 2022**, such as in the **Middle East**, the **Sahel**, the **Horn of Africa** or in countries such as **Afghanistan**, Eastern **D.R.Congo** or **Ukraine**

► UN Women Humanitarian work in Za'atari Refugee Camp in Jordan  
UN Women Photo-Christopher Herwig





## Enhance the use of enabling technology, in particular information and communications technology

### Proportion of individuals using the Internet

**63% of the global population** were using the **internet in 2021** and the number of users in the Least Developed Countries increased by 20%. However, the **digital divide**, which is the gap between regions that have or do not have access to modern information and communications technology, still needs to be closed. **Connectivity to the internet** is key to **leave no one behind** and bring the world closer together and improve **digital cooperation**.

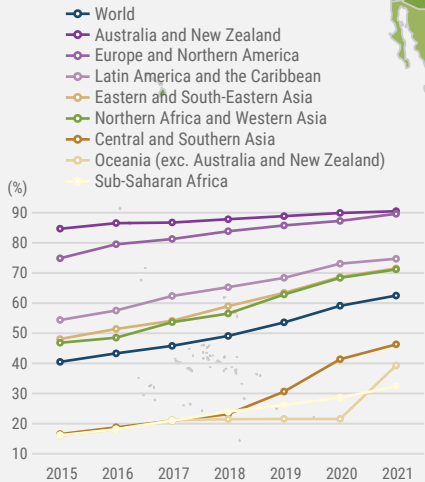


Internet users per 100 inhabitants (percentage)

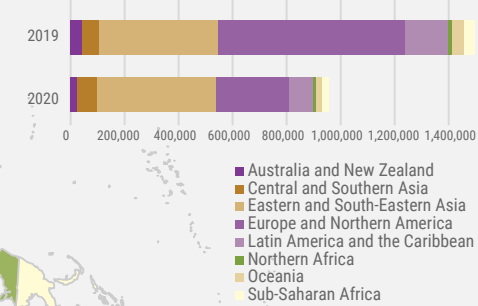
▲ «Learning Crisis Classroom» installation by UNICEF  
UN Photo-Mark Garten, 2022

▲ Next gen, 'lightning' fast global communication network on track for 2020 entry  
ITU Photo, 2017

Internet users per 100 inhabitants 2015-2021 (percentage)



Foreign direct investment (FDI) inflows (millions of US dollars)



▲ A teenage girl prepares to take part in a virtual class at home in Ecuador  
UNICEF-Santiago Arcos, 2021

*“Digital technologies sustain life, work, health and learning for billions of people. In the face of COVID-19, businesses, governments and the digital community have proven resilient and innovative, helping to protect lives and livelihoods. These challenging times have accelerated the transformation everywhere..”*

**Secretary-General of the United Nations**



▼ ITU Photo, 2017

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