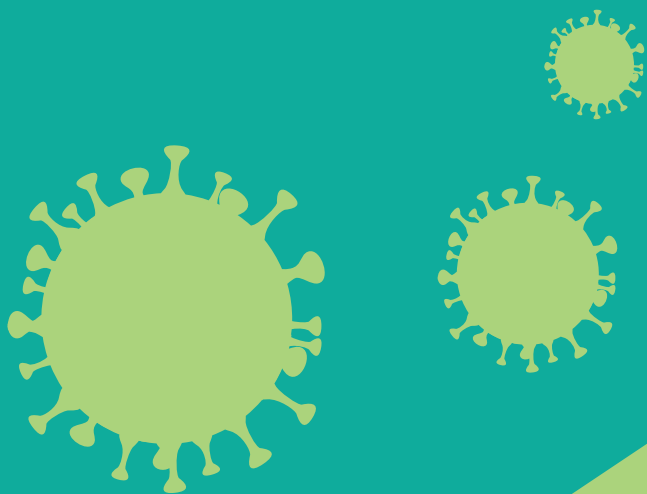


How COVID-19 is changing the world: a statistical perspective Volume III





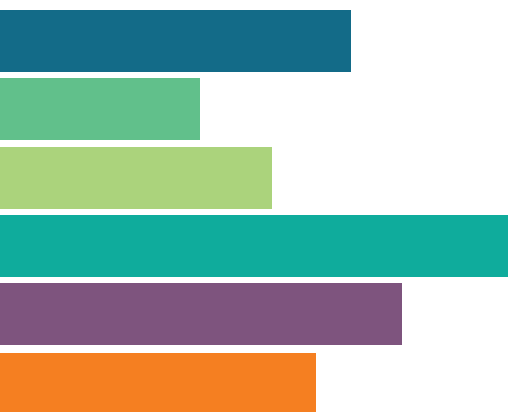
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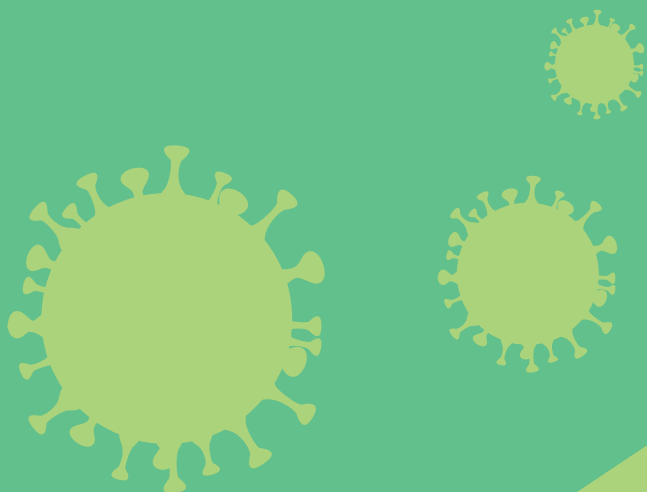
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Contributing organisations

Asian Development Bank (ADB)
African Development Bank (AfDB)
Bank for International Settlements (BIS)
European Central Bank (ECB)
Eurostat
Food and Agriculture Organization of the United Nations (FAO)
International Civil Aviation Organization (ICAO)
International Labour Organization (ILO)
International Organization for Migration (IOM)
Interstate Statistical Committee of the Commonwealth of Independent States (CISSTAT)
Office of the United Nations High Commissioner for Human Rights (OHCHR)
Organisation for Economic Co-operation and Development (OECD)
Partnership in Statistics for Development in the 21st Century (PARIS21)
The Statistical Center of the Gulf Cooperation Council (GCC-STAT)
United Nations Children's Fund (UNICEF)
United Nations Conference on Trade and Development (UNCTAD)
United Nations Department of Economic and Social Affairs (UN DESA)
United Nations Development Programme (UNDP)
United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)
United Nations Economic Commission for Africa (UNECA)
United Nations Economic Commission for Latin America and the Caribbean (ECLAC)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)
United Nations Environment Programme (UNEP)
United Nations High Commissioner for Refugees (UNHCR)
United Nations Human Settlement Programme (UN Habitat)
United Nations Industrial Development Organization (UNIDO)
United Nations Office on Drugs and Crime (UNODC)
United Nations Statistics Division (UNSD)
United Nations World Tourism Organization (UNWTO)
Universal Postal Union (UPU)
World Bank Group (WBG)
World Trade Organization (WTO)

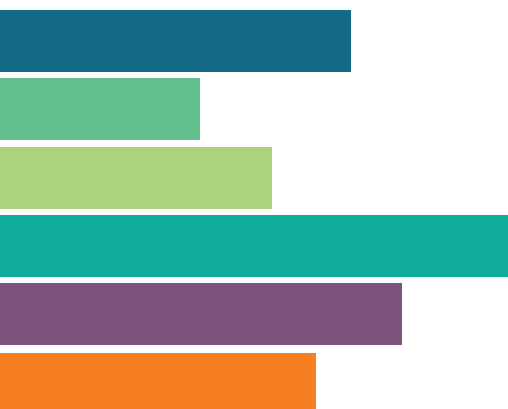




The Committee for the Coordination of Statistical Activities (CCSA)

The CCSA is comprised of international and supranational organizations whose mandates include the provision of international official statistics guided by the Principles Governing International Statistical Activities (https://unstats.un.org/unsd/ccsa/principles_stat_activities/) and which have a permanent embedded statistical service that maintains regular contact with countries. The mandate of the CCSA is to ensure the efficient functioning of the international statistical system, to assist Governments in the development of common statistical standards, platforms and methodologies, and to provide inter-institutional support, outreach and advocacy for high-quality official statistics.

More information can be found on the CCSA webpage: <https://unstats.un.org/unsd/ccsa/>



Introduction

We are pleased to present the third volume of “How COVID-19 is changing the world: a statistical perspective”.

Since the release of the first volume in May 2020, the COVID-19 pandemic has continued to rage around the world. By mid-March, 2021, countries around the globe had reported over 123 million cases—a nearly five-fold increase since this report’s previous volume—and over 2.7 million deaths attributed to the disease. And while new case loads are currently on the rise again, the global health community has already administered almost 400 million doses of vaccines, at last offering some signs of hope and progress.

Nonetheless, the pandemic continues to present daunting challenges for governments and international organizations. Economic impacts threaten to undo decades of recent progress in poverty reduction, child nutrition and gender equality, and exacerbate efforts to support refugees, migrants, and other vulnerable communities. National and local governments—together with international and private-sector partners—must deploy vaccines as efficiently, safely and equitably as possible while still monitoring for new outbreaks and continuing policies to protect those who do not yet have immunity. Economic recovery efforts are also increasingly urgent as the world begins to pivot to a “post-pandemic” reality. It is becoming increasingly clear that choices made over the next months and years could have impacts for generations to come.

More than ever, the world needs reliable and trustworthy data and statistics to inform these important decisions. The United Nations and all member organizations of the Committee for the Coordination of Statistical Activities (CCSA) collect and make available a wealth of information for assessing the multifaceted impacts of the pandemic. This report updates some of the global and regional trends presented in the first and second volumes and offers a snapshot of how COVID-19 continues to affect the world today across multiple domains. The report also highlights the impact of the pandemic on specific regions and population groups.

It has now been over a year since the pandemic began, and statistics are becoming available that quantify the year-on-year impacts of this terrible crisis and begin to hint at what a recovery and “post-COVID” world might look like. Some key findings include:

- 8.8 percent of global working hours were lost in 2020, equivalent to 255 million full-time jobs, an amount that is four times greater than the job losses during the 2009 financial crisis.
- COVID-19 is estimated to have pushed 119-124 million people into poverty in 2020, a substantial increase from earlier estimates.
- Aviation passenger traffic declined by 60 percent in 2020, while shipping activity—as measured by vessel port calls—likely declined by around 10 percent.
- The Human Development Index recorded its first drop since 1990 due to the pandemic, which has erased decades of progress in the female labour participation rate.
- International tourism recorded its worst year ever on record; international tourism declined by 74 percent.
- CO₂ emissions declined 6 percent in 2020 largely attributable to reduced activity in aviation and transport. As countries undertake recovery efforts, many are including green and sustainable targets in their planning.

National statistical systems continue to report daunting challenges to the collection of essential data and production of basic statistics. While many organizations have adapted their methods to some degree, the pandemic has underscored the need to provide sufficient resources, modernize operations, and upgrade critical infrastructure to provide flexibility, particularly in times of crisis.

Many more insights are provided in the individual sections of this publication. As we work to continue providing useful statistical perspectives on the pandemic, we also continue our broader efforts to make the data itself more accessible and useful. This volume is the first in the series to provide the underlying report data in free and open formats. Where available, these resources are indicated with an icon and website link at the end of their respective chapters. Some sections also provide source code.

Lastly, we would like to again give special thanks to the CCSA secretariat (Statistics Division of UN DESA) and to the team at the World Bank for its efforts to edit this collection of statistical information and curate the underlying data. Without their commitment and dedication, this report would not have been possible.

Angela Me
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UNODC
Co-chair CCSA

Haishan Fu
Director, Development Data Group
World Bank
Co-chair CCSA



CCSA
Committee for the Coordination of Statistical Activities

#StatisticalCoordination

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COVID-19



A time for international collaboration and co-investment

The crisis has revealed striking differences between National Statistical Offices (NSOs) from low- and high-income countries in how they are addressing operational challenges and meeting the new data demands from all sectors of society. This highlights the need to understand the country-specific circumstances that determine the effectiveness of different types of investments and partnerships aimed to enhance the resilience and responsiveness of the National Statistical Systems.

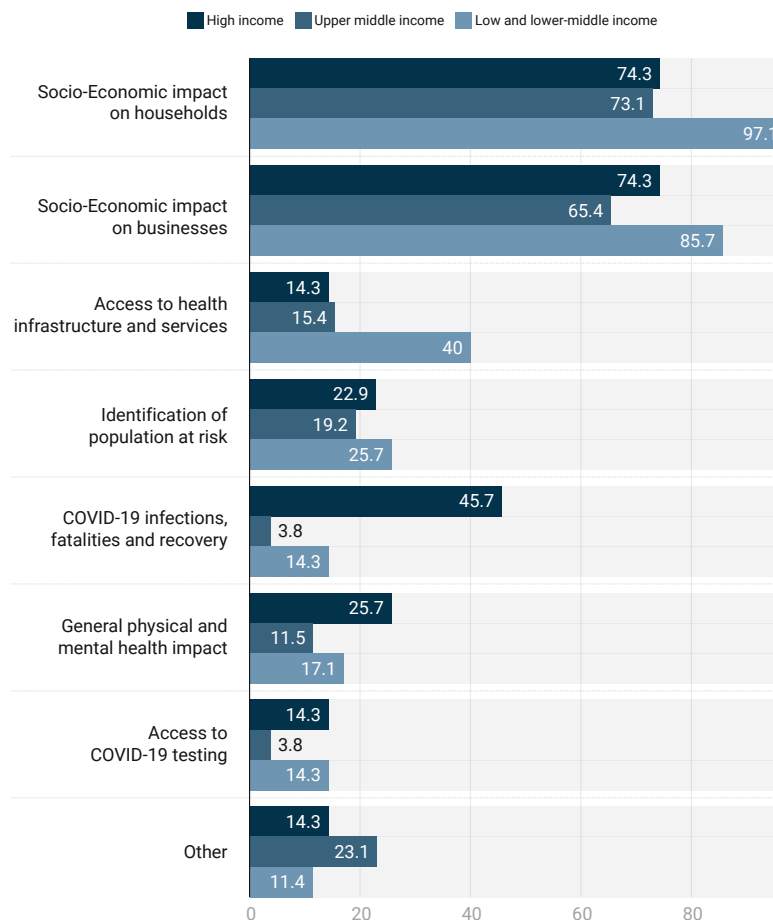
While addressing disruptions to their regular statistical operations brought about by the pandemic, NSOs have also actively responded to a large increase in data demands.

According to the COVID-19 Survey of National Statistical Offices (NSOs), conducted by the World Bank and the United Nations Statistics Division in collaboration with the UN Regional Commissions, in October last year, 82 percent among a sample of 125 NSOs were collecting data on COVID-19 and its impacts. Particularly in the case of low- and lower-middle income countries, these efforts focused predominantly on measuring the socioeconomic impacts of the pandemic on households and businesses.

However, out of 175 countries that have carried out or planned surveys measuring the impact of COVID-19 on households and individuals through telephone interviewing since 2020, only 34 per cent could rely on a recent survey or census to obtain respondent's contact information, while the remaining two thirds had to resort to other random digital dialing (RDD) or other non-probability sample designs. In tracking the spread and the impact of the COVID-19 pandemic, low and lower-middle income countries have had to compensate the lack of access to administrative data using alternative data sources, such as geospatial data and mobile phone data.

Figure 1. Focus of COVID-19 data collection efforts by National Statistical Offices

Share of NSOs that reported having planned or implemented COVID-19-related data collection, by focus area.



Source: Survey of National Statistical Offices (NSOs) during COVID-19, Round 3, October 2020.

The financial implications for statistical operations resulting from the pandemic were more immediately visible in low- and lower-middle income countries.

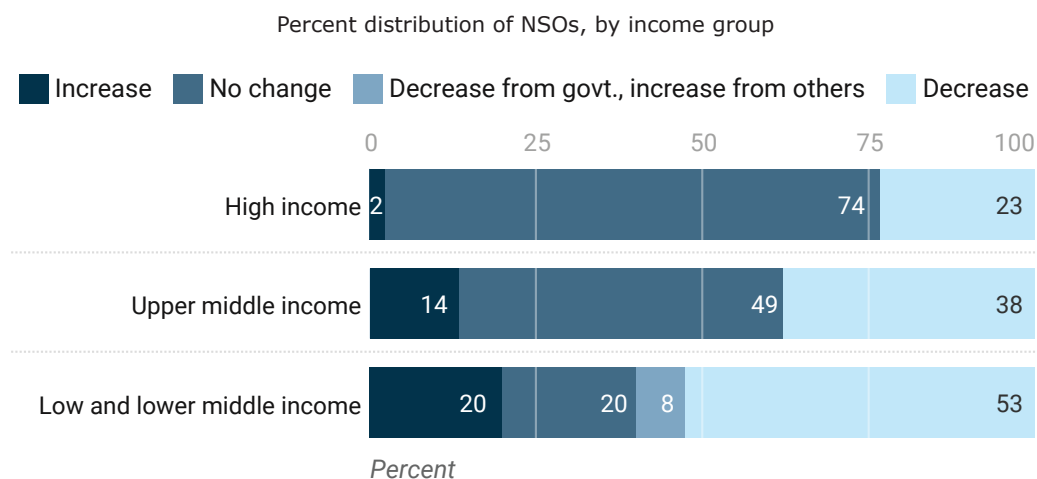
In May 2020, almost three quarters of NSOs in high-income countries reported no changes in their funding; in contrast, more than half of NSOs in low and lower-middle income countries noted a decrease in their overall funding from government and other sources. Consistent with this observation, already in May 2020, a large majority (87 percent) of NSOs in low and lower-middle income countries indicated that moderate to severe funding limitations were challenging their ability to operate during the pandemic (as opposed to only one third of NSOs in high-income countries).

The reorientation of funding resources (internal and external) away from population and housing census programmes and towards pandemic control activities remained generally limited (only 16 percent of all NSOs reported this to be the

case). However, such reorientations of funding were markedly more common among NSOs in low and lower-middle income countries (26 percent). This highlights the risk of a potentially widening gap in the funding of future censuses.

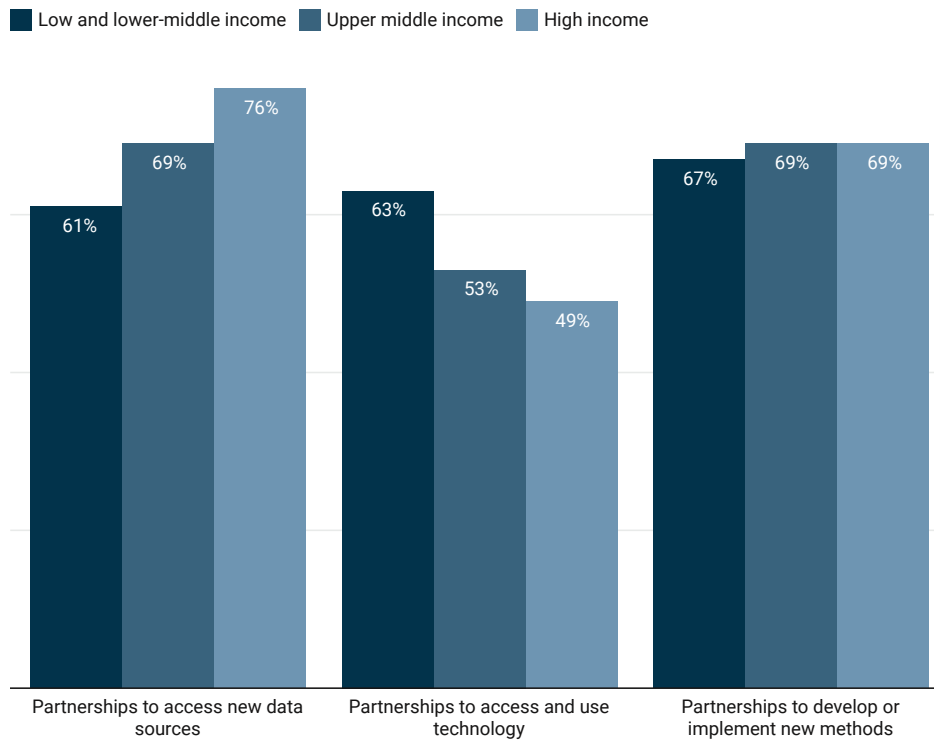
Moreover, in spite of the fact that 4 in 10 low and lower-middle income countries reported to have received financial support from international organizations and partners to face the challenges posed by the COVID-19 pandemic in 2020, 63 percent of NSOs in this group also indicated great need for additional financial support (as opposed to 12 percent of NSOs in high-income countries). In some countries, additional support is needed even to sustain the most basic capabilities, including remuneration of staff and the provision of IT infrastructure and internet connectivity services.

Figure 2. How the funding of National Statistical Offices was affected due to the COVID-19 pandemic



NSOs are engaging in new partnerships with international or public sector partners and, somewhat less frequently, private partners to bridge the data gaps created by the pandemic.

Figure 3. Share of National Statistical Offices that have established new partnerships, by type of partnership (percent)



Source: Survey of National Statistical Offices (NSOs) during COVID-19, Round 3, October 2020.

Countries with a strong government response to COVID-19 pandemic also had an increased chance to have produced information in partnership with others.* Over 7 in 10 NSOs that have collected data on COVID-19 and its impacts have relied on existing or new partnerships to do so. This practice was nearly universal in low and lower-middle income countries, where 89 percent of NSOs produced these data with at least one partner.

The most frequent type of partnership entered by NSOs in response to the pandemic varies across countries from different income groups. Sixty-three percent of NSOs from low- and lower-middle income countries entered new technology-related partnerships. Conversely, 76 percent of NSOs in high-income countries entered new partnerships to gain access to new data sources. Moreover, international partnerships accounted for the highest share in low and middle-income countries, while public sector partnerships were predominant

in their high-income counterparts.

Across all income-level groups, a majority of NSOs indicated that the formalization of collaborative arrangements was among the top three challenges preventing new partnerships with public sector partners (67 percent) and private sector partners (61 percent) during the pandemic. In contrast, for the establishment of new international partnerships, securing funding was reported by 62 percent of NSOs among the top three challenges.

Lessons learned

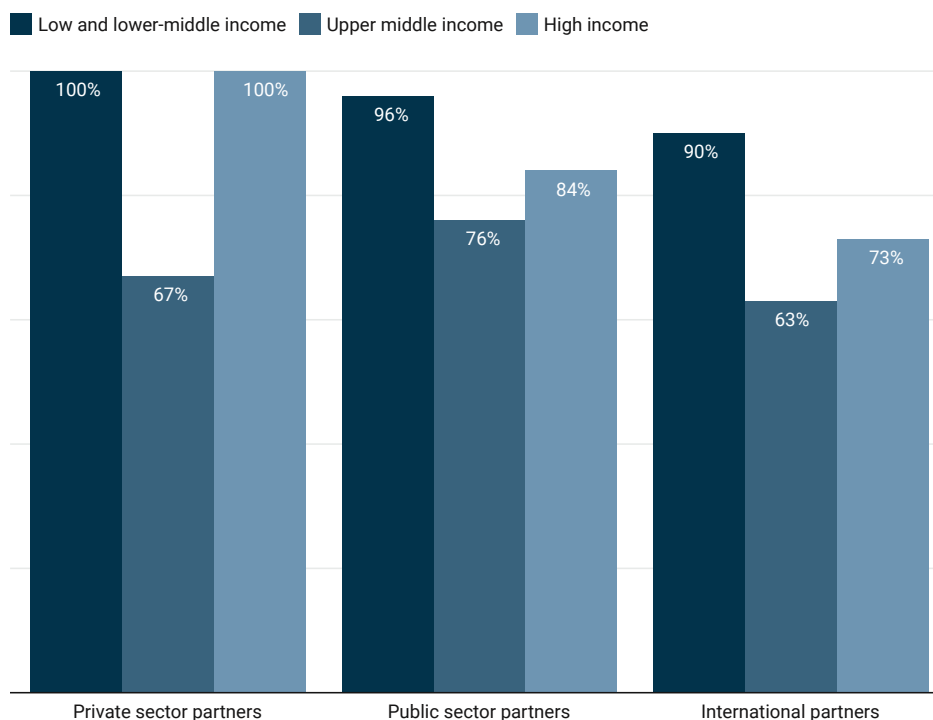
- Low and lower-middle income countries are ready to engage with international partners to meet their emerging demands in the use of new data sources, methods, and technologies—but funding is a major impediment.
- The majority of NSOs across all income groups expressed

* Controlling for strength of government response does not, however, reduce this difference between low- and high-income countries. For this analysis, the results of the COVID-19 survey of National Statistical Offices have been integrated with the Oxford Government Response Tracker[1] to track and compare government response to the COVID-19 pandemic.

the need for co-investment in (i) the production of granular data through the linking of microdata from surveys and administrative sources through registers of people and businesses and the integration of statistical and geospatial data and (ii) the production of high frequency statistics and indicators through the use of big data for high frequency statistics.

- Partnerships to support access to new data sources, methods and technologies by NSOs during this the COVID-19 crisis require a strategy for the short, medium and longer term, so they are implemented and further developed in a sustainable manner, leading to permanent rather than temporary solutions.

Figure 4. Share of National Statistical Offices that faced challenges to establish new partnerships during the pandemic, by type of partner (percent)



Source: Survey of National Statistical Offices (NSOs) during COVID-19, Round 3, October 2020.

Source:

- Survey of National Statistical Offices (NSOs) during COVID-19, conducted by World Bank and the United Nations Statistical Division (UNSD), in coordination with the five UN Regional Commissions. (see <https://covid-19-response.unstatshub.org/statistical-programmes/covid19-nso-survey/>)

A total of 195 NSOs were invited to participate in the first three rounds of this web-based survey. Of these, 122 NSOs (63 percent) responded to the first round that took place in May. For the second round (July), 112 NSOs (57 percent) responded. Some 125 NSOs (64 percent) participated in the third round, completed in October. The survey participation in the third round in each region was as follows: 7 NSOs in Central and Southern Asia (50 percent), 11 in Eastern and South-Eastern Asia (69 percent), 34 in Europe and Northern America (76 percent), 18 in Latin America and the Caribbean (53 percent), 18 in Northern Africa and Western Asia (75 percent), 5 in Oceania (36 percent), and 32 in Sub-Saharan Africa (67 percent). Overall, 149 NSOs (76 percent) participated in at least one round of the survey.

Get the Data <https://github.com/unstats/ccsa-covid-v3>

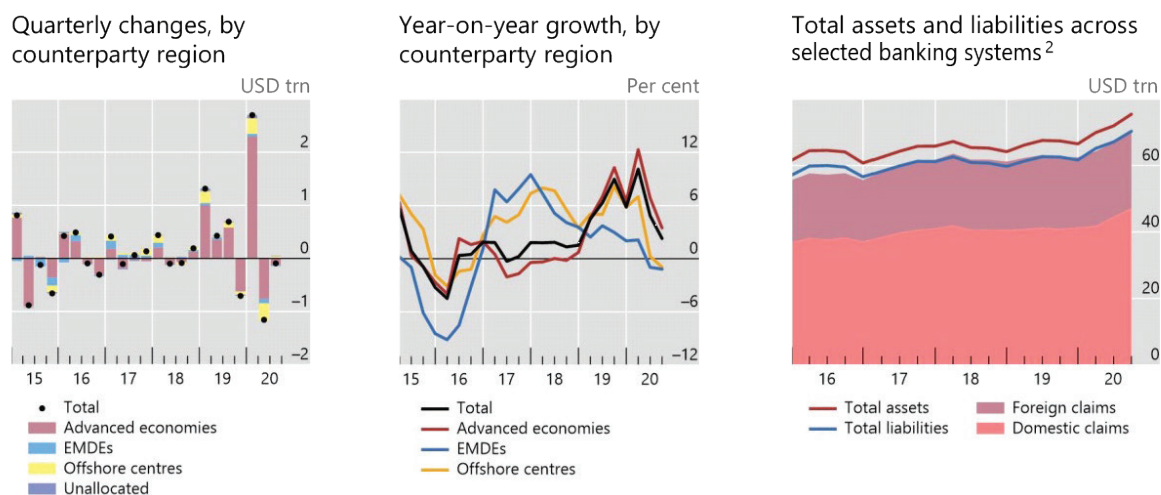
ECONOMIC IMPACT



Global credit turns toward domestic borrowers

After a surge in cross-border bank credit early in the pandemic, the subsequent reversal gave way to an expansion in domestic positions. Going beyond banking, Bank for International Settlements (BIS) statistics reveal similar trends in debt markets, fuelled by increased government borrowing in an effort to mitigate the effects of the pandemic.

Figure 1. Surge and reversal of banks' cross-border positions¹



¹ Year-on-year growth rates are calculated based on the adjusted changes for the past four quarters.

² The aggregate comprises all CBS/IC-reporting countries except for AT, BR, CL, ES, JP, MX, PA, PT and TR.

Source:

BIS locational banking statistics and BIS consolidated banking statistics on an immediate counterparty basis (CBS/IC).

The first quarter of 2020 saw an extraordinary expansion in global cross-border banking. Banks redistributed liquidity across their international operations, and reversed these flows in subsequent quarters as financial market stress subsided (Figure 1, left panel). Year-on-year (yoy) growth rates have dropped since, and turned negative for bank credit to emerging markets and developing economies (centre panel). Indeed, banks' cross-border claims on EMDEs contracted by nearly \$100 billion in Q2 (-\$82 billion) and Q3 2020 (-\$13 billion).

The fluctuations in cross-border positions provide but a partial picture of how internationally active banks' balance sheets have evolved during the pandemic. A more comprehensive view based on the BIS consolidated banking statistics (CBS) shows that banks' total assets and liabilities have actually surged since the beginning of 2020 (Figure 1, right panel). The total assets of banks headquartered in 22 BIS reporting countries grew from \$67 trillion at end-Q3 2019 to \$75 trillion by the third quarter of 2020, a 12% increase, in a pattern shared with total liabilities.

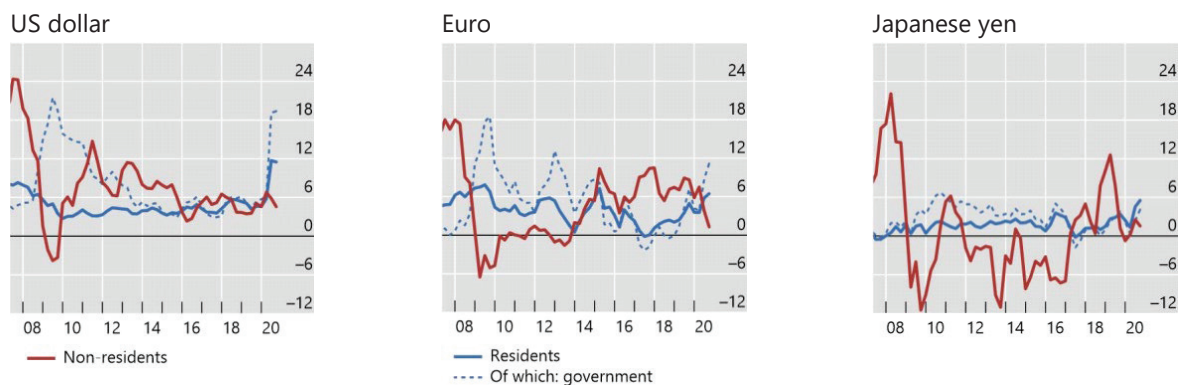
Most of the increase in claims was in domestic positions, i.e. deposits from, and credit to, residents in the banks'

home country. Increased holdings of government bonds and reserves at central banks played a key role, following accommodative policy. As a result, banks' portfolios have turned more domestic since the onset of the pandemic: the share of foreign claims in total claims fell across the board.

The same trend toward domestic borrowers shows when broadening the view to include both banking and bond markets. The BIS global liquidity indicators track credit to non-bank borrowers. For the three main reserve currencies, credit to domestic non-bank borrowers has grown faster than credit to non-residents since the start of the pandemic (Figure 2). The surge in credit to residents in recent quarters was fuelled by increased government borrowing, reflecting efforts to mitigate the economic effects of the pandemic. By Q3 2020, dollar credit to the US government grew by 19% yoy, while euro credit to euro area governments increased by 11%, comparable to growth rates seen following the Great Financial Crisis (GFC) of 2007–09 (Figure 2, dashed lines). Governments borrow predominantly in domestic markets, by issuing debt securities. The recent developments thus made global credit somewhat less global, and shifted the balance further from bank lending toward bond market financing.

Figure 2. Credit to non-residents and residents

Year-on-year change, in per cent



Source: BIS global liquidity indicators (Tables [E2.1](#), [E2.2](#) and [E2.3](#)).

Sources:

- The [BIS international banking statistics](#) cover the balance sheets of internationally active banks. The [debt securities statistics](#) cover borrowing activity in debt capital markets, both domestic and international. The [BIS global liquidity indicators](#) combine aggregates from both the banking and debt statistics.

Increase of the pandemic emergency purchase programme

In crisis times there is even more a need for high-quality data to be available on a timely basis. The European Central Bank (ECB) and the national central banks (NCBs) offer assistance to reporting agents to ensure that data remains fit for purpose. The European Central Bank has introduced a Pandemic Emergency Purchase Programme (PEPP) to support the euro area banks, firms and households through the COVID-19 crisis. On 10 December 2020, the Governing Council decided to increase the Pandemic Emergency Purchase Programme (PEPP) with €500 billion to €1,850 billion.

Table 1. Purchases under the PEPP (euro millions)

2020	Monthly net purchases
March	15,444
April	103,366
May	115,855
June	120,321
July	85,423
August	59,466
September	67,308
October	61,985
November	70,835
December	57,163

Table 2. Breakdown of holdings as at end-November 2020 under the PEPP.

End November 2020	euro millions
Asset Backed Securities	0
Covered Bonds	3,123
Corporate Bonds	17,620
Commercial Paper	24,306
Public Sector Securities	650,272
Total	698,461

The ECB will do everything necessary within its mandate to help the euro area through the crisis caused by the coronavirus (COVID-19) and will explore all options and contingencies to support the economy through this shock.

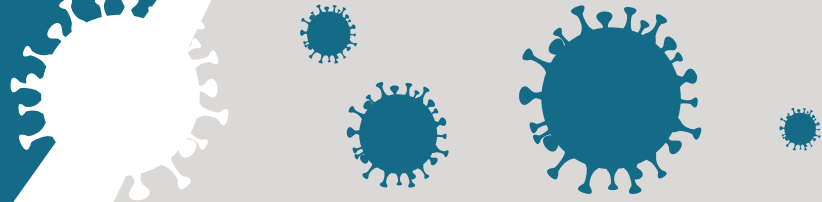
Despite the current coronavirus pandemic, the ECB is determined to continue collecting data on a timely basis and of a quality that is fit for purpose. This will allow the ECB to have the necessary statistical information at its disposal to adjust all of its measures, should this be needed, to safeguard liquidity conditions in the banking system and to ensure the smooth transmission of its monetary policy.

This statistical information contributes to the maintenance of price stability and the smooth conduct of policies pursued by the competent authorities responsible for the supervision and resolution of financial institutions, for markets and infrastructures, and for the stability of the financial system.

Many reporting agents have adopted remote working arrangements. Meanwhile, the continuity and quality of statistical information reporting may be challenged by the exceptional circumstances surrounding the performance of day-to-day operations underlying the statistical reporting.

The ECB has therefore invited the national central banks and reporting agents to find pragmatic solutions within the existing legal framework to keep data reporting within limits that are manageable for reporting agents, while maintaining the quality of the statistical information at a sufficiently high level.

In case of difficulties, reporting agents are asked to contact their national central banks and the ECB for assistance. The ECB and the national central banks cooperate closely with other European institutions and bodies. Together with the reporting agents, the ECB will rise to these unprecedented challenges, thus ensuring that the data and statistics required to support the necessary policy measures are fit for purpose.



Link to statistics and metadata:

- [Statistical Data Warehouse](#) website
- [Statistics webpage](#) on ECB website
- [Euro area statistics](#) website
- [ECB](#) and [SSM](#) websites

Sources:

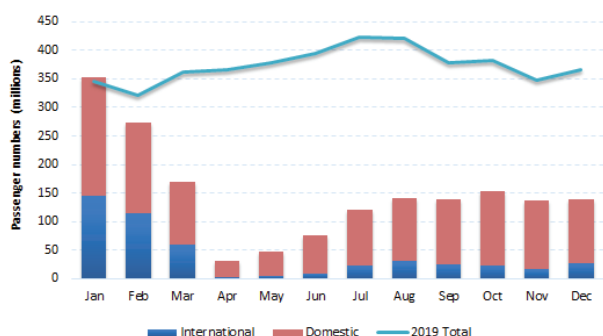
- [ECB communication to reporting agents on the collection of statistical information in the context of COVID-19, ECB, 15 April 2020.](#)
- [Supervisory reporting measures in the context of the coronavirus \(COVID-19\) pandemic, ECB, 15 April 2020.](#)
- [Pandemic emergency purchase programme \(PEPP\)](#)
- [Our response to the coronavirus emergency, Christine Lagarde, President of the ECB, the ECB Blog, 19 March 2020.](#)



2020 passenger totals drop 60 percent as COVID-19 assault on air travel continues

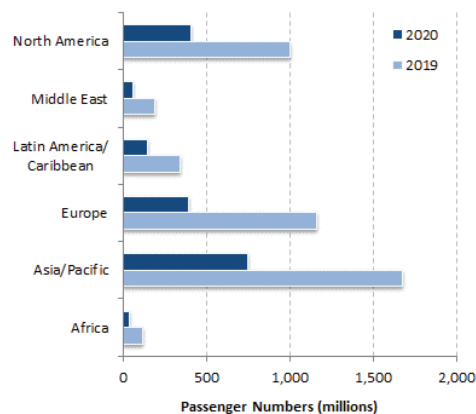
Aviation has been in its gravest moment in history with collapse in air travel demand globally. Its recovery has been vulnerable and volatile, severely hampered by the resurgence of outbreak across regions alongside stricter travel restrictions.

Figure 1. Air traffic evolution through 2020



Source: ICAO economic impact analysis

Figure 2. Passenger loss by region



Source: ICAO economic impact analysis

The latest [economic impact analysis of COVID-19 on civil aviation](#) by the International Civil Aviation Organization (ICAO) reveals that for the year 2020 as a whole, global passenger traffic fell drastically by 60% or 2.7 billion, compared with 4.5 billion in 2019. This brings global air travel totals back to 2003 levels.

Resulting from the plunge in air traffic, airline financial losses is estimated to reach USD 370 billion, with Asia/Pacific accounting the biggest losses by 32%, followed by Europe (27%) and North America (24%). Estimation in [ICAO air traffic dashboards](#) shows that airports and air navigation services providers (ANSPs) have lost a further USD 115 billion and USD 13 billion, respectively.

With the wide-scale lockdown measures, border closures, and travel restrictions being set out around the world, by April the overall number of passengers had fallen 92 per cent from 2019 levels.

Subsequent to the April low point being reached, passenger traffic saw a moderate rebound during the summer travel period. However, that upward trend was short-lived.

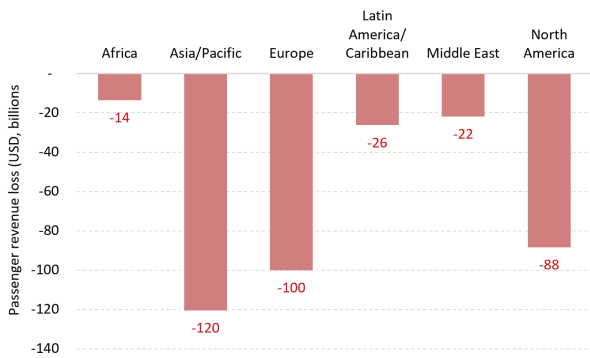
Hampered by the resurgence of infection in many regions since September of 2020, sectoral recovery became more vulnerable and volatile again, indicating an overall double-dip recession for the year.

There has been a persistent disparity between domestic and international air travel impacts. Overall, number of domestic passengers ended 2020 with a decline of 50% year-over-year, while international traffic stayed stagnant at far below 2019 levels, with 74% or 1.4 billion fewer passengers.

Due to the drastic fall in traffic, aircraft utilization dropped sharply by 58%, 50% and 43% for single aisle, twin aisle and regional jets, respectively. Nevertheless, the average utilization of dedicated freighters increased by 4%.

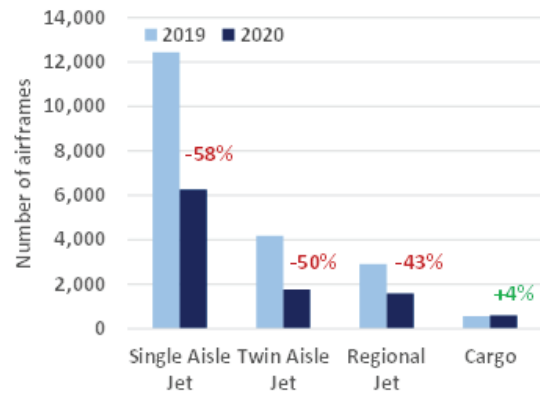
The near-term outlook is for prolonged depressed demand, with downside risks to global air travel recovery predominating in the first half of 2021. ICAO's projection (March 2021) indicates that global passenger number in 2021 would be 44% to 56% lower than 2019 levels. This traffic reduction would translate into further USD 281 to 351 billion loss in gross passenger operation revenues of airlines.

Figure 3. Airline passenger revenue losses by region



Source: ICAO economic impact analysis

Figure 4. Active fleet by average aircraft utilization



Source: ICAO ADS-B operational data

Additional information::

- ICAO Economic Impact Analysis of COVID-19 on Civil Aviation: <https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>
- ICAO COVID-19 Air Traffic Dashboard: <https://www.icao.int/sustainability/Pages/COVID-19-Air-Traffic-Dashboard.aspx>
- ICAO Air Transport Monthly Monitor: <https://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>
- ICAO Guidance on Economic and Financial Measures: <https://www.icao.int/sustainability/Pages/Economic-and-financial-measures.aspx>

Source::

- ICAO Air Transport Statistics, ADS-B FlightAware
- ICAO Economic Impact Analysis of COVID-19 on Civil Aviation

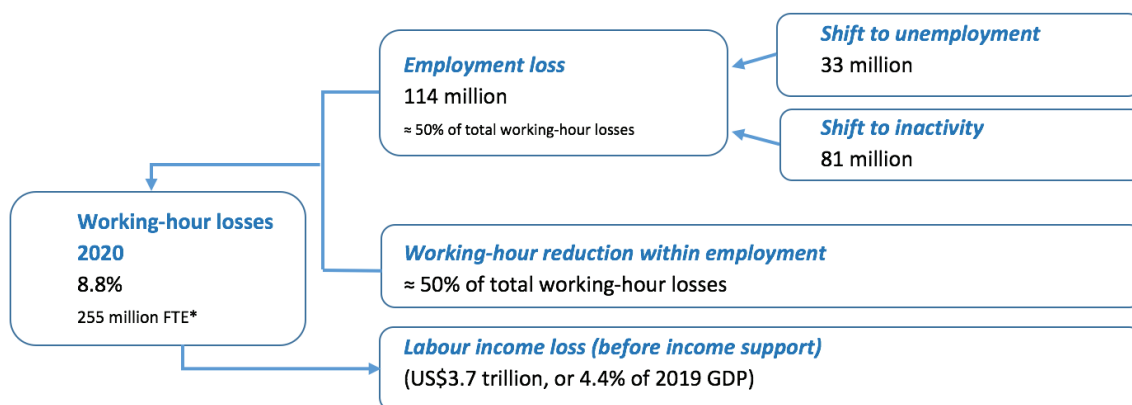


ICAO

Labour markets disrupted on a historically unprecedented scale

8.8 per cent of global working hours were lost in 2020, equivalent to 255 million full-time jobs. These losses were four times greater as those incurred during the global financial crisis in 2009.

Figure 1. Working hour, employment and labour income losses in 2020



Working-hour losses: Quarterly trends in 2020 and predictions for 2021

	2020 quarterly				2021 projection		
	Q1	Q2	Q3	Q4	Baseline	Optimistic	Pessimistic
%	5.2	18.2	7.2	4.6	3.0	1.3	4.6
FTE* (million)	150	525	205	130	90	36	130

* FTE: Full-time equivalent jobs (assuming a 48-hour working week)

ILO annual estimates confirm that the pandemic caused massive disruptions in the world of work throughout 2020. While the disruption was global, there was substantial variation between regions. Working-hour losses in 2020 were particularly large in Latin America and the Caribbean, Southern Europe and Southern Asia. In contrast, Eastern Asia and Central, Western and Eastern Africa experienced relatively smaller losses, reflecting less stringent lockdown measures in these subregions.

The global labour market disruption in 2020 far exceeded the impact of the financial crisis of 2009.

Average hours worked per person of working age (aged 15 to 64) dropped sharply (from 27.2 hours per week in 2019 to 24.7 in 2020). In contrast, during the financial crisis, average working hours declined by just 0.6 hours between 2008 and 2009. The effect of the COVID-19 shock on global working hours has therefore been approximately four times greater than that of the 2008-09 financial crisis.

Around half of the world's working-hour losses were due to employment loss, while the other half were attributed to reduced working hours (among workers who remained

employed but were not working). Employment losses in 2020 stood at 114 million jobs relative to the pre-crisis employment level in 2019. However, this estimate understates the full extent of employment loss: comparison with a “no pandemic” scenario reveals a much greater deficit of 144 million jobs.

In contrast to previous crises, the bulk of employment losses in 2020 translated into rising inactivity rather than unemployment, leading to an additional 81 million people shifting to inactivity alongside 33 million additional unemployed. Consequently, the global labour force participation rate dropped by 2.2 percentage points owing to the COVID-19 crisis, compared with just 0.2 percentage points between 2008 and 2009.

Globally and across all regions and country income groups, women have been affected by employment losses to a greater extent than men. At the global level, the employment loss for women stands at 5.0 per cent in 2020, versus 3.9 per cent for men. In absolute numbers, the loss is larger for men (80 million) than for women (64 million) because of the long-standing gender gap in labour force participation rates. Across all regions, women have been more likely than men to become economically inactive, that is to drop out of the labour force, during this crisis.

Young workers were particularly hard hit by the crisis across all regions and country income groups, resulting in an employment loss of 8.7 per cent in 2020, as opposed to 3.7 per cent for adults. The pandemic has exacerbated young people's disconnection from the labour market, highlighting the all too real risk of a lost generation.

Looking ahead, there are expectations that a robust recovery will occur in the second half of 2021, particularly in view of the latest developments regarding vaccine approvals. However, there is also much uncertainty together with risks that could dampen or derail the recovery. The actual speed and quality of the recovery will depend on a wide range of political, economic and health factors, including the extent of vaccination, how countries continue to control the pandemic, and whether policy measures can be maintained to promote economic and labour market recovery. Policy interventions must focus on robust and broad-based recovery by addressing employment, income, workers' rights and social dialogue: a human-centred recovery.

Source:

- The information presented here is an excerpt of the ILO Monitor: COVID-19 and the world of work, Seventh edition. Refer directly to the Monitor for more details, including on data sources. For information on COVID-19 and labour statistics, see ILOSTAT.



**International
Labour
Organization**

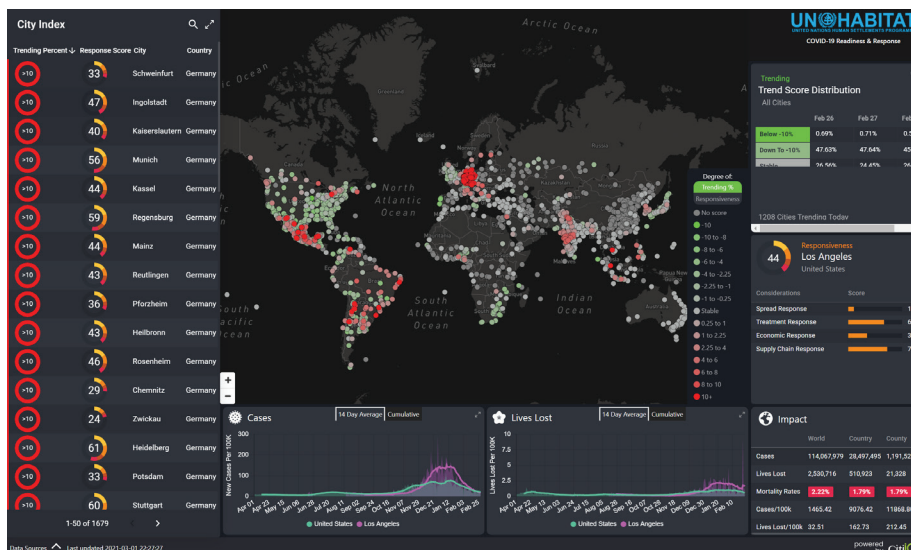
Get the Data

<https://github.com/unstats/ccsa-covid-v3>

COVID-19 impacts at the local levels

Globally, local governments and cities are the world's first line of defense in responding to the covid-19 pandemic. For many cities, the pandemic has ignited inequitable death rates, stretched municipal service delivery to the breaking point, and raised fundamental questions on safe urban structures and dynamics, among other challenges. The COVID-19 crisis has also demonstrated the agile role of local governments in the battle for a just and green recovery and their roles in building long-term resilience. Local and city leaders need to be empowered and strengthened with multilevel decision-making tools and systems that enable them to respond to the new covid-19 realities in close to real-time. At a moment when governments at all levels need to play a significant role, it is critical to develop new competences and capacities at the local levels where the battle for covid-19 is being felt directly. Monitoring the local covid-19 impacts and patterns has been key for national level responses since this allows local and national leaders to identify hotspots for new spreads of the virus and respond better. This motivated UN-Habitat and CitiIQ to develop a covid-19 tracker for cities (<https://unhabitat.citiq.com/>) with an initial set of 1200 cities monitored on a daily basis. This number of cities has now increased to 1700.

Figure 1. City covid-19 platform



Source: <https://unhabitat.citiq.com/>

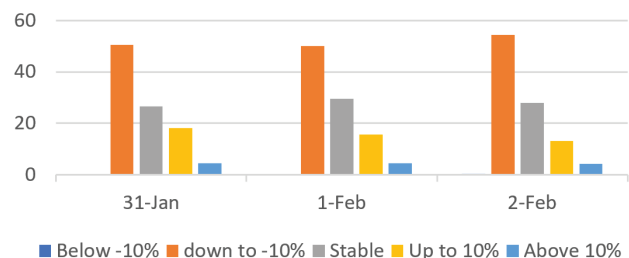
COVID-19 city level data for 1700 cities

With nearly 1700 cities tracked globally, daily city counts/scoring vary depending on data availability on any given day. All capital cities and regional capitals for some countries form part of the collection of cities that are tracked daily. The most recent additions includes over 85 cities from the UK, Germany (48), Argentina (58), Japan (24), South Korea (4), Australia (30), South Africa (7), Canada (25), the United States (75), and Mexico (144) (Figure 1).

The city covid-19 platform offers the city trending data which is readily illustrated using color coding on a world map simplifying the process of understanding these dynamics that are changing on a daily basis at the city level. Recent upward trending in many European countries resulting from a second wave of COVID-19 was evidently visible on this tracker with data available from city by city.

Many cities made difficult decisions to try and change the rate of COVID-19 infections by implementing lockdowns and other

Figure 2. Spread of covid-19 cases in 1700 cities by % of increase or decrease



Source: COVID-19 Cities Dashboard

restrictions, and the platform was able to demonstrate the results of these local actions a few weeks down. Over the last 7 months, the platform has shown the European cities that moved from trending red (increasing cases) toward a stable level and subsequent declines in cases (green colour).

Other parts of the world such as the United States and Canada experienced significant second wave COVID-19 increases

Figure 3. Cities with more than 1% increments in the covid-19 reported cases for the period 31st Jan 2021 to 4th Feb 2021.



and this was reflected by more cities experiencing an increase in cases (red colouring on the site). These trends are made even more clear when a specific city is selected, and the city trending is compared with that of its Country (Figure 1).

For the period 31st Jan 2021 to 2nd Feb 2021, nearly 1 in 5 cities were experiencing an upward trend (more than 10% increments) in their cases (Figure 2).

Some of the cities experiencing recent hikes in the number of cases include Bogor (Indonesia), Blantyre (Malawi), Lagos (Nigeria), Cordoba (Argentina), Lima (Peru), Quito (Ecuador), Havana (Cuba), Lisbon (Portugal), Cottbus (Germany), etc. (see Figure 3).

Understanding the local level impact of COVID-19

On the ground, some people working on the front lines of COVID-19 responses in many cities and local governments are aware of any disease surges and local impacts. For those who may be less directly connected to changes in the infection patterns, trending information provides a point of reference that is changing over time. These changes can support vigilance in cities with upward trending and a sense of hope where trending is moving downward.

Source:

- COVID-19 Cities dashboard <https://unhabitat.citiq.com/>
- United Nations Human Settlements Programme (UN-Habitat), "Opinion: COVID-19 demonstrates urgent need for cities to prepare for pandemics" <https://unhabitat.org/opinion-covid-19-demonstrates-urgent-need-for-cities-to-prepare-for-pandemics>.

COVID-19 has had a significant influence on urban transportation services, city tax revenues, citizens' income, tourism, and hospitality, small- and medium-sized businesses, urban food supply chain, migrant workers, etc., including an uneven and unequal social and spatial distribution of the effects of the pandemic.

With better and real-time data at the local level, linking large-scale patterns with local conditions and actions is easier and provides an important strategy in fighting the current pandemic. Given the significant value addition to the local covid-19 responses, we plan to grow the city coverage from the current 1700 to about 3000 cities by the end of Feb 2021.

UN-Habitat's support to cities and local governments on tracking of COVID-19

Processed data for the last 7 months demonstrates well how COVID-19 in urban areas can rapidly evolve from a stable situation to crisis- a situation that requires data and analytics that operate at close to near-real-time basis, and at community, city, sub-national, national, regional and global levels. The same is needed, at various degrees of rapidity and depth, to inform longer term policies and actions to make vulnerable communities more resilient to future crises by proactively addressing the issues and gaps revealed during this pandemic and to support wider actions of economic recovery, and multi-hazard resilience.

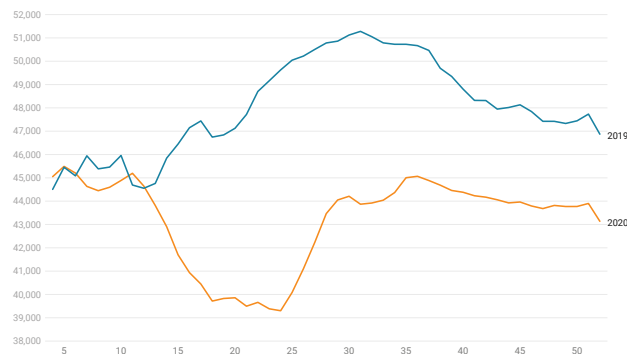
Placing urban analysis on COVID-19 within this broader context allows the means to ensure that responses to COVID-19 in cities complement and contribute to progressing other key agendas, including climate change and sustainable development.

The use of the valuable local data, just like data at the national level, relies on the local relevance of the indicators/aspects being monitored and the consistency of its production, quality, frequency, and spatial detail. This is a gap that the cities covid-19 platform has ably covered. However, good data on its own is not sufficient, if it doesn't contribute directly to the identification of the most impactful responses in urban management and the built environment, across social, economic, and environmental dimensions.

Maritime traffic in times of pandemic

COVID-19 disruption and the consequent ‘Great Lockdown’ have seen maritime transport and trade prospects deteriorate. UNCTAD expects seaborne trade volume to decline in 2020.

Figure 1. Vessel Port Calls – All vessels, Weeks 1-52 2020 and 2019 (4 week moving average)



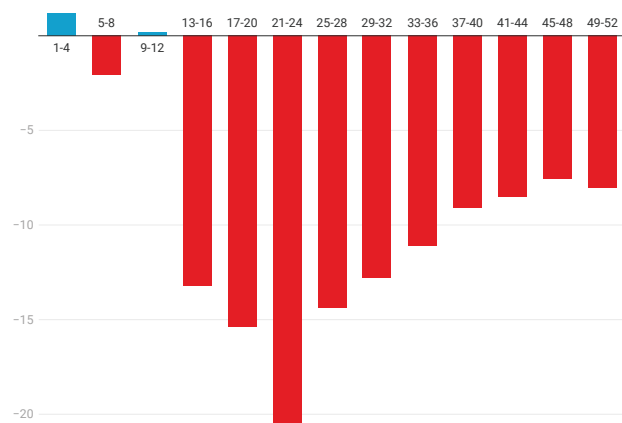
Source: UNCTAD calculations, based on the AIS data provided by MarineTraffic. See Notes

Timely data and statistics are crucial for monitoring the pandemic’s impact on the maritime supply chain. Automated Identification System data (AIS data), relaying vessel movement data by satellite and offering near real-time information, have been instrumental in assessing the immediate impact of COVID-19 disruption on shipping, ports, and world trade.

Vessel port calls in 2020 and 2019 indicate the magnitude of the disruption to the maritime supply chain. Figure 1 shows a significant drop in global vessel port calls occurring in weeks 12 and 13 (2nd half of March 2020). The most significant drop (almost 21%) occurred in Weeks 21-24 (mid May – mid June) when stringent and widespread lockdowns undermined global production and manufacturing activity and compressed world demand (See Figure 2). A tentative recovery, beginning in late June (week 25) as economies around the world eased out of lockdown, had peaked by early September (week 37) as COVID-19 infection rates across major consumption centres continued to rise.

The impact across maritime sectors was uneven. Container vessel port calls fell by 2.8% in 2020 compared with 2019; port calls for dry break-bulk carriers fell by 7.8%; and dry and wet bulk vessels declined by 4.1% and 4.9%, respectively. Calls by Ro/Ro vessels fell by 12.8%. Passenger vessels, including cruise ships, were harder hit. Passenger vessel

Figure 2. Vessel Port Calls – All vessels, Weeks 1 – 52, 2020 (YoY % change 2019)



Source: UNCTAD (2021 forthcoming). See Notes

port calls fell by 18.3%. Cargo vessels fared better, reflecting the continued delivery of merchandise trade, including goods required to fight the pandemic (e.g., personal protection equipment) as well as furniture and equipment needed to set up home offices

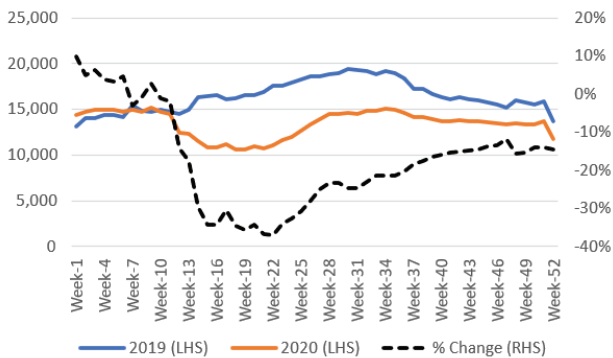
From a regional perspective, Europe and North America, two regions where maritime trade is heavily reliant on consumer goods, were deeply impacted by the disruption. The exporting Asian economies saw a relatively minor decline in vessel port calls as tight management of the pandemic ensured business continuity and a rapid resumption of economic activity.

Oceania experienced the most significant impact of all regions early in the year, but the decline in vessel port calls moderated in the second and third quarters.

In contrast, Latin America and the Caribbean saw their situation deteriorate during the second half of the year, with port calls declining by 16.3% during the fourth quarter of 2020 (Figure 4).

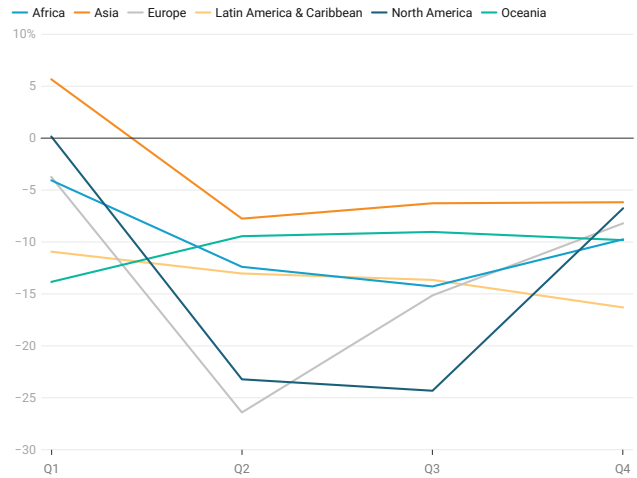
Uncertainty remains the overriding theme for 2021. Predicting the full and longer terms impact of the COVID-19 disruption on maritime transport and trade and the shape of the recovery is fraught with uncertainty.

Figure 3. Vessel Port Calls – Passenger vessels Weekly (2020 vs 2019, and % change)



Source: UNCTAD (2021 forthcoming). See Notes

Figure 4. Vessel Port Calls - By region, 2020 (YoY % change)



Source: UNCTAD (2021 forthcoming). See Notes

Notes: calculations by Athanasios A Pallis (consultant) based on the AIS data provided by MarineTraffic (www.marinetraffic.com). Aggregated figures are derived from the combination of AIS data and port mapping intelligence by MarineTraffic, covering ships of 5000 GT and above. Only arrivals have been taken into account to measure the number of port calls.

Sources:

- UNCTAD (2020). Review of Maritime Transport 2020. UNCTAD/RMT/2020. Sales No. E.20.II.D.31 Geneva New York.
- UNCTAD (2020). COVID-10 and maritime transport: Impact and Responses. UNCTAD/DTL/TLB/2021/1. Geneva.
- UNCTAD (2021). COVID-10 and maritime transport: Impact and Responses Update Forthcoming. UNDP

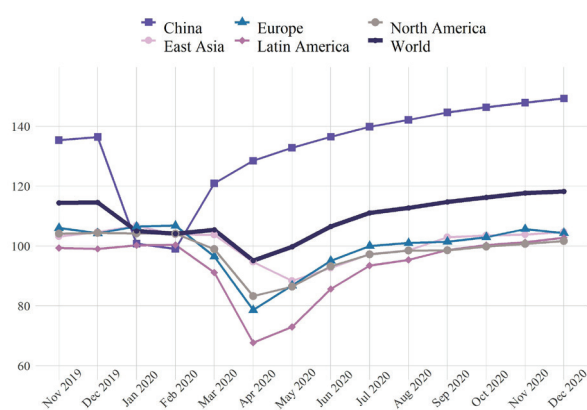


[Get the Data https://github.com/unstats/ccsa-covid-v3](https://github.com/unstats/ccsa-covid-v3)

Global manufacturing production has stabilized, but with industrialized economies are experiencing a delayed recovery

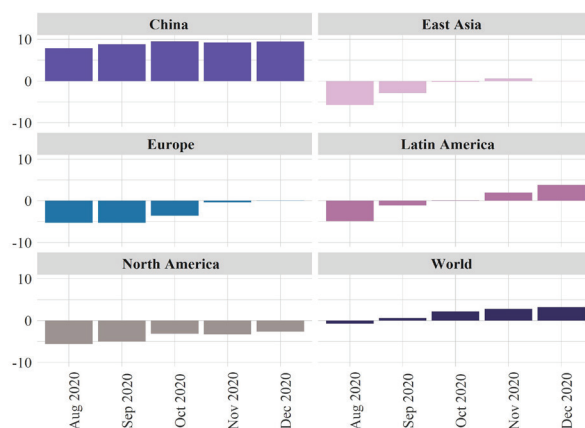
Global manufacturing production has stabilized following the economic disruptions caused by COVID-19, reaching pre-crisis levels in September 2020. Recent data indicate that regional recovery has varied: while China's manufacturing production has recorded year-over-year growth since June, many industrialized countries continue to report negative annual growth rates due to the extension of containment measures since autumn.

Figure 1. Index of world manufacturing output by region (base 2015)



Source: UNIDO Statistics.

Figure 2. Growth of manufacturing output by region, percentage change compared to the same period of the previous year



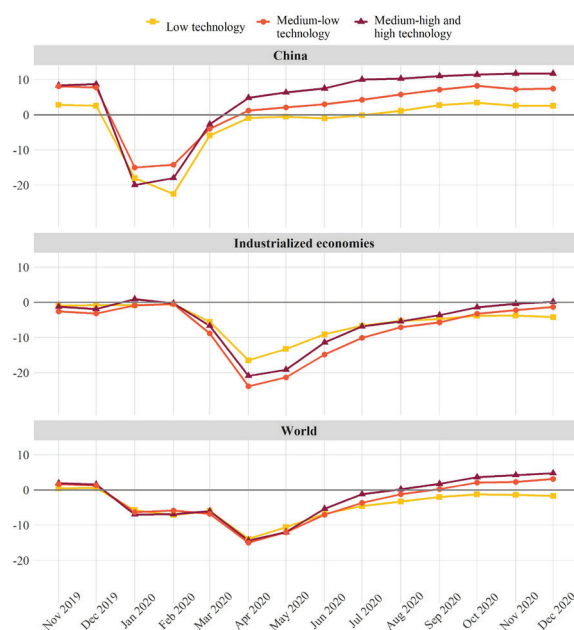
Source: UNIDO Statistics.

Figures 1 and 2 present global manufacturing production and that of selected country groups, and clearly depict the severe decline caused by the COVID-19 pandemic. Data on global manufacturing production from December 2020 indicate stabilization following the pandemic-related economic disruptions. In December, world manufacturing production recorded a year-over-year growth rate of 3.2 per cent, attributable primarily to China's positive performance.

Taking a closer look at specific regions reveals diverging trends. China's manufacturing sector recovered quickly, with a growth in production of over 9 per cent for the last three months. Production data for Latin America also suggest that recovery is underway, with a year-over-year growth rate of 3.8 per cent in December 2020.

By contrast, industrialized countries (grouped into North America, Europe and East Asia) continue to struggle with the ongoing economic and health crisis. Europe (+0.1 per cent) and East Asia (0.0 per cent) reported in December an output stagnation compared to the same month of 2019, whereas the output of North America decreased by 2.6 per cent. It remains to be seen how the health crisis will unfold and how fast the vaccination campaigns, which were launched at the end of 2020, will allow an easing of the economic restrictions still in force in these countries.

Figure 3. Growth of manufacturing industries by technological intensity, percentage change compared to the same period of the previous year

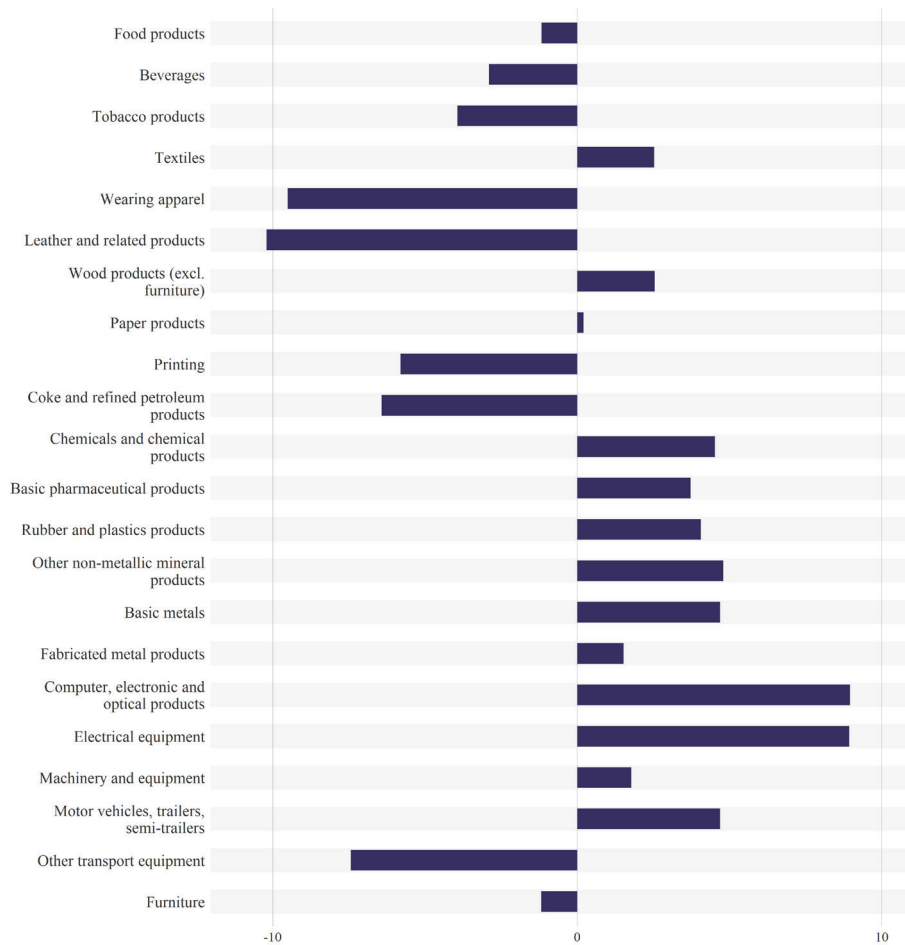


Source: UNIDO Statistics.

Data on industries grouped by technological intensity (Figure 3) reveal that medium-high and high-technology industries have recovered faster from the crisis than industries with lower technological intensity. Typical high-technology

industries include basic pharmaceutical products, electrical equipment, computer, electronic and optical products as well as motor vehicles, whose production are already registering comparatively high rates of growth (Figure 4).

Figure 4. Estimated global growth rates by industry, percentage change compared to the same period of the previous year, December 2020



This information is based on preliminary seasonally-adjusted data from official indices of industrial production (base year 2015) collected by UNIDO's Statistics Division. Country coverage is limited due to data availability, with the aggregate of world manufacturing output including around 40 countries and a share of approximately 80 per cent of global manufacturing output. Regional and world aggregates are calculated with weights referring to the base year 2015. Further information on the methodology of index calculation and seasonal adjustment can be found [here](#). The most recent monthly data are regularly updated and are available on the [UNIDO Statistics data portal](#).



2020: the worst year on record for tourism

International tourist arrivals have fallen from almost 1.5 billion in 2019 to around 380 million in 2020, a 74 percent decline. This represents a loss of an estimated 1.3 trillion USD in international tourism expenditure, about 11 times the loss of the 2009 global crisis. This unprecedented impact has disproportionately affected SIDS and their population for a number of reasons.

Figure 1. Impact of COVID on international tourism



Source: UNWTO (January 2021)

Unprecedented impact on tourism

Tourism is one of the hardest hit sectors by the COVID-19 pandemic, with unprecedented impact from an economic and social point of view. According to the **UNWTO World Tourism Barometer** (January 2021), international tourist arrivals have fallen by 74 percent from almost 1.5 billion arrivals 2020 to around 381 million in 2019, reaching the lowest levels on record. While all regions have been heavily affected, Asia and the Pacific has suffered the most during this period, with a decrease of 84 percent in international arrivals, followed by the Middle East and Africa, with a decline of 75 percent.

It is expected that international tourism will take between 2.5 to 4 years to return to the 2019 levels. The fall in international arrivals in 2020 translates into an estimated loss of 1.3 trillion USD in global inbound tourism expenditure with respect to 2019, more than 11 times the loss experienced with the 2009 global crisis.

Table 1. Percentage of domestic overnight stays in hotels and similar establishments in SIDS where data is available, 2019

Country	Percent Domestic
Cabo Verde	0.04
Cuba	0.19
Fiji	0.19
Seychelles	0.01
Timor-Leste*	0.13

*Data for 2018

Source: UNWTO database

Data available only for 5 SIDS

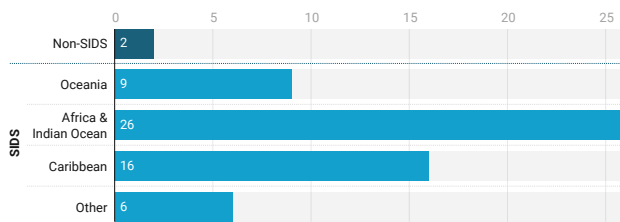
Source: UNWTO (January 2021)

SIDS disproportionately affected by the impact of COVID-19 on tourism

In 2020, Small Island Developing States (SIDS) lost 77 per cent of international tourist arrivals according to UNWTO data. The conjunction of several factors: a) heavy economic dependence on tourism (see Figure 2), b) weak domestic markets, which are the ones expected to recover faster (see Table 1), c) undiversified source markets based in other regions that require long-haul air travel (see Figure 3), and d) the deep impact of the pandemic and travel restrictions on the main source markets, has placed SIDS and their inhabitants in a critical situation.

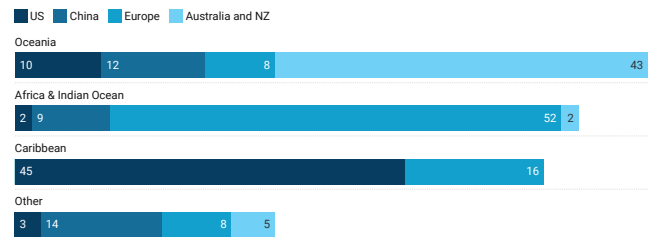
The COVID-19 pandemic has shown that, in the spirit of leaving no-one behind and considering the circumstances in Small Island Developing States, it is crucial that tourism has a prominent place in the SDG Agenda. The current SDG Global Framework set of indicators, which includes two indicators on tourism (8.9.1 and 12.b.1), is not enough to properly monitor SDG progress in SIDS. Tourism plays a key role in these states and further indicators need to be considered to fully reflect social and environmental aspects of tourism.

Figure 2. Inbound Tourism expenditure as a proportion of GDP: SIDS by region vs Non-SIDS



Source: Calculations based on UNWTO data. Weighted averages by region. SIDS under "Other" category includes: Bahrain, Guyana, Singapore, Suriname

Figure 3. Proportions of international arrivals in SIDS by main source markets, by region



Source: Calculations based on UNWTO data. Weighted averages by region. SIDS under "Other" category includes: Bahrain, Guyana, Singapore, Suriname

Link to metadata:

- Methodological Notes to UNWTO Tourism Statistics Database: https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-02/methodological_notes_2020.pdf

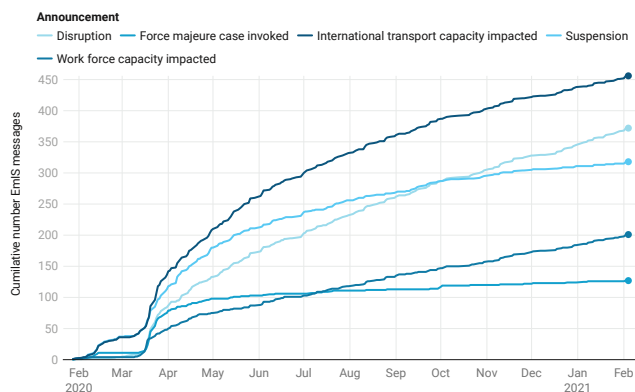
Sources:

- UNWTO statistical database available through the UNWTO website and Dashboard: <https://www.unwto.org/tourism-statistics-data>
<https://www.unwto.org/unwto-tourism-dashboard>
- Impact of COVID-19: <https://www.unwto.org/news/2020-worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals>
- UNWTO World Tourism Barometer, Volume 19 • Issue 1 • January 2021, <https://www.e-unwto.org/toc/wtobarometereng/19/1>
- UNWTO Briefing Note – Tourism and COVID-19, Issue 2. Tourism in SIDS – the challenge of sustaining livelihoods in times of COVID-19: <https://www.e-unwto.org/doi/book/10.18111/9789284421916>

Disruption of the international postal supply chain

- During the peak of the crisis, over one in two international mail items was « stranded ».
- Since then, the logistics supply chain has fully recovered.
- International mail volumes in 2020 remain depressed, down by 20% due to the crisis.

Figure 1. Number of announcements to the UPU Emergency Information System



Source: UPU Emergency Information System(EmIS) messages

Note: Daily cumulative sum of announcements at the global level

Postal operators around the world have been facing hurdles in providing their traditional services due to the COVID-19 outbreak. In particular, the sanitary measures taken by governments have both restricted the access to labor (e.g. social distancing) and transportation services (e.g. closure of airports). At the same time, in countries experiencing important economic shutdowns, postal services have been deemed vital and continue to function in contrast to many other businesses.

As the UN agency in charge of coordinating cross-border postal activity, the Universal Postal Union (UPU) monitors international mail in real time through its big-data platform. Through its Emergency Information System (EmIS), it also collects essential information on the capacity of postal operators to supply services. As of December 31, 2020, 145 countries have submitted EmIS messages to announce disruptions in their operations. As shown in Figure 1, the international transport capacity has been the most impacted area, with over 456 EmIS messages sent to the UPU since the beginning of the crisis.

The disruption of air-routes has impacted the delivery of many postal items. Figure 2 leverages postal big-data by exploiting the information captured through Electronic Data Interchange (EDI) messages embedded in bar-coded mail items. By calculating the ratio between items ready to be exported and

Figure 2. Ratio of international outbound messages to international inbound messages



Source: UPU big data platform, EMSEVT3 messages

Note: Weekly ration between announced dispatch reception and reception of mail. Electronic Data Interchange (EDI) messages at the office of exchange level.

items received by the importing country, one can measure the level of disruption in the international supply chain. In normal times, the ratio is slightly above one, as in a given week almost every exported item is received by the importing country. Since February 2020, the ratio has climbed and, during the week of April 27 2020, reached its historic maximum. At the peak of the crisis, for every 2.3 weekly items exported, only one was notified as received. Since then the ratio has decreased and eventually stabilized close to pre-crisis levels. As of now, the logistics of international postal network has recovered.

Problems related to the availability of labor (201 EmIS announcements) have also lengthened the clearance of items through customs, with bar-coded parcels showing an increase from an average of 2 hours to over 64 hours during the peak of the crisis.

Overall, even if the international logistics postal chain has proved resilient to the crisis, international mail has been decreasing. Estimates gathered from high-frequency data indicate that the drop of international mail due to the emergence of the pandemic is 20%, as shown in Figure 3. This is just one of the symptoms of the extent to which COVID-19 has impacted international economic flows.

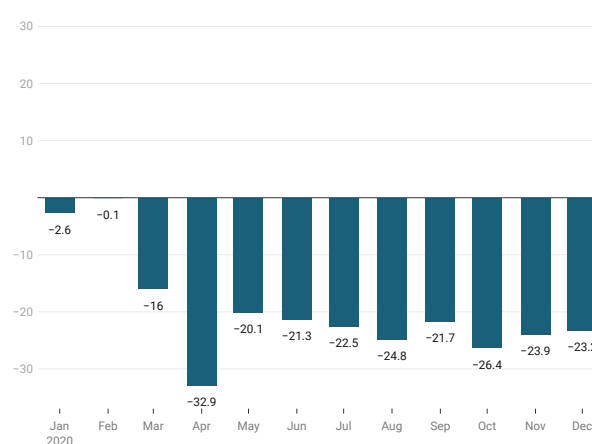
Table 1. Postal disruption due to COVID 19

Number of EmIS announcements of a disruption in the supply of postal services	372
Number of EmIS announcements of a disruption of international mail flows	456
Maximum Stranded mail ratio (outbound messages / inbound messages) reached during the crisis	2.3 (+134% compared to April 2019)
Drop in international postal volumes due to the crisis (items, all mail classes)	20%
Average increase in customs clearance time (inbound parcels) during the peak of the crisis	from 2 to 64 hours

Source: UPU big-data platform. UPU EmIS messages. UPU Quality Control System (QCS).

Note: Drop in volumes obtained by comparing the period going from the January 1, 2020 to December 31, 2020 to the period January 1, 2019 to December 31, 2019.

Figure 3. Year-on-Year monthly growth rates, all mail classes



Source: UPU big-data platform.

Note: Global monthly tonnage of letters, parcels and express mail

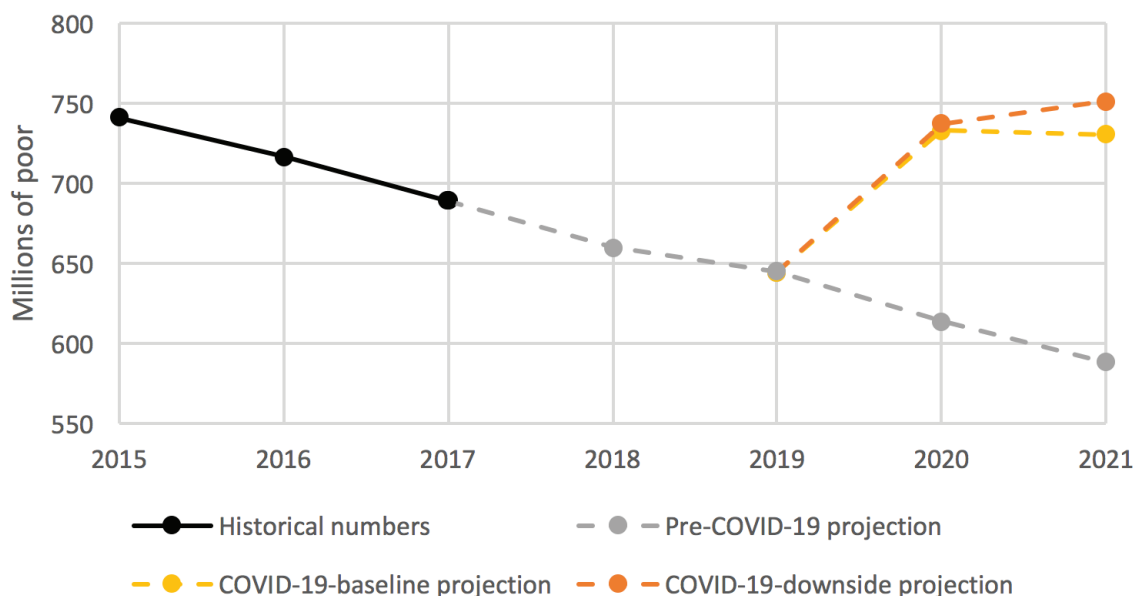
Sources and links:

- UPU (2020), "The COVID-19 crisis and the postal sector". <https://www.upu.int/UPU/media/upu/publications/theCovid-19CrisisAndThePostalSectorEn.pdf>
- UPU (2020), "Postal Economic Outlook". https://www.upu.int/UPU/media/upu/publications/Postal-Economic-Outlook-2020_1.pdf
- UPU Emergency Information System (EmIS).
- UPU Quality Control System (QCS).
- UPU official statistics are freely available in the following platform: <https://www.upu.int/en/Universal-Postal-Union/Activities/Research-Publications/Postal-Statistics>
- UPU postal big data is a collection of Electronic Data Interchange (EDI) messages sent between postal operators, customs and airlines. The EDI messages are the result of the implementation of UPU standards. Several guides on standards are available in the UPU website
- <https://www.upu.int/en/Postal-Solutions/Programmes-Services/Standards>
- A description on how to transform EDIs into bilateral postal flows and supply chain indicators is available in the following two papers:
- Ansón, J, Boffa, M, Helble, M. Consumer arbitrage in cross-border e-commerce. Rev Int Econ. 2019; 27: 1234– 1251. <https://doi.org/10.1111/roie.12424>
- Ansón, J, Arvis, J-F, Boffa, M, Helble, M, Shepherd, B. Time, uncertainty and trade flows. World Econ. 2020; 00: 1– 18. <https://doi.org/10.1111/twec.12942>

COVID-19 estimated to have pushed 119-124 million people into extreme poverty in 2020

COVID-19 has had an unprecedented impact on global extreme poverty. For the first time in 20 years, global poverty is increasing. The pandemic is estimated to have pushed between 119 and 124 million people into extreme poverty in 2020.

Figure 1. The impact of COVID-19 on global poverty



Estimating how much global poverty will increase because of COVID-19 is challenging and comes with a lot of uncertainty. Here we use the latest household survey data for 166 countries in PovcalNet (an online tool provided by the World Bank for estimating global poverty) and extrapolate the distributions of consumption forward using growth forecasts from World Bank’s Global Economic Prospects (GEP). The COVID-19-induced poor is calculated by comparing poverty using the GEP growth forecasts from January-2021 (i.e. COVID-19-influenced forecast) with those from January-2020 (i.e. pre-COVID-19 forecast). The January-2021 GEP vintage provides baseline and downside growth forecasts, the latter of which assumes that outbreaks persist longer than expected, forcing lockdown measures to be maintained or reintroduced.

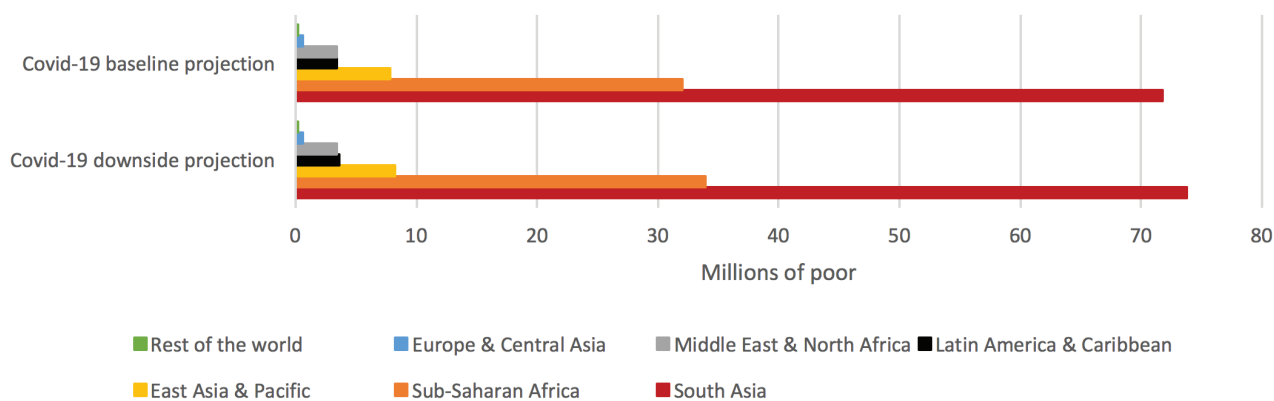
The pandemic-influenced global extreme poverty rate is estimated to be 9.5%, which translates to between 733 million (baseline) and 738 million (downside) people living in extreme

poverty—i.e. those living under \$1.90-a-day—in 2020. The pre-pandemic forecast for 2020 was estimated to be 7.9% or 614 million people. The difference of 119 million (baseline) and 124 million (downside) is the COVID-19-induced new poor.

This is a truly unprecedented increase in global poverty. To make it relative, consider that the only other crisis-induced increase in global poverty in the last three decades was during the Asian financial crisis, when global extreme poverty increased by 18 million in 1997 and 47 million in 1998. If things do not change rapidly, poverty may increase in 2021 as well. Using the same forecasts, we anticipate that the COVID-19-induced new poor in 2021 will be between 143 and 163 million people.

In 2020, South Asia contributed the largest share of the new poor, with around 60% of the 119-124 million people, followed by Sub-Saharan Africa with around 27%, and East Asia with around 7%.

Figure 2. The regional distribution of the COVID-19-induced poor



Sources:

- <http://iresearch.worldbank.org/PovcalNet/home.aspx>
- <https://www.worldbank.org/en/publication/global-economic-prospects>
- <https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty>
- <http://documents1.worldbank.org/curated/en/765601591733806023/pdf/How-Much-Does-Reducing-Inequality-Matter-for-Global-Poverty.pdf>



World trade developments Q1-Q3 2020

- World merchandise exports were down 11% year-on-year from January to September. While the manufacturing and the fuels and mining sectors contracted markedly, respectively by 10% and 26%, exports of agricultural products were more resilient with a decline of only 2%
- During the same period, trade in commercial services remained depressed, down 20% versus the year prior. The travel and transport sectors suffered the most from lockdown measures, with drops of 61% and 21% in world exports, while other commercial services remained almost stable at -2%.

Figure 1. YoY % change in world merchandise trade, 2020

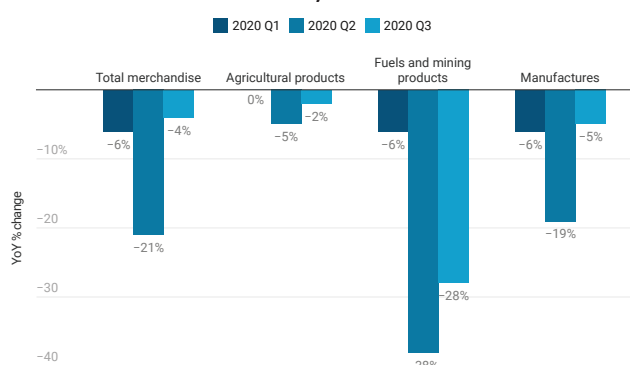


Table 1. YoY % change in world trade in manufactured goods, 2020

Product group	Annual percentage change (%)		
	Q1 2020	Q2 2020	Q3 2020
Manufactured goods	-6	-19	-5
Iron and steel	-13	-25	-19
Footwear	-10	-31	-18
Travel goods, handbags	-13	-38	-17
Automotive products	-10	-53	-13
Clothing	-10	-29	-8
Industrial machinery	-7	-17	-8
Chemicals	-6	-14	-7
Toys, games and sports equipment	-13	-9	-6
Telecommunications equipment	-10	-12	-2
Precision instruments	-3	-12	-2
Pharmaceuticals	11	11	-1
Integrated circuits etc.	10	8	10
Computers etc.	-11	3	11
Textiles	-9	10	24

The value of trade in **fuels and mining products** decreased by 26% during the first nine months of 2020, with sharp declines in the second and third quarters due to falling oil prices.

Trade in **manufactured goods**, for which prices are less volatile than commodities, contracted by 10% in the same period. World exports in agricultural products remained more resilient due to the sustained demand for food during the pandemic.

Trade in **manufactured goods** was down 5% year-on-year in Q3 2020, much closer to pre-pandemic trade levels than the second quarter's 19% shortfall. **Computers and electronic components** saw double-digit trade growth in the third quarter, as did shipments of **textiles**, which were boosted by demand for face masks and other protective equipment.

Shipments of **automotive products** – a sector representing usually more than 11% of world manufactures' exports – decreased by 13% in the third quarter of 2020, further to a collapse of 53% year-on-year in Q2 2020 mainly due to both supply disruptions and plunging demand in the early stages of the pandemic.

After growing at an average rate of 10% in the first half of the year, world exports of **pharmaceutical products** contracted by 1% in the third quarter. Thus, reflecting an end to stockpiling, particularly in Europe, where COVID-19 cases dropped significantly over the summer.

Services trade was hit harder by the pandemic than merchandise trade, more especially the **travel sector**, down 61% during the first three quarters of 2020. This sector suffered the most from closing borders and the decline of international tourism and business travel.

Trade in "**Other commercial services**", revealed uneven performances during the first three quarters of 2020. Sub-sectors such as **construction, recreational or manufacturing services**, contracted, while world exports of **computer services** increased significantly during the same period (9% rise in Q3 2020), in line with the increasing use of electronic devices and IT systems and the demand for cloud computing and virtual workplaces. Global **construction** exports suffered the most from the crisis. The sector was down 16% in the third quarter.

Figure 2. YoY % change in world trade in commercial services, 2020

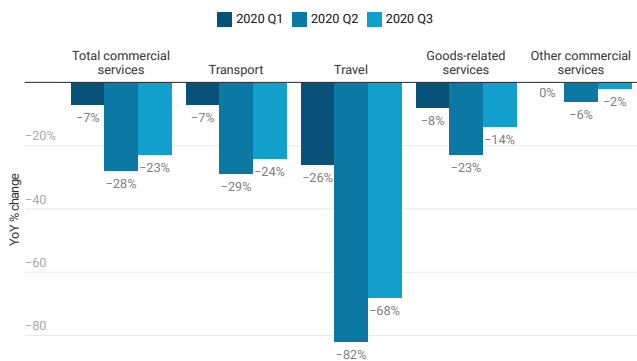


Table 1. YoY % change in world trade in other commercial services, 2020

Product group	Annual percentage change (%)		
	Q1 2020	Q2 2020	Q3 2020
Other commercial services	0	-6	-2
Construction	-30	-25	-16
Audiovisuals, artistic, and recreational	-5	-18	-14
Manufacturing and repair services	-7	-20	-12
Telecommunications	-7	-8	-7
Intellectual property-related services	-1	-7	-6
Architectural, engineering, & business services	-4	-11	-6
R&D services	-5	-7	-4
Legal, management, accounting, advertising	5	-4	1
Financial services	5	-1	2
Insurance services	-2	-11	3
Computer services	10	4	9

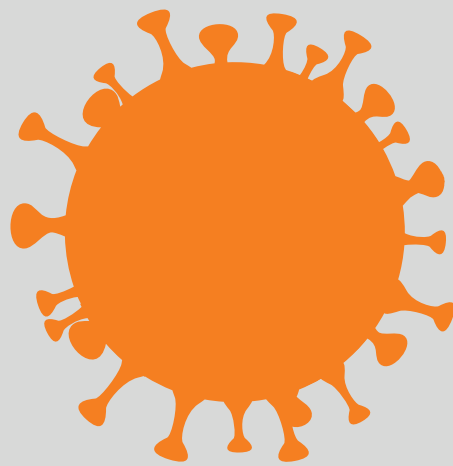
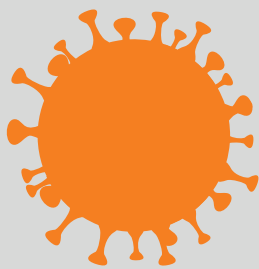
Sources:

- WTO portal on COVID-19 and world trade: https://www.wto.org/english/tratop_e/covid19_e/covid19_e.htm
- WTO international trade statistics news items: https://www.wto.org/english/news_e/archive_e/stat_arc_e.htm

Data sources:

- Merchandise trade: WTO Secretariat estimates, based on preliminary monthly data of major economies sourced from Trade Data Monitor (TDM).
- Commercial services: WTO estimates based on WTO-UNCTAD-ITC data.

ENVIRONMENTAL IMPACT



COVID-19 impact on CO₂ emissions reduction

Total CO₂ emissions reduction amounted to six per cent in 2020 compared to 2019. Domestic aviation and ground transport sectors witnessed the largest decreases. Major economies' recovery plans include green and sustainability targets, but are they enough bring the world closer to the Paris Agreement goals?

Figure 1. Sectoral CO₂ emissions



Note: Data cover the period from 01 January till 30 November for each year; lockdown period e.g. for China differs from the rest of the world. Source: Carbon Monitor

The COVID-19 pandemic has offered the world an opportunity to revisit their environmental impact and work towards reducing it.

From January to November 2020, CO₂ emissions were six per cent lower (1,913 Mt CO₂) compared to the same period in 2019. During the lockdown, between the months of March through April and November, CO₂ reduction per month ranged between 10 and 15 per cent contributing to a total CO₂ emission decrease of 1,366 Mt.

Domestic aviation and ground transportation represent the sectors with the highest CO₂ reductions of 33 and 16 per cent respectively, with the decrease continuing even after the lockdown was lifted, due to countries' restrictions on domestic aviation and transport. Industrial and power generation sectors also witnessed some CO₂ emissions reductions. CO₂ emissions, however, quickly increased to 2019 levels once the lockdown was lifted.

The recovery packages of the world's leading economies have created the momentum for "building back better", meeting emission reduction targets and seizing the opportunity of reaching carbon-neutrality.

Out of the US\$13 trillion of recovery aid (up to December 2020), a total of US\$4 trillion targeted carbon emissions and nature-intensive sectors (agriculture, industry, waste, energy, and transport). Canada, the European Union, Republic of Korea and the UK have laid out recovery plans with carbon reduction elements focusing on renewable energy, investing in clean transport and mobility and promoting a green Industrial revolution. China's stimulus measures include support for electric vehicles roll-out and related infrastructure and setting up a China Green Development Fund. In New Zealand, the government has launched a NZD70 million fund targeting the decarbonisation of industrial process heat through government investment in a Decarbonising Industry Fund.

The UNEP Emissions Gap Report 2020 indicates that unless strong decarbonisation is incorporated in countries' economic recovery plans, the COVID-19 pandemic will only offer a short-term reduction in global emissions without contributing significantly to 2030 emissions reductions.

Green pandemic recovery could reduce around 25 per cent of the emissions predicted to occur in 2030 and provide an opportunity to bring the world on a pathway to reach the Paris Agreement goal of limiting global warming to below 2°C.

Unfortunately, to date this opportunity has largely been missed. As much as some governments are adopting measures that support low-carbon development, most countries are relying on, and investing in, traditional industries that have negative impacts on the environment and have high carbon emissions.

This raises the question of whether countries will be able to reach their emission reduction targets by the set timelines, and whether the world will seize this opportunity to build back better in a way that benefits nature and societies alike.

Data source:

Carbon Monitor, CO2 Emissions Variation, <https://carbonmonitor.org/> Downloaded on Jan 20, 2021

Source:

- European Commission. 27 May 2020. Europe's moment: Repair and prepare for the next generation. Brussels. https://ec.europa.eu/commission/presscorner/detail/en/ip_20_940
- New Zealand Government. 11 November 2020. New fund launched to reduce carbon emissions from coal and gas. <https://www.beehive.govt.nz/release/new-fund-launched-reduce-carbon-emissions-coal-and-gas>
- United Nations Environment Programme (2020). Emissions Gap Report 2020. Nairobi
- Vivid Economics. December 2020. Fourth Edition Greenness of Stimulus Index. https://a1be08a4-d8fb-4c22-9e4a-2b2f4cb7e41d.filesusr.com/ugd/643e85_3c3ff551af364f0f9d097546b0eb28c1.pdf

SOCIAL IMPACT



Food insecurity experience scale (FIES) data collection in COVID-19 era: the examples of Burkina Faso and Sierra Leone

Between September 2020 and January 2021 FAO collected data in 20 countries to assess food insecurity within the context of COVID-19, using the Food Insecurity Experience Scale (FIES). Results are reported for Burkina Faso and Sierra Leone.¹

Figure 1. Burkina Faso

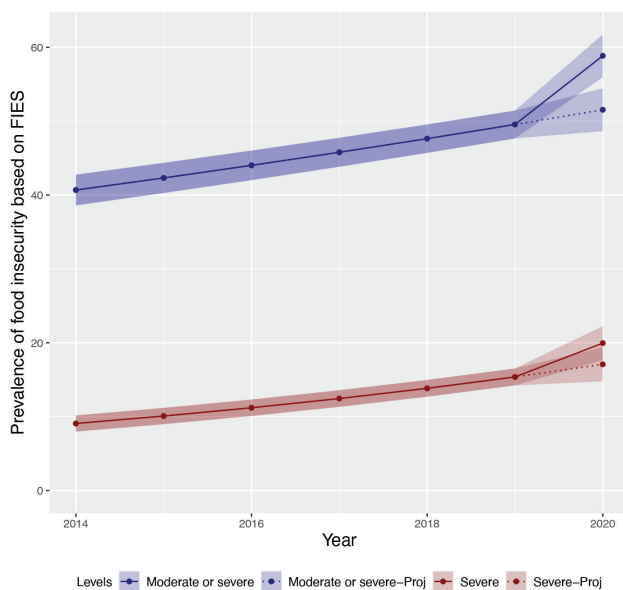
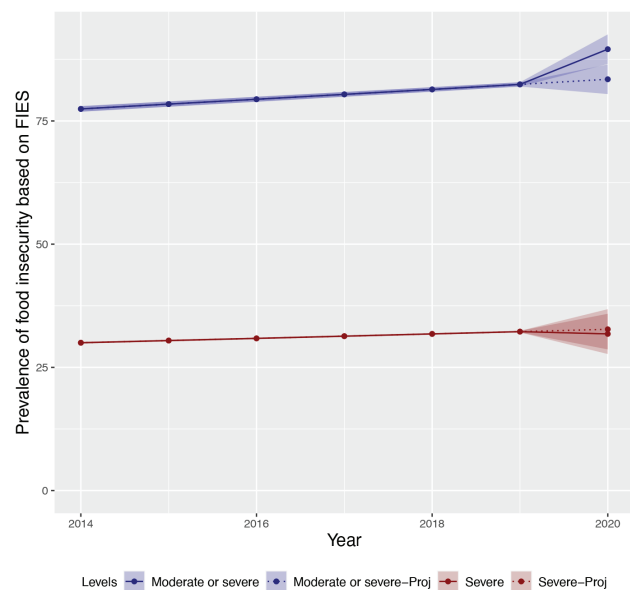


Figure 2. Sierra Leone



Note: data from 150 countries and territories that provided an update to FAO.

When compared to previous assessments on food insecurity (SOFI 2020), FAO preliminary results from the analysis of data collected during the COVID-19 pandemic reveal a substantial increase in the prevalence of total food insecurity (at moderate or severe levels combined) in both Burkina Faso and Sierra Leone.

If confirmed – the 2020 estimate will exceed the one obtained by projecting the recent past trends in both countries (Figures above). The additional increase is beyond margins of error and might be (at least partially) attributed to the impact of the pandemic on people's ability to access food.

In Burkina Faso the increasing trend involves both moderate and severe levels, while in Sierra Leone the impact of the pandemic is evident mostly in terms of moderate food insecurity, as the prevalence of severe food insecurity remains practically unchanged around the very high recent levels.

Measures are obtained using the **Food Insecurity Experience Scale (FIES)**, FAO's corporate tool to measure

the severity of food insecurity as experienced by people that relies on people's direct responses to eight survey questions regarding their access to adequate food (Cafiero et al., 2017).

In producing the 2020 figures to be compared with the previous trends, adjustments were needed to reflect the difference in sampling design and data collection methods.

While in previous years (2014-2019) data had been collected face to face, in 2020, data was collected via mobile telephone. Sampling was mostly through Random Digit Dialing (RDD), targeting at least 200 observations at each administrative level 1 areas within each country.

The telephone data collection modality implies different reference population (only individuals with access to mobile phone) compared to face-to-face surveys, and the composition of the sample in terms of characteristics related to food insecurity may be heavily affected, especially if mobile telephone coverage is low.

¹ Document prepared by the Food Security statistics team at the Statistics Division of FAO

Therefore, post-hoc adjustments were needed to reflect the difference in the structure by education level and gender (or other socio-economic aspect when available) in the sample and in the general population.

Data collected by FAO through face-to-face interviews included information on the respondent's regular access to mobile phone. This allowed conducting an analysis by splitting samples revealing that, in Burkina Faso, the prevalence of food insecurity among those who have access to a mobile phone has been, in the recent past, not significantly different than that of the total population. Given this finding, no further adjustment was made to reflect the difference in the results. However, in Sierra Leone, such difference is significant, with the prevalence of food insecurity in the total population being about 5 percent and 7 percent (for moderate + severe, and severe, respectively) higher than the prevalence among those who have access to a mobile. This implies that the actual prevalence of food insecurity in 2020 in Sierra Leone could be higher than the one reported above.

The FIES module used to generate the results for 2020 was adapted to respond to the challenges presented by the need to collect data via telephone, during the COVID-19 pandemic, while preserving all the desirable properties in terms of food security measurement rigor and reliability.

Adaptation includes adding follow-up questions on whether respondents attribute their food insecurity experiences mainly to the COVID-19 crisis. (<http://www.fao.org/3/ca9205en/ca9205en.pdf>)

In both cases, more than 70% of the respondents identify COVID-19 as the main reason for food insecurity in 2020. However, if recent past trends persisted in absence of COVID-19, we should infer that many of those who attributed their food insecurity in 2020 to COVID-19 would have been affected by food insecurity even in the absence of the pandemic.

References:

- Cafiero, C., Viviani, S. and Nord, M. (2017). Food security measurement in a global context: The food insecurity experience scale. <https://www.sciencedirect.com/science/article/pii/S0263224117307005>. FAO, Rome, Italy.
- FAO, IFAD, UNICEF, WFP and WHO. 2020. The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO. <https://doi.org/10.4060/ca9692en>



COVID-19 posing a major challenge to collection of migration statistics

Migrants worldwide play an important role in sectors vital to addressing the pandemic, but are also exposed to higher risks of contracting the virus. Collecting data on migrants has become increasingly important in light of both of these factors. Nonetheless, collecting data and statistics on migrants and migration-related issues has become increasingly challenging since the outbreak of COVID-19. Pre-existing challenges to migration data have been exacerbated by the implementation of extensive local and international mobility restrictions and reprioritization of resources. The implementation of planned censuses, surveys, and other sources of data on migrants and human mobility have therefore been affected.

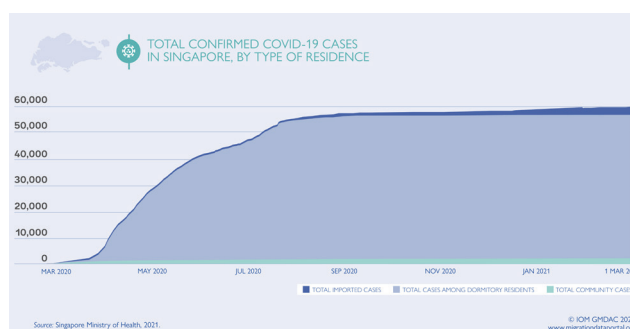
Impact of COVID-19 on migrants

Migrants in many countries affected by the outbreak of COVID-19 make up a large proportion of the workforce in sectors important for the pandemic response.

For example, many migrants are employed as healthcare workers. Among the 20 countries with the highest number of COVID-19 cases as of February 2021, at least 7 countries – the United States, France, Spain, the United Kingdom, Italy, Germany, Chile and Belgium – depend heavily on foreign-born workers in healthcare. For example, data from 2015-2016 indicates that 33 per cent of doctors and 22 per cent of nurses in the United Kingdom were foreign-born.

Migrants also make up a significant proportion of other sectors essential to the COVID-19 response and recovery. More than 13 per cent of all services and sales workers in 7 of the 20 countries with the highest number of COVID-19 cases as of February 2021 were foreign born. 2020 analysis shows that across countries in the European Union, an average of 13 per cent of all key workers were migrants. In the United States, analysis of 2018 data indicates that an estimated 69 per cent of all migrant workers work in critical infrastructure sectors.

The data available on COVID-19 cases among migrant groups shows that migrants are more vulnerable to the spread of the virus than other groups. In particular, lower-skilled migrants in crowded dormitories have been disproportionately affected

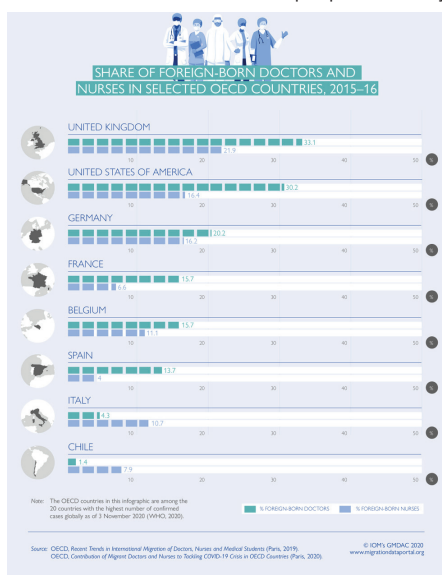


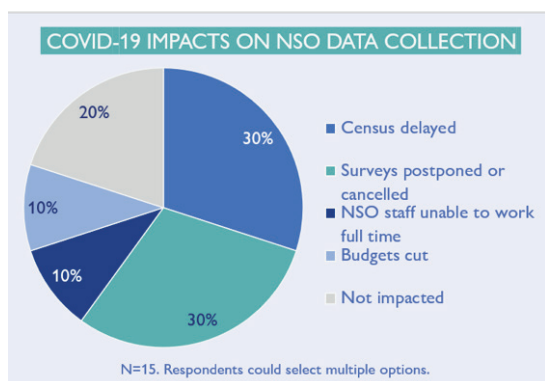
by the pandemic. In Saudi Arabia, for example, data from the national Ministry of Health indicates that 75 per cent of all confirmed COVID cases through May 2020 were among migrants. In Singapore, more than 95 per cent of cases confirmed by the Ministry of Health as of June 2020 were of migrants, with more than 91 per cent of all cases linked to crowded dormitory housing as of March 2021.

Refugees, internally displaced persons and other migrants in irregular situations are among those most vulnerable to the virus. This is linked both to the often-overcrowded settings in which they live, but also due to the travel restrictions and border closures imposed to stop the spread of COVID-19. Many migrants, including seasonal workers and international students, have become stranded and unable to return to their countries of origin due to COVID travel restrictions. As of July 2020, IOM's Return Task Force identified at least 3 million stranded migrants worldwide.

Generally, migration flows have decreased dramatically due to the pandemic. UN DESA estimates that the number of migrants worldwide will decrease by nearly 2 million people between mid-2019 and mid-2020. Similarly, migration flows to OECD countries fell by an estimated 46 per cent in the first semester of 2020.

While migration in 2020 generally decreased, irregular migratory movements and deaths on some routes actually increased since the outbreak of the pandemic. These include the maritime routes across the Central Mediterranean, between Western Africa and the Spanish Canary Islands, and from Venezuela to Caribbean nations. More than 3,600 people lost their lives during migration in 2020, according to IOM's Missing Migrants Project, a number which excludes many more deaths of migrants due to COVID infection and linked to mobility restrictions and lockdowns.





The impact of COVID-19 on national migration data collection

Policy aimed at addressing the pandemic must include migrants, and such policy hinges on the continued collection and analysis of robust data on migrants and migration-related issues. However, the outbreak of COVID-19 and the ensuing mobility restrictions and reprioritization of resources has in many cases exacerbated the existing challenges to migration data. Both the collection of statistics on regular and irregular migration have been affected.

The data collected and analysed by national statistical offices (NSOs) plays a vital role in the body of evidence on migration. A survey conducted by IOM's Global Migration Data Analysis Centre with 15 NSOs shortly after the outbreak of the pandemic showed that there were both increased demands for migration data and decreased capacities to collect and analyse such data because of the pandemic. The respondents, who were staff at NSOs in countries across Europe, Africa, Asia and the Americas, reported widespread demands for increased disaggregation of data by migratory status, especially in healthcare and employment sectors, as well as on irregular migration and seasonal workers. However, as shown in the graph in this section, most NSO respondents had been negatively impacted by the outbreak of the pandemic, with most reporting delays to censuses and surveys, and cuts to statistical offices budget and staff hours.

COVID-related challenges to censuses and surveys profoundly impact the collection of migration data, and population statistics more broadly. With 150 countries scheduled to conduct census enumeration between 2020 and 2021, the

pandemic is likely to disrupt data collection through delays, interruptions or cancellations, all of which can compromise the quality of census data. Similarly, as many surveys are conducted via face-to-face interviews, COVID-related mobility restrictions have hindered the collection of vital information on migration.

Data on irregular migration movements, which often requires in-person presence of key transit hubs, has also been profoundly limited by the COVID-19 pandemic. Though many routes likely saw fewer irregular movements due to extensive travel restrictions implemented to limit the spread of the virus, this was not always the case. Decreases in data on migrant flows and deaths linked to irregular movements are not necessarily an indication of a real drop since the pandemic. For example, IOM's Missing Migrants Project received far more reports of 'invisible shipwrecks' – unverifiable cases in which ships carrying migrants disappear without a trace – in 2020 compared to prior years.

IOM GMDAC's work on addressing COVID-related migration data challenges

The International Organization for Migration's Global Migration Data Analysis Centre (IOM GMDAC) has taken steps to address the data challenges caused by COVID-19 and ensuing measures, but more action is urgently needed. This has included extensive knowledge management on migration data related to the COVID-19 pandemic through the Migration Data Portal, which provides the latest data on migration on a wide variety of topics. COVID-related resources on migration data on the Portal include thematic pages, expert blogs, and guidance materials.

IOM GMDAC also supports migration-related indicators in the 2030 Agenda for Sustainable Development through its Migration Governance Indicators (SDG Indicator 10.7.2) and Missing Migrants Project (SDG Indicator 10.7.3). COVID-related work on the former project has included the aforementioned NSO survey on migration data needs and challenges in the wake of the pandemic; another round of this survey is planned for 2021. Monitoring deaths and disappearances during migration, including on irregular routes affected by the pandemic, is a central part of IOM's Missing Migrants Project.

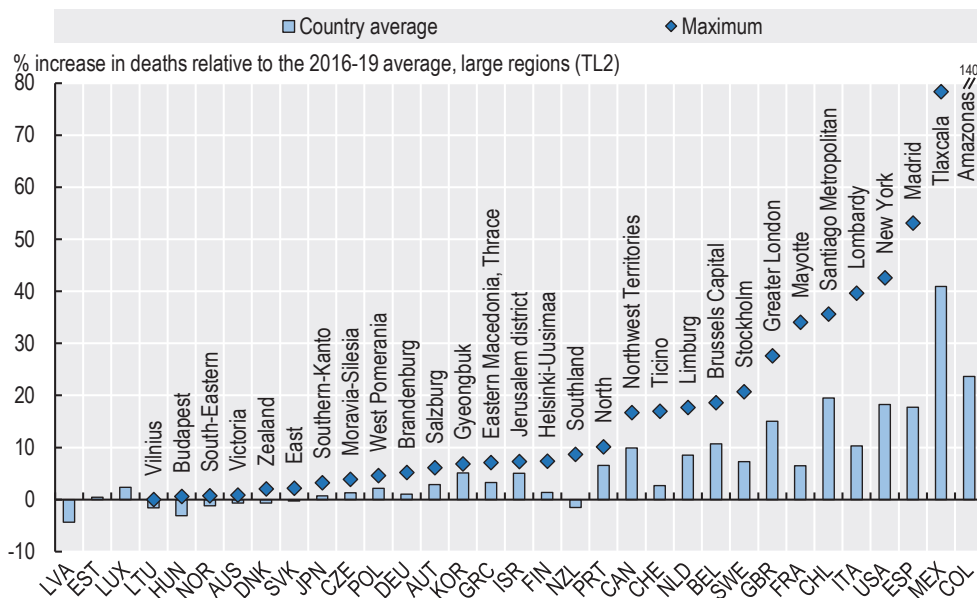
Sources:

- [5 UN resources for adapting migration data collection in times of COVID-19](#). Migration Data Portal, IOM GMDAC, 2020.
- [Migration data relevant for the COVID-19 pandemic](#). Migration Data Portal, IOM GMDAC, 2021.
- [Missing Migrants Project](#). IOM GMDAC, 2021.

Excess mortality higher in metropolitan regions

In most OECD countries, metropolitan regions have experienced higher excess mortality than remote regions due the COVID-19 pandemic.

Figure 1. Regional disparities in excess mortality, January to August 2020

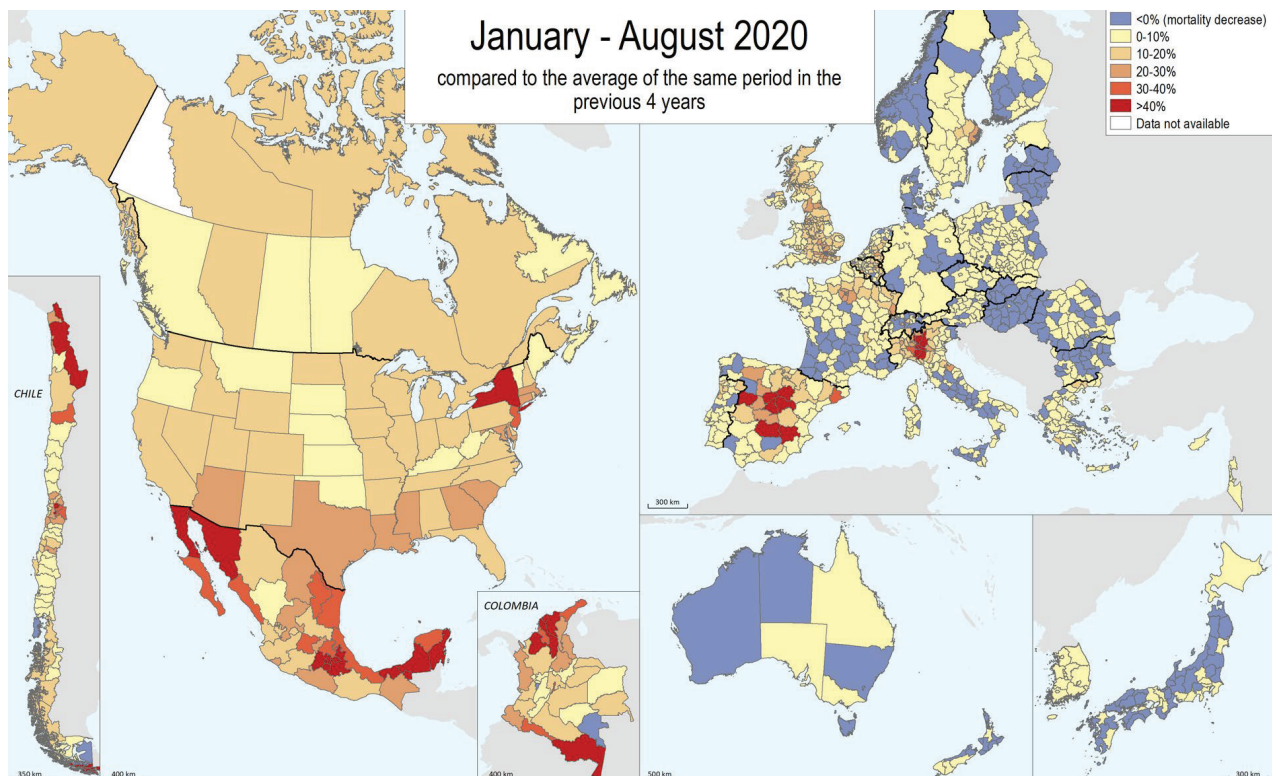


The first wave of the COVID-19 pandemic hit certain parts of countries harder than others. Beyond the count of fatalities directly reported as due to the COVID-19 infection, the increase in the number of total deaths in a region relative to previous years provides a useful indication of the overall health impact of the current pandemic. More specifically, the excess mortality during the pandemic – the increase in deaths as a percentage of deaths in previous years – avoids problems of misreporting caused by low levels of testing. From January to August 2020, subnational regions in 33 OECD countries registered on average 11% more deaths than in the same months of the previous four years (average of 2016-2019). Interestingly, regional disparities in this indicator are strikingly high. Excess mortality in Lombardy, New York (United States), Madrid (Spain), Tlaxcala (Mexico) and Amazonas (Colombia) ranged from 40% to 140% in the period from January to August 2020 – at least 24 percentage points higher than the average excess mortality in their respective country.

Differences in excess mortality during this period also reveal clear patterns across types of regions, depending on the share of the regional population living within or near (up to one-hour drive) from a metropolitan area (see Regional typology for more details). In 20 out of 23 OECD countries with available data, regions far from a metropolitan area have recorded lower excess mortality than metropolitan regions. More specifically, regions far from a metropolitan area experienced an average excess mortality of 4% compared to 7% in metropolitan regions. However, there can be exceptions to such a pattern, as is the case of Switzerland, where excess mortality is significantly higher in regions far from a metropolitan area than in metropolitan regions.

Definition: Excess mortality is the percentage increase in the cumulative number of deaths (all causes) between the period of January to August 2020 with respect to the average number of deaths in the same period in 2016, 2017, 2018 and 2019.

Figure 2. Excess mortality in subnational regions of OECD countries



Regional typology:

Subnational regions within the 37 OECD countries are classified into two territorial levels reflecting the administrative organisation of countries: large regions (territorial level 2 or TL2) composed by 427 regions, and small regions (TL3) composed by 2 290 regions. Small regions can be further

classified into three groups based on their level of access to metropolitan areas (i.e. dense and highly populated functional urban areas of at least 250 000 inhabitants): Metropolitan regions, Regions close to a metropolitan area, and Regions far from a metropolitan area (composed of Regions with/near a small-medium city, and Remote regions). For more details, see Fadic, M. et al. 2019.

Link to metadata:

- OECD (2021), Public repositories of the Economic Analysis, Data and Statistics Division (EDS) of the OECD's Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), <https://github.com/oecd-cfe-eds/ccsa-excess-mortality>.
- OECD (2021), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

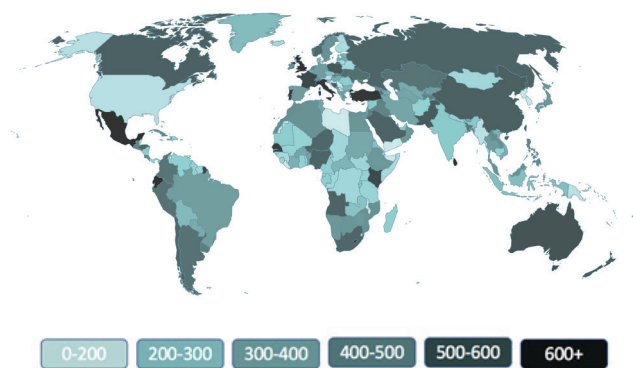
Sources:

- Refer OECD (2020), OECD Regions and Cities at a Glance 2020, OECD Publishing, <https://doi.org/10.1787/959d-5ba0-en>.
- Fadic, M, Garcilazo, J.E., Moreno Monroy, A., Veneri, P. (2019), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", OECD Regional Development Working Papers, No. 2019/06, OECD Publishing, <https://doi.org/10.1787/b902cc00-en>.

Human rights at the core of efforts to build back better

The United Nations human rights system plays a crucial role in lighting the path to a more inclusive, just and sustainable recovery. Tailored country-level information on human rights challenges, guidance on addressing them, and ensuring a human rights-based response to the COVID-19 pandemic and in achieving the 2030 Agenda for Sustainable Development are available to States.

Figure 1. Total number of recommendations from the human rights mechanisms (2016-2020)



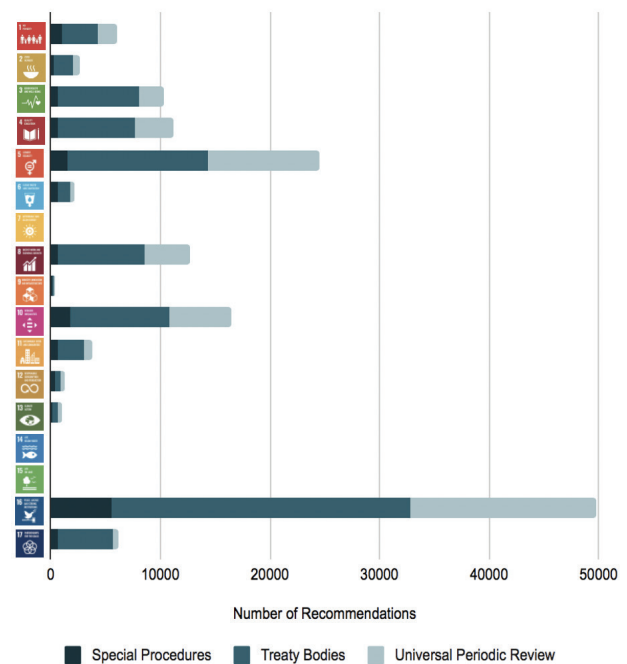
“Responses that are shaped by and respect human rights result in better outcomes in beating the pandemic, ensuring healthcare for everyone and preserving human dignity. Moreover, they also focus our attention on who is suffering most, why, and what can be done about it. They prepare the ground now for emerging from this crisis with more equitable and sustainable societies, development and peace.”

- **UN Secretary General, António Guterres**

[UN Human Rights](#) has continued to work towards integrating human rights into the responses of all stakeholders. It has produced close to 200 guidance notes, statements, press releases and reports on various human rights dimensions of the crisis, including detailed COVID-19 human rights guidance notes on civic space, detention, indigenous peoples, migrants, minorities, women, racial discrimination, LGBTI persons, older people, persons with disabilities business and human rights, access to vaccines and states of emergency. Its 92 field presences worldwide have supported Member States, civil society, various State institutions and national human rights institutions in implementing the guidance provided by the human rights system.

The [UN human rights mechanisms](#), composed of the Human Rights Council’s Universal Periodic Review, Special Procedures, and the Treaty Bodies provide country-specific observations and implement human rights commitments by member States giving practical directions on how human rights can help COVID-19 recovery and response.

Figure 2. Recommendations by SDG and mechanism (2016-2020)



New data from the [Universal Human Rights Index](#) show that in the last 5 years, at least 74,606 observations and recommendations were made by the mechanisms to States. On average, every year a State received 75 guidance which advises them on transforming into more just, equal and resilient societies. The timely and concerted implementation of these recommendations can have positive impact on individuals, communities and society as a whole. Using the [National Recommendations Tracking Database \(NRTD\)](#), States can track their progress in translating the mechanisms’ recommendations into actual human rights improvements.

These recommendations cover a broad range of human rights themes, concerned groups, Sustainable Development Goals (SDGs) and targets, including those highlighted in the [COVID-19 Human Rights Indicators Framework](#). This framework, a crucial element of the UN’s Socio-Economic Response Framework, is a practical tool for measuring whether the UN and States’ responses to the pandemic are consistent with international human rights standards, address key human

Figure 3. Distribution of recommendations across human rights themes, by SDG regions (2016-2020)

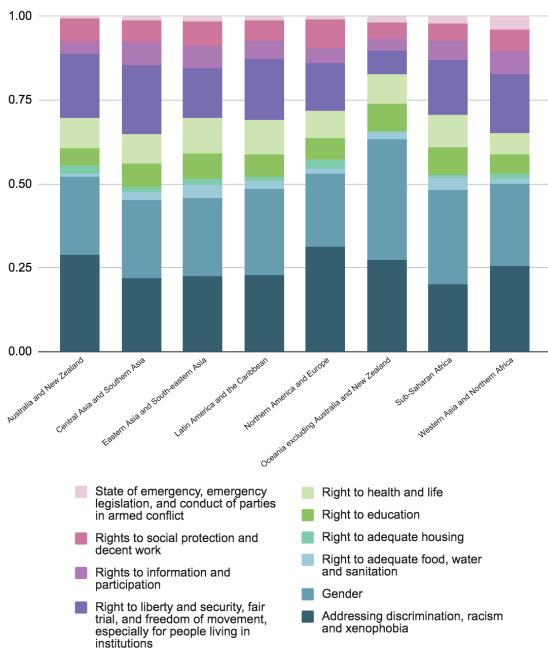
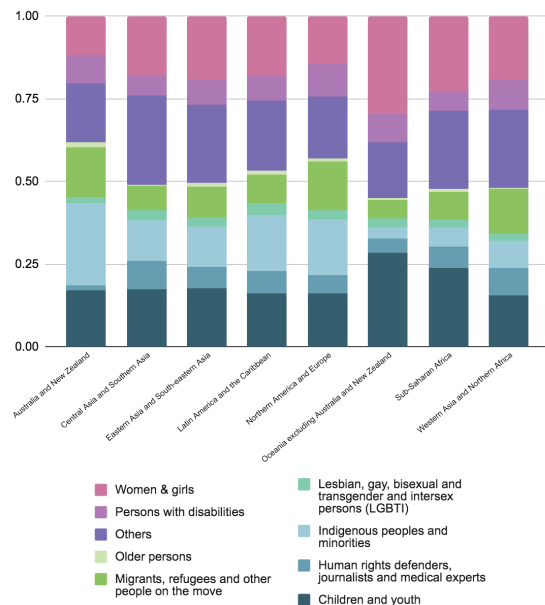


Figure 4. Distribution of recommendations across 'groups left behind', by SDG regions (2016-2020)



rights concerns, and builds on the global SDG indicators framework. It highlights the importance of safeguarding the rights to health and life, upholding freedom of speech, information, association and others that are critical to a healthy civic space, and ensuring that states of emergencies, public health and other measures comply with international law.

Data on how the recommendations made by international human rights mechanisms help address human rights issues show that there is readily-available information to guide States' policies to minimize the impact of COVID-19 on progress made in implementing the 17 SDGs, on our socio-economic gains and ensuring that COVID-19 does not magnify pre-existing forms of discrimination and inequalities. For example, in all the SDG regions, most recommendations seek to address vulnerability and marginalization.

"We need to build up human rights-based systems to protect and cherish the people, who are the greatest resource of any country and the only bottom line that really counts. We need to devise policies that are grounded in right, democracy and rule of law, so that we can minimize the devastating social, economic and humanitarian consequences of COVID-19 – and build back societies that are resilient and fair."

– **UN High Commissioner for Human Rights, Michelle Bachelet**

Sources:

- [COVID-19 and its human rights dimensions](#)
- [A UN framework for the immediate socio-economic response to COVID-19](#)
- [Checklist for a Human Rights-Based Approach to Socio-Economic Country Responses to COVID-19](#)
- [The Universal Human Rights Index](#) contains over 170, 000 country-specific observations and recommendations, aligned with SDGs and searchable by Goals and targets. This Index includes a machine learning algorithm developed by the Danish Institute for Human Rights & Specialisterne ApS. For more information contact uhrisupport@ohchr.org



Get the Code

Get the Data

<https://github.com/unstats/ccsa-covid-v3>

SDG monitoring of learning proficiency trends in the context of the pandemic

Building effective systems to monitor learning proficiency, already important before the pandemic, has become even more urgent

Figure 1. Reading trajectories at three levels with 20% acceleration



Learning losses resulting from pandemic-related school disruptions have been referred to as a generational catastrophe. Successful catching up and learning acceleration in schools can mitigate the harm. But what are the key data and statistics needed for planning?

Firstly, each country should ideally have reliable measures of learning proficiency from just before the pandemic, with metadata that allows for repeated monitoring after the school disruptions. Ideally, secure anchor items, or test questions which are not publicly available, should be used and repeated over time to ensure comparability. What is often poorly understood is that sample-based monitoring, following rigorous random sampling protocols, produces the most comparable statistics, largely because item security is easier to manage when a sample of schools is monitored.

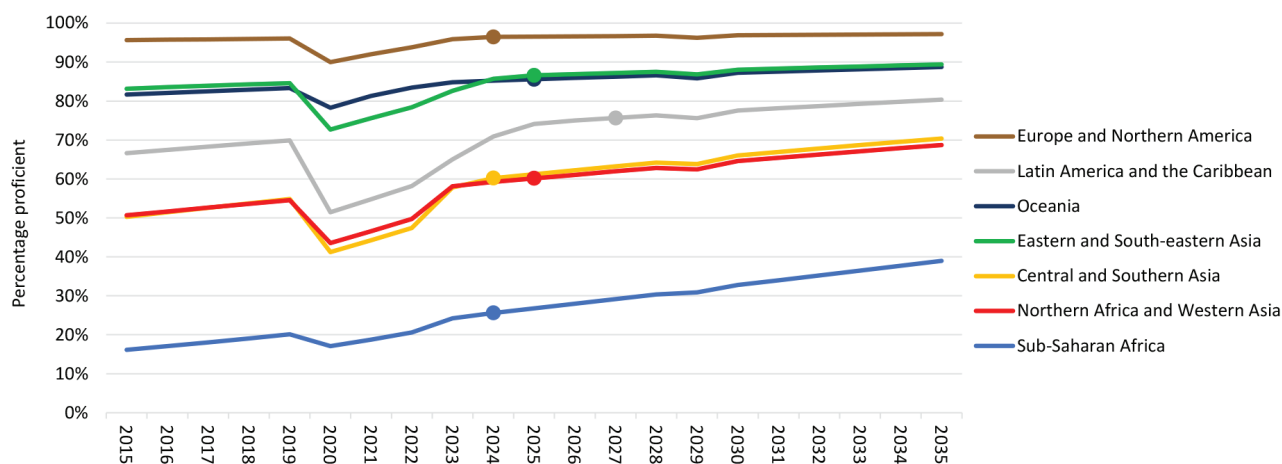
How widely available are the required monitoring programmes? Unfortunately, only around a third of primary-level children are in countries with at least roughly reliable measures of learning proficiency before the pandemic. And this is when considering data which could be as old as 20 years. Imputations where

there is no data is necessary, but it can also mask how serious the data gaps are.

Secondly, countries should ideally know what their learning proficiency trends in the pre-pandemic years were. Efforts to compare proficiency across countries can detract from what is of great importance for national authorities, namely comparisons across time and the detection of trends. Without trend data, it is very difficult to gauge whether sector-wide strategies are working, yet most developing countries lack good trend data. If there was improvement before the pandemic, then a return to the original trajectory implies a proficiency level above what was seen in, say, 2019. This is shown in Figure 1, for the world.

Thirdly, unexpected dropping out during the pandemic requires careful adjustments to proficiency indicators, which should cover all children of the relevant age cohort, not just those in school. Children who drop out tend to be the most vulnerable academically. Thus, what may seem like a flat trend in a schools-based monitoring system could mask a deterioration for the age cohort, in a context of increased dropping out.

Figure 2. Lower primary reading trajectories by region with 20% acceleration



Metadata:

- <https://sdg.uis.unesco.org/2020/01/30/benchmarks-using-data-to-set-evidence-based-targets-to-improve-learning-proficiency>
- <https://sdg.uis.unesco.org/2020/10/23/recalculating-proficiency-in-schools-covid-19-related-learning-losses-and-dropping-out>

Sources:

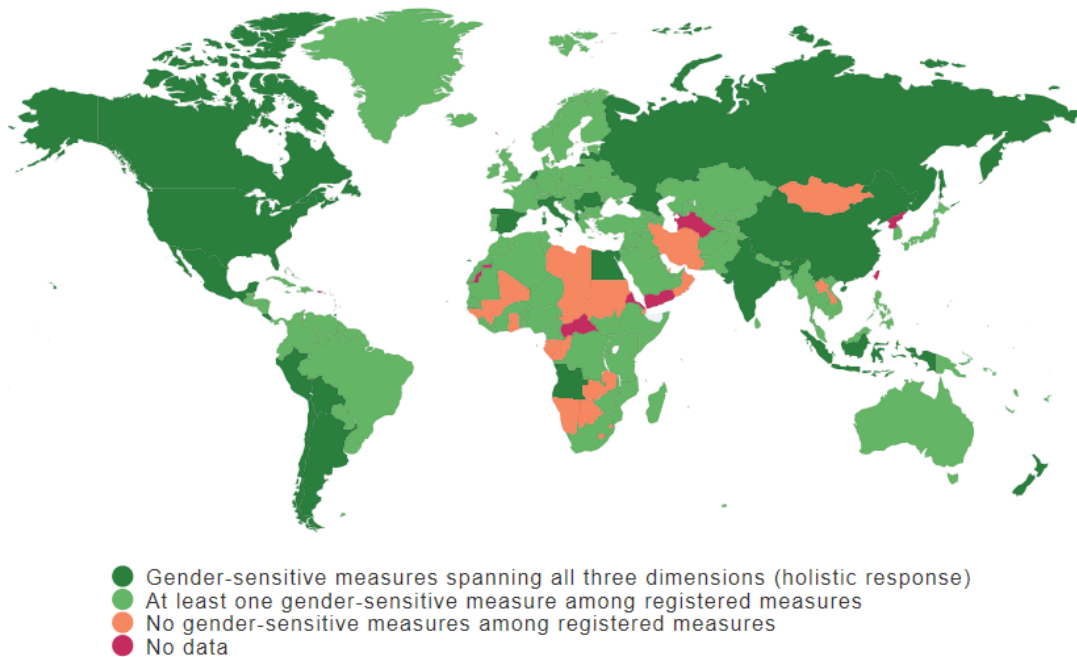
- UIS (2020). Projections for learning proficiency can inform post COVID-19 educational strategies. Montreal. [Blog post]
- UIS (2021). Pandemic-related disruptions to schooling and impacts on learning proficiency indicators: A focus on the early grades. Montreal. [Forthcoming report]



COVID-19 response falling short of addressing threats to gender equality and women's rights

Joint data collection and analysis by UNDP and UN Women identifies gaps in the global policy response to the pandemic and highlights countries' good practices

Figure 1. Gender-sensitive response measures by country



COVID-19 has had a devastating impact on women and girls, as documented in [previous](#) editions of this report. What are governments doing to protect women's rights and prevent backsliding on gender equality as a response? To answer this question, UNDP and UN Women compiled and analysed over 2,500 policy measures across 206 countries and territories in the [COVID-19 Global Gender Response Tracker](#) – a unique database that monitors government responses to the pandemic from a gender perspective. It focuses on measures that address three key challenges: the surge in violence against women and girls, the unprecedented increase in unpaid care work, and the large-scale loss of jobs, incomes and livelihoods.

The Tracker identifies a total of 992 gender-sensitive measures across 164 countries, defined as those that address violence against women, strengthen women's economic security or support unpaid care. However, only 25 countries (12 per cent) have a holistic response, with measures that span all three domains. Worryingly, 20 per cent of countries analysed register no gender-sensitive response measures.

The bulk of the gender response so far has focused on violence against women (704 measures across 135 countries)

with [services for survivors](#) accounting for almost two-thirds of these measures. However, many of these are small-scale and only 48 countries have defined violence against women measures as essential as part of their COVID-19 response plans.

The social protection and jobs response, in turn, has been largely blind to women's needs. Out of over 1,300 measures in this area, only 18 per cent have been gender-sensitive – meaning they either target women's economic security (10 per cent) or provide support for unpaid care (8 per cent). While Europe, North America, Australia and New Zealand are leading responses on violence against women and unpaid care, Latin America and the Caribbean is the region with the most measures prioritizing women's economic security, followed by sub-Saharan Africa. Recognizing the severe impacts of the pandemic on women and girls, [governments need to adopt comprehensive gender-responsive policies](#) that address gender-based violence prevention and response, support unpaid care work and ensure women's economic security. Governments must also support [women's active participation in leadership and decision-making](#) in their COVID-19 responses.

Figure 2. Social protection and jobs response: proportion of gender-sensitive measures



Interactive dashboard and database for download:

- <https://data.undp.org/gendertracker/>

Methodology and limitations:

For more information about the methodology, including data sources, date and limitations, please [click here](#). The UNDP-UN Women COVID-19 Global Gender Response Tracker is a living database with countries and measures being regularly added and updated. Like all policy trackers, there may be gaps or biases due to a lack of available information, underreporting of measures being announced, overreporting of measures that have been suspended, or the lack of data on the gender components of existing measures. Please contact gender.data@unwomen.org for more information.

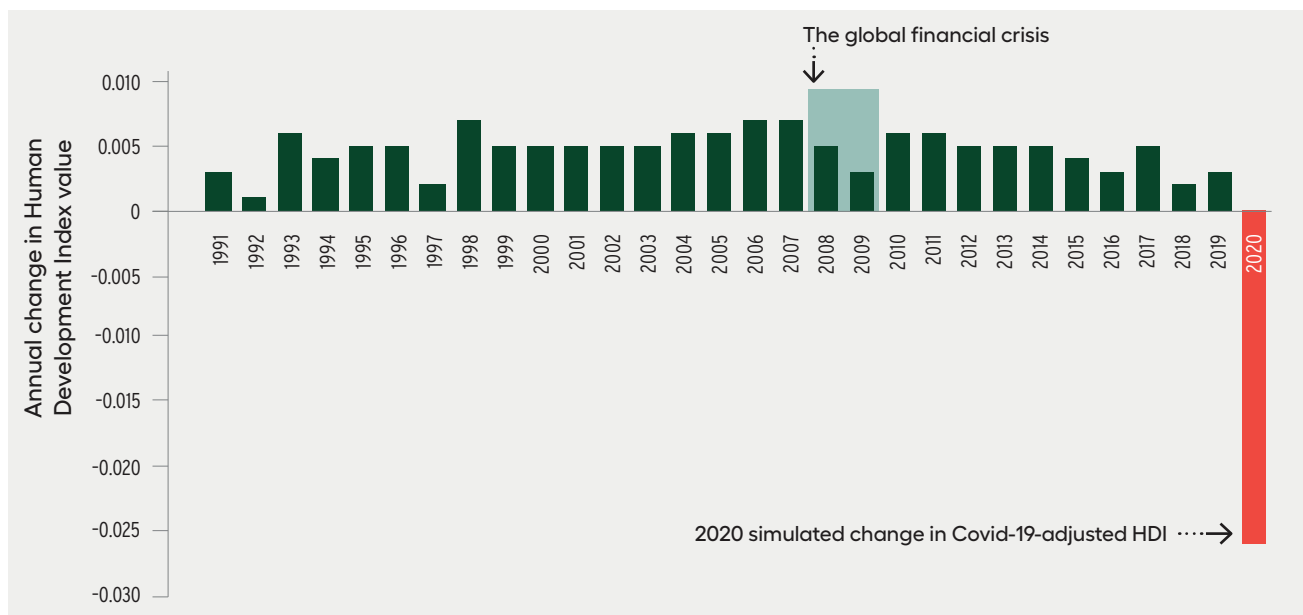
Further resources:

- [Global and regional factsheets](#)
- [Women Count Resource Page](#)

Global Human Development's first drop since 1990 (an update)

COVID-19, with its triple hit to health, education, and income, is causing declines in human development worldwide. When new shocks interact with intersecting horizontal inequalities, they reinforce patterns of disempowerment of specific groups—remarkably children, young people, and women.

Figure 1. The COVID-19 pandemic's unprecedented shock to human development



Source: UNDP 2020b. For 2020, simulations based on data from the International Telecommunications Union, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics, the World Health Organization/ACAPS, and the International Monetary Fund. Based on data as of December 2020.

Shocks emanating from disturbances in life systems and climate change are affecting people and changing societies. The COVID-19 pandemic is a paramount example, affecting the main components of human development with unprecedented magnitude, synchronicity, and global reach.

Simulations of the pandemic's impact suggest that during 2020, all the capabilities accounted for in the Human Development Index were severely affected: a fall equivalent to seven years of progress (previous estimate was equivalent to six years, UNDP 2020a), and the first decline in global human development since 1990 (Figure 1).

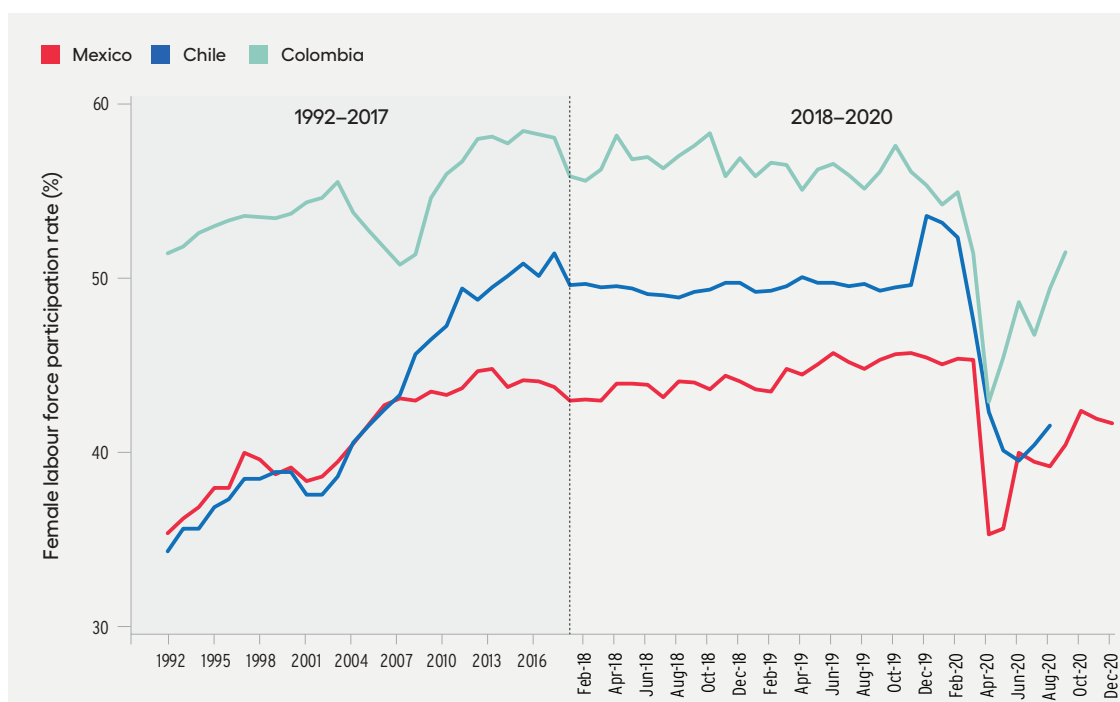
A key driver behind the shock is education, a variable with long term effects. School closures have affected approximately 90 percent of children worldwide. While some have had the opportunity to keep learning remotely, thanks to access to the internet, others have experienced an almost complete loss of formal learning throughout 2020.

During the peak of the pandemic in countries with school closures, the estimated short-term out-of-school rate in primary education was 20 percent in high human development

countries, compared with 86 percent in low human development countries. The education shock might result in a loss of key capabilities and of effective empowerment for a generation that will have to deal with mounting tensions coming from Anthropocene risks, technological transformations, and social inequality.

Indeed, even before the COVID-19 pandemic, systemic risk had been on the rise, often overshadowed by average progress in economic development and poverty reduction (UNDP 2020b). COVID-19 has acted as an x-ray exposing how shocks exacerbate human development inequalities. As an illustration of the disempowering effect of imbalances between people and the planet, the COVID-19 pandemic shows how environmental hazards exacerbate existing gender inequalities: women and girls are disproportionately affected by shocks because of their traditional roles and responsibilities, including around three-quarters of unpaid care work at home. This burden, combined with the lockdowns, has reduced the female labour force participation rate in Mexico, Chile, and Colombia by 10 percentage points, erasing decades of progress (Figure 2).

Figure 2. The COVID-19 pandemic has erased decades of progress in the female labour force participation rate



Note: Refers to the population ages 15 and older. Source: Yearly data for 1992–2017 from the International Labour Organization’s ILOSTAT database; monthly data for 2018–2020 from the National Institute of Statistics and Geography, the National Survey of Occupation and Employment and the Telephone Survey of Occupation and Employment for Mexico and from the ILOSTAT database for Colombia and Chile.

Sources:

- United Nations Development Programme (UNDP) 2020a. Human Development Perspectives: COVID-19 and Human Development: Assessing the Crisis, Envisioning the Recovery. <http://hdr.undp.org/en/hdp-covid>
- United Nations Development Programme (UNDP) 2020b. Human Development Report: The next frontier Human development and the Anthropocene. <http://www.hdr.undp.org/en/2020-report>

Assumption for simulations of COVID-19 adjusted HDI. For income: International Monetary Fund (IMF) projections of gross domestic product per capita for 2020. For health: life expectancy at birth in 2020 (based on United Nations Department of Economic and Social Affairs 2019 Revision of World Population Prospects) is adjusted by the potential effects of COVID-19 on health, taking the low-impact scenario from a study published in the Lancet Global Health (Roberton, T., Carter, E.D., Chou, V.B., Stegmuller, A.R., Jackson, B.D., Tam, Y., Sawadogo-Lewis, T. and Walker, N., 2020. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet Global Health, 8(7)). For education: adjusted expected years of schooling is computed using data of school closures (United Nations Educational, Scientific and Cultural Organization Institute for Statistics and World Health Organization/ACAPS) and access to internet (International Telecommunications Union). We took conservative parameters, including the equal role of on-line on on-site learning. It includes updated time series for HDI, with respect to UNDP 2020a.



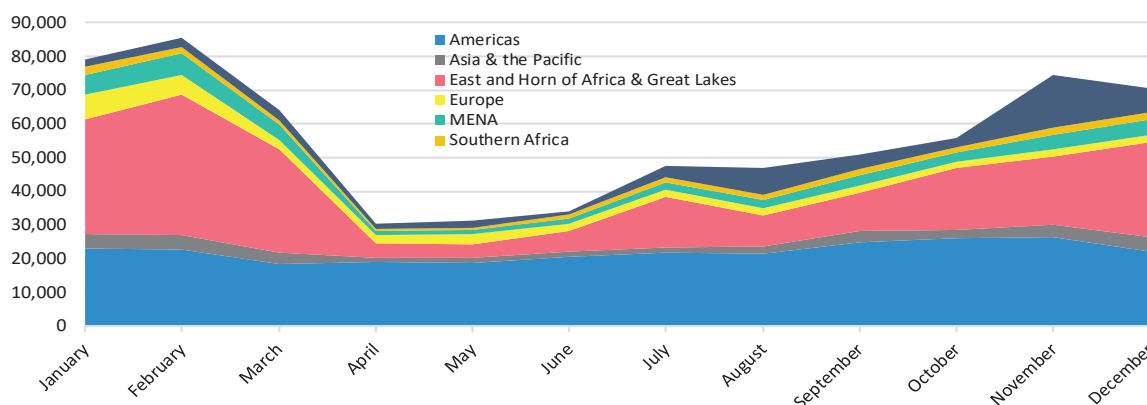
**HUMAN
DEVELOPMENT
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Forcibly displaced disproportionately affected by COVID-19

The health, protection, and socio-economic crises caused by COVID-19 continue to disproportionately affect the forcibly displaced at the onset of 2021. While progress in data collection has been made, more accurate statistics are still needed in all three domains to better understand the impact of the pandemic and devise appropriate responses.

Figure 1. UNHCR monthly refugee registration



The stark increase in hospitalizations and deaths during the second wave of the pandemic has led governments to reinstate lockdown measures and restrictions on international movements. These measures, in combination with the ongoing health crisis, aggravated previous humanitarian, social and economic challenges, and disproportionately affected the most vulnerable groups in society, in particular the over 80 million forcibly displaced persons (FDPs) who flee war and persecution. FDPs have been strongly affected in their ability to obtain protection, due to cross-border movement restrictions and other measures. As of January 2021, 144 countries maintained restrictions on access to their territory, of which 64 countries made no exception for people seeking asylum. Refugee registration, an essential protection activity conducted by UNHCR field staff, dropped significantly between mid-February and mid-June but has recovered again for some regions. East-African figures, though, are still short of their pre-pandemic levels (see chart) in spite of an increase in conflicts in the region. In countries which conduct refugee status determination, despite the adaptation of refugee status determination introducing health protocols and the implementation of remote procedures, there was a global decrease of 33 per cent in the number of asylum applications in the first half of 2020 compared to the previous year. In the case of EU+ countries, 422,000 asylum applications were lodged in total in 2020 as of 30 November, substantially fewer than in the same period in 2019 (-31%). Additionally, in part as a result of the COVID-19 pandemic, which delayed departures and programmes, only 22,770 refugees in need were resettled

to third countries in 2020, as compared to 63,726 departures in 2019, the lowest figure recorded by UNHCR in almost two decades.

In addition to the above-mentioned protection challenges, FDPs are affected by a health crisis compounded by the fact that many displaced persons live in crowded situations, and often live in developing countries with weak and overburdened health care systems. As of December 2020, at least 38,500 positive cases among forcibly displaced people were reported, a figure considered to be seriously under-reported. As vaccination plans start to be rolled out at a global level, UNHCR is advocating for the inclusion of FDPs in governments' vaccine distribution plans. Although countries such as Jordan included refugees and asylum-seekers in their vaccination programmes, many developing countries struggle to secure vaccines against COVID-19. As of January 2021, around 95 per cent of vaccines were administered in just ten countries.

Last, the 2020 global recession induced by COVID-19 is inflicting a huge setback to the fight to end extreme poverty worldwide. The World Bank estimates that between 119 and 124 million people around the globe were pushed into extreme poverty in 2020. While poverty rates remain difficult to estimate for FDPs, these persons are among the most vulnerable, as they are more likely to live in low- and middle-income countries, and to be employed in the informal sector or in lower-quality jobs that are more adversely affected by the pandemic. Unfortunately, the impact of the pandemic, coupled with underdeveloped national statistical systems, limits the

ability to estimate the impact of crises and policy shocks. In a recently published study that relies on non-official data, the World Bank and UNHCR estimate that 1.1 million refugees or internally displaced persons in Lebanon, the Kurdistan Region of Iraq, and three governorates in Jordan have been newly pushed into poverty by the pandemic, in addition to 4.4 million people in host communities. Another UNHCR study in Zambia evaluated both the refugee and host community in terms of their ability to maintain their livelihoods in the context of the global pandemic. As shown in the chart, refugees have been more exposed to economic adversity, as over 70% of the surveyed population said that their income was reduced, in comparison to 65% of those in the host community. A survey conducted by the World Bank and UNHCR in Kenya, which consulted over 16,000 individuals in both displacement and non-displacement settings, showed that FDPs were

significantly more impacted by job loss, despite already lower pre-pandemic levels of employment than Kenyan nationals (17.6% vs. 52.3%). Although the absolute number of job losses was larger among the host community, controlling for factors like gender, educational level, and geographic location showed that the decrease in the employment of refugees and stateless persons was significantly larger than the equivalent decrease in the employment of their national counterparts (see chart).

It is hoped that more accurate and timely information will become available in the coming months to assess the impact of the pandemic on FDPs. To partially fill data gaps, UNHCR and other partner organizations have been collecting data remotely, through telephone surveys, self-directed surveys, or key informant interviews. Some of these datasets are already available in UNHCR's Microdata Library.

Figure 2. COVID-19 impact assessment on refugee livelihoods in Zambia

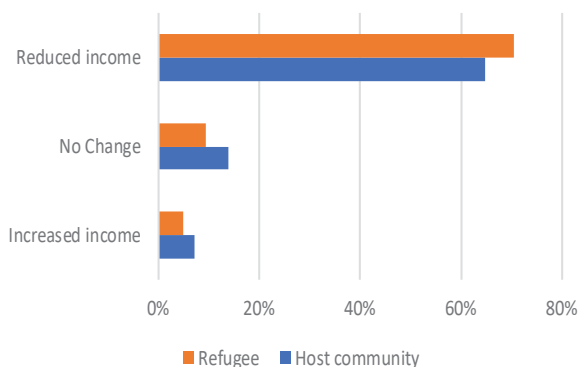
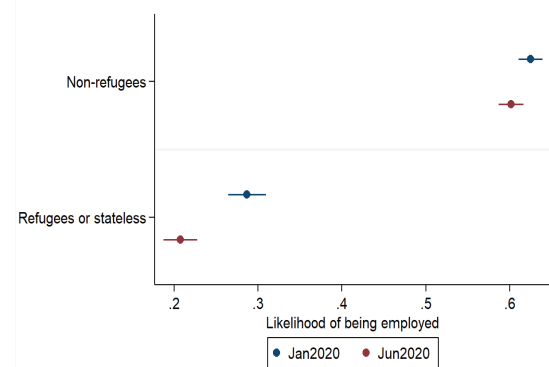


Figure 3. Monitoring COVID-19 impact on household in Kenya (2020)



Link to metadata:

- <https://www.unhcr.org/refugee-statistics/methodology/>
- <https://microdata.unhcr.org/index.php/catalog/252/study-description>
- <https://www.worldbank.org/en/country/kenya/brief/monitoring-covid-19-impact-on-households-and-firms-in-kenya>

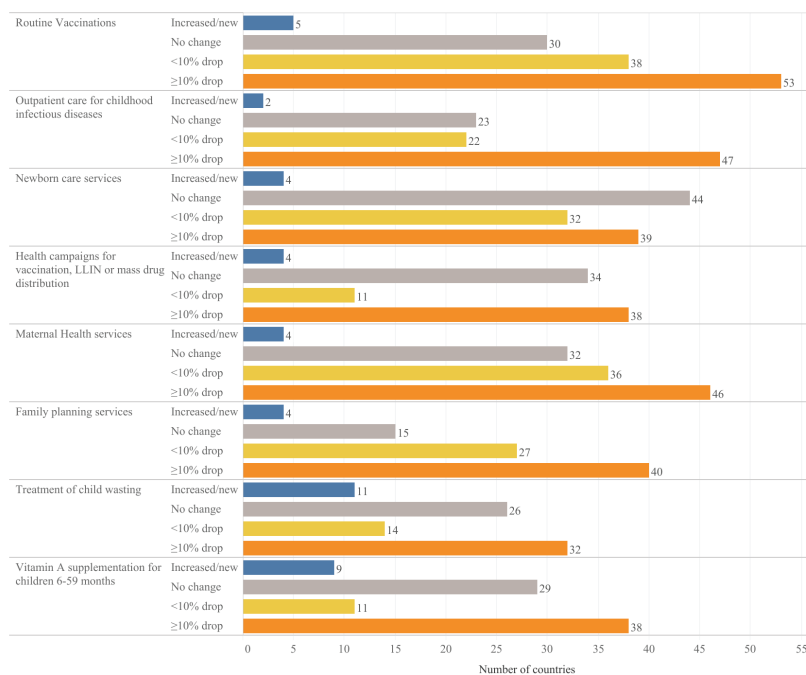
Sources:

- Global COVID-19 Operational Portal: <https://data2.unhcr.org/en/situations/covid-19>
- Mid-Year Trends 2020: <https://www.unhcr.org/statistics/unhcrstats/5fc504d44/mid-year-trends-2020.html>
- Compounding misfortunes. Changes in Poverty since the onset of COVID-19 on Syrian Refugees and Host Communities in Jordan, the Kurdistan Region of Iraq and Lebanon: <https://www.jointdatacenter.org/wp-content/uploads/2020/12/World-Bank-UNHCR-COVID-Compounding-Misfortunes-final.pdf>
- Highly vulnerable yet largely invisible Forcibly displaced in the COVID-19-induced recession: https://www.jointdatacenter.org/wp-content/uploads/2020/12/JDC-Paper-Series-on-Forced-Displacement_No.1_Final.pdf

COVID-19 is reversing decades of progress in health and nutrition for children

Most countries experienced drops in coverage of life saving health and nutrition services in 2020, putting millions of pregnant women, children and adolescents at risk of death and other poor health outcomes.

Figure 1. COVID-19 related change in coverage levels of select health and nutrition services in 2020, compared to 2019



Source: UNICEF, Tracking the situation of children dashboard during COVID-19, September 2020.

Note: A total of 148 countries participated in the survey.

Although children and adolescents are less likely to suffer from severe disease and death from COVID-19, disruptions in critical health and nutrition services due to country response measures pose a significant threat to their survival, health and well-being. Countries have reported common reasons for these disruptions including shortages of health personnel, equipment and supplies; closures of facilities; reduced service hours; restrictions on transportation; financial difficulties making health care expenses prohibitive for many households; and fear of infection resulting in fewer families seeking health care services for their children and fewer pregnant women accessing maternal health services.

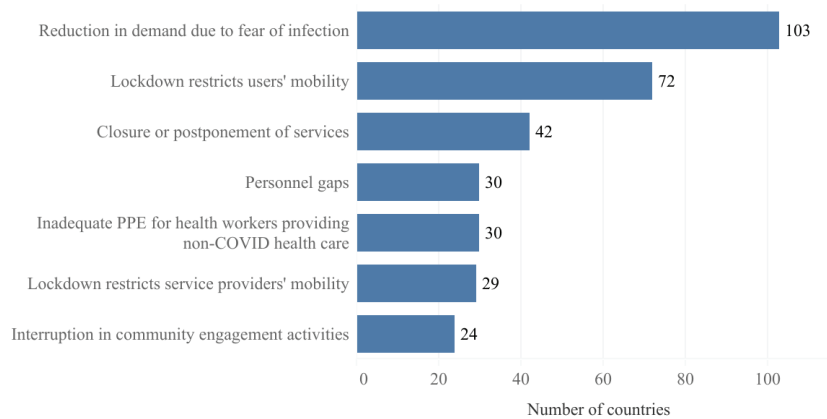
UNICEF's latest survey tracking the impact of COVID-19 found that health and nutrition service disruptions were still widespread at the end of 2020. Over one third of the 148 countries included in the survey reported reductions of at least 10 percent compared to the same time in 2019 in coverage of vaccination services, outpatient care for childhood infectious diseases, and maternal health services. About a quarter of these countries reported reductions of 10 percent or higher in vitamin A supplementation and treatment of child wasting. In addition, one in four countries with ongoing humanitarian

situations was facing reductions of 10% or more in household drinking water services coverage, a major concern especially for countries with protracted crises that are facing recurrent health outbreaks, such as cholera.

Trade restrictions and disruptions in transportation due to the pandemic impact the food systems negatively, increasing the risk of food insecurity for millions of families. Widespread school closures have meant that millions of children and adolescents are missing out on nutritious meals and health services delivered through schools. An estimated additional 6.7 million children were expected to experience severe acute malnutrition or wasting by the end of 2020, increasing their risk of death and other negative health and development outcomes.

Almost a year into the COVID-19 crisis, it is evident that service disruptions are taking a toll on the health and well-being of pregnant women, children, and adolescents. Countries need to continue prioritizing the delivery of high-quality essential health and nutrition services so that the hard fought gains achieved in the past few decades on maternal, newborn and child survival are not lost.

Figure 2. Ranking of reasons for health service disruption (top 3 reasons)



Source: UNICEF, Tracking the situation of children dashboard during COVID-19, September 2020.

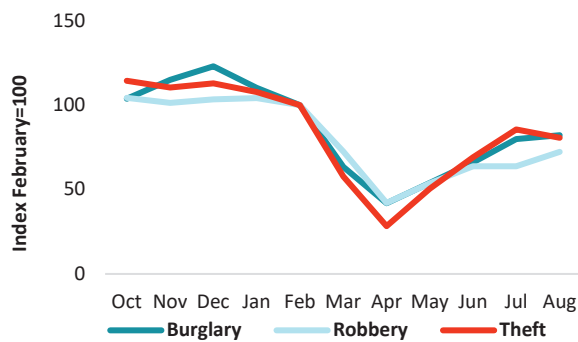
Sources:

- [Tracking the situation of children in COVID-19](#)

The pandemic initially reduced property crime but its legacy is likely to increase it

Reported robbery, theft and burglary declined significantly, falling by more than 50 per cent in most countries. Socioeconomic strains will likely reverse the trend in the long-term.

Figure 1. Trends in the number of reported property crimes: robbery, theft and burglary, November 2019–August 2020

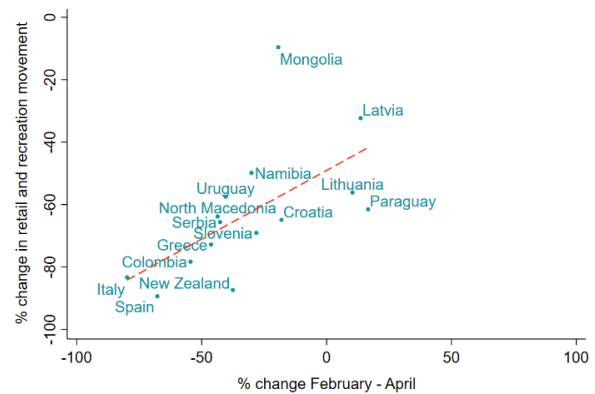


Note: Trend is calculated based on the total number of property crimes reported to the police in 22 countries with data available (February 2020 = 100). Robbery = 22 countries; burglary = 20 countries; theft = 21 countries.

Property crime - robbery, theft and robbery – decreased markedly in the first emergency phase at the onset of the COVID-19 pandemic. Data available for the period October 2019 to August 2020 from 22 countries located in five different regions, provide evidence of a relatively steep decline in March, and even more so in April, in the reporting of property crime to the authorities. As the COVID-19 containment measures were progressively put in place, the number of reported robberies declined by 58 per cent from February to April, burglaries by 58 per cent and theft by 72 per cent (see Figure 1). Beyond the immediate impact, property crime rebounded when the restrictive measures were lifted or softened.

The role of confinement measures in affecting levels of property crime is confirmed by considering mobility of individuals during lockdown periods. Countries with stronger reductions of mobility – due to tight lockdown measures and a high level

Figure 2. Relationship between change in number of reported burglaries and change in population movement related to retail and recreation (selected countries based on available data), February to April 2020

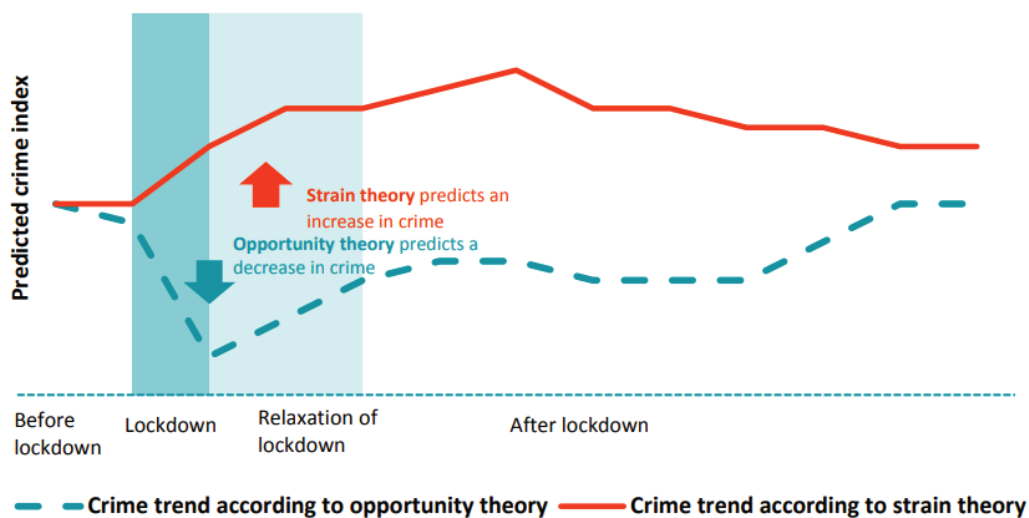


of enforcement - experienced a greater reduction in property crime than those with more lenient measures (Figure 2).

These findings are in line with criminological theory, which suggests that lockdown measures can activate causal mechanisms for a reduction of crime in the short term, as they in general reduce opportunities to commit crime. At the same time, scientific research warns that in the longer-term socioeconomic strains caused by secondary impact of the pandemic can affect negatively a large stratum of the population and drive individuals to commit crime.

This happened in some of the countries more severely hit by the financial crisis of 2008–2009. Although the literature has shown contrasting evidence, in some countries significant changes in economic factors have been associated with significant changes in crime, with violent property crimes such as robbery being most affected.

Figure 3. Simulation of crime trends based on causal mechanisms that influence crime during a pandemic



Note: Based on, Manuel Eisner and Amy Nivette, "Violence and the pandemic - Urgent questions for research"

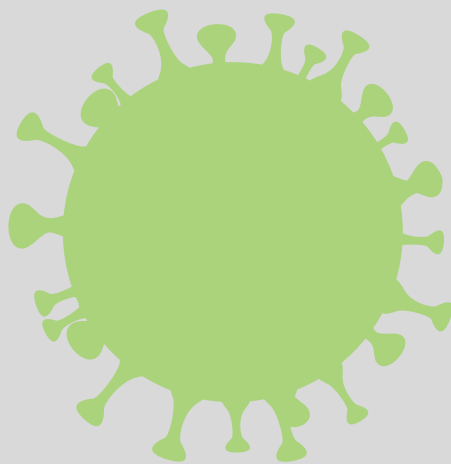
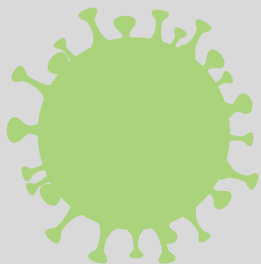
Link to data and metadata:

- <https://dataunodc.un.org/content/covid-19>
- UNODC Research brief: Effect of the COVID-19 pandemic and related restrictions on homicide and property crime (https://www.unodc.org/documents/data-and-analysis/covid/Property_Crime_Brief_2020.pdf)
- UNODC: Monitoring the impact of economic crisis on crime (https://www.unodc.org/documents/data-and-analysis/statistics/crime/GIVAS_Final_Report.pdf)

Sources:

- Figure 1 and 2: country level data collected as part of the UNODC Global initiative to improve knowledge on COVID-19's impact on crime and drugs.
- Figure 2: Google COVID-19 Community Mobility Reports

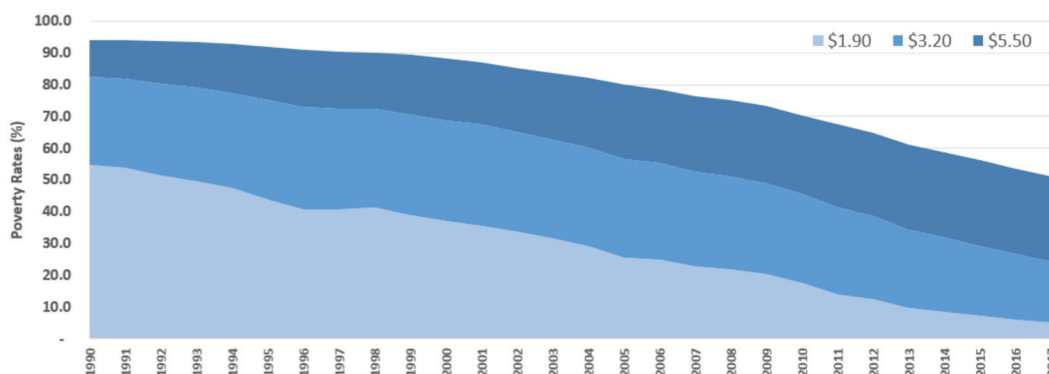
REGIONAL IMPACT



Helping poor households cope with COVID-19 lockdowns through innovative data sources and poverty mapping

Satellite images were used to map the spatial distribution of poverty, and helped target the most vulnerable households in pandemic-affected areas in the Philippines.

Figure 1. Income distribution in developing Asia



Source: ADB staff estimates using data from World Bank's PovcalNet Database.

Developing Asia scored substantial gains in poverty reduction over the past few decades. From 55% in 1990, the proportion of people living in extreme poverty or those with less than \$1.9 a day dropped to 5% in 2017. Likewise, the proportion of people living with income between \$1.9 to \$3.2 a day also contracted significantly during the same period. As Asians moved out of poverty, the proportion of people with higher incomes also increased. By 2017, it was estimated that 24.5% had income between \$3.2 and \$5.5 per day. Had this trend continued, the prevalence of extreme and (\$1.9, \$3.2] poverty would have further declined to 2.9% and 15.7%, respectively, while the proportion of people who had (\$3.2, \$5.5] further increased to 25.8% in 2020.

But the COVID-19 pandemic might have reversed these rosy trends and stalled Developing Asia's poverty clock. Factoring in the estimated economic performance of Developing Asia, ADB's simulations suggest that the proportion of people living below \$3.2 was about 22.8% by the end of 2020.¹

Using Innovative Data Sources to Target an Emergency Food Program in the Philippines

Even before the pandemic broke out, many of the poor were already stretched out just to serve food on the table and make ends meet. Unfortunately, the poor were also the hardest hit by the socioeconomic impact brought by the pandemic, due to job losses, price increases, and service interruptions. As COVID-19's cumulative effects are expected to be felt in the next several years, formulating a data-guided set of actions to protect the poor, the vulnerable, and wider populations across Developing Asia is important. To navigate through the ongoing

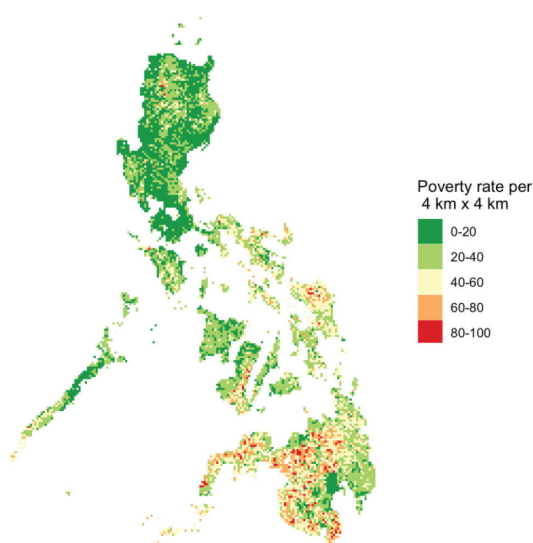
crisis, and ensure that nobody, especially the poor, will be left behind, countries should use targeting mechanisms driven by high-quality data.

Designing poverty intervention programs will benefit from integrating conventional with innovative data. Traditionally, poverty statistics are compiled by conducting household surveys but these rarely have sample sizes adequate enough to be able to pinpoint where the poor are, at a very granular level. Instead of inflating the sample sizes of traditional poverty data sources, Asian Development Bank (ADB) statisticians pilot tested a potentially more cost-effective approach to collecting granular poverty data.² In particular, the research team applied computer vision algorithms on publicly accessible satellite imagery to spot specific features that can be used to predict the prevalence of poverty in specific areas. Since satellite imagery is available for granular areas, this method can produce poverty maps at granular levels too, making targeting more efficient.

Bayan Bayanihan, a COVID-19 emergency food program in the Philippines initiated by ADB showcases how novel applications of big data and technological tools can inform the design of programs that benefit the poor.³ (ADB 2020c). In mid-March 2020, Metro Manila was placed under the Enhanced Community Quarantine by the national government in an attempt to contain the COVID-19 contagion. In response, ADB acted swiftly by launching a food program in partnership with government agencies. The program distributed critical food supplies to the poorest areas of Metro Manila and nearby provinces during the onset of the lockdown. The satellite imagery-based poverty maps played

an important role in identifying the food program's target beneficiaries to ensure that the poorest and vulnerable areas were prioritized and provided immediate assistance. These data were further complemented by information pertaining to the presence of retail facilities and markets in a barangay taken from the Census of Population and Housing of the Philippine Statistics Authority. By integrating this data source with the poverty maps, the program prioritized areas that were poor and whose residents may encounter more difficulties in accessing food due to longer distances to markets. When the program concluded, it benefited 162,000 households across 44 barangays (villages).

Figure 2. Machine-learning poverty rates for Philippines



Source: ADB staff estimates²

Notes:

1. Asian Development Bank. 2020. Asian Development Outlook Update: Wellness in Worrying Times. <https://www.adb.org/sites/default/files/publication/635666/ado2020-update.pdf>
2. Asian Development Bank. 2020. Mapping Poverty through Data Integration and Artificial Intelligence: A Special Supplement of the Key Indicators for Asia and the Pacific. <https://www.adb.org/sites/default/files/publication/630406/mapping-poverty-ki2020-supplement.pdf>
3. Asian Development Bank 2020. Bayan Bayanihan: A food program for Filipino families. [Bayan Bayanihan | Asian Development Bank \(adb.org\)](https://www.adb.org/bayan-bayanihan)
4. Asian Development Bank. 2019. Readiness of National Statistical Systems in Asia and the Pacific for Leveraging on Big Data to Monitor the SDGs. [Readiness of National Statistical Systems in Asia and the Pacific for Leveraging Big Data to Monitor the SDGs \(ADB Brief No. 106\)](https://www.adb.org/publications/readiness-of-national-statistical-systems-in-asia-and-the-pacific-for-leveraging-big-data-to-monitor-the-sdgs)
5. United Nations Economic and Social Commission for Asia and the Pacific. 2020. Incorporating Non-traditional Data Sources into Official Statistics. [Incorporating Non-traditional Data Source into Official Statistics - The case of Consumer Prices Indexes: Lessons and experiences from Australia, Japan and New Zealand \(unescap.org\)](https://www.unescap.org/publications/incorporating-non-traditional-data-sources-into-official-statistics)

Other Innovative Data-Guided Intervention Programs

The food relief provided through the Bayan Bayanihan program is just a case in point. Many other countries are also finding ways to design intervention programs during the pandemic, through actionable insights derived from integrated data sets. For instance, there had been numerous initiatives to use internet-based mobility data to identify potential COVID-19 hotspots as well as to measure the impact of local containment policies on movement and economic activities. Big data have also helped identify bottlenecks in supply chains, providing decision makers with access to insights that can enable them to quickly address emerging issues.

National statistical systems will play an important role in institutionalizing the exciting applications of innovative data sources for planning and policymaking in the coming years. Based on a policy brief prepared by ADB in 2019, the readiness of national statistical systems to harness big data and other innovative data sources depends on several factors, including hardware and software requirements for storing, examining, and visualizing big data.⁴ Official statisticians need to strengthen their skills in analyzing unstructured, unfiltered, and complex collages of data points collected for distinct purposes and which may not have clear target populations. Thankfully, there are numerous case studies underway, which can provide rich lessons to help other countries' national statistical systems in their efforts to incorporate similar approaches.⁵

Socio-economic impacts of COVID-19 in Africa

The significant socio-economic impacts of COVID-19 in Africa emerged early in 2020. Similar to the effects of the pandemic in the rest of the world, for Africa, the year 2020 was characterized by economic contraction, higher inflation, increased public debt and expenditure, restricted global movements, and increased social restrictions.

The COVID-19 Situation in Africa

The number of confirmed COVID-19 cases had surpassed 2.7 million by the end of 2020, of which 83 percent had already recovered. The Case Fatality Rate (CFR) in Africa as a whole registered 2.3 percent by the end of the year, which was a significant decline from its peak of 4.9 percent in early April 2020 (Figure 3).

The trend in the daily confirmed cases across Africa fluctuated in 2020 across countries. However, the number of daily cases at year-end was generally higher than in the earlier months of 2020 (Figure 2).

By the end of 2020, Africa had accounted for 3.3 percent of total confirmed cases, 3.6 percent of deaths, 4.9 percent of recovered cases and 1.1 percent of active cases, globally.

There was a significant variation in the prevalence of the disease between countries, with over 80 percent of the cases largely attributable to just 10 countries.

The Economic Impact of COVID-19 in Africa

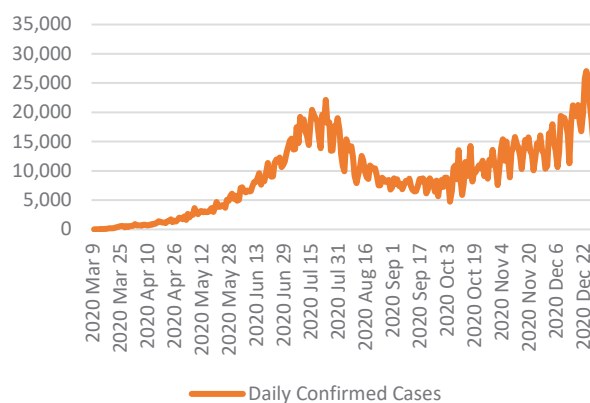
Economic growth: According to the latest estimate from the African Economic Outlook (AEO), Africa's economy was estimated to have contracted by 2.7 percent in 2020. This marked a significant drop compared to the 3.3 percent growth registered in 2019. Africa's growth was characterized by

significant cross-country variations, with some 25 percent of the countries registering growth in 2020.

Inflation: Inflation in Africa grew incrementally to reach 10.4 percent in 2020, compared to 9.8 percent in 2019.

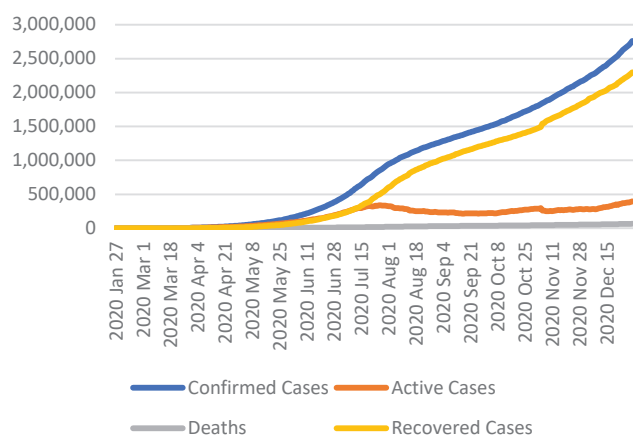
Government Expenditure increased in response to the spread of the COVID-19 pandemic. As a result, the average fiscal deficit for Africa was estimated at 8.4 percent of GDP in 2020, a significant widening compared to the 4.6 percent deficit recorded in 2019.

Figure 2. The trend in daily confirmed cases



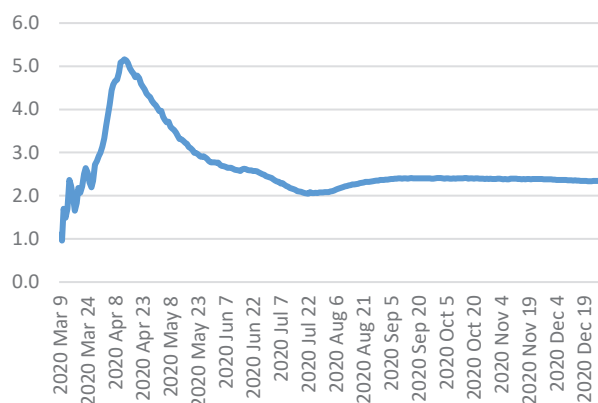
Source: AfDB, COVID-19 Dashboard

Figure 1. Africa COVID-19 trend (Cumulative)



Source: AfDB, COVID-19 Dashboard

Figure 3. Africa trend in the COVID-19 death rate (%)



Source: AfDB, COVID-19 Dashboard

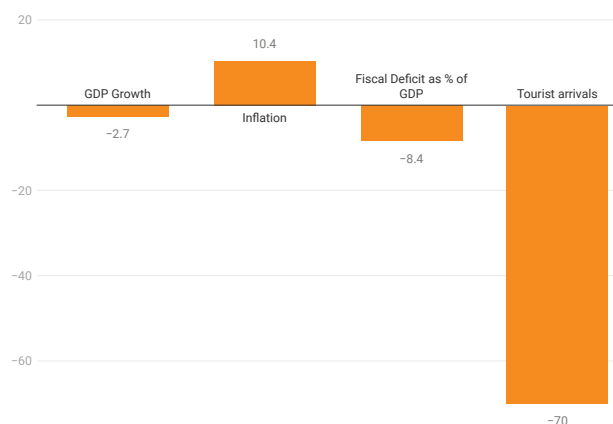
AfDB's Support to African Countries and RECs on the Tracking of COVID-19 Statistics

The AfDB launched a COVID-19 Dashboard in May 2020, in order to track daily developments and present reliable data on the spread of COVID-19 in Africa, as well as its socioeconomic impacts. The Dashboard is an interactive platform intended to provide high-frequency updates on relevant COVID-19 indicators such as daily statistics on the number of active cases, deaths, recoveries and number of tests conducted across Africa. In addition to the main COVID-19 indicators, the Dashboard features critical socio-economic indicators on demography, the health sector and the economy. The dashboard can be accessed on the following link:

<https://africacovid.opendataforafrica.org/>

The bank has also extended support to RECs and African countries to develop their own dashboards to track and disseminate information on COVID-19 in their respective regions and countries. So far, RECs and five countries have been assisted to develop COVID-19 tracking and reporting dashboards linked to the Bank's AIH Open Data Platform. Meanwhile, the Bank continued to provide remote technical assistance to African Countries throughout 2020 as a way of sustaining statistical capacity-building efforts during the COVID-19 period. Remote support has proven to be a cost-effective method for supplying this type of assistance and will continue to be explored even after the pandemic.

Figure 4. Africa's performance on selected indicators in 2020 (%)



Source: AfDB, African Economic Outlook.

Sources:

- [COVID-19 dashboard https://africacovid.opendataforafrica.org/zwHPgb/global-covid-19-pandemic-tracker-daily-update?location=Africa](https://africacovid.opendataforafrica.org/zwHPgb/global-covid-19-pandemic-tracker-daily-update?location=Africa)
- [African Economic Outlook https://dataportal.opendataforafrica.org/mhuiccf/african-economic-outlook-june-2020](https://dataportal.opendataforafrica.org/mhuiccf/african-economic-outlook-june-2020)



AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE
DE DEVELOPPEMENT

NSOs in CIS member states adapting operations to COVID-19

In order to analyze the changes in the work of the National Statistical Services of the Commonwealth of Independent States in the context of the COVID-19 pandemic, the CIS-Stat conducted a survey in the middle of 2020, the results of which showed the following.

Out of five countries of the CIS which planned to conduct the population census in 2020 three countries postponed it until the next year, one has carried it out and one has not determined its dates yet.

Despite the transition during the pandemic of almost all National Statistical Services of the CIS countries to remote work (from 80 to 95% of the total number of employees), basically all of them carried out their activities in accordance with their approved work programs.

In order to obtain statistical information from the respondents, the traditional methods of data collection had to be changed in some way:

- the method of telephone survey, use of websites and e-mail became more widely used;
- household surveys were conducted without face-to-face interviewing using instead of this the telephone conversation method and the Internet.

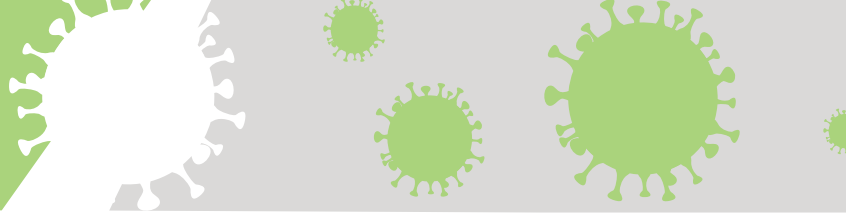
Taking into account the special interest regarding the issue of the socio-economic situation in a difficult epidemiological period, certain National Statistical Services of the Commonwealth have increased the number of publications on this matter.

For example, to obtain information on the number of deaths from coronavirus infection, Rosstat has introduced new cause codes from the International Classification of Diseases into the program to collect monthly statistical information on mortality.

Essential goods and certain types of medicines were included into the program of weekly monitoring of consumer prices by Rosstat. The Statistical Committee of the Republic of Armenia expanded the range of publications on demography indicators and health care, as well as on the labor market. The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, the National Bureau of Statistics of the Republic of Moldova and other CIS National Statistical Services collected information that allows to assess the impact of the COVID-19 pandemic on households in the country, as well as on the labor market situation.

At the same time, some National Statistical Services of the Commonwealth were forced to postpone the release of the information on certain statistical works to a later date or indefinitely and some items were canceled at all.





Continuity of the measurement of inflation in Latin America and the Caribbean under COVID-19 restrictions

Countries in the region implemented new modalities for data collection on prices to overcome the restrictions imposed by the health emergency

Figure 1. New collection modalities used by countries

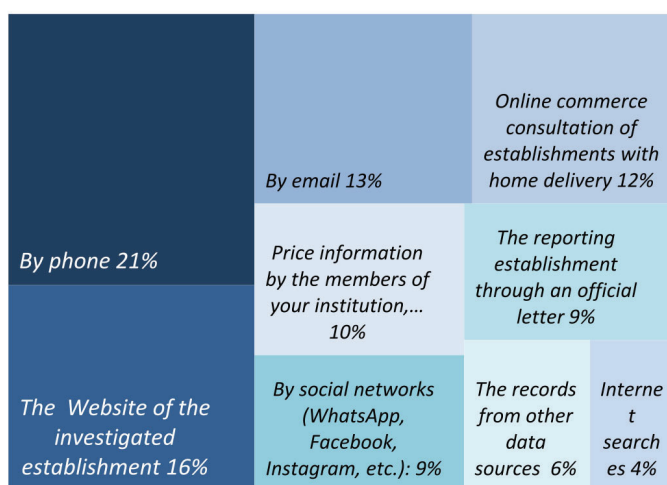
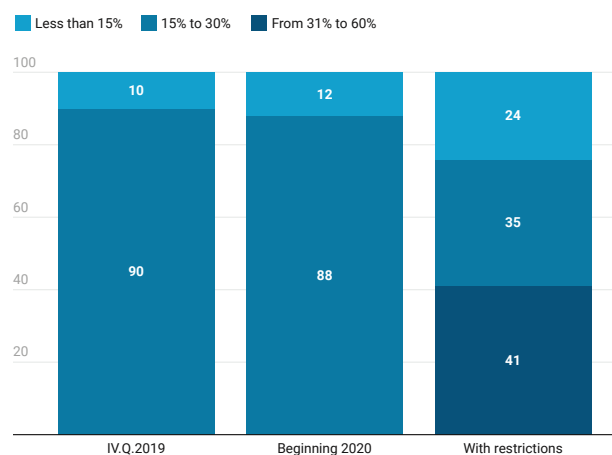


Figure 2. Percentage of Latin American and Caribbean countries by imputation range



During 2020, the Economic Commission for Latin America and the Caribbean (ECLAC), through the Statistics Division, conducted surveys to institutions in charge of compiling CPI data in the regional countries to identify the problems faced in the context of the COVID-19 pandemic and the implemented responses.

The surveys comprised four sections, the first three were to consult on quantitative indicators related to the proportion of imputed prices, implemented new price collection modalities and the perception of specialists in their application, and the fourth section concerned the operational measures implemented in the new survey modalities.

Results of the last Survey on 2nd quarter 2020

Figure 2 presents the information corresponding to imputation levels of unobserved prices, using ranges of imputation percentages in each of these periods, 4th quarter 2019, beginning of 2020 (January and February) without restrictions and period with restrictions at the time when most of the countries decreed sanitary emergency mobility limitation, with the imputation ranges: a) Less than 15%; b) Between 15% and 30%; c) Between 30% and 60%; ranges in which the countries were gathered in the above three mentioned periods.

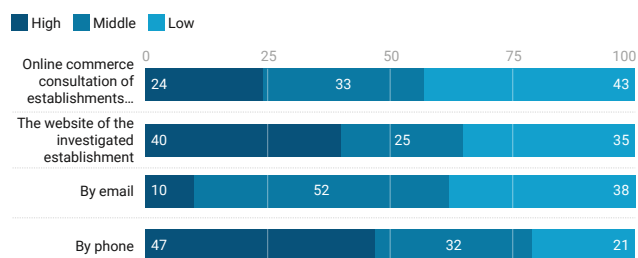
Modalities used for the survey

In response to the containment measures, the NSOs in charge of the CPI had to adopt new modalities for data collection to replace or complement face-to-face collection, see figure 1. Prior to the pandemic, national experiences in this area turned out to be scarce or non-existent, since these methods are considered innovative they do not ensure those elements that enrich the face-to-face collection of information for prices of goods and services, as is the proximity to the points of sale of products in the CPI basket, the different marketing channels in force and monitoring the individual characteristics of the goods or services. The modalities with the highest preference and effectiveness are presented below. To determine effectiveness, a 1 to 9 scale was assigned according to the experience of its application, where 9 was the most effective in terms of implementation. Figure 3 shows the modality that was used by most countries and obtained an average score higher than 6.

The modalities chosen by the countries to be most effective were clearly identified by those who obtained response directly from the informant (telephone and/or e-mail). Those with the score of at least 6 were considered high effectiveness and those with at least 4, medium effectiveness. The sum of both is greater than 55% of the countries that responded.

In this context, it was necessary to establish actions to support the collection of prices to achieve a representative coverage of the target sample for the CPI calculation. For this reason, it was necessary to implement collection modalities; these new collection alternatives should be part of the usual collection methods in the future, helping to strengthen the collection of prices for the CPI calculation.

Figure 3. Modalities with greater effectiveness



Sources:

- Survey monitoring in statistical processes as responses by COVID-19 - Prices, ECLAC, March, 2020.
- Producing the Consumer Price Index (CPI) and the COVID-19 pandemic in Latin America and the Caribbean, April 2020, UN ECLAC.

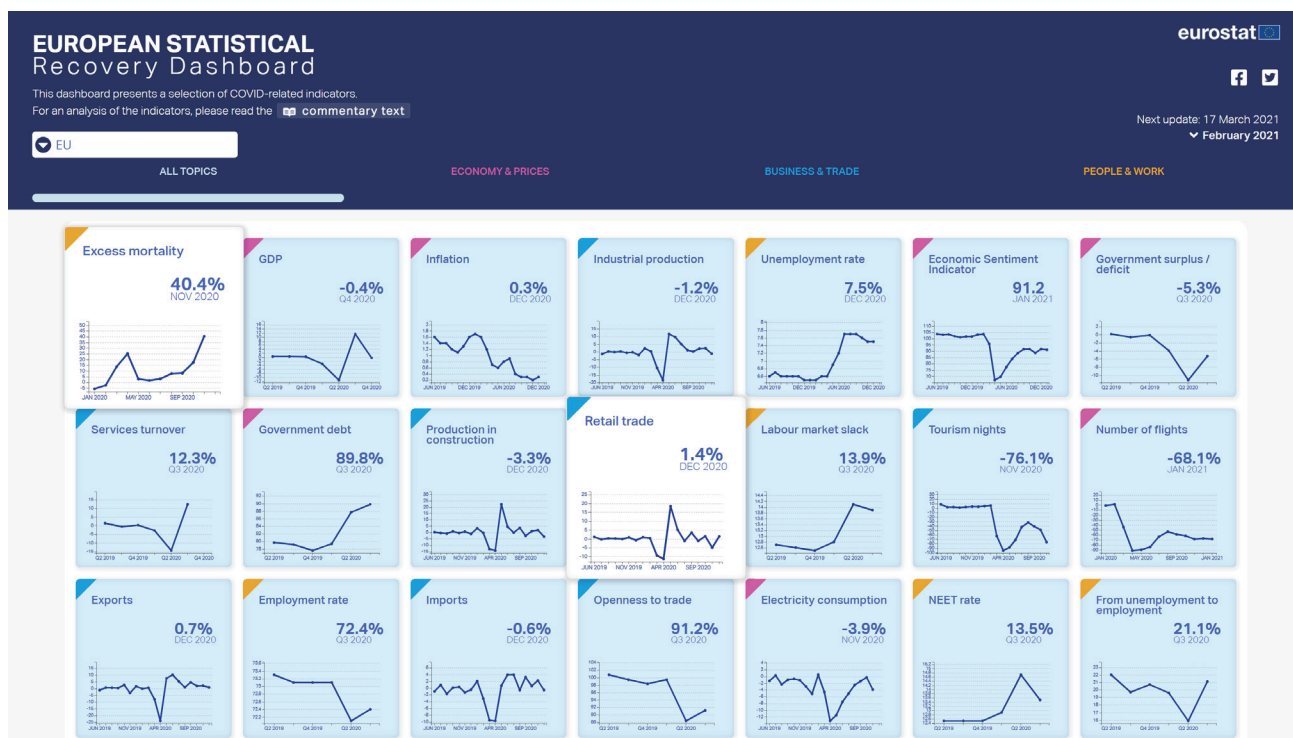


UNITED NATIONS



Tracking the recovery from COVID-19 – A Eurostat dashboard

When will life in Europe return to normal? And what will Europe's economy look like? Eurostat has launched an interactive dashboard that monitors the complex recovery from the pandemic.



With the roll-out of vaccinations against COVID-19 across Europe, there is hope for a return to pre-pandemic times. But what will that recovery look like? And will all sectors necessarily get there at the same pace and scale? To help answer this, on 17 December last year Eurostat launched the European Statistical Recovery Dashboard (<https://ec.europa.eu/eurostat/cache/recovery-dashboard>), which gives an overview of the developments in those areas that have been particularly impacted by the pandemic.

The recovery is measured with the help of 23 indicators, divided into three wider themes: Economy & Prices, Business & Trade, and People & Work. They cover broader economic areas such as GDP, government debt, inflation (theme 1), more detailed differences between sectors and the asymmetry in the recovery (theme 2), as well as the social dimension of the pandemic, giving insight, among others, into excess mortality caused by the pandemic, and the labour market situation (theme 3).

The European Statistical Recovery Dashboard features an interactive visual tool, which is linked to the Eurostat database. Each indicator can be explored by means of an interactive chart view and comparisons between countries and across time are also possible. The data can be downloaded and re-used.

Work on the dashboard began in July 2020 with the goal of being finished by the end of the year. Considering the short timeframe for the execution, this has been one of Eurostat's most intensive projects, with all directorates working together and all levels of management involved in selecting its design and functionality.

The work on the dashboard continues with new indicators being envisaged. The dashboard is also updated monthly with new data and each update features a commentary describing the economic and social situation in the latest available period, allowing for a comparison between the different editions. No end date has been planned for the dashboard yet, only that its duration will last until everyone agrees that the recovery has been achieved.

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Some of the indicators were already being produced by Eurostat and required only little effort to transform into the form necessary for the dashboard. Most of the indicators, however,

required a substantial effort to develop and harmonise the data, and for two indicators, excess mortality and flight data, there were no existing data sets, so new methodology had to be developed and data sources explored.

Although we are still in the middle of the pandemic, some areas are already recovering, while others might get worse before getting better. This asymmetry is visible in the dashboard, and the indicators have been selected to provide a broad overview without losing sight of those sectors which are likely to recover more slowly.

The work on the dashboard continues with new indicators being envisaged. The dashboard is also updated monthly with new data and each update features a commentary describing the economic and social situation in the latest available period, allowing for a comparison between the different editions. No end date has been planned for the dashboard yet, only that its duration will last until everyone agrees that the recovery has been achieved.

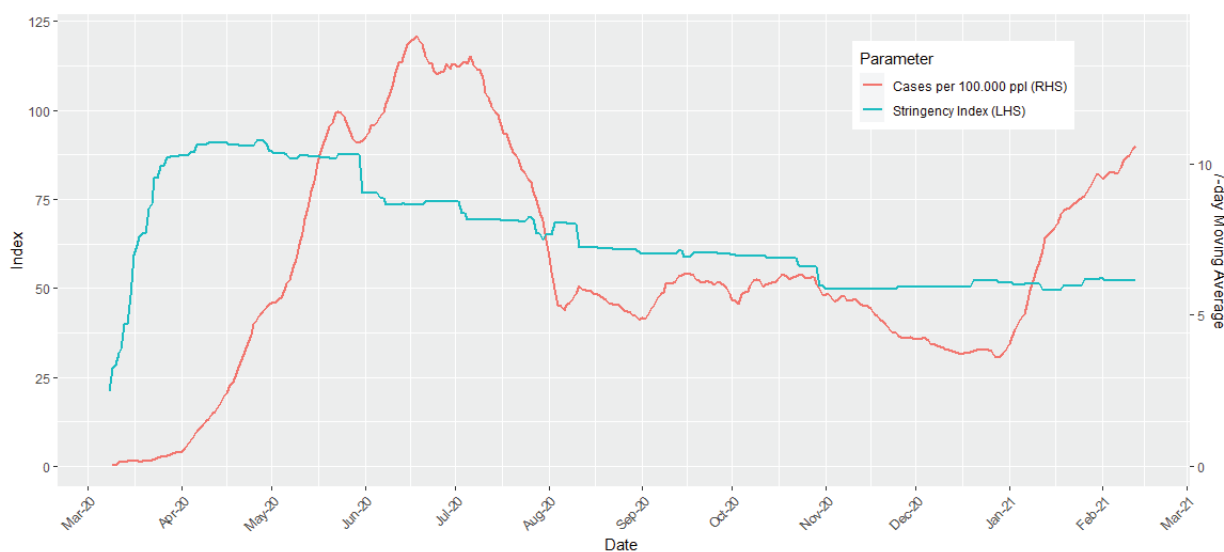
Source:

- <https://ec.europa.eu/eurostat/cache/recovery-dashboard>

COVID-19 and GCC economy: balancing towards recovery

After a year into COVID-19 pandemic, the life is slowly turning to normalcy with restrictions generally easing and the economies of Gulf Cooperation Council member states exhibiting signs of gradual recovery and return to growth in year 2021. However, challenges remain with an apparent second wave of infections and reliance on the global markets for regional recovery.

Figure 1. GCC epidemiological curve and Oxford University stringency index



After COVID-19 pandemic first hit over a year ago, the GCC states first saw a continued increase until mid-summer 2020. Along with rest of the world, regional policymakers quickly responded by imposing restrictions on movement and other public health measures to stop the spread, as seen on the Oxford Stringency Index (Figure 1). The pandemic and associated response measures sent the GCC economy in a tailspin during the first half of 2020, exacerbated by simultaneously declining oil prices. Contemporaneously, regional policymakers responded with an array of fiscal and policy measures to counteract the dual impact. During the second half of 2020, daily registered cases of COVID-19, as well as hospitalizations and deaths, showed a steady downward trend which prompted authorities in GCC to relax mobility restrictions and business closures. This was also accompanied by an improvement in crude oil prices with the start of a rebound in global energy demand, bringing the price of Brent oil to about \$50 by December 2020.

With the beginning of the new year, the COVID-19 caseload has significantly increased and restrictions, broadly maintained, are closely monitored. Meanwhile, GCC countries have approved number of different WHO approved vaccines and commenced large scale vaccination programs.

During the third and fourth quarters of 2020, various monetary and financial indicators suggest that the GCC economy is still resilient. The banking systems remain sound, with strong

capitalization, adequate liquidity, and relatively low NPLs. Stock markets exhibit positive performance during the second half of 2020. International oil prices have partially recovered from their downturn during the first half of 2020 (Figure 2), with positive outlook for 2021 and 2022 as the global demand gradually rebounds. The growth in monetary aggregates (namely M1 and M2, Figure 3) is still steady, with slower growth in M2 during Q3 of 2020, reflecting lower growth in saving deposits.

Based on the GCC-Stat medium scenario economic forecast, real GDP is expected to contract by 4.6% for the year 2020, while it's expected to return to growth of 1.8% in 2021 (Figure 4). The non-oil sector constitutes 71% of the GCC economy in 2019. It is expected to contract by 5.7% during the year 2020.

As of Feb 1, 2021, GCC health systems have given 4.3 millions doses (7.5% of population) with a priority of high-risk population groups.

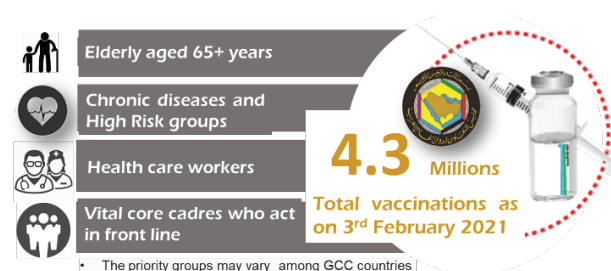


Figure 2. Price of oil price (Brent), USD/brl

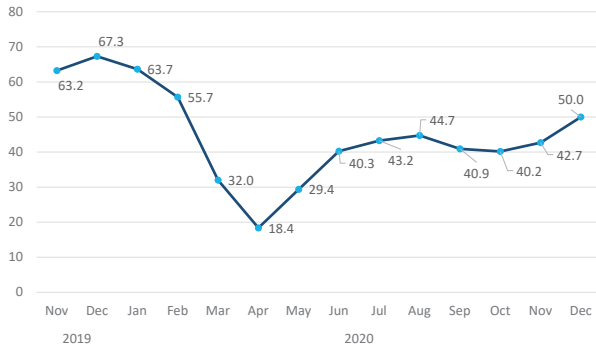


Figure 3. GCC Money supply, stock market, change %

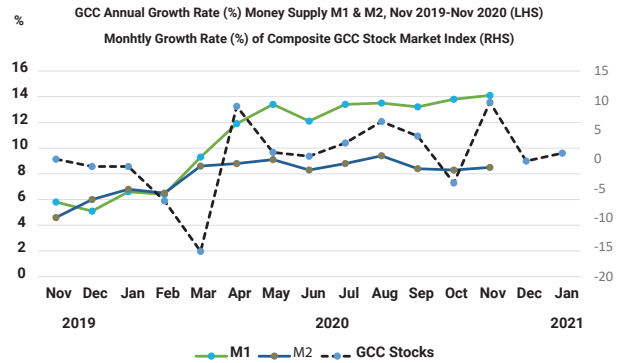


Figure 4. GCC real GDP growth estimates, %

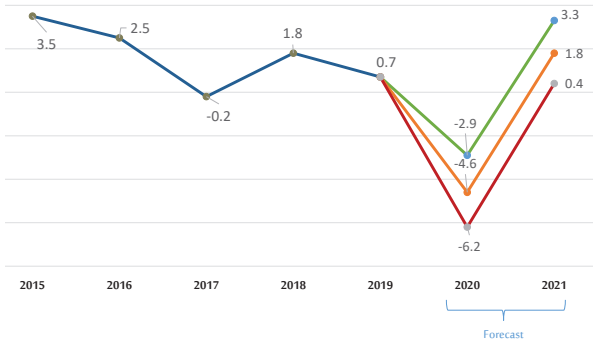
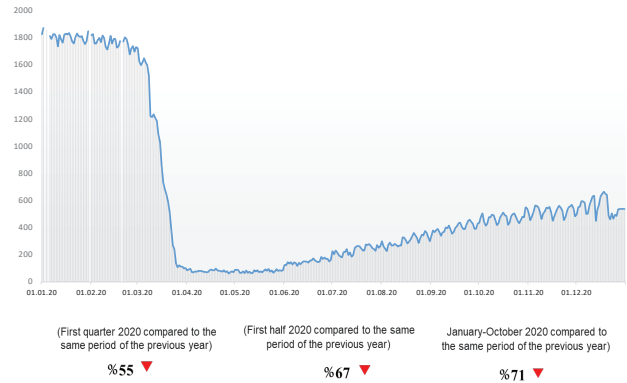


Figure 5. GCC air passengers, number of daily departures



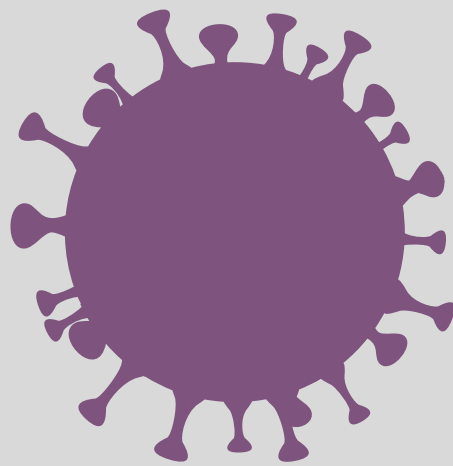
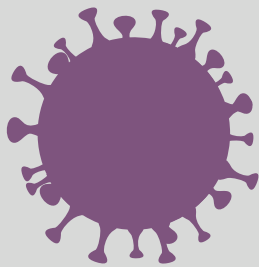
Decline in number of tourists coming to GCC, 2020

On the other hand, the speed of recovery across economic sectors is profoundly dissimilar. The tourism sector is expected to take at least a couple of years to recover to pre-pandemic levels (Figure 5). While the airline industry has come out of total disruption, the level of activity remains suppressed. Given the pandemic related uncertainty, the prospects of a number of other economic sectors remain unpredictable.

Source:

- [GCC-Stat, A Year of COVID-19 in GCC \(in Arabic\)](#)
- [Oxford COVID-19 Government Response Tracker, Oxford University Stringency Index](#)

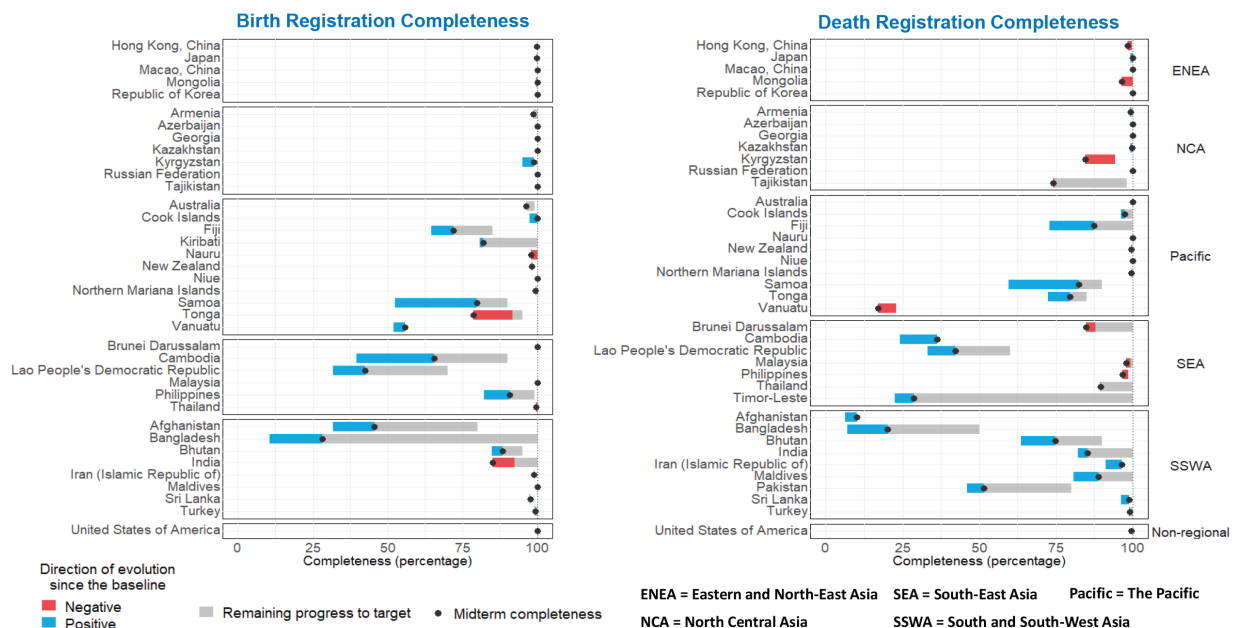
STATISTICAL IMPACT



COVID-19 and civil registration and vital statistics in Asia and the Pacific

In the absence of universal registration of deaths, the true impact of COVID-19 may never be known. Many deaths go unregistered, especially in lower capacity systems and for the most vulnerable and marginalized populations, often those also most impacted by the pandemic. Asia-Pacific is making great strides in improving death registration completeness during its CRVS decade 2015-2024.

Figure 1. Progress in completeness of vital event registration from baseline to midterm of Asian and Pacific CRVS decades (2015-2024)



In November 2014, governments attended the First Ministerial Conference on Civil Registration and Vital Statistics (CRVS) in Asia and the Pacific and proclaimed the Asian and Pacific CRVS Decade (2015-2024). During the 2014 Ministerial Conference, governments also adopted the Ministerial Declaration to “Get Every One in the Picture” and committed to strengthening national CRVS systems.

Through the declaration of the CRVS Decade, governments gave 2015-2024 as a time frame for realizing their shared vision that all people in Asia and the Pacific will benefit from universal and responsive CRVS systems facilitating the realization of their rights and supporting good governance, health and development.

While many countries need to accelerate progress to meet their targets, significant progress has been made, especially in some Pacific Islands as can be seen in the figure above.

Understanding the true impact of COVID-19 on mortality requires reliable and timely data that are not always available in many low-resource settings. While cause of death data is important for measuring COVID-19 deaths, many low- and middle-income countries have little capacity for testing or

clinical case detection, especially when deaths occur outside of a health facility. This makes registration of all deaths even more imperative. Equally important are the statistical data drawn from civil registration for governments to plan and deliver services during crises, and to better meet the needs of their most vulnerable populations.

While we are far from universal registration of deaths in Asia and the Pacific, the deaths of some population groups are even less likely to be registered. These groups can include people living in rural, remote, isolated or border areas, minorities, indigenous people, migrants, non-citizens, asylum-seekers, refugees, stateless people, lower income groups, and people without documentation. These are also the same populations who are often disproportionately affected by COVID-19. Therefore, it is likely that in many countries in the Asia-Pacific region, the true mortality impact of COVID-19 will never be truly known.

The provision of legal identity is also critical for facilitating the effective and equitable roll out of vaccinations. Additionally, the timely and disaggregated population data which can be provided through CRVS systems allows vaccination

campaigns to be focused on areas with more vulnerable people, for example, areas with a more elderly population or those who are living in more densely populated areas.

On a positive note, the current crisis has resulted in closer collaboration between civil registration, health ministries and national statistical offices in several countries in Asia and the Pacific. Countries have highlighted these positive developments through engagements in the ESCAP Stats Café series, which have included sessions on challenges to CRVS systems during COVID-19, death registration and measuring excess mortality.

ESCAP also initiated global guidance for civil registration authorities in collaboration with UNICEF and the Secretariat of the Pacific Community (SPC).

This guidance was further developed in collaboration with the United Nations Legal Identity Agenda Task Force, supplementing a global short survey implemented to assess the impact of the COVID-19 pandemic on the functioning of civil registration. worldwide, provide an information regarding national solutions and a forum for exchange of experiences.

The survey found that most respondents from Asia and the Pacific consider civil registration an essential service, and therefore had continued services during COVID-19 restrictions. Despite this, service constraints and restrictions on movement have resulted in fewer registered events in some countries. It is yet to be seen whether there will be an increase in the proportion of vital events which go unregistered. Several countries with well-functioning systems reported of further improvements to systems as a result of the increased demand for timely mortality statistics.

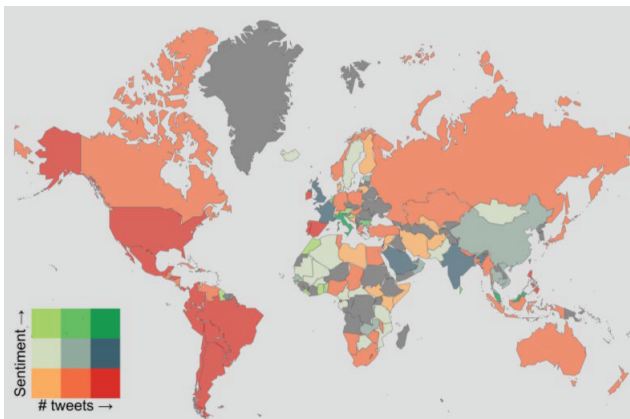
Sources:

- <https://unstats.un.org/legal-identity-agenda/documents/COVID-19-Guidelines.pdf>
- <https://unstats.un.org/legal-identity-agenda/COVID-19/>
- <https://www.unescap.org/our-work/statistics/stats-cafe>
- <https://getinthepicture.org/crvs-decade/regional-action-framework>
- <https://getinthepicture.org/crvs-decade/ministerial-declaration>

A data-driven approach to measuring the COVID-19 impact on Economic and Social areas¹.

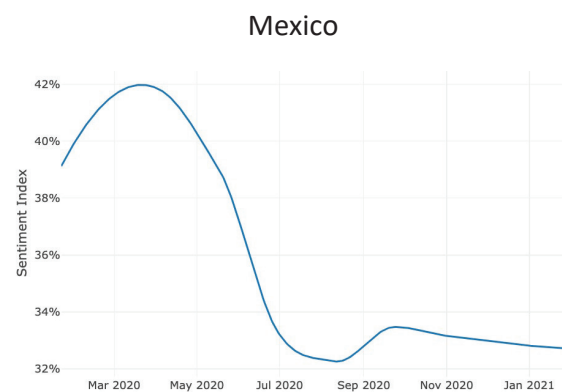
The spread of COVID-19 was an entirely new event and as such, no past knowledge was available. The lack of prior knowledge of the phenomenon required a new approach, where information had to come from non-conventional data and support to decision-making came by “letting the data speak”.

Figure 1. Sentiment map on COVID-19 from Newspapers' Tweets, by country (22 – 28 Jan 2021).



Source: FAO Data Lab

Figure 2. Sentiment index on COVID-19 (Feb 20 - Jan 21).



Source: FAO Data Lab

The amount of information generated on a daily basis and the recourse to novel unstructured data sources, are forcing statisticians to acquire new efficient techniques for data collection, storage, analysis, and visualisation. Like many statistics offices, FAO Statistics Division set a Data Lab as part of a modernisation strategy. The Data Lab explores new methods to supplement official data sources and producing timely insights for analysts and decision makers.

How is the pandemic affecting food chains, their economics and society as a whole?

Given the quick response needed to understand the COVID-19 pandemic impacts, the Data Lab developed tools such as: collection of web-scraped food prices to monitor market turmoil; a dashboard on newspapers sentiment in their social media accounts; a news database and media coverage summaries on food chain disruptions.

More specifically, the first wave of the pandemic required daily real time information to get the gist of the situation (Fig 1) and its facets in the countries (Fig 2, 3 and 4).

FAO's Data Lab developed an application that automatically extracts and analyses information from Twitter and the Web. The analysis focuses on newspapers twitter accounts throughout the world. A Social Unrest Application uses sentiment analysis to detect early signals of social unrest

in countries as the pandemic unfolded (fig. 1 and 2). A co-occurrence model on the same newspapers articles highlights the relations between the COVID-19 and its impact on food and economic chains (fig 3).

The application monitors sentiment levels and trends on 3 topics - COVID-19, Social Unrest, and Overall sentiment - by geographical area and over time. In Figure 1, the color legend is a biplot chart, with the number of tweets on the x-axes (shades), and the sentiment on the y-axes (colors). A red palette means a lower or negative sentiment and a green palette means a higher or positive sentiment. Stronger shades mean more underlying tweets. Users can select a country and plot the sentiment index over time (Figure 2, where a lower sentiment index represents an increase in negative sentiment).

With the idea to identify the potential impact of COVID in the economy and the society, figure 3 shows the most associated terms to COVID-19 for the World. The terms refer to economic (blue) and food chain (orange) disruptions caused by the pandemic. The model was initially constrained to a pre-set of key words and has been trained to find and extract new terms. Users can interactively select the geographical area and number of terms to visualize in the network.

In order to identify potential disruptions in food chains, a set of interactive maps monitor daily retail prices of 14 food products. The maps scrape daily data from a crowd-sourcing website.

¹ Document prepared by the team of the Data Lab for Statistical Innovation at the Statistics Division of FAO

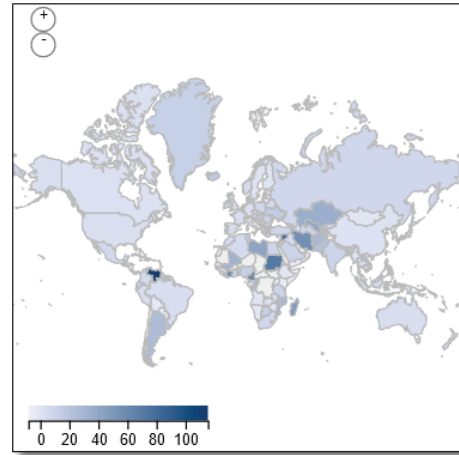
Figure 3. Network of the most associated terms to COVID-19 (22 – 28 January 2021). World.



Source: FAO Data Lab

Figure 4. Mapping prices changes

Bread and other bakers wares (1kg) prices and changes from: 14/02/2020 to 31/01/2021



Source: Numbeo

References:

- About FAO Data Lab : <http://www.fao.org/datalab/website/about-data-lab-statistical-innovation>, Methods and Areas of Work
- Social Unrest metadata: <http://www.fao.org/datalab/website/sites/default/files/2020-08/Social%20Unrest.pdf>
- COVID-19 impact metadata: <http://www.fao.org/datalab/website/covid-19-tool>



**Food and Agriculture Organization
of the United Nations**

Worrying stagnation in funding to statistics despite growing data demand amid COVID-19

PARIS21's data show that only 0.42% of international COVID-19 aid so far has a primary focus on data & statistics, despite the fact that data needs have never been greater.

Figure 1: Share of statistics-related projects in development aid addressing COVID-19

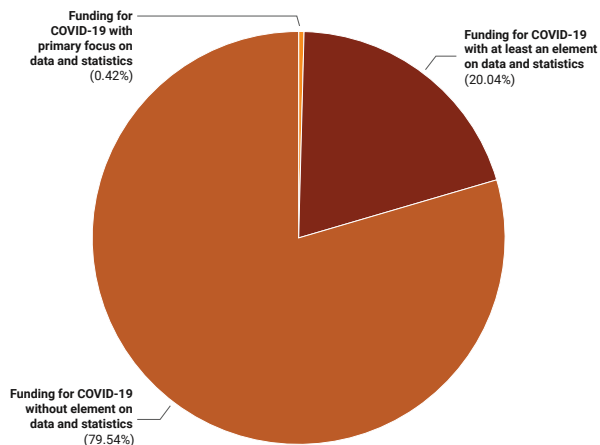
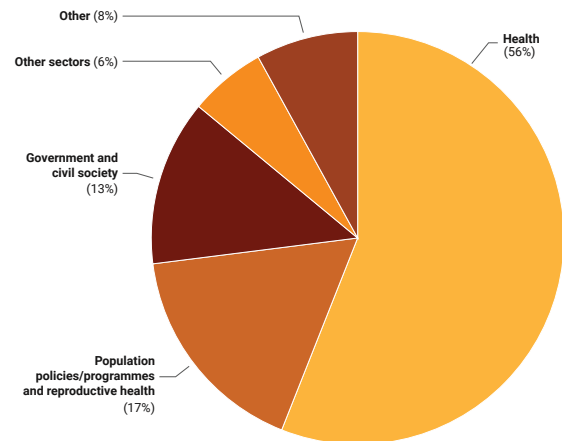


Figure 2. Area distribution of funding to COVID-19-related projects that also have a gender statistics dimension



The COVID-19 pandemic has illustrated how crucial data is for sound decision making. However, the centrality of data and statistics to crisis response and recovery has not translated into more funding.

According to PARIS21 (2020), development support to data and statistics has not risen significantly despite the surge in data demands. As of January 2021, data and statistical development projects reported by the International Aid Transparency Initiative (IATI) accounted for only 0.42% (USD 327 million) of reported funding for COVID-19-related funding (Figure 1), which does not represent a significant increase from pre-pandemic levels (around 0.39%) in projects reported by the IATI.

The pandemic has accelerated the recent trend of pivoting funding to patchwork support through sectoral projects instead of systemic support directly to data and statistics. About 20% of the total amount of COVID-19-related development aid reported to IATI contains a dimension on data production, dissemination or use – a much higher share than the 0.42% of the same amount with a primary focus on statistics. More importantly, sectoral projects are less aligned with beneficiary countries' national statistical plans (45% compared to 57% in systemic projects). They are also less likely to align with priorities identified in national statistical systems and make a limited contribution to closing the fundamental data gap. The lack of alignment with national priorities also puts country ownership at risk, which may eventually threaten the sustainability of the capacity built through the projects.

Latest data also reveal that despite evidence that women are

disproportionally impacted by the pandemic, funding to close the gender data gap remains low. Within the \$327 million COVID-19-related funding to data, about 17% of projects have an explicit gender dimension. "Health" and "Population and reproductive health" are the sectors that received the most funding from these projects (Figure 2), while the effects of COVID-19 on women and girls transcend immediate threats to health, encompassing employment, education, and social protection. The persistent lack of funding to foundational gender data even in emergency situations continues to hamper the design of inclusive policies and programming at a time where they are needed most.

Three important steps should be taken to tackle the challenges to move towards more and better financing for statistics in a post-COVID world:

- First, while funding for specific data production during crises is well understood, development partners should not forget that funding to fundamental statistical activities, such as census and CRVS, is still crucial for the long-term benefit of data ecosystems.
- Second, the data and statistics community should increase advocacy to highlight the significance of data and statistics in this period. Additional funding will be easier to access if the effectiveness of current levels of support is demonstrated.
- Third, mechanisms are needed to improve information availability from donors and recipients. A platform like The Clearinghouse for Financing Development Data, currently being developed by the Bern Network, will be essential for coordinating information from aid providers and recipients.



Link to metadata:

- [Link to metadata](#)
- [The Clearinghouse for Financing Development Data](#)

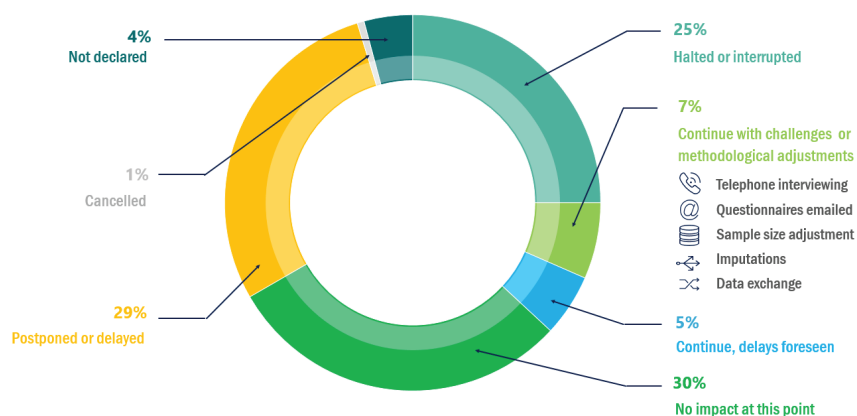
Sources:

- The updated figures mentioned above build on the methodology used in PARIS21. (2020), Partner Report on Support to Statistics 2020. December 2020, <https://paris21.org/news-center/news/press2020-under-covid-19-worrying-stagnation-funding-despite-growing-data-demand>

Transforming and modernizing national statistical offices and national statistical systems

COVID-19 has severely impacted the statistics programmes and practices of national statistical offices and systems. The statistical community in Africa is addressing this impact by building back and forward better through accelerating transformation and modernization of national statistical systems in the region.

Figure 1. Status of surveys planned for 2020 as a consequence of COVID-19 in Africa (April 2020)



COVID-19 crisis has affected activities of national statistical systems across the world including Africa. An assessment of the impact of the crisis on statistics offices by the Economic Commission for Africa in April, showed that data collection operations were significantly affected. Twenty-five per cent (42 out of 168) of surveys planned were halted or suspended, and a further 48 postponed. Additionally, ongoing surveys recorded higher non-response rates and low sample coverage. Impacts on national statistical offices limited their resource and responsiveness mainly because they heavily operate using traditional approaches, such as face-to-face data collections, use of paper based-questionnaires, limited data interoperability and non-use of new data sources including the potential of Big Data.

National and international statistical organizations including partners have since taken action to ensure continuity of crucial statistical activities. ECA has, for instance, built the capacity of member States in data collection for the compilation of consumer price index during COVID-19, supported countries in mitigating the impact of the pandemic on civil registration operations, produced technical notes on innovations adaptable for business continuity - E-Notifications. As a consequence of this, several data collection operations and production of core data have resumed in Africa.

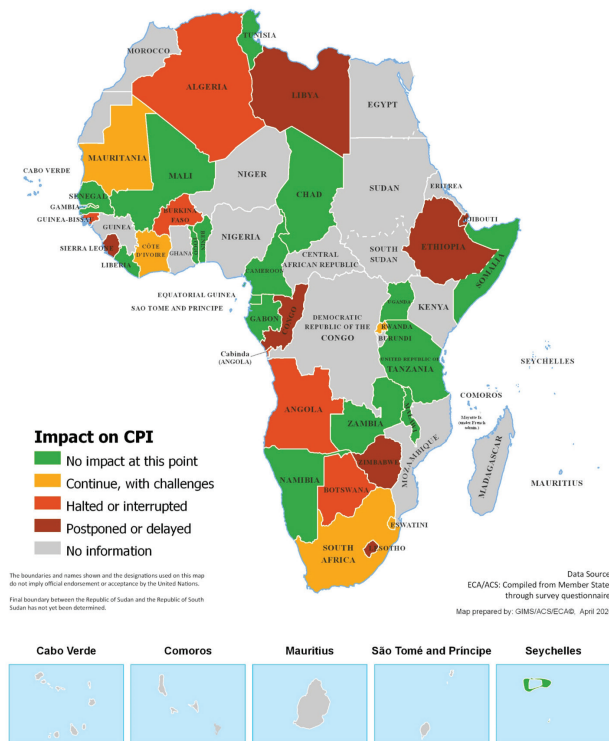
However, the African statistical community recognized that the COVID-19 “shock” has shown vulnerability of the national

statistical systems in the region. Consequence to this finding, the Directors-General of national statistical offices during tele-conference of Heads of national statistical offices organized by ECA to deliberate the COVID-19 impact on activities, discussed mitigation measures to continue delivering core mandate of statistical offices as well as identified areas where significant changes should be made or introduced, namely, coordination and collaboration, partnership, digitalization, human resources and statistical processes- and concluded that there is an imperative need to transform and modernize national statistical systems in the continent. The Statistical Commission for Africa approved in its seventh meeting held virtually in October 2020 the creation of the African group on transformation and modernization of official statistics. The Group’s mission is to strategically guide and coordinate the work on transformation and modernization of national statistical systems in Africa.

The Group tasks are to:

- identify priority modernization and transformation areas and domains of focus;
- identify challenges to the existing NSO’s Organization Structure in Africa and propose a generic organization structure that will accommodate all these changes;
- oversee and approve the development of frameworks, guidelines, methods and standards

Figure 2. COVID-19 impact on Consumer Price Index (CPI) data collection (April 2020)



- support transformation and modernization of official statistics in Africa;
- create, direct and oversee the work of sub-groups that will deal with specific topics and issues;
- advise the Statistical Commission for Africa on issues of strategic importance to transformation and modernization of official statistics in Africa;

Link to metadata:

- <https://www.uneca.org/events/data-and-statistics/seventh-meeting-statistical-commission-africa>
- ECA (2020). Quick assessment of the impact of the COVID-19 pandemic on African NSO operations. <https://repository.uneca.org/handle/10855/43785>
- <https://www.uneca.org/archive/publications/guidelines-developing-integrated-user-engagement-strategy-national-statistical-systems>

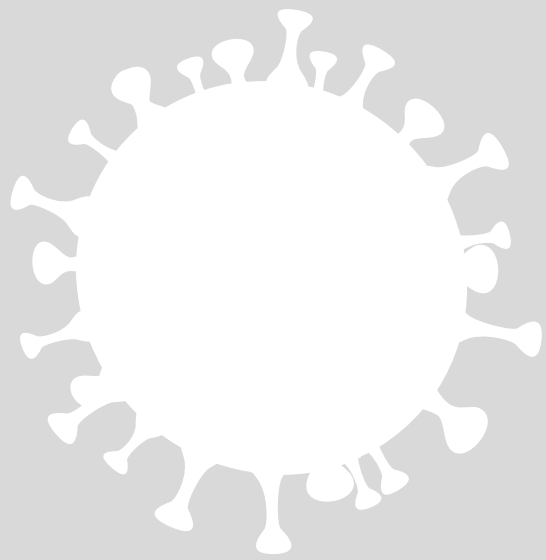
- To propose African Champions who will foster statistical development, including transformation in the continent and advice Heads of States to promote evidence-based and finance culture.

The Group is composed of ten Directors-General from the following countries; Equatorial Guinea, Cameroon, Egypt, Kenya, Morocco, Niger, Nigeria, Rwanda, South Africa and Zambia.

A technical team on transformation and modernization will be set up to support the work of the Group.

As the Group's secretariat, ECA is taking steps to operationalize and support its work. The first meeting of the Group is scheduled in mid-February 2021. In parallel, ECA is conducting several activities in support to transformation and modernization. These include capacity building on the use of alternative price data collection methods, focusing in particular on the use of telephone surveys, scanner data and web scrapping methods; publication of guidelines for promoting user engagement; establishment of data science campus to promote use of data science in national statistical systems; establishment of a leadership programme to equip senior leaders with the skills required to lead their organizations on a programme of statistical modernization.

In the same context, the ninth Forum on African Statistical Development was organized in December 2020 by ECA, jointly with the African Development Bank, the African Union Commission, the Partnership in Statistics for Development in the 21st Century and the World Bank to foster partnerships among countries, partners and institutions that support statistics, with a view to addressing the needs of national statistical systems in order to bring about their transformation and modernization.



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