Global review of impacts of the COVID-19 pandemic on labour force surveys and dissemination of labour market statistics

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Lessons from the COVID-19 pandemic:

Global review of impacts of the COVID-19 pandemic on labour force surveys and dissemination of labour market statistics

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This report was authored by Antonio Discenza and Kieran Walsh, both of the ILO Department of Statistics. It is based on the information provided by countries in response to a global survey on COVID-19 impacts on labour force surveys and dissemination of labour market statistics completed in March 2021.

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Key points

- The COVID-19 pandemic has impacted the ability of countries to collect and disseminate statistics including those on the labour force.

- The mode and frequency of data collection were key determinants of the impact of the COVID-19 pandemic on countries capacity to continue running their LFS as planned as well as maintaining or increasing data dissemination. Countries relying fully on face-to-face data collection and carrying out irregular surveys generally reported greater impacts, albeit all countries faced major challenges.

- At the beginning of 2020 over half of the responding countries were expecting to use face-to-face collection for all their LFS interviewing during the year. These countries were far more likely to have to temporarily suspend their data collection (nearly two-thirds as compared with about one-quarter of those with remote data collection modes in place). They were also more likely to face other impacts such as having to change their sampling approach or cancel the LFS entirely.

- These differences in practice also explain major variations in the impact across regions. Reflecting this, impacts were relatively greater in Africa and the Americas than in Europe and Central Asia and Asia and the Pacific.

- In some cases, the disruptions did lead to an important loss of information on the labour market at a time when this information was desperately needed. However, despite the challenges, most countries published additional information for their users during 2020, while about 80% managed to avoid any reductions in planned publication. This reflects the flexibility and responsiveness of statistical producers across all regions.

- Many countries adapted their approach to data collection to keep labour data flowing, such as the introduction of telephone interviewing. Five out of six made some important change to their data collection approach, with over 60% making increased use of remote data collection. Some countries that introduced remote modes reported that they would return to face-to-face data collection due to a lack of systems and contact information - potentially leading to problems with data quality. This highlights that countries need support to maintain or increase the use of remote data collection in the future, in a way that fits the national context.
1 Background

Since the beginning of the COVID-19 pandemic it was clear it would impact the ability of countries to collect and disseminate statistics, including those on the labour force.

During the first months of 2020, the ILO Department of Statistics started to develop and publish a specific set of guidance and support documents for producers of labour market statistics. In April 2020, an early review of the many challenges countries were facing to continue the planned operations for their labour force surveys was released. Also a note to provide guidance on approaches to maintain LFS data collection while attempting to deal with the impacts of COVID. Beyond the LFS guidance produced by ILO, a wide range of information on household surveys during the COVID-19 pandemic has been generated by other international organisations, much of which has been co-ordinated through a dedicated task force of the Intersecretariat Working Group on Household Surveys.

In March 2021, the ILO Department of Statistics carried out a global survey to collect up to date information on how the pandemic actually has impacted data collection and dissemination, and the kinds of measures taken by countries to continue operations. This note summarizes the information provided by the 110 countries that responded.

The ILO would like to thank all respondents to the survey for the time they dedicated to providing this information.

A good regional coverage was generally reached (see Figure 1), providing a strong basis for both global and regional analysis. Due to the low number of respondent countries from the Arab States, they are combined with Africa for analytical purposes for the majority of the report.

Figure 1. Number of countries that responded to the questionnaire by major region

![Figure 1. Number of countries that responded to the questionnaire by major region](image-url)
2 Planned labour force survey field operations during 2020

The initial focus of the survey was to establish the pre-pandemic plans that countries had to complete a labour force survey (LFS) during 2020, and the way they would do this, such as data collection mode. This was used as a base to compare with what actually happened during the year to assess the impact of the pandemic on those plans.

The information collected about LFS plans is presented in more detail in Appendix 1. For the purpose of this report a few points are particularly worth highlighting as they were clearly related to the impacts of the COVID-19 pandemic on data collection plans during 2020.

Firstly, about 90% of the responding countries (97 out of 110) had plans to complete a labour force survey (LFS) during the year (see Figure 2). The vast majority, 76 out of 110, planned to carry out a continuous or regular labour force survey (i.e. at least one week every quarter); 21 countries intended to conduct one or two rounds only; while 13 did not have any LFS planned during 2020. Of the 13 that did not have plans for 2020, six were planning an LFS for 2021 and seven are still unsure of when they will run their next LFS.

Figure 2. Pre-COVID-19 pandemic plans to complete a labour force survey during 2020, by region and periodicity

<table>
<thead>
<tr>
<th>Region</th>
<th>Continuous or regular data collection planned</th>
<th>One or two survey rounds planned</th>
<th>No plans to complete a labour force survey during 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>76</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Africa</td>
<td>6</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Americas</td>
<td>15</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Arab States</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>13</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Europe and Central-Western Asia</td>
<td>13</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Northern, Southern and Western Europe</td>
<td>28</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

There were some notable differences in the plans across regions, including:

- at least 90% of the respondents from Eastern Europe and Central-Western Asia had plans for data collection during all four quarters of 2020,
- by contrast, this was the case for only about 60% of respondents from Americas and Asia and the Pacific, and for only 30% of responding African countries.
Considering the potential for COVID-19 related impacts, the key issue was the extent to which countries were reliant on face-to-face collection modes (CAPI and PAPI) or remote modes. Figure 3 shows that out of the 97 countries that had plans for an LFS during 2020, 52.6% (51 countries) were only planning to use face-to-face modes, while 39.2% (38 countries) were planning to use a combination of face-to-face and remote modes, and 8.2% (8 countries) planned to use remote modes only. What this highlights is that remote modes of data collection, while certainly growing in prevalence over time, were rarely being used on their own by countries, meaning the large majority of countries remained vulnerable to the disruptions caused when Governments put in place restrictions on movement and contact.

Figure 3. Use of face-to-face and remote modes for LFS data collection (2020 plans), by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Face-to-face mode(s) only</th>
<th>Combination of face-to-face and remote modes</th>
<th>Remote mode(s) only</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>52.6%</td>
<td>39.2%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Africa and Arab States</td>
<td>94.1%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>76.2%</td>
<td>23.8%</td>
<td></td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>64.7%</td>
<td>35.3%</td>
<td></td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>19.0%</td>
<td>64.3%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Summarising the above, there was a significant variation in LFS plans across regions at the beginning of 2020, ranging from one off survey activities and face-to-face data collection to continuous data collection and remote modes. As shown in the remainder of this report these variations were important determinants of impacts on data collection and dissemination plans, with those countries having less regular data collection and relying fully on face-to-face collection being particularly hard hit.
3 Suspensions of data collection

Countries were asked to indicate how data collection had proceeded by comparison to the plans made at the beginning of 2020. Overall, among the countries that had plans to carry out a LFS during 2020, close to half (46.4%) reported that they had to suspend planned interviews, either partially or completely, for a period of at least one week during the year (see Figure 4).

However, there was a clear regional disparity. In Africa and the Arab states, and in the Americas more than two thirds of the countries had some kind of suspension of data collection. This compares with around one third for countries in Europe (31%) and Asia and the Pacific (35.3%).

Figure 4. Proportion of countries that had some kind of suspension of interviewing at some time(s) during 2020, by region

<table>
<thead>
<tr>
<th>Region</th>
<th>No suspensions of interviewing</th>
<th>Complete or partial suspensions at some time(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>53.6</td>
<td>46.4</td>
</tr>
<tr>
<td>Africa and Arab States</td>
<td>29.4</td>
<td>70.6</td>
</tr>
<tr>
<td>Americas</td>
<td>33.3</td>
<td>66.7</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>64.7</td>
<td>35.3</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>69.0</td>
<td>31.0</td>
</tr>
</tbody>
</table>

The kind of suspension(s) countries had to face not only depended on the severity of the COVID-19 pandemic and the restrictions imposed by governments, but also on the periodicity of the survey and the modes of data collection already in place or planned.

Starting with the periodicity of data collection (see Figure 5), countries with continuous or regular data collection were relatively less likely to suspend interviewing, although it was still relatively common, being reported by 43.4% of those countries. For 13.2% of those countries the suspensions were only partial, i.e. at least some part of the interviewing could continue. For the other 30.2% complete suspensions of at least one week duration occurred, including a small proportion of countries that had a mix of partial and complete suspensions at different times of the year.

For countries with less regular data collection plans (one or two rounds only during 2020) suspensions were more common. Over half (57.1%) experienced some kind of suspension, with 52.4% had to completely stop interviewing for some period(s) - 47.6% only experiencing complete suspensions and a further 4.8% having a mix of partial and complete suspensions at different times.
Undoubtedly, these differences are at least partly related to the fact that those countries having continuous or regular LFS surveys were more likely to have remote modes already in place, often using a mix of face-to-face and remote data collection modes. This allowed them to continue to use at least the remote modes when lockdowns occurred. By contrast, those with one or two survey rounds often used or planned face-to-face modes only.

The link between mode and data collection impacts is further illustrated in Figure 6, which shows that close to two-thirds (64.7%) of countries fully relying on face-to-face modes had to suspend interviewing (either partially or completely) at some point in 2020, compared with 26.1% of those who were using remote modes for some or all of their interviewing. Moreover, within the former group, 54.9% (51% plus 3.9%) of the countries had to stop interviewing completely for some periods, while in the latter group this happened only for the 13.1% (10.9% plus 2.2%) of the countries.

* The group “Used remote modes” includes any country that already planned to use remote modes for some or all of their interviews.
Looking at this from the regional perspective, Figure 4 above showed that the share of countries reporting some kind of suspension did vary substantially by region. Figure 7 below shows a further disaggregation of this by the different types of suspension. Worldwide, about one third of the responding countries had to completely stop data collection at some time in 2020. Around three-fifths of countries in Africa and the Arab States (52.9% plus 5.9%), and in the Americas (61.9%) experienced complete suspensions of interviewing. By contrast, complete suspensions were reported by about one-sixth of the countries in Europe and Central Asia (16.7%), and less than a quarter of the countries in Asia and the Pacific (11.8% plus 11.8%).

**Figure 7. Type of suspension(s) during 2020, by region**

<table>
<thead>
<tr>
<th>Region</th>
<th>No suspensions</th>
<th>Complete suspensions only</th>
<th>Complete and partial suspensions</th>
<th>Partial suspensions only</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>53.6%</td>
<td>32.0%</td>
<td>8.1%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Africa and Arab States</td>
<td>29.4%</td>
<td>52.9%</td>
<td>5.9%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Americas</td>
<td>33.3%</td>
<td>61.9%</td>
<td>4.8%</td>
<td></td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>64.7%</td>
<td>11.8%</td>
<td>11.8%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>69.0%</td>
<td>16.7%</td>
<td>14.3%</td>
<td></td>
</tr>
</tbody>
</table>

**3.1 Attempts to complete suspended interviews later**

Countries that had some kind of suspension of data collection (46.4% of all the responding countries with LFS plans in 2020) were asked whether it was possible to attempt to complete all the originally planned interviews after the suspension, i.e. the same households or units originally selected in the sample. Countries who were successfully able to do this would be expected to end up with less bias in the results produced and lower likelihood of breaks in series. For about half of the countries who had suspensions (23.7% of all countries with LFS plans in 2020), it was not possible to attempt to recover the suspended interviews later (see Figure 8).

The proportion of countries that were able to attempt the originally planned interviews – because they either had no suspensions (blue bars in Figure 8) or were able to recover them later (light blue bars) – was generally high for Europe and Central Asia (92.9%), and Asia and the Pacific (82.4%). However, this was much lower for the Americas (57.1%) and Africa and the Arab States (52.9%) suggesting impacts on published results would be relatively greater in those regions.
The ability to recover interviews at a later date, and the variations across regions, were clearly linked to differences in the periodicity of data collection, the data collection mode(s) originally planned and the ability to re-direct face-to-face interviews to remote modes (either already in place or introduced to cope with the restrictions).

In fact, among countries with continuous or regular data collection 81.6% were able to attempt to complete the originally planned interviews. This includes 56.6% that had no suspensions in the first place and a further 25% that did have suspensions but were able to attempt the interviews later. A small minority (18.4%) were not able to attempt the originally planned interviews (see Figure 9).

By contrast, among all the countries that planned only one or two rounds of data collection in 2020, a much lower proportion (57.2%) were able to attempt all the originally planned interviews. This includes 42.9% that had no suspensions, and 14.3% who had suspensions but attempted the interviews later. This leaves 42.9% that reported having suspensions and being unable to recover interviews later (see Figure 9), much higher than the proportion observed for countries with continuous or regular collection (18.4%).
Similarly, the countries planning to only use face-to-face modes were also relatively less likely to be able to recover interviews later (35.3% of all the countries, or more than half of the 64.7% who experienced suspensions) (see Figure 10). This contrasts to those countries who already had remote data collection in place, whereby only 26.1% had suspensions and only 10.9% were not able to attempt to complete those interviews later.

Notably, countries with only one round of data collection planned were typically not able to recover planned interviews later. In fact, within the 9 countries in that situation, 8 of them did not manage to recover interviews later and he only one that did had planned their data collection in the fourth quarter of 2020, giving them longer to prepare. These 9 countries typically used face-to-face modes only, again lessening their ability to recover interviews later than originally planned.

Figure 10. Suspensions and attempts to recover interviews, by type of data collection mode

* The group “Used remote modes” includes any country who planned to use remote modes for some or all of their interviews
These results provide a clear segmentation of the data collection impacts of the pandemic into distinct groups of countries. Those with continuous or regular data collection and also using remote-modes, unsurprisingly, seem to have been less affected by suspensions and more able to recover interviews after. However, those with only one or two survey rounds and fully relying on face-to-face modes were more likely to suspend interviewing, and were less likely to recover the planned interviews later. These differences arise from a mix of infrastructure, resources and experience in data collection, all of which improve or increase with regularity and resource investment.

4 Other changes to LFS data collection

Beyond suspensions of interviewing, countries were asked to provide information on any other changes in their data collection approach in 2020.

Countries made many different types of changes to their LFS data collection plans, ranging from cancellations of the LFS, to changes in mode, changes in sampling approach etc. Mostly these changes were made to ensure that crucial labour market data continued to be available in the face of the challenging circumstances. Overall, 81 of the 97 countries (83.5%) reported making some important change to their LFS survey operations during 2020, leaving approximately one in six countries (16) who did not make any important changes (see Figure 11). Regionally, changes were made by over 85% of the countries in all regions except Asia and Pacific where about two-thirds of the countries (64.7%) made changes to their approach.

Figure 11. Countries that made changes in their data collection approach during 2020, by region

Figure 12 below shows the types of changes reported by the respondent countries. The most common changes related to the mode of data collection, particularly introducing or increasing reliance on telephone interviewing. Related to this, changes in sample were also relatively common, particularly to retrieve contact details needed for telephone interviewing. Other changes such as LFS cancellations were relatively less common but still reported by quite a few (21) countries. The types of changes made are discussed in more detail below starting with LFS cancellations.
Figure 12. Types of change made to LFS data collection plans during 2020

4.1 LFS cancellations

One reported impact of the pandemic was the necessity to completely cancel a planned LFS. For those with a sub-annual LFS this could relate to some or all of the periods. Countries that cancelled a LFS during 2020 were asked to indicate if an alternative survey had been organised to provide some information on the labour market, such as a rapid telephone survey. To quickly fill data gaps during the pandemic, these types of rapid surveys were promoted and supported by international agencies, and implemented in many countries. While not delivering the same breadth of information as a LFS and not generally being suitable to generate key labour market indicators based on international statistical standard definitions, they nonetheless provided useful insights into the impacts of the pandemic on the world of work.

Slightly more than one fifth of all the responding countries (21.6% or 21 counties) that had plans for a LFS in 2020 had to cancel the LFS for some or all planned periods. Just over half of those (12 countries or 12.4% of all countries with LFS plans) did a different survey on labour market impacts (e.g. a rapid survey) while the remaining 9 countries did not do any other survey (see Figure 13 below).

In Africa and the Arab States the proportion of countries cancelling the LFS was much higher than in other regions, covering 58.8% of the countries who started the year with LFS plans, but most of those countries did an alternative survey (41.2%). However, this still means that 17.6% of the responding countries in this region that started the year with plans for a LFS, had to cancel those plans with no alternative collection of data on labour market impacts.

Less than a quarter of responding countries in the Americas had to cancel a planned LFS, while in Asia and the Pacific and in Europe and Central Asia this was the case for about 10% of the countries.
In terms of periodicity, countries with continuous or regular data collection were less likely to have cancellations compared to those with one or two planned rounds (17.1% vs. 38.1%). With reference to mode of data collection, of the 21 countries that had to cancel their LFS, 18 had plans to use face-to-face modes only. By contrast, only 3 countries with plans for remote data collection had to cancel the LFS at some point in the year (representing 6.5% of those countries).

### 4.2 Introduction or increased use of remote data collection

At the global level, 61.9% of the countries with a planned LFS in 2020 (60 of the 97) decided to make greater use of remote modes (generally telephone interviewing) as a way to maintain the actual sample size at the highest level possible (see Figure 14). This approach was pursued by at least three out of four countries in Europe and Central Asia (76.2%), and two out of three countries in the Americas (66.7%). Approximately four out of ten of the countries in the other regions used this solution.

The increased use of remote modes was achieved by various means. The most common change - reported by 45.4% of the countries worldwide (44 out of 97) - consisted of re-assigning the planned face-to-face interviews to a remote mode using existing systems and processes, mainly switching to telephone interviews. A quite typical example of this would be countries that were using a mix of CAPI and CATI interviewing before the pandemic, and subsequently moved the planned CAPI interviews also to CATI. However, other countries achieved a broadly similar outcome by allowing their regular interviewers to complete telephone interviews from their homes, as a replacement for planned face-to-face interviews. Within the graphs this approach is distinguished from cases where countries developed a new CATI system, generally involving the development of new systems, hardware and potentially changing questionnaires.
The large majority of those countries already using remote modes increased their usage as a means to maintain their response levels (69.6% or 32 countries, see Figure 15). This was far less frequent but still not uncommon among those countries who did not have remote modes already in place (23.5% or 12 of those countries).

The close link between periodicity and mode could again be seen, whereby countries with regular data collection were more likely to switch planned interviews from face-to-face to telephone using existing systems (52.6% as compared with 19% among countries with less regular data collection plans).

Figure 15. Countries that re-assigned some face-to-face interviews to a remote mode, by periodicity and type of mode of data collection

* Some countries made both types of changes at different times in the year so there is overlap between the red and lighter blue bars
The second most common change was the introduction of CATI (or CAWI in only one case) as a new mode of data collection. This was done by 27 countries (27.8% of the total), of which 21 had originally planned to use only a face-to-face mode, and 6 already planned to use some kind of remote mode (including postal or self-completed forms). This choice was relatively more common in the Americas and in Africa and Arab States, where it was reported by more than 40% of the countries (see Figure 14).

An interesting point to note is what this means in terms of the overall prevalence of remote data collection, something which has been gradually increasing over time. As discussed earlier, 46 out of the 97 countries with plans for an LFS during 2020 already planned to use remote data collection modes at the beginning of the year. An additional 27, more than half of the other countries, introduced remote data collection during the year (generally CATI) in response to pandemic related impacts, representing a seismic shift in the number of countries using remote modes, at least temporarily.

### 4.3 Changes to enable remote interviewing

As highlighted in earlier guidance notes, one of the key challenges faced by many countries in adopting telephone interviewing has been as absence of contact details for sampled households. Reflecting this challenge, more than half of the countries who increased their use of remote modes (light and dark red bars in Figure 16), made sample changes or additional efforts in order to have contact details and enable telephone interviewing to take place. This represents approximately one third of all the responding countries with LFS plans in 2020.

The large majority of these countries (25 countries out of 32, or 25.8% of all countries with LFS plans) had to change their planned sample and select different households to interview. The most common approach to achieve this was to reuse old samples and households already interviewed in the past for whom the telephone contacts were available (20 countries). This was mostly households recently interviewed for the LFS, but in some cases included households interviewed for other household surveys, such as a household income and expenditure survey.

In addition, 8 countries selected new samples or sub-samples from different frames on which the telephone contact details were available. A small number of countries (3) had to use both these strategies, perhaps at different times in the year, maybe initially re-interviewing households previously interviewed, and subsequently using a new sampling frame. Another 7 countries took some new actions to obtain telephone numbers for their original sample without changing the sample of households to be interviewed.

Almost half of the countries that made more use of remote modes did not report having to make any important change in their approach to enable interviewing (28.9% of the total that had plans for LFS in 2020). In some cases this was because they already had contact details (e.g. from the sampling frame), while in other cases countries temporarily had to accept the solution of only interviewing the households for whom contact details were already available, leading to some loss in sample.
Figure 16 shows some obvious cross regional differences in how updates to enable telephone interviewing were achieved. For example, while similar proportions of countries in Africa and the Arab States, and Asia and the Pacific increased their use of telephone interviewing (just over 40%), in Asia and the Pacific the majority did not have to change their sampling approach (29.4% out of 40.2%). By contrast in Africa and the Arab States very few were able to maintain their original sampling approach (5.9%).

A similar contrast can be drawn between Europe and Central Asia and the Americas. Overall, broadly similar proportions of countries in those regions made increased use of remote interviewing (76.2% and 66.7% respectively). However, in the Americas the large majority had to change their sampling approach (57.2% out of 66.7%), while in Europe and Central Asia the majority were able to continue with their existing samples.

In other words while the reaction may have been similar on the surface, the scale of change required to implement remote interviewing differed greatly across regions. These differences reflect a variety of factors, generally related to the scale of resources and infrastructure already in place, for example sampling frames or population registers with contact details. Another important variable influencing this would have been whether or not panel interviewing was in use. In countries where households are interviewed multiple times in successive periods, it is typical to collect contact details during the first visit, meaning the problem of getting contact details for subsequent interviews would have been far less when restrictions started.

Looking at the 16 countries (16% of those with LFS plans) who reported that no changes to their data collection approach was made during the year, there were a range of profiles involved. A small minority were using only face-to-face data collection meaning that it cannot be assumed that the reason they made no change was because they had more advanced systems in place. Indeed some of countries in question reported that changes were not made due to a lack of capacity or resources, while others introduced precautions such as personal protective equipment to allow them to continue with face-to-face collection. For others it may have been the case that restrictions in the country were limited, thereby not being required to change approach. In any case it does not alter the conclusion that some types of change in data collection approach or related methodologies were very common.
4.4 Beyond the aggregates – how data collection for the LFS changed in 2020

The preceding section presents an aggregate level view of the key changes made by countries to their LFS data collection practices during 2020. However, it does not fully capture the dynamic nature of the challenge faced or the full range of solutions implemented during the year. The types of suspensions discussed earlier in this report could range from one week up to several weeks or months. For example, in some other Latin American countries particularly long suspensions were reported (up to four months). Beyond suspensions, many countries faced other impacts such as having to suspend training of interviewers, stop household listing exercises or shutting down call-centres to meet social distancing requirements. The scale of the challenge in moving to telephone interview also varied substantially across countries.

Reflecting this, an attempt is made below to present a more dynamic and nuanced view of how countries were impacted and adapted during 2020 to maintain their data collection operation. This is based on the supplementary information many countries presented in response to the survey.

Initial changes made by countries

At the initial stage of the pandemic, face-to-face interviewing was mostly replaced by telephone interviewing but with different implications across countries.

One variation of this approach involved countries that had been fully relying on face-to-face interviewing instructing their interviewers to conduct interviews by telephone (assuming contact details were available). In these cases, as time was not available to develop new systems, interviewers were often told to use the existing data capture tool - i.e. a CAPI tool using a laptop, or a PAPI questionnaire. Countries taking this approach often had very serious difficulties in obtaining contact details causing them to change their sampling approaches, for example, through the use of old samples as described earlier.

Countries that had a CATI system already in place as part of a mixed mode approach, started to redirect as many as possible of the planned face-to-face interviews to CATI. However, these countries often had to make adjustments to their operations because of a lack of access to CATI call centres or offices. For example, several European countries had to shut down call centres and instead ask interviewers to complete interviews from their own homes, requiring the appropriate hardware to be provided to ensure data could be captured securely. Some countries reported serious difficulties in implementing this approach as the systems in place in the call centres could not be replicated or accessed at interviewers’ homes requiring alternative systems to be developed and used. In some of these cases countries redirected the interviews to existing CAPI interviewers who at least had the capacity to complete interviews from home.

One implication of suspensions, reported by several countries, was the need to apply longer recall/reference periods in questionnaires when interviewing could recommence. This approach allowed them to capture information based on the originally planned reference periods. This was most feasible where the durations of suspensions were short (one or two weeks) but still created significant resource burdens to reach as many as possible of the sampled households in a short time period after the suspensions ended.

Changes made by countries at a later stage

At a later stage, when it was obvious that the pandemic would affect data collection for a long period, it was relatively common that countries made additional efforts to enable the continued used of remote data collection, especially by telephone.

For some countries this came by the adoption of a new mixed mode, approach, combining face-to-face and telephone interviewing to cover as many households as possible. This is similar in nature to approaches already
in use in relatively more advanced statistical organisations. Under such a design a panel approach is also typically adopted, whereby the same household is re-interviewed over several periods, with the first interview being face-to-face (CAPI) and subsequent interviews being done by telephone using the contact details collected in the first interview. This approach has been successfully used by several countries for years as it retains the benefits of the initial face-to-face contact as way to gain co-operation, while still achieving the benefits of telephone interviewing in later rounds. Panel interviewing has other benefits such as improvements in the precision of estimates of change over time, depending on the panel design chosen. Considering these benefits, and the fact that countries already using a mixed mode approach suffered relatively lower impacts to their data collection operations when the pandemic began, this could be considered a recommended approach where available resources allow for it.

In other countries, complete restrictions remained in place and data collection could only continue by telephone. These countries could evidently only complete interviews for households with available contact information, leading to the possibility of bias in the achieved sample if ways could not be found to collect that information. This bias could arise either from incomplete availability of contact details or the fact that telephone coverage is not universal, particularly in rural areas or among poorer households. For some of these countries the same panel of households was re-interviewed for an extended period of time. In the absence of robust ways to obtain contact details for new samples, this was a sensible approach to maintain response levels while adhering to a representative sample design. However, this also has its limitations in so far as attrition will typically reduce the size of the achieved sample over time, again potentially leading to increasing bias and/or reduced precision of estimates. The impacts of these additional sources of bias can be difficult to detect and may not be evident in published results.

In other cases, countries ultimately decided to return fully to face-to-face interviewing as soon as possible, or else suspended interviewing entirely until face-to-face interviewing became possible again – this was particularly common among those with less regular data collection operations. For all these countries, and those who restarted face-to-face interviewing as part of a mixed mode approach, they often had to take serious measures to protect the health of their interviewers and respondents, such as providing personal protective equipment and various other safeguards. These approaches were generally in line with guidance issued by the Intersecretariat Working Group on Household Surveys.2

**Contact details and remote interviewing – a major challenge**

As discussed earlier obtaining contact details was one of the single greatest challenges faced by countries turning to telephone interviewing to solve their data collection challenges. To overcome this, some countries reported that they made agreements with service operators to get access to the details on telephone directories. Others used local administrative sources to get contact information of members of sampled households, e.g. through electoral registers as reported by more than one country. However, for some countries the only option was to do a listing exercise prior to the LFS to collect contact details from households in the primary sampling units because existing frames did not include any contact information. Others sent letters in advance asking respondents to get in contact with the interviewers or the office or provide details to be contacted for an interview or inviting them to use a web app to schedule an appointment to complete the interview by telephone.

Another major related challenge reported by several countries was trying to get co-operation from respondents when moving to remote interviewing for the first time. Countries were particularly concerned about how to ensure respondents could be made to trust that the contact was coming from an official source for a valid reason, and distinguishing them from telemarketing companies. Various countries turned to innovations such as establishing a special number from which the interviewer would call, so the respondent would know it was

official. These approaches were often accompanied by publicity or letters to raise awareness and notify the respondent in advance about the interview.

In some cases, the interviewing mode was adapted to the level of risk of the different zones within a country (based on the number of COVID-19 infections). In areas with lower risk interviewers resumed conducting some in-person face-to-face interviews. In areas of high epidemiological risk, respondents were interviewed either by DOPU (Drop Off Pick Up/self-enumeration) or by telephone, while face-to-face interviewing continued in lower risk areas.

5 Changes beyond data collection

The earlier parts of this report have primarily focused on data collection impacts of the pandemic. While this was the most obvious and immediate impact on labour market statistics, in fact countries made many other important changes. For example, countries published additional indicators on total hours actually worked, absences from work or others that provided a useful supplement to traditional key labour market indicators on employment and unemployment. Countries were asked to provide information on the range of other changes made related to labour market statistics during 2020.

The types of changes reported reflect a balance of pressures faced by producers of statistics during the pandemic. On the one hand the ability to collect information was significantly impacted, as described earlier, creating challenges to maintain existing dissemination plans and data quality on the basis of good statistical practices. On the other hand, the pressure to generate relevant information has never been higher, leading to demands to produce new indicators on a timely basis to understand just how significantly the pandemic impacted the world of work. Producers of statistics deserve significant credit for their efforts to meet these unprecedented challenges, while continuing to adhere to fundamental principles of official statistics, which are the bedrock of statistical production.

5.1 Collecting additional information through household surveys

Many of the countries that had plans to conduct a LFS survey in 2020 used their LFS to collect extra information on COVID-19 impacts on work and the labour market (see Figure 17). Overall, this applied to 69.1% of the responding countries (67 out of the 97 countries). This was most common in the Americas (17 countries or 81%), followed by Africa and the Arab States and Asia and the Pacific (70.6%). This was relatively less common in Europe and Central Asia although still covering over 60% of the responding countries in the region.

Countries managed to produce additional information by different means, including the addition of questions to the LFS and the implementation of separate surveys. Globally, of the 97 countries that had plans for a LFS in 2020, 61.9% (60 countries) added further questions/modules to their LFS survey to capture the impact of COVID on the labour market. About one fifth (19.6% or 19 countries) carried out additional surveys on work related impacts (e.g. rapid surveys). About one eight of the countries (12.4% or 12 countries) did both. In combination, this means that 72 of the responding countries managed to maintain their LFS and collect additional information by one means or the other.

A small minority of countries (7.2% or 7 countries) did an additional survey as a replacement for the LFS – often
a rapid survey. This distinction is important as countries replacing a full LFS with a rapid survey would most likely not be able to generate key labour market indicators in line with statistical standards or without breaking historical time-series, albeit they could still generate some useful information. A much preferred situation would be to maintain the LFS and collect additional information, as was done by the large majority, either through the LFS or a separate survey.

**Figure 17. Countries that tried to capture additional information on COVID-19 impacts on labour market during 2020, by region**

Notably, 14 of the 60 countries that added questions to the LFS also removed some questions or modules from the LFS to reduce burden (see graph on the right of Figure 17), highlighting the balancing pressures faced by countries. This was reported by countries in all regions except Europe and Central Asia, with the highest share in the Americas (33.3%). Most of these cases involved countries who had to move from face-to-face to telephone interviewing, thereby needing to reduce the overall length of the questionnaire, while at the same time attempting to generate additional information.

Almost one quarter of the countries that had plans to use face-to-face modes only (23.5%) had to cut content of their LFS questionnaire in order to introduce other additional questions (see Figure 18). This contrasts with countries already using remote modes, who were generally able to add questions without making cuts to existing content (over 95%), due to the fact that their questionnaire was already generally adapted to work with telephone interviewing.
Figure 18. Countries that tried to capture additional information on COVID-19 impacts on the labour market during 2020, by periodicity and mode of data collection

<table>
<thead>
<tr>
<th>Countries with LFS plans in 2020</th>
<th>Countries that tried to capture COVID-19 impact with new questions / modules in the LFS or with additional surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>of which</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Counts</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
</tr>
<tr>
<td>Continuous or Quarterly data collection was planned</td>
<td>76</td>
</tr>
<tr>
<td>One or two survey rounds planned</td>
<td>21</td>
</tr>
<tr>
<td>Face-to-face mode(s) only</td>
<td>51</td>
</tr>
<tr>
<td>Remote modes (in combination with face-to-face or not)</td>
<td>46</td>
</tr>
<tr>
<td>Counts</td>
<td>100</td>
</tr>
<tr>
<td>Continuous or Quarterly data collection was planned</td>
<td>100</td>
</tr>
<tr>
<td>One or two survey rounds planned</td>
<td>100</td>
</tr>
<tr>
<td>Face-to-face mode(s) only</td>
<td>100</td>
</tr>
<tr>
<td>Remote modes (in combination with face-to-face or not)</td>
<td>100</td>
</tr>
</tbody>
</table>

Related to this, about one third of the 97 countries (30.9%) did not report any change in the LFS questionnaire and did not carry out any additional survey. This included countries of various profiles such as those who had complete suspensions of data collection, countries who felt they already captured sufficient information through their regular LFS, and countries who felt they could not make changes for various reasons (e.g. lack of time to develop and test new content).

5.2 Changing data dissemination plans – publishing additional indicators

Alongside changes to the information collected, countries also made changes to the range or frequency of published information. In most cases, this was related closely to changes made to questionnaire content, e.g. collecting and publishing additional information. However, there were other cases where the range of data published was changed even without changing the LFS. For example, many countries took the opportunity to publish indicators based on information that was already being collected, but not included or emphasised in earlier publications. Notably this included information on actual hours worked and temporary absences, which often gave a more complete picture of pandemic impacts when analysed alongside traditional labour market indicators (see Box 1).
Box 1: Using existing information to shed additional light on COVID-19 impacts

A common response of countries was to publish additional information, already being collected through the LFS but not typically highlighted or included in publications. For example, Eurostat, included additional series on its database covering total hours worked and temporary absences (https://ec.europa.eu/eurostat/web/lfs/data/database), something also done by many countries. These indicators were very useful supplements to indicators on employment and labour underutilization given that, at least initially, absences were only temporary and thus people continued to be counted as employed as long as they had an expectation of a return to the same job. Given that some Governments created schemes to avoid people entirely losing their jobs during lockdowns a sole focus on total employment would therefore not give a full picture of pandemic related impacts which become clearer when information on absences and total hours actually worked are analysed.

Reflecting the particular value of data on total hours actually worked, the ILO published a series of COVID-19 monitors which gave particular prominence to total working hours losses in 2020. For example the seventh edition of the monitor (https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_767028/lang--en/index.htm), published in January 2021, reported that “In 2020, 8.8 per cent of global working hours were lost relative to the fourth quarter of 2019, equivalent to 255 million full-time jobs” and “Working-hour losses in 2020 were approximately four times greater than during the global financial crisis in 2009”. It was estimated that losses in employment accounted for 50% of this loss, with the other 50% being accounted for by reductions of working time, which would include full temporary absences from jobs. Focussing only on movements in the numbers employed, while an important indicator, would thus only have shown half of the impacts on total volume of employment work.

Slightly more than 60% of the countries that responded to the global survey (61 countries) published additional indicators or produced special additional publications to provide more insights about the impact of the COVID-19 pandemic on the labour market (see Figure 19). More precisely, 46.4% (45 countries) published additional indicators making use of information already available from the LFS questionnaire, while 39.2% (38 countries) produced additional dedicated publications, and 22.7% did both.

At the regional level, the shares of countries that published additional indicators or produced special additional publications were higher in Africa and the Arab States (70.6%) and Europe and Central Asia (69%), compared with 61.9% in the Americas and 41.2% in Asia and the Pacific.

The majority of the countries that managed to publish additional information (50 of the 61, representing 51.5% of all responding countries with a LFS in 2020) were able to do this because they had introduced specific questions/modules to the LFS, or had undertaken additional surveys (see graph of the right side of Figure 19). This was slightly more prevalent in Africa and Arab states and the Americas, compared to the other regions. The remaining 11 countries managed to publish additional indicators without collecting additional information, by doing more in depth analysis of the information regularly collected. The majority of these were in Europe and Central Asia (8 countries). There were only 2 cases like this in Africa and the Arab States, 1 in the Americas, and none in Asia and the Pacific.
Looking at the periodicity and the types of modes of data collection another important dichotomy appears (see Figure 20). Countries that had plans for a continuous or quarterly LFS and using remote modes were generally a) more able to publish new indicators using existing surveys/data, and b) more able to produce special additional publications. For example, close to three quarters (71.7%) of countries already using remote modes of data collection managed to publish additional information compared with just over half (54.9%) of those planning to use face-to-face modes only. This in part reflects the relatively greater resources often available for the LFS in those countries with more regular collection and/or already using remote modes of data collection before the pandemic.

Figure 19. Countries that published additional indicators and/or produced special publications to describe COVID-19 impacts on the labour market during 2020, by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Published additional indicators using existing data</th>
<th>Both published additional indicators and produced special publications</th>
<th>Produced special additional publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>23.7</td>
<td>22.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Africa and Arab States</td>
<td>17.6</td>
<td>5.9</td>
<td>47.1</td>
</tr>
<tr>
<td>Americas</td>
<td>14.3</td>
<td>38.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>23.5</td>
<td>11.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>31.0</td>
<td>26.2</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Figure 20. Countries that published additional indicators and/or produced special publications to describe COVID-19 impacts on the labour market during 2020, by periodicity and types of mode of data collection

<table>
<thead>
<tr>
<th>Periodicity and Type of Mode</th>
<th>Counts</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>97</td>
<td>61</td>
</tr>
<tr>
<td>Continuous or Quarterly data collection was planned</td>
<td>76</td>
<td>52</td>
</tr>
<tr>
<td>One or two survey rounds planned</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Face-to-face mode(s) only</td>
<td>51</td>
<td>28</td>
</tr>
<tr>
<td>Remote modes (in combination with face-to-face or not)</td>
<td>46</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>62.9</td>
</tr>
</tbody>
</table>
5.3 Reducing or delaying publication of data

Inevitably and unfortunately, despite their best efforts, some countries also needed to make reductions to the range of data they planned to disseminate, while some also had to delay planned publications. Globally, about one-fifth (20.6%) of the countries (see Figure 21) had to reduce the range of data published at one or more points in time during 2020. Among these, 17.5% of countries had to entirely cancel their publications for some periods. This included 13.4% who reported having to entirely cancel their publication plans for some periods but also removing some published indicators for other periods. A small number of countries reported removing indicators but not having cancellations, or having cancellations but not removing indicators. One message which can be taken from this is that the large majority of countries (about 80%) did manage to avoid reducing the range or planned frequency of published information.

Figure 21. Countries whose plans for publication were negatively impacted by the COVID-19 pandemic, by region

The Americas was the region most heavily affected by the need to cut published data, with almost 50% of the responding countries reporting cancellation of publications or removal of indicators, and with one third of the countries reporting both (see graph on the left side of Figure 21). That region also had the highest share of countries reporting delays in publications (33.3%) (see graph on the right side of Figure 21). This result is mainly due to the severity of pandemic related restrictions and impacts in Latin America, combined with quite frequent surveys and a general reliance on face-to-face modes of data collection. This combination created a particular vulnerability to data collection disruptions, subsequently causing publication difficulties.

In Africa and the Arab States cancellation of publications or removal of indicators were reported by 29.5% of the countries, compared with 17.7% of countries in Asia and the Pacific. Delays in publications were reported by about one quarter of the countries of these regions (23.5% in each).

Countries in Europe and Central Asia by and large managed to maintain their dissemination plans. In fact, only 4.8% of the countries (2 out of 42) reported cancellation of publications and removal of indicators, and only the 11.9% (5 out of 42) reported delays in publications.

It is interesting but unsurprising to note that the 7 countries that had their publication entirely cancelled for some periods had all planned to use face-to-face modes of data collection only, also representing about three quarters of those who had to remove indicators from their regular publications (see Figure 22). This further reinforces the anticipated message that remote modes of data collection proved to be more resilient and should be promoted for the future to the extent possible.
5.4 Beyond the aggregates – changing dissemination of labour market statistics – a tricky balance between more and less data

A demand for more data is nothing new to producers of official statistics. Demand among users almost universally exceeds the available information, and the resources available to collect information. At the best of times this creates a significant challenge for NSOs attempting to meet as many user needs as possible with generally scarce resources. During 2020, this challenge increased to an unprecedented level where demand for information on labour market impacts of the pandemic became greater than ever, while the platform upon which that information was built (household surveys) was being undermined. Unsurprisingly, many countries reported the extreme difficulties they faced in trying to maintain any kind of data collection, while at the same time attempting to provide the additional information so strongly demanded.

The ultimate impact was that the range and frequency of data published was changed significantly in most countries, and this was achieved by various means the full extent of which cannot fully be captured through the aggregate level analysis presented above. The range of changes reported by the responding countries is described in additional detail below.

**Additional questions included in the questionnaire**

Several countries introduced additional questions to their LFS questionnaires to understand whether people’s labour market participation had been affected by COVID-19 pandemic. These questions covered many relevant topics including:

- Questions on teleworking and working from home (done for the first time during pandemic or done also in the past);
• Questions to measure the impact of government policies implemented to limit COVID-19 effects on labour market;

• Questions to measure the impact of the pandemic on income, working arrangements, turnover, etc;

• Questions on workers who kept their job but worked reduced hours, and the number of people who did not look for work because of ongoing business closures.

• Questions on impacts on unpaid working activities such as unpaid household service work (childcare etc.) and volunteer work.

Moreover, additional response categories (e.g. "was it because of COVID-19") were generally added to questions regularly present in the questionnaires to ensure a distinction could be drawn between changes due to the pandemic and other types of changes, which are always a feature of any dynamic labour market. This type of approach was used for issues such as temporary absences from work, reduction of hours worked, job loss, job search, job availability, desire to work, not being able to start a new job or business, etc. This approach is consistent with advice provided by international organisations such as ILO and Eurostat.

The outcome from these additions was the generation of additional indicators in regular publications or the production of supplementary reports, both of which were quite as discussed earlier.

**Increased frequency of publications**

Following the request to monitor the impact of COVID-19 on the labour market, for specific periods some countries started producing estimates (sometimes provisional) with a higher frequency, even every 2 weeks with data from the LFS, sometimes also producing higher frequency seasonally adjusted series.

**Negative impacts, delays, cancellations of publications, reductions in detail**

Despite all efforts some countries reported that they had to temporarily suspend publication of time series, including key labour market indicators. For many countries this will have been the ultimate negative impact of disruptions, given the importance placed on users of unbroken time series, particularly at a moment when the labour market was undergoing significant and rapid change.

To try to avoid complete breaks several countries made use of modelling approaches to continue to generate time series despite the loss in raw data availability. For those countries seasonally adjusting their time series, one of the impacts was a need to update seasonal adjustment calculations, for example to take account of level shifts in time series. However, these countries typically did manage to maintain published series.

Due to low response rates, the lack of coverage and problems of representativeness for certain areas and sub-groups some countries suspended temporarily the production of specific geographical disaggregations or estimates related to the characteristics of employment (e.g. detailed estimates of employment by industry), while others produced model-based estimates.

As reported earlier, another relatively common impact was the need for countries to delay publication of results or reduce the scope or coverage of published data. For example, due to an inability to collect nationally representative data, more than one country started to temporarily focus its publications on indicators covering urban areas only where data collection operations could be maintained to a greater extent that rural areas. While reduced in scope, these publications remained of very high relevance and represented a good options versus the alternative of entirely cutting publication of key indicators, or knowingly publishing data with serious quality concerns.
5.5 Data quality impacts

One area often raised in discussions with countries during 2020 was the issue of data quality assessment. As part of standard practices countries apply a wide range of data quality checks, although the types of data checks vary across countries. However, given the unprecedented nature of COVID-19 disruptions it was uncertain if existing checks would be sufficient. For example, non-response analysis may have been limited and thus not adequate to capture increases in bias, which may have been inconsistent across areas or population sub-groups. Reflecting this, the ILO and other international agencies have been promoting a review of data quality assessment approaches to consider and identify any increases in bias, as a basis to consider if changes in approach were needed, e.g. additional targeted data collection, changes in non-response adjustment approaches etc.

At the global level, only 33 of the countries that carried out an LFS survey in 2020 (representing the 34%, see graph on the left in Figure 23) reported that additional quality checks or analysis were introduced to assess possible effect of under-coverage, bias etc. At the regional level, the Americas had the highest proportion of countries carrying out additional quality checks (57.1%); these were mainly countries that had plans for a continuous or regular LFS and that had no suspensions during the year, or were able to attempt to complete the interviews after the suspension. In Europe and Central Asia about one third of the countries introduced additional quality checks. Much lower proportions were reported in Africa and Arab States (23.5%) and Asia and the Pacific (11.8%).

Figure 23. Countries that introduced additional data quality checks (e.g. to assess bias, undercoverage etc) and their assessment of bias, by region

Notably, countries with continuous or regular data collection were more likely to introduce additional data quality checks (31 out of the 33 who did this). Most likely, this is because the impacts of the pandemic on time-series would be more visible in regular series, however, it could also reflect the greater resources available to countries with regular collection operations, creating the possibility to more rigorously assess potential bias due to non-response. This also explains the regional variations observed.

The complementary group of 64 countries did not introduce additional data quality checks. There could be a variety of related explanations for this. Firstly, checking for data quality is a process undertaken by all countries...
to differing degrees. Many countries may have felt that their existing methods were sufficient to detect biases and thus not made any changes. In other cases countries may have felt that the impact of data collection was limited therefore meaning no change in approach was required.

**Bias – an increasing challenge**

On balance, the large majority of responding countries did not feel that there had been a significant increase in bias of published labour market data during 2020. At the global level only 12.4% reported their subjective belief that there had been a significant increase in bias, ranging from 4.8% in the Americas to 17.6% in Africa and the Arab States. While this is encouraging it does not fully reflect the level of concern reported by countries about possible bias, as illustrated by the other information they provided.

Countries reported particular concerns about selective non-coverage or non-response when moving to telephone interviews, either because of uneven gaps in phone coverage (e.g. lower coverage among poorer households) or differential non-response by phone for certain groups, e.g. older respondents being less likely to respond by phone. This led to higher substitution rates and higher overall non-response.

One of the sensible solutions chosen by countries to meet the challenge of quickly implementing telephone interviewing was to re-use old LFS samples. While generally reporting that this approach was quite successful where it could be used, several countries did note that attrition became an issue the longer this approach was used, again often hitting some groups of respondents more than others.

In addition to non-response related problems, countries reported various other concerns about possible bias. For example, for those countries who had to reduce the length of their questionnaire one concern reported was that the questionnaire was now more simplified, which could have impacts on data quality, perhaps missing certain groups and having an impact on indicators which could be difficult to identify due to the major shift actually taking place in the labour market at the same time. Another concern of a similar nature was the untested and unidentified mode effect cause by a sudden shift to remote data collection.

Where bias was identified, corrective treatments were sometimes introduced in the weighting procedure applied to the raw data. Often these were adapted/modified to correct for non-response (e.g. separate adjusting each month, geographical areas, or using a set of covariates from previous rounds). Also introducing calibration of weights with additional constraints (e.g. educational level) and composite weighting was reported by countries as a way to reduce the impact on the estimates.

Where changes to practices have been made, countries generally updated their methodological notes relating to the LFS to try to ensure any concerns with data quality were as transparent as possible.

However, ultimately it should be noted that some countries did report having concerns about increased bias but were unsure about good methods to assess and correct for it. Thus there is a need for further support and guidance to these countries, both about bias, but also more generally about the assessment and reporting of data quality to support appropriate interpretation of published results.
6 Future LFS plans

Finally, countries were asked to provide information about their future LFS plans, for example whether they had plans to make further changes to mode, or to retain changes introduced during 2020. This information is useful to assess whether the events of 2020 do truly mark a seismic and sustained shift in data collection practices, or whether the increase in telephone interviewing in particular could be short-lived.

While the introduction of telephone interviewing has many benefits, there is no guarantee that it is a sustainable solution if the infrastructure cannot be developed to support it, such as teams of dedicated interviewers, databases of contact details, electronic questionnaires etc. For example, there will be a limit to how many times households from an old sample can be revisited before response attrition will introduce significant bias. Furthermore, over time the population covered will become less representative of the current structure of the population. Therefore, if a way cannot be found to get contact information for households, telephone interviewing will not be a long-term solution.

6.1 Continued use of remote modes of data collection

Of the 27 countries who introduced CATI/CAWI as a new mode or data collection, about half (13) reported that they would definitely continue to use CATI in the future. Of the other 14 countries, 9 reported that they will not continue to use this mode in the future and 5 did not know. This highlights the need for ongoing support to countries to enable a longer term modernisation of data collection operations, building on the experiences of 2020 and 2021.

Regionally, the situation was quite differentiated. In the Americas almost half of the countries that had plans for a LFS in 2020 introduced a new remote mode (see Figure 24). The large majority (8 out of 10) of these countries reported that they plan to keep using these remote modes in the future (38.1% of all the countries in the region with LFS plans in 2020). A similar situation was found in Africa and the Arab States were 4 out of 7 countries will keep using the new remote modes in the future. Interestingly, across the other two regions only 1 of the 10 countries that introduced new remote modes in 2020 reported having clear plans to keep using them in the future.
Using this information a timeline can be created of the use of remote modes, before, during and after the pandemic (see figure 24). This tells us that before the pandemic a little under half of the countries with a planned LFS during 2020 were expecting to use remote modes of data collection (47.4%). During 2020 this increased to approximately three quarters (75.3%) but this is expected to relapse to 60.8% as some countries revert to face-to-face collection or were unsure if they would retain the new modes. This still represents a substantial shift in practice, but shows that for quite a few countries the change was not considered sustainable.
7 Summary and conclusions

It is clear that 2020 was an incredibly challenging year for compilers of official statistics and those challenges have continued into 2021, and perhaps beyond. The information provided by the 97 responding countries show that no country was entirely cushioned from COVID-19 impacts on data collection. The range of responses does not even fully reflect the many challenges faced, such as requirements for head office staff to work remotely, direct health impacts of the pandemic, and many other challenges never previously faced. It also does not reflect all the solutions countries used to generate labour market information, such as increased used of administrative sources. With that said, the responses of the countries do lend themselves to some overarching summary conclusions, such as:

- Unsurprisingly, those countries already planning to use remote modes of data collection were relatively less impacted in their data collection operations than those entirely relying on face-to-face collection. Suspensions or complete cancellations of data collection were less common and by and large they increased the range of data published to illustrate impacts of the pandemic on the labour market. This is quite closely related to the frequency of planned data collection, with those countries with more regular collection faring relatively better than others. This clearly shows the relatively greater resilience of remote data collection, which also brings efficiency gains and should be promoted for use where possible. The substantial variations in data collection impacts across regions to a large extent reflect differences in use of remote modes and data collection frequency, which in turn also reflect differences in resources and infrastructure in those countries.

- While trying to exclusively use remote modes may be unachievable for many countries in the near future, using them as part of a mixed-mode approach, alongside CAPI for example, has been shown to be a good practice in many countries, often in parallel with panel interviewing. These changes of course have important resource implications, but can bring many benefits where possible to implement. Care is also needed to ensure changes in mode can be done without negative effects on data quality, something which can be difficult to assess.

- Cancellations, delays and reductions in published data did occur, but ultimately the majority of the countries not only managed to maintain the published information, but in fact managed to publish additional information, either by adding questions to the LFS, undertaking new surveys or doing additional analysis of existing data.

- Despite all the challenges, countries also, by and large, did not believe there was a significant increase in bias in published information during 2020.

- NSOs and other agencies running the LFS during 2020 deserve substantial credit for their efforts to maintain the flow of labour market and related information, under the very challenging circumstances. This required significant flexibility and effort on the part of many staff from head-office staff to interviewers and all others involved in the process. This also reflects the high value placed by countries on labour market and related information during the pandemic, hopefully reinforcing the need for support for regular LFSs in the future.

Notwithstanding the above, it was evident during 2020, and remains so in 2021, that for many countries, substantial technical and financial support is required to build resilience into their data collection operations, in particular moving more and more towards electronic and remote data collection modes, as well as modernising related processes and infrastructure. The results show that for quite a few countries the short-term move to telephone interviewing was not expected to continue, due to lack of contact information or the required systems and resources to sustain it. International agencies and development partners must consider how to meet this support requirement to build on the shift in practice caused by the pandemic. This would not only improve the resilience of the LFS, but more generally the capacity of countries to collect and publish information across many domains.
8 Appendix 1 – LFS plans at the beginning of 2020

The main body of the report included a brief description of the LFS plans the responding countries had for 2020.

While there has been a substantial increase in the number of countries running a regular LFS over recent decades, the frequency and periodicity still varies greatly. At the beginning of 2020, before the COVID-19 pandemic, about 90% of the responding countries (97 out of 110) had plans to complete a labour force survey (LFS) during the year (see Figure A1). The vast majority, 76 out of 110, planned to carry out a continuous or regular labour force survey (i.e. at least one week every quarter\(^3\)); 21 countries intended to conduct one or two rounds only; while 13 did not have any LFS planned during 2020. Of the 13 that did not have plans for 2020, six were planning an LFS for 2021 and seven are still unsure of when they will run their next LFS.

Figure A1. Pre-COVID-19 pandemic plans to complete a labour force survey during 2020, by region and periodicity

<table>
<thead>
<tr>
<th>Region</th>
<th>Continuous or regular data collection planned</th>
<th>One or two survey rounds planned</th>
<th>No plans to complete a labour force survey during 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>76</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Africa</td>
<td>6</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Americas</td>
<td>15</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Arab States</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Asia and the Pacific</td>
<td>13</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Europe and Central-Western Asia</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern, Southern and Western Europe</td>
<td>28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^3\) This includes a variety of different frequencies that countries adopt such as continuous data collection every week, collection for one week each month or collection for one week each quarter. In each case data collection is taking place in all quarters of the year.
There were some notable differences in the plans across regions, including:

- at least 90% of the respondents from Eastern Europe and Central-Western Asia had plans for data collection during all four quarters of 2020,
- by contrast, this was the case for only about 60% of respondents from Americas and Asia and the Pacific, and for only 30% of responding African countries.

For the 21 countries who had plans for only one round (14) or two rounds (7), data collection activities were mostly planned from the second quarter onward (see Figure A2). Only four of the 28 planned survey rounds were due to take place in the first quarter, with 13 in the second half of the year and four undecided. For the most part the greatest concentration of data collection was planned to take place in the second and fourth quarters of the year.

The timing of data collection and the timing of lockdown and restrictions for these countries might have generated different impacts on survey operations. While lockdowns and restrictions varied in timing and nature across countries, they generally emerged from March 2020 onwards. As such the greatest impact would be felt by those with plans for data collection from the second quarter onwards. This refers to all 76 of the countries with a quarterly LFS plus 17 of the 21 countries who had periodic data collection plans. As such, it can be concluded that the potential for impact on LFS data collection was almost universal among the responding countries who had a planned LFS during 2020.

Figure A2. Quarter(s) of 2020 in which there were plans to conduct fieldwork operations for countries that did not have plans for a continuous or regular survey

As highlighted in previous publications, the planned mode(s) of data collection was a major determinant of the impact of restrictions on fieldwork operations (listing, data collection, supervision, etc.). While all countries faced challenges to maintain their operations, it was clear that even greater challenges were faced by those only relying on face-to-face modes, i.e. paper and pencil interviewing (PAPI) or computer assisted personal interviewing (CAPI). One of the common reactions was to introduce or increase the use of remote modes of data collection – in particular telephone interviewing. Reflecting the key role of mode, countries were asked to provide a range of information on the mode they had expected to use in 2020 and any changes they made, such as moving to telephone interviewing.
Countries can use multi-mode data collection to either improve coverage or reduce costs of data collection, often mixing between face-to-face and remote collection which heavily influenced how COVID-19 restrictions impacted data collection operations (discussed further below). In 2020, about half of the responding countries (48.5%) were planning to use a single mode of data collection for their LFS (see Figure A3), but this share varied substantially across regions. Africa and Arab States had the greatest share of countries planning to use a single mode (88.2%), and the lowest was reported by Europe and Central Asia (28.6%).

Figure A3. Single mode versus multi-mode LFS data collection, by region

Globally, the most common mode for the LFS was CAPI, expected to be used by 77.3% of all responding countries with a planned LFS (75 out of 97) (see Figure A4). This was followed by computer assisted telephone interviewing (CATI, 41.2%), PAPI (27.8%) and computer assisted web interviewing (CAWI, 15.5%), while small numbers of countries planned to use paper assisted telephone interviewing (PATI) or self-completed paper forms (2 and 3 countries respectively).
There was substantial cross-region variation in planned data collection modes for the LFS. For example:

- **CAPI** was the most common mode in all regions with the exception of Europe and Central Asia. In that region, while CAPI was still very common (29 out of 42 countries), a slightly larger number had plans to use CATI (32 out of 42). The majority of these countries were planning to use those two modes in combination, as part of a mixed mode strategy. **CAWI**, which is self-completion and does not require interviewers, was also more prevalent in Europe and Central Asia than other regions (10 out of 42 countries).

- In Africa and the Arab states all but one of the 17 respondent countries (94.1%) planned to use CAPI for the LFS during 2020. Only 2 planned to use PAPI and one had plans for telephone interviewing.

- In the Americas and Asia and the Pacific, while CAPI was the most common mode, PAPI was relatively more common than in other regions, being planned for use by over 40% of countries in both regions. CATI was planned for use in 23.5% of countries in Asia and the Pacific compared with 14.3% in the Americas, while CAWI was somewhat less prevalent.

Considering the potential for COVID-19 related impacts, the key issue is the extent to which countries were reliant on face-to-face collection modes (CAPI and PAPI) or remote modes\(^4\), whether they were planning to use only one mode or multiple modes. **Figure A5** shows that out of the 97 countries that had plans for an LFS during 2020, 52.6% (51 countries) were only planning to use face-to-face modes, while 39.2% (38 countries) were planning to use a combination of face-to-face and remote modes, and 8.2% (8 countries) planned to use remote modes only. What this highlights is that remote modes of data collection are certainly growing in prevalence, but just over half of all responding countries remained reliant on face-to-face collection only for their LFS, and therefore particularly vulnerable to disruptions to data collection. This varied heavily across regions.

\(^4\) Remote modes includes CATI, CAWI, telephone interviews using paper questionnaires, and postal or self-completion forms.
Responding countries from the African and Arab state regions were almost universally (94.1%) planning to use face-to-face modes only. This was also prevalent in the Americas (76.2%) and Asia and the Pacific (64.7%) However, this was much less common in Europe and Central Asia (19%).

By contrast a combination of face-to-face and remote modes was widely used in Europe and central Asia (64.3%), but also featured relatively frequently in Asia and the Pacific (35.3%) and the Americas (23.8%). At the global level just 8.2% of respondent countries planned to use remote modes only (typically either CATI only or CATI with CAWI) and this was most prevalent in Europe and Central Asia (16.7%).

As shown in Figure A6, the 76 countries that had plans for a continuous or regular LFS, 46.1% planned to use a mix of face-to-face and remote modes, while another 46.1% planned to use face-to-face only.

By contrast, among the 21 countries that had plans for just one or two rounds of data collection during 2020, only a small minority planned to use a combination of face-to-face and remote modes (14.3%), while the majority (76.2%) expected to only use face-to-face modes.
Figure A6. Planned types of modes of data collection for countries that before the pandemic had plans to conduct an LFS during 2020, by periodicity of data collection

<table>
<thead>
<tr>
<th>Continuous or periodic data collection planned</th>
<th>One or two survey rounds planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face mode(s) only</td>
<td>Face-to-face mode(s) only</td>
</tr>
<tr>
<td>Combination of face-to-face and remote modes</td>
<td>Combination of face-to-face and remote modes</td>
</tr>
<tr>
<td>Remote mode(s) only</td>
<td>Remote mode(s) only</td>
</tr>
</tbody>
</table>

Summarising the above, the large majority of responding countries (91.8% of those having plans for a LFS in 2020) had plans to use face-to-face data collection modes (either partially or fully), and planned interviewing from the second quarter onwards. This indicates a very widespread potential impact of COVID-19 on data collection plans. There were clear linkages between planned periodicity of data collection and data collection mode, as well as important variations across region. All of these factors clearly influence the scale of potential impact on survey operations as described in the main body of the report. Those countries with regular collection and remote modes were relatively better positioned to deal with the impacts of the pandemic on their survey operations, for example in Europe and Central Asia. In addition, these countries typically had relatively greater resources to carry out the LFS. By contrast, countries with relatively less frequent data collection relied more heavily on face-to-face modes and were in theory relatively more vulnerable.