Measurement of unpaid domestic and care work
Acknowledgements

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1. Abbreviations and Acronyms

<table>
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<th>Description</th>
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<tr>
<td>CAPI</td>
<td>Computer Aided Personal Interviewing</td>
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<td>CAUTAL</td>
<td>Classification of Time-Use Activities for Latin America and the Caribbean</td>
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<td>CI</td>
<td>Cognitive Interview</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>HETUS</td>
<td>Harmonised European Time-use Survey</td>
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<td>ICATUS</td>
<td>International Classification of Activities for Time-Use Statistics</td>
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<td>ICLS</td>
<td>International Conference of Labour Statisticians</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>ILO-ITC</td>
<td>International Labour Organization – International Training Centre</td>
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<td>ISCO</td>
<td>International Standard Classification of Occupations</td>
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<td>LFS</td>
<td>Labour Force Survey</td>
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<tr>
<td>LMIC</td>
<td>Low- and Middle-Income Country</td>
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<td>NSO</td>
<td>National Statistics Office</td>
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<td>OPS</td>
<td>Own-use provision of services</td>
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<tr>
<td>REA</td>
<td>Rapid Ethnographic Assessment</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>SNA</td>
<td>System of National Accounts</td>
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<tr>
<td>TU</td>
<td>Time-use</td>
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<td>TUS</td>
<td>Time-use survey</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNSC</td>
<td>United Nations Statistical Commission</td>
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<tr>
<td>UNSD</td>
<td>United Nations Statistics Division</td>
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</table>
2. **Introduction and background**

1. Resolution I of the 19th ICLS\(^1\) signified a major change in the measurement of productive activities in official statistics. Among other important changes, the adoption of this resolution brought *own-use provision of service work*, also termed “unpaid domestic and care work”, within the reference scope of activities for labour force statistics, for the first time.

2. Own-use provision of service (OPS) work encompasses a wide range of activities and responsibilities. It includes care for children and care for adults with disabilities, illness, or age-related frailties, as well as routine housework (cooking, cleaning, shopping...), minor household repairs and decoration, and household management (budgeting, planning, administration).

3. A defining feature of OPS is that it is undertaken *for own final use*. That is, it is performed for oneself and/or for one's household or family members, without (expectation of) remuneration.\(^2\)

4. Around the world, women and girls perform the major share of OPS work. The existence - and persistence - of gender inequalities in the division of OPS has been shown to be both a cause and effect of women's political, economic, and social marginalisation, with the effect most pronounced for the poorest in society, who lack options to outsource activities to the market and/or invest in timesaving domestic appliances.

5. In recent years, the measurement of OPS has been accorded new priority in official statistics\(^3\), reflecting renewed attention to the topic in international and national policy circles.

6. The production of official statistics on OPS has relevance for a wide range of public policy areas, especially when collected alongside detailed data on labour force participation and employment situations. Data can directly inform the formulation and implementation of policies to increase labour market participation, to promote gender equality in the workplace, to address gender pay-gaps, decent work deficits, excessive work burdens, and time poverty. Such data may also reveal opportunities for investments in the care economy, as well as public infrastructure and basic services (e.g., piped water and sanitation, electricity, cooking fuel, public transport), to reduce or redistribute OPS work.

7. Over the longer term, successive rounds of data can inform monitoring, evaluation, and cost-benefit analysis of policy changes. The data may also inform valuation exercises, which can permit transitions from household provision of services to market-based provision to be monitored, with important implications for the interpretation of national GDP figures, and for international comparability of the same.

8. The 19th ICLS standards set out a comprehensive conceptual framework and attendant reference definitions to underpin the production of statistics on OPS – alongside other forms of work – in national labour force surveys (LFS). Operationalisation of the standards has, however, lagged. One reason for this lag is the complexity of the default measurement source - *the independent time-use survey* – which has deterred regular implementation in many regions.

9. Reflecting on progress made since the 19th ICLS, amid “an ever-increasing demand on countries to generate statistics on unpaid work activities”,\(^4\) the 20th ICLS identified a “critical

\(^1\)ILO (2013) ICLS-Resolution-I [STATI-131114-1]

\(^2\)ILO (2013) ICLS-Resolution-I [STATI-131114-1]

\(^3\)ILO (2013) ICLS-Resolution-I [STATI-131114-1], 5: 22D.

need for guidance and methodological development related to time-use methods”, noting the “many challenges... [raised by] data collection...analysis, and use of the data generated”.5

10. Responding to this stated need, the ILO initiated a programme of work to support the production of statistics on OPS through the periodic attachment of light time-use modules to national LFS, with a focus on low- and middle-income countries (LMICs).

11. Beginning in June 2020, with financial support from UN Foundation and Data 2X, the ILO partnered with national statistics offices (NSOs) and research institutes to develop, pilot test, and refine new modular time-use measurement tools. Testing also evaluated alternative sample designs and field operation protocols to support modular measurement at scale.

12. The development process drew on existing guidance and best practices, taking account of recent developments towards harmonised international standards for the production of time-use statistics, and technical advances in CAPI (computer assisted personal interviewing).

13. Testing took place in three countries, between 2021 – 2023, and combined qualitative and quantitative phases to target key evidence gaps. This resulted in refinements to the module content and design and to the guidance on survey administration / fielding.

14. Outputs include new model light-time-use modules (developed in CSPro for CAPI mode), and national adaptation, implementation, and data processing guides. The ILO has also developed a dedicated training course on the topic of unpaid care work, launched through ILO-ITC in 2022, and has integrated the topic of own-use provision of services and time-use measurement within its training and technical assistance programmes.

15. Outputs have been developed for implementation in low- and middle-income countries (LMICs). They are designed to support NSOs to produce statistics on OPS when resource constraints or other considerations impede an independent time-use survey. The OPS module may also be appropriate when there is demand for interim statistics between decennial or quinquennial independent time-use survey rounds.

16. All outputs are aligned to the 19th ICLS standards, and to other relevant international standards, including the System of National Accounts (SNA) 2008 and the International Classification of Activities for Time-use Statistics (ICATUS) 2016. The recommendations are also consistent with the current direction of the UN Statistical Division’s (UNSD’s) updated guidance for the production of time-use statistics6.

17. In parallel with this development work, the ILO has continued to be active in providing technical inputs to inform the updating of international standards and guidance on the production of time-use statistics, and on the related topic of the valuation of unpaid household services to ensure alignment with concepts, reference definitions, and indicators as specified by international standards for labour statistics.

18. Participants in the Conference are invited to indicate their support for the continuation of work to support countries to integrate light time-use measurement within their LFS programmes, in order to improve the measurement of OPS work alongside other forms of work.

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6Provisional outputs published by the United Nations Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics (EG-TUS)
3. Conceptual framework for the measurement of own-use provision of services (OPS)

19. The 19th ICLS standards provide the underpinning concepts and attendant reference definitions for the production of statistics on OPS in national labour force surveys. This section summarises the concepts of work and OPS, as set out in those standards, which formed the basis for the development of the new LFS add-on modules.

3.1 Conceptualising work

20. In October 2013, the 19th ICLS adopted a new resolution on international standards “concerning statistics of work, employment, and labour under-utilisation”\(^7\). These standards superseded those adopted under the 13\(^{th}\) ICLS Resolution “concerning statistics of the economically active population, employment, unemployment and underemployment”, which had set the scope for labour statistics for over 30 years.

21. The 19th ICLS standards introduced an internationally agreed statistical definition of “work” as a reference concept. Under this definition, work “comprises any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own-use”\(^8\). This definition encompasses all paid and unpaid productive activities and applies regardless of the (in)formality or (il)legality of the sector and status of the work, or the economic unit in/for, which it is performed.

22. These standards are especially notable for extending the remit of labour statistics to encompass work activities that fall outside of the system of national accounts’ (SNA) “production boundary” but within the broader SNA “general production boundary”\(^9\).

23. While the SNA general production boundary recognises all work as economically productive\(^10\), the narrower, “production boundary” determines which economically productive activities are included – and which excluded – in estimates of core macro-economic indicators, including gross domestic product (GDP)\(^11\). Such indicators occupy a central role in public policy, planning, and budget decisions, focussing attention and resources on a sub-set of economically productive activities.

24. In the years prior to the introduction of the 19th ICLS standards, labour statistics’ coverage of work activities was restricted to the narrower of the two SNA defined production boundaries. This includes all work performed for pay or profit, as well as selected unpaid work activities (unpaid traineeships / apprenticeships, organisation-based volunteer work, direct volunteer work to produce goods, and own-use production of goods), as depicted in figure one.

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\(^7\)ILO (2013) ICLS-Resolution-[STATI-131114-1]

\(^8\)ILO (2013) ICLS-Resolution-[STATI-131114-1], 3: 7

\(^9\)The 19\(^{th}\) ICLS concept of work is aligned to the General production boundary as defined in the System of National Accounts 2008 and its concept of economic unit that distinguishes i. market units (i.e., corporations, quasi-corporations, and household unincorporated market enterprises); ii. non-market units (i.e., government and non-profit institutions serving households), iii. households that produce goods or services for own final use.

\(^10\)All non-work (i.e., all activities that do not involve production of goods or provision of services) fall outside of the SNA general production boundary. In the case of non-market-oriented activities, this dividing line centres the market-mediated delegate-ability of the activity in question. Activities that fail to meet this “third-party criterion”\(^13\) (activities that cannot be performed by another person on one’s own behalf, e.g., sleeping, learning, recreation) fall outside of the general production boundary\(^10\).

\(^11\)While highly stable, the boundary is not immutable – some previously excluded economically productive activities have been admitted within the production boundary in the past. Most notably, in the 1970s, the scope of subsistence production work (own-use production of goods) admitted within the production boundary (and, by extension, labour statistics) was expanded beyond subsistence farming, fishing, and forestry, to include a wider range of activities (Beneria, Lourdes (1999))
The introduction of the 19th ICLS standards extended the remit of labour statistics to recognise all forms of work as eligible for coverage. This resulted in a realignment of labour statistics to the SNA general production boundary. In expanding the scope of labour statistics to recognise all work, the 19th ICLS standards also narrowed the concept of “employment” for the purpose of labour force statistics (to encompass only “work performed for pay of profit”). Under the previous (13th ICLS) standards, the concept of employment was expansive, collapsing all activities within the SNA (2008) production boundary in a single “employment” category.

These twin changes resulted in a dual measurement framework for labour statistics, integrating statistics on labour market engagement alongside participation in – and trade-offs between – different paid and unpaid productive activities. At a conceptual level, this entails parity in the treatment of different forms of work for the purposes of statistical measurement.

### 3.2 Conceptualising own-use provision of services (OPS)

As shown in figure one, the 19th ICLS standards recognise five separate and mutually exclusive “forms of work”, with persons potentially occupying multiple work situations within a given reference period:

- **a) Own-use production work** comprising production of goods and services for own final use.
- **b) Employment work** comprising work performed for others in exchange for pay or profit.
- **c) Unpaid trainee work** comprising work performed for others without pay to acquire workplace experience or skills.
- **d) Volunteer work** comprising non-compulsory work performed for others without pay.
- **e) Other work activities** (not defined in the resolution but encompassing activities such as court mandated unpaid work).

OPS forms one of two sub-categories of work classified under (a), own-use production work. Own-use production work refers to productive activities for own final use. That is, production of goods or provision of services “where the intended destination of the output is mainly for

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12 A third, related, change ushered in by the 19th ICLS standards relates to the treatment of unemployment, refined to permit a wider range of labour under-utilisation indicators, covering time-related unemployment and potential labour force, as supplements to the unemployment rate (which remains a key indicator for labour force statistics).

13 ILO (2013) ICLS-Resolution-I-[STATI-131114-1], 3: 7
final use by the producer...or final consumption by household members, or by family members living in other households.¹⁴

29. The 19th ICLS standards specify the reference periods appropriate to each form of work (or sub-set thereof), “based on the intensity of participation and working time arrangements”.¹⁵ For OPS, the reference period is “one or more 24-hour days within a seven-day or one-week period”.¹⁶ This corresponds to the standard reference period used in (diary-based) time-use measurement.

30. Four distinct “activity clusters” are distinguished within OPS. These are:

(i) household accounting and management, purchasing and/or transporting goods
(ii) preparing and/or serving meals, household waste disposal and recycling
(iii) cleaning, decorating, and maintaining one’s own dwelling or premises, durables and other goods, and gardening
(iv) childcare and instruction, transporting and caring for elderly, dependent or other household members..., etc.

31. The use of activity clusters permits separate estimates and indicators to be produced for each cluster, and for aggregated categories of domestic work (clusters i – iii) and care work (cluster iv) activities performed as OPS, as well as the overarching OPS form of work. This distinction provides a useful organising framework for the development of measurement tools.

Figure 2: OPS activity clusters mapped to unpaid domestic and care work concept.

32. Figure 2, above, maps the four OPS activity clusters to the concept of unpaid domestic and care work as articulated in recent UN guidelines for time-use measurement, and in SDG indicator 5.4.1, which mandates countries to produce statistics on the “proportion of time spent on unpaid domestic and care work, by sex, age and location”.¹⁷

¹⁴ILO (2013) ICLS-Resolution-I-[STATI-131114-1], 5: 22D.
¹⁵ILO (2013) ICLS-Resolution-I-[STATI-131114-1], 4: 19.
¹⁶ILO (2013) ICLS-Resolution-I-[STATI-131114-1], 5: 19.
¹⁷SDG indicator 5.4.1
3.3 International classification of activities for time-use statistics (ICATUS-16)

33. Efforts to simplify and modernise time-use measurement have intensified in recent years, motivated, in large part, by renewed efforts to measure the volume, distribution, and contributions of OPS work. The release, in 2017, of the International Classification of Activities for Time-Use Statistics (ICATUS-16) was a major advance for the standardisation and international comparability of time-use data.

34. ICATUS-16 is a three-level hierarchically organised classification scheme with 9 major divisions (one-digit), disaggregated across 56 divisions (two-digit), and 165 groups (three digit). The scheme is harmonised to the SNA (2008) production boundary and general production boundary, and to the 19th ICLS forms of work framework. Table 3 lists the nine major divisions and summarises their relationship to the 19th ICLS forms of work framework and the SNA (2008). ICATUS-16 provides a scheme for the classification of all activities performed by persons.

Table 1: ICATUS Major Divisions

<table>
<thead>
<tr>
<th>ICATUS Major Divisions</th>
<th>19th ICLS forms of work framework. (SNA (2008) production boundary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Employment and related activities</td>
<td>Employment (work for pay or profit) (Within SNA (2008) Production Boundary)</td>
</tr>
<tr>
<td>2 Production of goods for own final use</td>
<td>Own-use production work: Production of goods. (Within SNA (2008) Production Boundary)</td>
</tr>
<tr>
<td>3 Unpaid domestic services for household and family members</td>
<td>Own-use production work: Provision of services. (Inside SNA (2008) General Production Boundary)</td>
</tr>
<tr>
<td>4 Unpaid caregiving services for household and family members</td>
<td>Own-use production work: Provision of services. (Inside SNA (2008) General Production Boundary)</td>
</tr>
<tr>
<td>5 Unpaid volunteer, trainee, and other unpaid work</td>
<td>Volunteer work (organisation based) Volunteer work (Direct volunteering producing goods) Unpaid trainee work Other work activities (Within SNA (2008) Production Boundary) Volunteer work (Direct volunteering providing services) (Inside SNA (2008) General Production Boundary)</td>
</tr>
<tr>
<td>6 Learning</td>
<td>N/a (Outside SNA general production boundary)</td>
</tr>
<tr>
<td>7 Socializing and communication, community participation, and religious practice</td>
<td>N/a (Outside SNA general production boundary)</td>
</tr>
<tr>
<td>8 Culture, leisure, mass media and sports practices</td>
<td>N/a (Outside SNA general production boundary)</td>
</tr>
<tr>
<td>9 Self-care and maintenance</td>
<td>N/a (Outside SNA general production boundary)</td>
</tr>
</tbody>
</table>

35. Countries are increasingly adopting ICATUS-16 for their time-use surveys or designing / adapting their national classifications to align to ICATUS-16. ICATUS is broadly comparable with established regional classifications, including the Harmonised European Time-use Survey (HETUS) classification scheme and the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL) scheme. Though some variation remains, they are largely interoperable.²⁰

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Table 2, below, maps the four OPS activity clusters to their corresponding divisions within the International Classification of Activities for Time-Use Statistics (ICATUS-16). The relevant major divisions within the ICATUS-16 scheme are major division three “unpaid domestic services for household and family members” and major division four “unpaid caregiving services for household and family members”.

<table>
<thead>
<tr>
<th>19th ICLS forms of work framework: Own-use provision of services, Activity clusters</th>
<th>Corresponding ICATUS-16 Divisions</th>
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</thead>
</table>
| (i) Household accounting and management, purchasing and/or transporting goods      | **ICATUS Major Division 3:** Unpaid domestic services for household and family members  
**ICATUS Divisions (3.)**  
35: Household management for own final use  
37: Shopping for own household and family members  
38: Travelling, moving, transporting, or accompanying goods or persons related to unpaid domestic services for household and family members  
39: Other unpaid domestic services for household and family members |
| (ii) Preparing and/or serving meals, household waste disposal and Recycling        | **ICATUS Divisions at 2-digit (3.)**  
31: Food and meals management and preparation  
32: Cleaning and maintenance of own dwelling and surroundings\(^{20}\)  
39: Other unpaid domestic services for household and family members |
| (iii) Cleaning, decorating, and maintaining one’s own dwelling or premises, durables and other goods, and gardening |  
32: Cleaning and maintenance of own dwelling and surroundings  
33: Do-it-yourself decoration, maintenance, and repair  
34: Care and maintenance of textiles and footwear  
39: Other unpaid domestic services for household and family members |
| (iv) Childcare and instruction, transporting and caring for elderly, dependent or other household members and domestic animals or pets, etc. | **ICATUS Major Division 4:** Unpaid caregiving services for household and family members  
**ICATUS Divisions (4.)**  
41: Childcare and instruction  
(416: Minding children (passive care))  
42: Care for dependent adults  
(425: Passive care of dependent adults)  
43: Help for non-dependent adult household and family members  
44: Travelling and accompanying goods or persons related to unpaid caregiving services for household and family members  
49: Other activities related to unpaid caregiving services for household and family members  
**ICATUS Divisions (3.)**  
36: [Pet care]\(^{21}\) |

\(^{20}\)Slight misalignment between the content of the activity cluster and ICATUS groups at the 2-digit division level  
\(^{21}\)Slight misalignment between the content of the activity cluster and ICATUS groups 1-digit major division level
4. Data sources

37. The 19th ICLS standards recognise time-use surveys (TUS) as the main measurement approach for OPS statistics,\(^\text{22}\) noting that LFS add-on modules can be a useful source when the objective is “to capture general patterns of participation of the population in different forms of work”.\(^\text{23}\)

38. Two main time-use measurement approaches can be distinguished. These are termed “diary” and “stylised”\(^\text{24}\). A variety of different formats have been developed within each of these broad approaches. In recent years, ‘hybrid’ diary instruments, which combine aspects of each, have been the subject of growing interest\(^\text{25}\).

39. Diary measurement formats are characterised by the chronological reporting of time-use over the 24 hours of a day, sometimes for multiple days. The respondent records (if self-administered) or reports (if interviewer-administered) how they spend (if contemporaneous) / spent (if retrospective) their time, from a designated moment, conventionally 4am or 12midnight, or from the moment that they wake/woke up. The exercise is sometimes repeated for multiple days.

40. Within this broad approach, several alternative formats exist. Formats vary in important ways. Episode timings may be open-ended or pre-defined. In the former, the respondent records (or reports) the start and end times of each activity. In the latter, the 24 hours of the day are divided into, usually equal\(^\text{26}\), intervals of between five minutes and 60 minutes, ready to be populated with the respondents’ activity/ies.

41. Formats also vary according to whether activities are open-coded or pre-defined. In the former, activities are recorded verbatim, in the respondents’ own words, subject to coding at the data entry stage. In the latter, the respondent (if self-administered) or interviewer (if interviewer-administered) selects the code that most closely corresponds to each activity from a pre-specified list. The convention is to refer to diaries with pre-designated activity codes as “light” / “lite” diaries and to open-code diaries as “full” diaries.

42. Further variations, applicable to both light and full diaries, include the presence of fields to record “multi-tasking”, i.e., activities undertaken simultaneously or over-lapping, and/or contextual information such as location, presence of others, ‘beneficiary’, remuneration, use of ICT, and/or affect. The inclusion of simultaneity fields emerged as a corrective to a known tendency for OPS to be under-reported. It has been shown to improve recall and reporting of background caregiving responsibilities, in particular. As well as being informative in their own right, context fields may also aid recall. They are often necessary to permit the proper assignment of activities to higher level activity classes.

43. In contrast, in a stylised format, respondents report participation in, and total, summed, time dedicated to, an activity or activity-class over a specified reference period, usually either a seven-day week or one or more 24-hour days. Where diary formats record the timing, sequencing, and duration of activities, stylised formats provide participation and total duration.

44. Stylised questions may be framed in terms of a specific reference period, e.g., “Yesterday (or last week), how much time did you spend doing (activity X)?” Alternatively, questions may be phrased more generally in terms of usual or typical practices, e.g., “How many hours a day (or a week) do

\(^{22}\)ILO (2013) ICLS-Resolution-I-STATI-131114-1, 13-14: 67B.

\(^{23}\)ILO (2013) ICLS-Resolution-I-STATI-131114-1, 13-14: 67A.

\(^{24}\)Approaches used outside of survey contexts, such as immersive observation, experience sampling methods (ESM), and deployment of wearable technologies, are omitted from discussion as beyond scope.

\(^{25}\)Folbre, N., (2021) Quantifying Care: Design and Harmonisation Issues in Time Use Surveys, UN Women, Mexico City

\(^{26}\)In some cases, longer intervals are assigned to night-time hours, during which most respondents are presumed to be sleeping, to condense the diary exercise.
you usually spend doing (activity x...)?". The term "stylised" originated in this latter framing. The resulting time-use estimates are "stylised" in that they refer to a hypothetical construct – the "typical" day, week, month, or other reference period – rather than a concrete, actual, reference period. Contemporary usage of the term "stylised" has expanded to incorporate "actual" and "usual" framings. The distinctiveness of the approach is instead defined in opposition to the diary format.

45. Stylised approaches vary in breadth of coverage. At one end of this spectrum are "stylised analogues of time diaries". The scope of activities covered in such "stylised analogues" is deliberately comprehensive, the goal being to capture – at varying levels of detail – all activities the respondent performed for a given reference period.

46. The comprehensive list of activities included in stylised analogues permit a level of activity coverage comparable to diary approaches. At the other end of the spectrum are short question series, which forego a full accounting of respondents' time-use, to restrict investigation to a limited number of activity classes.

47. Hybrid diary instruments include direct question items, familiar from the "stylised" approach, alongside a 'core' diary. Such combined approaches have developed in response to a range of different measurement, operational, and statistical considerations. The inclusion of targeted direct probe(s) can address under-identification of activity/ies omitted from spontaneous diary reports.

48. The existing literature provides a strong direction for the optimisation of both diary and stylised approaches. The development of the LFS add-on modules has integrated a number of strategies from the available literature in order to reduce under-reporting of OPS, aid respondent recall and minimise respondent burden, and limit reporting bias originating in social desirability or overestimation bias.

49. Table three, below, summarises the key features of the common time-use measurement approaches described in this section.

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27 There is broad consensus that "typical" period questions place greater cognitive demands on respondents than do specific period questions (where the specific period is sufficiently short and recent).

28 https://www.jstor.org/stable/pdf/1519852.pdf?refreqid=excelsior:6d98f12a60de24a7a3e375a2c7c6720b


32 Folbre, N., (2021) Quantifying Care: Design and Harmonisation Issues in Time Use Surveys, UN Women, Mexico City

### Table 3: Comparison of common time-use measurement approaches.

<table>
<thead>
<tr>
<th>Format / Features</th>
<th>Full diary</th>
<th>Light Diary</th>
<th>Stylised analogue</th>
<th>Stylised, restricted domains</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference periods</strong></td>
<td>• 24-hour day(s), actual</td>
<td>• 24-hour day(s), actual</td>
<td>• 24-hour day(s), actual</td>
<td>• 24-hour day(s), actual</td>
</tr>
<tr>
<td><strong>Activity coverage</strong></td>
<td>• Comprehensive domain coverage</td>
<td>• Comprehensive domain coverage</td>
<td>• Comprehensive domain coverage</td>
<td>• Limited / targeted domain coverage</td>
</tr>
<tr>
<td><strong>Timing and duration</strong></td>
<td>• Open episodes (5 – 60 minutes)</td>
<td>• Open episodes (5 – 60 minutes)</td>
<td>• Summed durations for activities</td>
<td>• Summed durations for activities</td>
</tr>
<tr>
<td><strong>Available contextual items</strong></td>
<td>• Location</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td><strong>Simultaneity / multi-tasking</strong></td>
<td>• Supports disaggregated reporting and analysis of concurrent activities</td>
<td>• Supports disaggregated reporting and analysis of concurrent activities</td>
<td>• Simultaneous activities tend to be collapsed in summed estimates</td>
<td>• Simultaneous activities tend to be collapsed in summed estimates</td>
</tr>
<tr>
<td><strong>Supervisory dimensions of unpaid care work</strong></td>
<td>• Permits records of timing, frequency, sequencing, duration of concurrent activities</td>
<td>• Permits records of timing, frequency, sequencing, duration of concurrent activities</td>
<td>• Summary estimate for duration (relies on direct question, difficult to isolate in practice. Prone to double counting.)</td>
<td>• Summary estimate for duration (relies on direct question, difficult to isolate in practice. Prone to double counting.)</td>
</tr>
<tr>
<td><strong>Response burden</strong></td>
<td>• Sequential narrative structure and context probes designed to anchor memory and promote recall.</td>
<td>• Sequential narrative structure and context probes designed to anchor memory and promote recall.</td>
<td>• Requires respondents to abstract and interpret, calculate, and sum activities as part of recall process.</td>
<td>• Requires respondents to abstract and interpret, calculate, and sum selected activities as part of recall process.</td>
</tr>
<tr>
<td></td>
<td>• Burden is heightened for respondents with limited “clock time” familiarity.</td>
<td>• Burden is heightened for respondents with limited “clock time” familiarity.</td>
<td>• Burden is heightened for respondents with limited “clock time” familiarity.</td>
<td>• Burden is heightened for respondents with limited “clock time” familiarity.</td>
</tr>
</tbody>
</table>

*Description:* The table compares different time-use measurement approaches in terms of features such as reference periods, activity coverage, timing and duration, available contextual items, simultaneity/multi-tasking, supervisory dimensions of unpaid care work, and response burden.
5. Statistical Indicators

50. The 19th ICLS standards specify the production of three statistical indicators, headcounts, participation rates, and volume measures by activity cluster of own-use providers of services.\(^{34}\)

51. This is in line with indicators specified in the 19th ICLS for other forms of unpaid work (i.e., own-use producers of goods, unpaid trainees, and volunteer workers (the latter disaggregated by type of economic unit))\(^{35}\).

52. The indicators specified for OPS by the 19th ICLS standards, i.e., participation rates and volume measures (with headcounts calculated as an input), are consistent with headline indicators produced for time-use data, which include – at a minimum:
   - Participation rate (proportion of population participating)
   - Volume measures:

53. Volume measures for time-use data can be calculated in one of two ways (and sometimes both), with the difference originating in the denominator of interest.

54. The two volume indicators are mean time spent, or social time (where the denominator includes all observations)\(^{36}\) and mean participant time spent or participant time (where the denominator is restricted to observations for the activity of interest).
   - Mean time spent (minutes per day or hours per week) on activity/ies of interest, for the population (or sub-groups of interest) as a whole (sometimes termed 'social time')
   - Mean participant time spent (minutes per day or hours per week) by activity/ies, of interest for the participating population (or sub-groups thereof) only (sometimes termed 'participant time')

55. The principal advantage of a mean time spent, or social time, indicator is its greater sensitivity to changes over time, which may originate in the amount of time allocated to an activity domain by participants, the proportion of the total population (or population sub-group) participating in the activity class, or a combination of the two.

56. In contrast, mean participant time spent or participant time indicators capture only the former source of change over time (changes in time allocations for the participating population).

57. The social time volume indicator is consistent with SDG Indicator 5.4.1 (“the proportion of time spent [in a day\(^{27}\)] on unpaid domestic and care work by sex, age\(^{38}\), and location\(^{39}\).”)

58. While the mean participant time spent, or participant time, indicator is less sensitive to change over time, it is sometimes favoured, owing to the ‘user-friendliness’ of the output. Since only

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\(^{34}\)ILO (2013) ICLS-Resolution-I-[STATI-131114-1], 15: 74B.

\(^{35}\)ILO (2013) ICLS-Resolution-I-[STATI-131114-1],15: 74A, 74C, 74D

\(^{36}\)The 19th ICLS Standards (ILO (2013) ICLS-Resolution-I-[STATI-131114-1],5: 22A, 22B) impose a one-hour criterion for the calculation of OPS indicators. This means that headcounts, participation rates, and volume rates are calculated only for participants reporting 60 minutes or more activity in OPS (as a whole). The same one-hour criterion is imposed for all “forms of work” (with the appropriate reference period varying for the different forms of work). However, in the case of OPS this may be overly restrictive – and may be problematic, skewing overall estimates downwards (particularly in the case of men), exaggerating gender-based differences, and undermining monitoring of change over time. Such a constraint also impedes comparative analysis, including comparability of estimates for SDG indicator 5.4.1 (which imposes no such minimum floor). For that reason, the interim recommendation (pending formal revision by the ICLS) is that the one-hour criterion is not imposed for the calculation of OPS indicators.

\(^{27}\)The reference period – in square brackets – is specified in the UNSD definition (UNSD 2019)

\(^{37}\)Age: 15+, 15-24, 25-44, 45-54, 55-64 and 65+ (UNSD 2018).

\(^{38}\)Location: Urban/rural (according to national definitions in the absence of a standardised international definition (UNSD 2019)
participant’s time allocations are included, the average time recorded for each activity more closely aligns with intuitive expectations (e.g., an average of ∼8 hours spent in employment).

59. While intuitively appealing, participant time indicators are vulnerable to misinterpretation as the sum of different (primary) activity domains exceeds 24 hours (or 168 hours for a 7-day week). This is because the cohort of participants differs across activity classes.

60. The extent to which ‘social time’ and ‘participant time’ diverge is a function of the participation rate. For activities with universal, or very comprehensive, rates of participation, e.g., sleeping, the two indicators will closely align.

61. For activities with highly skewed participation rates, divergence will be greater. For these reasons, volume measures should generally be calculated based on mean time spent, or social time approach. This allows for greater sensitivity to variations over time.

62. For each activity cluster, the 19th ICLS resolution specifies disaggregation as follows: “Indicators should be computed for the population as a whole and disaggregated by sex, specified age groups (including separate categories for youth)\(^{40}\), level of educational attainment, geographic region, urban and rural areas, and other relevant characteristics taking account of the statistical precision of the estimates.”\(^ {41}\)

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\(^{40}\)The relevant guidance on disaggregation by age-band states: *Five-year age bands should be used for the main aggregates, where the lowest age bracket refers to persons aged 15–19 years and the highest age bracket to persons aged 75 years and above. Where concerns regarding the precision of the estimates impede disaggregation by five-year age bands, broader bands may be used; in all cases these should include 15–24 years, 25–34 years, 35–54 years, 55–64 years, 65–74 years and 75 years and above* (ILO (2013) ICLS-Resolution-I [STATI-131114-1] 18:93)

\(^{41}\)ILO (2013) ICLS-Resolution-I [STATI-131114-1], 14: 71.
6. Priority areas for pilot testing

63. The pilot time-use measurement tools were developed to permit the evaluation of alternative measurement approaches designed to reduce the response burden and resource intensity of traditional “full diary” approaches, while maintaining data quality.

64. Piloting focussed on several key evidence gaps in modular time-use measurement, with the aim of refining the questionnaire design as well as informing key aspects of survey administration.

6.1 Aspects of module design and content prioritized for testing.

65. In relation to the module design, a key area of focus was the measurement of simultaneity / multi-tasking, and the performance of alternative measurement strategies to reduce known under-reporting of caregiving within OPS (via a mix of context-based items, items to record simultaneity, and dedicated probing / recovery items specifically targeting passive care time).

66. Here, “direct” and “indirect” caregiving activities can be usefully distinguished. “Direct care” refers to active interactions between a care-provider and a care-recipient (such as feeding, bathing, dressing, providing medical care, accompanying places), as well as “passive” / “supervisory” responsibilities expressed in caregiver proximity and availability to intervene in case of need. “Indirect” care work refers to the provision of services (such as cooking, cleaning, laundry, household maintenance and management) which underpin daily life, and form the pre-conditions for direct caregiving.\(^{42}\)

67. The category of direct care may be further sub-divided to distinguish “active” dimensions of caregiving (such as feeding, bathing, dressing, providing medical care, accompanying places), and “passive” / “supervisory” dimensions, expressed in caregiver presence, availability, and readiness to respond. The multi-dimensional character of caregiving is acknowledged in the ICATUS-16 scheme, to which the ILO light time-use tools and guidance are aligned. ICATUS-16 distinguishes active form passive dimensions of caregiving for both children and adults.\(^{43}\)

68. This multi-dimensional concept of caregiving has several, important implications for the operationalisation of OPS activity cluster (iv) “childcare and instruction, transporting and caring for elderly, dependent or other household members and domestic animals or pets, etc.”

69. “Passive” or “supervisory” dimensions of caregiving have been shown to be highly prone to under-reporting. Often taken-for-granted by respondents as a background constant, passive care corresponds to a particular “state of mind”\(^{44}\), expressed in being present, attentive, available, watchful.\(^{45}\)

70. Understood as a “state of being”, rather than of “doing”, time spent on passive care is especially prone to omission or misrepresentation when measurement tools operationalise caregiving as a series of discrete, isolated activities.\(^{46}\)

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\(^{46}\) Carrasco and Serrano (2011) draw attention to the parallels with certain occupations, where a part –sometimes the major part – of employment time is acknowledged to involve a state of being “on call”, and is recognised, recorded, and remunerated indivisibly from more “active” aspects of the work. Cristina Carrasco & Mónica Serrano (2011) “Lights and Shadows of Household Satellite Accounts: The case of Catalonia, Spain”. Feminist Economics, 17:2, 63-85, DOI: 10.1080/13545701.2011.573463
Adequate measurement of passive dimensions of caregiving requires the inclusion of additional survey items, increasing the interview duration. While minimising respondent burden is a motivating factor in the development of the OPS modules, the inclusion of items to record passive care dimensions is justified by the scope for exclusion to deflate estimates of overall time allocations to care-giving. The ILO OPS module's treatment of passive/supervisory care is aligned to the UNSD provisional definition of supervisory care.

Box 1 reproduces the UNSD provisional definition of supervisory care.

Box 1: Provisional statistical reference concept for supervisory care

"Unpaid supervisory care refers to the time the caregiver is in hearing or visual proximity to a dependent household or family member to provide unpaid caregiving services, should such need arise. The provision of supervisory care does not require the active involvement implied in the provision of those caregiving services where an interaction between the caregiver and dependent household or family member is needed. Supervisory care may occur at any location where the dependent household or family member is present and in close proximity with the caregiver. There is no requirement for bodily proximity of the caregiver with the dependent household and family member, such as being in the same room. More specifically, the provision of unpaid supervisory care includes:

- Time when the caregiver engages in other activities in parallel, including remunerated activities listed in ICATUS-2016 Major Division 1, provided the caregiver remains accessible and in proximity should the need to provide caregiving services arise.
- Time when the dependent household or family member is engaged in activities alone, including sleeping.
- Time when the caregiver is not necessarily interacting with the dependent household or family member- but is ‘on-call’ should unpaid caregiving services be needed. This includes personal activities, such as sleeping.
- Unpaid supervisory care comprises hours related to being on call for the direct provision of unpaid caregiving services. It is classified as an activity under Group 416 (minding children) and 425 (passive care for dependent adults) ...it excludes time spent on [other] productive activities falling under ICATUS 2016 Major Division 4, including help to non-dependent household and family members (Division 43)".

In addition to the focus on the measurement of simultaneous caregiving, gaps and/or redundancies in the pre-coded listing and contextual items at the data input and analysis phases were a focus for the refinement of the tools, as was the performance of a fixed episode approach to recording the timing and duration of activities in the light diary tools.

More generally still, respondent comfort with “clock time” and the fungibility of alternative temporal frameworks was explored.

6.2 Aspects of field operations prioritized for testing.

In relation to survey fielding, the workability of alternative schemes to minimise non-response was a key site of testing.

Time-use surveys usually impose additional requirements for the timing and distribution of field operations in comparison with standard household sample surveys. This is because, in addition to generating a probabilistic sample of persons, the sample design will often also

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47 Provisional definition developed by the United Nations Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics (EG-TUS) sub-group on the measurement of supervisory care.
be required to generate a probability sample of days. Failure to do so may bias estimates of population-level time-use.

77. In practice, a probability sample of days of the week is achieved by the randomised pre-assignment of each sample unit to one or more designated “diary days”. In the case of retrospective “yesterday” diaries, the random assignment of respondents to designated diary days directly conditions the survey participation day (i.e., the day immediately following the diary day). Sample units assigned to report on Monday’s time-use must be surveyed on Tuesday, those assigned to report on Tuesday’s time-use must be surveyed on Wednesday, and so on.

78. While it is relatively straightforward to extend the sample design to obtain a probability sample of days of the week (often supported by adjusted sample weights), the designation of a specific diary day presents challenges for survey operations. Upholding the design increases the time and effort required to obtain a complete response, since a proportion of sampled individuals will be unavailable, unable, or unwilling to participate in the survey on their assigned day.

79. In many household sample surveys proxy-reporting (whereby a household member provides information for other eligible household members) is permitted to reduce the number of contact attempts required to obtain a response. The use of proxy-reporting is discouraged in existing international guidelines on time-use measurement, as the risks of information loss and inaccurate reporting for time-use are substantial.

80. Taken together, the twin requirements for direct reporting and pre-assignment of reporting day can present serious challenges when it comes to obtaining sufficiently high response rates, presenting its own risks for data quality, via non-response bias. In a modular design, this may risk undermining response rates for the parent survey in addition to the time-use module, depending on the mode of attachment.

81. Various strategies have been proposed to reduce the challenges imposed by the designated diary day feature.

82. As summarised in table four, below, some strategies retain the designated diary day feature in modified form, while others relax or even dispense with it completely. Each strategy involves trade-offs in exposure to selection bias, measurement error, and the complexity and costs of field operations.

83. Two strategies were selected for pilot testing. The first combined postponement of up to seven days (maintaining the original day of week assigned), with some restricted substitution (substitute days were probabilistically assigned at the sampling stage when sampled households were probabilistically assigned to days of the week).

84. The second strategy commenced identically, with households probabilistically assigned to an initial day of the week, but more flexibility was permitted at the pending recovery stage, meaning interviews could be rescheduled flexibly.

85. In both cases, interviewers were directed to make an initial appointment and to schedule the timing of interviews on the designated day around the respondent’s availability. The sample was randomly assigned to one of the two pending recovery conditions.

86. Table four summarises the available designated diary day strategies.

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48In practice, data collection for the core LFS modules may make use of proxy response
49For example, UN 2005: 90
50Earlier research has found that response probability for time-use surveys varies systematically with individual demographics and characteristics, impacting time-use estimates (e.g., Abraham, Matilien, and Bianchi, 2006; Fricker and Tourangeau, 2010, Abraham, Helms, and Presser 2009, Van Ingen, E., Stoop, I., and Breedveld, K. (2011).
### Table 4: Comparison of available interview scheduling strategies.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Diary day selection</th>
<th>Diary day substitution</th>
<th>Selection bias</th>
<th>Measurement error</th>
<th>Field operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Postponement</td>
<td>Designated</td>
<td>7-day deferral</td>
<td>Scope for bias</td>
<td>No direct impact</td>
</tr>
<tr>
<td></td>
<td>(Probabilistic</td>
<td>(Diary day</td>
<td>(Diary day</td>
<td>originating in non-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sampling)</td>
<td>maintained)</td>
<td>maintained)</td>
<td>response if non-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>contact is</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>correlated to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>designated day</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Extension of</td>
<td>Designated</td>
<td>Reporting day</td>
<td>No direct impact</td>
<td>Heightened risk of recall error as reference period extends</td>
</tr>
<tr>
<td></td>
<td>reporting period</td>
<td>(Probabilistic</td>
<td>deferral</td>
<td></td>
<td>Minimal impact to standard field operations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sampling)</td>
<td>(Diary day</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maintained)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Substitution:</td>
<td>Designated</td>
<td>Alternate day,</td>
<td>Random assignment</td>
<td>No direct impact</td>
</tr>
<tr>
<td></td>
<td>Pre-assigned day</td>
<td>(Probabilistic</td>
<td>pre-designated</td>
<td>of an alternate diary day minimises scope for substitution related selection bias</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>sampling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Postponement with</td>
<td>Designated</td>
<td>7-day deferral</td>
<td>Scope for bias</td>
<td>No direct impact</td>
</tr>
<tr>
<td></td>
<td>Substitution:</td>
<td>(Probabilistic</td>
<td>(Diary day</td>
<td>originating in non-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-assigned day</td>
<td>sampling)</td>
<td>maintained)</td>
<td>response if non-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>contact is</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>correlated to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>designated day</td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>Substitution:</td>
<td>Designated</td>
<td>Alternate day,</td>
<td>Introduces selection bias for non-contact conversion units, originating in systematic differences in time-use for convenience sampled days vs non-contact designated day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Convenient day</td>
<td>(Probabilistic</td>
<td>convenience</td>
<td></td>
<td>No direct impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sampling)</td>
<td>sampled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5b</td>
<td>Convenience sample</td>
<td>Convenient</td>
<td>Alternate day,</td>
<td>High likelihood of selection bias across sample, originating in systematic differences in time-use for convenience sampled days vs other days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of days</td>
<td>(non-probabilistic</td>
<td>convenience</td>
<td></td>
<td>No direct impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sampling)</td>
<td>sampled</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Pilot instrument development and testing

87. Based on a review of country practices, and taking account of the existing evidence base, three alternative time-use measurement modules were developed for testing. Two modules adopted the light diary format – with variability limited to their treatment of activities performed simultaneously. The third module was a stylised diary analogue. All tools underwent several phases of refinement, across repeated phases of piloting.

88. The pilot strategy proceeded from intensive qualitative research (rapid ethnographic assessment and cognitive interviewing) to randomised survey experiments (utilising a between subject design). The separate study phases were intended to inform and evaluate key decision points in the design of the different module formats, the enumerator guidelines, and broader features of sample design and field operations.

89. Piloting was undertaken in India and Lesotho. In addition, a smaller scale trial of the light diary tool was undertaken in Indonesia. For the survey experiment phases in each country, geographies were purposively selected and then stratified by urban, rural, and “remote” locations. Within strata, primary sampling units, households, and individual respondents were purposively selected. A balanced design was adopted, with randomisation to experimental arm at the level of PSU (50% of PSUs allocated to each arm). Full details of each pilot phase are provided in a separate report.51 Table 5 summarises the different pilot phases.

Table 5: Pilot testing phases and objectives

<table>
<thead>
<tr>
<th>Pilot phase</th>
<th>Location</th>
<th>Timing</th>
<th>Main objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rapid Ethnographic Assessment</td>
<td>India (Haryana state) (Three field sites:</td>
<td>December 2021</td>
<td>• Identify potential for reporting gaps</td>
</tr>
<tr>
<td>(REA)</td>
<td>urban / rural / “remote”)</td>
<td></td>
<td>• Assess salience of “passive” care responsibilities and clock-time</td>
</tr>
<tr>
<td>2. Cognitive Interviewing</td>
<td>Indonesia (Three field sites: urban / rural /</td>
<td>August 2022</td>
<td>• Assess respondent comprehension, recall, retention, interpretation, and salience</td>
</tr>
<tr>
<td>(CI) n = 50</td>
<td>“remote”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Small-scale trial n = 910</td>
<td>Indonesia (Three field sites: urban / rural /</td>
<td>October - November</td>
<td>• Assess comprehensiveness of pre-coded activity list &amp; contextual items</td>
</tr>
<tr>
<td></td>
<td>“remote”)</td>
<td>2022</td>
<td>• Trail CAPI tool</td>
</tr>
<tr>
<td>3. Survey Experiment 1 n = 1,960</td>
<td>India (Haryana state) (Three field sites:</td>
<td>November - December</td>
<td>• Evaluate performance of alternative pending recovery strategies</td>
</tr>
<tr>
<td></td>
<td>urban / rural / “remote”)</td>
<td>2022</td>
<td>• Evaluate performance of global simultaneity field</td>
</tr>
</tbody>
</table>

51ILO (forthcoming, October 2023)
4. Survey Experiment 2  
   n = 1,120  
   Lesotho (Three field sites: urban / rural / “remote”)  
   November - December 2022  
   • Assess concordance of light diary and stylised estimates

6. Validation Exercise (CI)  
   n = 28  
   Lesotho (Two field sites: urban / rural)  
   August - September 2023  
   • Validate updates to item and script wording

7. Expert Review  
   Global  
   August - September 2023  
   • Subject tools to expert scrutiny

NB: Planned timings for field piloting were severely impacted by the COVID-19 pandemic, resulting in a concentration of activities in line with easing of restrictions on travel / social mixing.

90. All pilot time-use modules were designed for face-to-face interviewer administration. A CAPI (computer aided personal interviewing) tool was developed in CS Pro software by the ILO.

91. Table six summarises the key features of the three time-use modules developed for testing.

**Table 6: Key features of the light time-use modules developed for piloting.**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Summary details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode (all three instruments)</td>
<td>Face-to-face interviewer administered</td>
</tr>
<tr>
<td>Administration (all three instruments)</td>
<td>CAPI, CS Pro</td>
</tr>
<tr>
<td>Reference period (all three instruments)</td>
<td>One 24-hour day, “yesterday” from 04:00 to 04:00</td>
</tr>
<tr>
<td>Reference day assignment (all three instruments)</td>
<td>Probabilistic assignment of sampled households to days of week in advance</td>
</tr>
<tr>
<td>Pending recovery strategy (Experimental group one)</td>
<td>Postponement (+7 days) or substitution (pre-specified substitution day)</td>
</tr>
<tr>
<td>Pending recovery strategy (Experimental group two)</td>
<td>Convenience-based substitution (no specified substitution day, but day after designated day barred)</td>
</tr>
</tbody>
</table>
| Respondent sampling (within household)       | One eligible couple-dyad (probabilistically sampled in households with more than one eligible couple (Pilot experiment one)  
|                                              | Or Probabilistic sampling of one household member (Pilot experiment two)         |
| Activity timing (light diary instruments)    | Fixed episodes (96 x 15-minute episodes)                                         |
| Activity coding (light diary instruments)    | Respondent narrates diary day verbatim. Interviewer selects from between 35 and 50 pre-coded activities (depending on pilot version) + “other, specify” (aligned to the UN International Classification of Activities for Time-use Statistics 2016 (ICATUS-16) coding scheme) |
| Activity coding (stylised instrument)        | 27 direct question items on participation in and (conditional on participation) volume of time spent on select activities (aligned to ICATUS-16) |
| Contextual items (light diary instruments)   | Five conditionally activated contextual items targeted for pilot testing (location, co-presence, beneficiary, job linkage, income generation) |
| Treatment of supervisory / passive care time (light diary instruments) | Dedicated recovery series activated on completion of the diary day. Separate items target supervision / passive care of children and adults |
| Treatment of simultaneity / multi-tasking (One of two light diary instruments) | Multiple activities recorded as occurring simultaneously (i.e., during one or more of the same 15-minute episodes). |

92. Use of CAPI, together with the pre-coding of activities and the use of fixed episodes of time, results in a much faster turn-around time from data collection to analysis and dissemination. It also has potential to minimise data entry error. The pilot time-use modules included several
features to reduce erroneous or missing data fields (including restrictions on data entry format, automated updates and warning flags activated for incongruous entries).

93. The pilot time-use modules were embedded within a wider pilot survey reproducing standard LFS items. The objective was to contextualise the questions contained in the TU modules for respondents and support meaningful analysis of TU module performance within a national LFS.

94. In the case of the light diary instruments, the time-use modules recorded everything the respondent reported that s/he did on her/his diary day. The diary day was divided into 96 consecutive and non-overlapping fixed episodes of 15-minutes, from 4am on the day preceding the interview until 4am on the day of the interview.

95. The initiation of the diary day at 4am is a standard convention in time-use research (an alternative convention is to begin at 12midnight). Generally – but not always – respondents are asleep at 4am so the diary “catches” the start of the waking day.

96. The light diary modules began by asking respondents to recall what they were doing at 4am. Once the activity was recorded (selected from the drop-down menu), the respondent was asked “until when” they did this activity. The start time of each activity was automatically updated in the question wording, based on the end-time entered for the prior activity. The end-time of the activity was recorded to the nearest 15-minute interval on a drop-down menu, which automatically updated to exclude episodes prior to each activity start time.

97. The adoption of fixed episodes in place of open episodes represented a trade-off between different aims. A fixed episode approach limits scope to record activities lasting for less time than the episode (or exaggerates their duration if recorded). However, it dispenses with the need for interviewers to manually enter end times in hours and minutes (removing an important potential for interviewer error) and simplifies data cleaning and analysis considerably. This approach relies on consistency in interviewer practices, with rules for the coding of activities with duration of less than 15-minutes, and for rounding up/down to the nearest interval.

98. The pilot time-use modules were designed to comprehensively record respondents’ time-use for one 24-hour day. The modules were programmed with a drop-down menu of between 35 and 50 pre-coded activities (depending on the pilot phase), along with an option for “other, specify”, featuring an open field to record activities that did not fit the pre-specified codes.

99. Codes were aligned to the UN ICATUS-16 scheme at the two- or three-digit level, with all nine of the ICATUS major divisions represented. The level of disaggregation for the pilot activity codes varied by activity domain, with a greater number of codes dedicated to priority domains and/or domains known to be prone to under-counting, and fewer codes assigned to domains less prone to measurement error and/or of lower substantive priority for the measurement objectives.

100. For purposes of comparison, one of the two light diary pilot instruments permitted only a single activity to be recorded for each fixed episode. The other permitted multiple simultaneous activities to be recorded, via a dedicated questionnaire item “were you doing anything else while you were [spontaneously reported activity]”.

101. This item was included to permit multi-tasking to be recorded, given the large body of pre-existing research indicating this strategy supports reporting of otherwise unacknowledged caregiving within OPS work.

102. Interviewer training undertaken as part of the pilot exercises highlighted that care must be taken to ensure that only genuinely simultaneous activities were recorded for the same episode(s) of time, with interruptions to an activity recorded sequentially. The trade-
offs in information gain versus respondent burden, interview duration, and the complexity of the resulting data were a priority area for comparison.

103. In addition to the record of daily activities, “contextual information” was recorded to support correct assignment of respondents’ time-use to higher level activity domains.

104. There is evidence that contextual items may also aide respondent recall, particularly items probing location and co-presence of others. The pilot light diary time-use modules included five conditional context items. Context items were activated only when a coded activity was eligible for classification to multiple higher-level domains. The five conditional context items included in the pilot instruments were: location\(^{52}\); co-presence / with whom; for whom / beneficiary; job linkage; income generation. With reference to the 19th ICLS standards, these contextual items can allow activities to be distinguished between the different forms of work, for example caring for children could be employment (if done for pay or profit), volunteer work (if caring for non-household or family members without pay), or own-use provision of services (if caring for household or family members without pay).

105. The activation of the contextual items was tailored to the activity reported. For time spent sleeping, only location was recorded (the omission of the “with whom” item for sleep time may result in an under-estimation of passive care time, however, the question can be received as intrusive and undermine the interview interaction at an early stage).

106. The recovery series on passive care time did permit passive care time to be recorded during times when the respondent was asleep. For all other activities, “location” and “with whom” were recorded. The contextual items “for whom”, “job linkage”, and “income generation” activated only when required to correctly classify activities to higher-level domains.

107. Common to both light diary tools, a “supervisory” or “passive” care recovery series was designed to correct for known under-reporting of supervisory or background / on-call unpaid caring responsibilities. This series prompted respondents to recall time when s/he was watching over, or supervising “dependents”, but not directly interacting with them.

108. The passive care recovery series asks first about whether and if so when the respondent had supervisory / passive care responsibilities for children household or family members (anyone aged under 17 and younger). These questions are then repeated with reference to adult household or family members (aged 18 and over) who require assistance or help from others to undertake daily activities due to illness, injury, frailty, or disability. The recovery sequence was activated only once the diary day has been fully filled out. A separate roster permitted the timing, sequencing, and duration of supervisory / passive care episodes to be recorded in 15-minute fixed episodes, along with the corresponding diary activity/ies. Lastly, a short quality audit series asked respondents to confirm – and revise if desired – the timings of key points throughout the diary day (wake up time / bedtime / mealtimes).

109. In the case of the stylised time-use module, a diary analogue approach was adopted. This meant that the instrument covered – at varying levels of detail – all major “activity domains”. A total of 27 activities were listed to develop an accounting of respondents’ time-use for the reference day. The objective was to assess concordance with the diary tool across activity domains, while also minimising risk for social desirability bias inherent in asking about time spent on a single domain of interest.

\(^{52}\)The location item includes a quality control feature to limit under-reporting of travel time (a known tendency in recall diaries). If the interviewer codes a change in location in the absence of an intervening travel episode, for instance, a respondent reports being at home readying a child for school [Location: Own home] and next reports employment [Location: Office], a warning will activate, requiring the interviewer to probe for intervening travel episodes.
The stylised module asked respondents if they had participated in each activity in turn during the preceding day, and – if so – how long they had spent on it. Duration was recorded in minutes (if less than 60 minutes) or hours and minutes (if more than 60 minutes). Contextual items (excepting that specified in the wording of the activity) and simultaneity are not compatible with the stylised approach, marking a key site of divergence from the light diary modules. Only participation and volume measures were recorded, since sequencing, frequency, and timing of activities are not compatible with the stylised format. Effort was made to separately account for active and passive care time in the question wording.

Common across both the stylised and light diary tools, a short “typical day” series asked respondents to report whether the diary day reported in the survey is unusual in any way. This series permitted any apparent anomalies in the resulting data to be contextualised. Similarly, all respondents were asked the time at the commencement of the individual interview as a means to assess their familiarity and ease with clock time. The interviewer recorded the response and the means by which the respondent told the time (e.g., reference to a watch, clock, mobile phone /electronic device, an external schedule or timetable, the position of the sun, etc.).
8. Labour force survey light time-use add-on module

8.1 LFS add-on modules for measurement of OPS key features

112. This section summarises the key features of the final LFS add-on light diary module in advance of publication later this month. The current version of the module is provided in appendix one.

113. At the time of writing, finalisation of the module is proceeding on the basis of a recently completed validation exercise and an independently coordinated expert review.

114. Table seven summarises the final module design. The final module will be available in CSPro software for CAPI administration. It has been developed for interviewer administration.

Table 7: Key features of the LFS add on module for the measurement of OPS (hybrid light diary format)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Summary details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>Hybrid light diary</td>
</tr>
<tr>
<td>Target population</td>
<td>Identical with population for labour force survey (working age population, 15 years old and above), no limitations imposed on labour force status or other characteristics</td>
</tr>
<tr>
<td>Mode</td>
<td>Face-to-face interviewer administered</td>
</tr>
<tr>
<td>Administration</td>
<td>CAPI, CSPro</td>
</tr>
<tr>
<td>Reference period</td>
<td>One 24-hour day, “yesterday” 04:00 to 04:00</td>
</tr>
<tr>
<td>Reference day assignment</td>
<td>Probabilistic assignment of sampled households to days of week in advance</td>
</tr>
<tr>
<td>Pending recovery strategy</td>
<td>Substitution (pre-specified substitution day) protocols developed as part of allied implementation guidance</td>
</tr>
<tr>
<td>Respondent sampling (within household)</td>
<td>Minimum of one eligible household member (probabilistically sampled) Countries may adopt other intra-household sample designs, e.g., couple dyad / all eligible members.</td>
</tr>
<tr>
<td>Activity timing</td>
<td>Fixed episodes (96 x 15-minute episodes)</td>
</tr>
<tr>
<td>Activity coding</td>
<td>Respondent narrates diary day verbatim. Interviewer selects from 40 pre-coded activities + “other, specify”. Codes aligned to the UN International Classification of Activities for Time-use Statistics 2016 (ICATUS-16) coding scheme.</td>
</tr>
<tr>
<td>Contextual items</td>
<td>Four conditionally activated contextual items (location / reason for travel, co-presence, beneficiary, market orientation) to support assignment to forms of work / ICATUS-16 major divisions</td>
</tr>
<tr>
<td>Treatment of simultaneity / multi-tasking</td>
<td>Optional fields to record multiple activities as occurring simultaneously (i.e., during one or more of the same 15-minute episodes).</td>
</tr>
<tr>
<td>Treatment of supervisory / passive care</td>
<td>Dedicated recovery series activated on completion of the diary day. Separate items target supervision / passive care of children and adults</td>
</tr>
</tbody>
</table>

115. The piloting indicated that the pre-assignment of diary days (with some flexibility to substitute) was feasible, providing advance visits to households could be made and repeat-visits (up to three) allowed for. Substitution protocols and recommendations will be published as part of implementation toolkits.

116. The final tool retains the closed-episode design, with the diary day divided into 96 15-minute episodes. The drop-down menu CAPI feature to select “end-time“ for each activity proved effective. The latest piloting of the light diary indicated strong performance of the 15-minute
interval. Overall, 38% of all activities were recorded within a single 15-minute interval. Indicating that significant information would be lost if a longer minimum interval were selected. A further 28% of activities were of 30-minute duration. The mean duration of a reported activity was 38 minutes (waking time) and 54 minutes (all time, including sleeping).

117. Piloting enabled the pre-coded activity listing to be refined. A maximum of 50 activities were included in the pilot designs tested. Just 0.2% of activities were reported as “don’t know / can’t remember”. 0.3% of activities were recorded as “other, specify” (manually assigned to the correct pre-coded activity prior to analysis). The final activity list contains 40 activities, accessed via a drop-down menu. Activities may be refined as part of national adaptation of the tool. Interviewer training is crucial to enable fast navigation and ease of classification in real time. Guidelines and interviewer training manuals will be released as part of the implementation toolkit. The table in appendix 1 summarises the activity listing, aligned to ICATUS-16.

118. On the basis of piloting, the number of conditionally activated context items was streamlined from five to four. The remaining context items include: location / reason for travel, co-presence, beneficiary, and market orientation). The context item “reason for travel” is a recent addition, implemented to streamline data cleaning and analysis. In the absence of this item, travel episodes must be assigned manually during data analysis.

119. The final module includes optional fields to record multiple activities as occurring simultaneously (i.e., during one or more of the same 15-minute episodes). This field was found to perform well in identifying OPS activities (particularly childcare). However, the inclusion of this item results in a more complex data structure. For this reason the item is marked “optional for countries”. Implementation guidance on managing the data files (and for conversion from raw “episode” to “summary” data files) is provided as part of the implementation toolkit.

120. Targeted stylised probes are included in the LFS add-on light diary modules to recover “supervisory” or “passive” caregiving responsibilities. The direct probes are sequenced after initial diary completion, with newly recalled / reported activities flagged as recovered items in the diary record. There are two sequences. The first targets passive care of children and the second passive care of adults. The retention of these probes was justified on the basis of piloting. Up to 30% more caregiving time was identified when the probes were included.

121. The final version of the module is being subjected to a final round of testing to ensure the revisions made to the pilot versions perform as anticipated. Once concluded, the final version of the module – together with allied national adaptation and implementation guidance will be made available as part of the ILOs LFS resources.

Available at ILO (2023) Labour Force Survey Resources
9. Conclusions and points for reflection

122. Participants in the Conference are invited to indicate their support for the continuation of the ILO’s work to support countries to integrate light time-use measurement within their LFS programmes, in order to improve the measurement of OPS work alongside other forms of work.

123. Participants are invited to indicate interest in implementing the new modular tools for the measurement of OPS.
### Appendix 1: LFS add-on module: pre-coded activity list aligned to ICATUS-16

<table>
<thead>
<tr>
<th>ACTIVITY DOMAIN (ICATUS-16)</th>
<th>ACTIVITY CODE</th>
<th>ICATUS-HIERARCHICAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment and related activities</td>
<td>1 Sleeping or napping</td>
<td>ONE</td>
</tr>
<tr>
<td>Production of goods for own final use</td>
<td>2 Personal hygiene and health</td>
<td></td>
</tr>
<tr>
<td>Unpaid domestic services for household and family members</td>
<td>3 Eating or drinking</td>
<td></td>
</tr>
<tr>
<td>Unpaid caregiving services for household and family members</td>
<td>4 Cooking, baking, preserving, serving meals, snacks, beverages + related tasks (cleaning dishes, storing food and drinks)</td>
<td></td>
</tr>
<tr>
<td>Volunteering (Direct and Organisation based)</td>
<td>5 Manufacturing, processing foods, beverages, herbs, medicines, tobacco</td>
<td></td>
</tr>
<tr>
<td>Trainee and other unpaid work</td>
<td>6 Consumer and personal services</td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>7 Enabling children, young people, adults to learn</td>
<td></td>
</tr>
<tr>
<td>Socialising and communication, community participation and religious practice</td>
<td>8 Care, leisure, mass-media, sports practices</td>
<td></td>
</tr>
<tr>
<td>Culture, leisure, mass-media, sports practices</td>
<td>9 Self-care and maintenance</td>
<td></td>
</tr>
</tbody>
</table>

#### ICATUS DIRECTORY

<table>
<thead>
<tr>
<th>ACTIVITY CODE</th>
<th>ICATUS-HIERARCHICAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONE</td>
<td>THREE</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

#### LFS add-on module:
- **OWN use provision of services**
- **add-on module**
- **pre-coded activity list**
- **aligned to ICATUS-16**
LFS add-on OPS modules

Conventions used in the ILO model LFS questionnaires for CAPI

- Regular text: Indicates text to be read by the interviewer
- *Italics*: Indicates interviewer instructions or aids, not to be read aloud
- **CAPS**: INDICATES RESPONSE CATEGORIES AND FILTERS NOT TO BE READ OUT LOUD
- (Parenthesis): Indicates that a choice or a substitution must be made
- **Red text**: Indicates overall filter groups to be asked a question/set of questions, related instructions, or other guidance to the developer
- [Blue text within square brackets]: Indicates text to be adapted as per national circumstances
- **Bold text**: Indicates question numbers, section headings, skips, other structural items
### OBJECTIVES AND SCOPE
- To record the timing, duration, and sequencing of all activities undertaken by persons over a 24-hour reference period
- To accurately classify and characterise activities undertaken by persons over a 24-hour reference period
- The sequence is aligned with the 19th ICLS standards (2013), the UN ICATUS (2016), and the SNA (2008)
- This module marks the start of the personal hybrid light diary covering a period of 24 hours from 04:00 on the day prior to the interview until 04:00 of the day of the interview.

### IMPLEMENTATION NOTES
- To be asked of one probabilistically sampled eligible household member
- Proxy reporting is NOT permitted for module LDB_
- The 24-hour reference period is divided into 96 x 15-minute time slots. Start and end times are recorded by selection of the corresponding 15-minute episode. Intervening episodes are filled automatically.
- 40 pre-coded activities are listed on page 7.
- Additional contextual information fields are automatically activated for selected activities.
- Two global variables (LDB_TSS, LDB_TSE) are created as pre-filled variables to direct the interview flow and inform calculation of additional background variables (not shown here for ease of navigation)
- Items LDB_1B, LDB_6, LDB_6A, and LDB_7 record simultaneous activities. These are optional for countries.

### LDB_1

**INTERVIEWER TO READ INTRO TEXT:**
The purpose of the next section of the survey is to create a snapshot of daily life in [COUNTRY]. That is, how people spend their day – the things they do, the places they go, and the responsibilities they have.

Information about how people spend their time on a day-to-day basis is very important to help plan services needed in the local area, as well as national policies and schemes.

I’m going to ask you about what you did yesterday. We will start with what you were doing at 4am yesterday morning. We begin at 4am because people are often asleep at that time. This allows us to capture the start of the waking day.

Please tell me what you did yesterday in the order that you did it. Try to tell me as much detail as you can about what you were doing, where you were, and who was with you throughout the day.

Thinking about yesterday, what were you doing at [4am...]? [SELECT FROM PRE-CODED ACTIVITIES]

**Note for CAPI:** Subsequent loops: And what did you do next...?
Until when?
[SELECT FROM DROP-DOWN LIST OF 15-MINUTE TIMESLOTS]

### LDB_CHK
**Note for CAPI:** If respondent was **not** sleeping [LDB_1 NE 01] at 04:00, ask:
What time did you wake up yesterday?
HH:MM
9977: DID NOT SLEEP THAT NIGHT (E.G., WORKING NIGHTSHIFT)

### ASK IF LDB_1 IS NOT EQUAL TO 01 [SLEEPING]

### LDB_1B
Were you doing anything else at the same time as you were [LDB_1]?
**Note for CAPI:** CONSTRAIN TO ONE ACTIVITY PER 15 MINUTE SLOT
[SELECT FROM PRE-CODED ACTIVITIES]

**Note for CAPI:** ACTIVATE ONCE ONLY [FIRST TIME THAT LDB_1B = 42 or 97]

**IF LDB_1B = 42 or 97:** Probe: For instance, were you talking with a family member, friend, or neighbour, or [looking after | minding | keeping an eye on] a child, or eating a snack, or listening to the radio, or watching television...
Until when did you [LDB_1B]?
Notes: For CAPI implementation, from second iteration onwards, LDB_TSE updates to start range from value of LDB_TSS + 1

IF LDB_1 NE 40 “TRAVEL” & IF LDB_1 NE 97 “DON’T KNOW”
Note for CAPI: LDB_2 SHOULD BE AUTO-FILLED AS 08 “IN TRANSIT” IF LDB_1 = CODE 40 “TRAVEL”

LDB_2
Where were you when you were [LDB_1]?
[FOR SECOND LOOP OF LDB_1 ONWARDS: 99. NO CHANGE IN LOCATION SINCE PRIOR ACTIVITY]
01. OWN HOME (DWELLING OR IMMEDIATE SURROUNDS)
02. OTHER PERSONS’ HOME (DWELLING OR IMMEDIATE SURROUNDS)
03. WORKPLACE
04. SCHOOL OR OTHER EDUCATIONAL ESTABLISHMENT
05. RELIGIOUS SITE / PLACE OF WORSHIP (CHURCH, MOSQUE, TEMPLE, SPIRIT HOUSE…)
06. OTHER OUTDOOR PUBLIC OR COMMERCIAL SITE (STREET, MARKET, PARK, FIELD, FOREST, POND, LAKE…)
07. OTHER INDOOR PUBLIC OR COMMERCIAL SITE (SHOP, BANK, RESTAURANT, CINEMA, MUSEUM, HOSPITAL…)
08. IN TRANSIT
09. OTHER (SPECIFY)

Note for CAPI: If location changes between iterations of LDB_1, without intervening “Travel” [LBD_1 = CODE 40] or “in transit” [LDB_2 = CODE 08], activate script: “Warning: Change in location without intervening travel time. Please enter a valid value”

IF LDB_1 = 40 “TRAVEL”

LDB_2A
What was the main reason for this travel?
01. COMMUTING FOR WAGED OR SALARIED JOB, OWN/HOUSEHOLD BUSINESS, TRAINEESHIP, VOLUNTEER WORK, STUDIES
02. OTHER TRAVEL FOR WAGED OR SALARIED JOB, OWN/HOUSEHOLD BUSINESS, TRAINEESHIP, VOLUNTEER WORK STUDIES
03. PRODUCTION OF GOODS (GROWING CROPS/RAISING ANIMALS/GATHERING FIREWOOD/FETCHING WATER…)
04. PROVISION OF SERVICES (SHOPPING, DOING LAUNDRY, PAYING BILLS, RUNNING ERRANDS…)
05. SOCIALISING / COMMUNITY PARTICIPATION / RELIGIOUS PRACTICE
06. CULTURE / LEISURE / SPORTS OR EXERCISE
07. SELF-CARE & MAINTENANCE (MEDICAL APPOINTMENTS, HAIRDRESSER / SALON VISITS, SPA TREATMENT…)
08. DROPPING OFF / COLLECTING / ACCOMPANYING HOUSEHOLD OR FAMILY CHILDREN
09. DROPPING OFF / COLLECTING / ACCOMPANYING ADULT HOUSEHOLD OR FAMILY MEMBERS
10. DROPPING OFF / COLLECTING / ACCOMPANYING OTHER CHILDREN OR ADULTS
11. OTHER

LDB_3
ASK IF (LDB_1 NE 1) & (LDB_1 NE 97) & (LDB_1 NE 40) & (LDB_2 NE 08)
Who was there with you when you were [LDB_1]? That is, close enough that you could see them, or hear them if they called for you?
ASK IF (LDB_1 NE 1) & (LDB_1 NE 97) & (LDB_1 = 40) OR (LDB_2 = 08)
Who was travelling with you?

[FOR SECOND LOOP OF LDB_1 ONWARDS: 99. NO CHANGE IN PERSONS PRESENT SINCE PRIOR ACTIVITY]
01. ALONE (INCLUDES WITH STRANGERS IN PUBLIC SETTING)
ALL THAT APPLY
02. HOUSEHOLD AS A WHOLE (INCLUDES SELF AND ALL HH MEMBERS)
03. SPOUSE
04. OTHER ADULT HOUSEHOLD OR FAMILY MEMBERS
05. OTHER ADULTS KNOWN TO RESPONDENT (E.G., FRIENDS / NEIGHBOURS / COLLEAGUES)
06. OWN CHILD(REN)
07. GRANDCHILD(REN)
08. OTHER FAMILY CHILDREN
09. OTHER CHILDREN

ASK IF LDB_3 = 06 – 08

LDB_3A
How old [is/are] [she / he / they]?
**ALL THAT APPLY**
01. UNDER 3 YEARS OLD  
02. 3 YEARS OLD TO 6 YEARS OLD  
03. 7 YEARS OLD TO 12 YEARS OLD  
04. 13 YEARS OLD TO 17 YEARS OLD  
05. 18 YEARS OR OLDER  

**ASK IF LDB_1 = 4–19, 21, 24–32, 41 OR LDB_2A = 3, 4, 8, 9**

**LDB_4**
Who did you mainly do [LDB_1] for?  
**CONSTRAIN: SELECT ONE ONLY (MAIN BENEFICIARY)**  
[FOR SECOND LOOP OF LDB_1 ONWARDS: 99. NO CHANGE SINCE PRIOR ACTIVITY]  
01. SELF  
02. HOUSEHOLD AS A WHOLE (INCLUDES SELF AND ALL HH MEMBERS)  
03. SPOUSE  
04. OTHER ADULT HOUSEHOLD OR FAMILY MEMBER  
05. OTHER ADULTS (E.G., FRIENDS / NEIGHBOURS / COLLEAGUES / STRANGERS)  
06. OWN CHILD(REN)  
07. GRANDCHILD(REN)  
08. OTHER FAMILY CHILDREN  
09. OTHER CHILDREN  
10. WAGED OR SALARIED JOB  
11. OWN-BUSINESS OR HOUSEHOLD/FAMILY BUSINESS OR OTHER INCOME GENERATION  
12. FOR A CHARITY, COMMUNITY GROUP, OR ORGANISATION  
13. HOUSEHOLD OR FAMILY LIVESTOCK  
14. HOUSEHOLD OR FAMILY PET  
15. WILD OR STREET ANIMALS / NATURAL ENVIRONMENT  
16. OTHER: SPECIFY  

**ASK IF LDB_4 = 06 – 08**

**LDB_4A**
How old [is/are] [she / he / they]?  
01. UNDER 3 YEARS OLD  
02. 3 YEARS OLD TO 6 YEARS OLD  
03. 7 YEARS OLD TO 12 YEARS OLD  
04. 13 YEARS OLD TO 17 YEARS OLD  
05. 18 YEARS OR OLDER  

**ASK IF LDB_1 = 5, 26–32, 41 AND LDB_4 NE 10 – 12**

**LDB_5**
Are the products from [LDB_1] intended...?  
01. ...Only for sale  
02. ...Mainly for sale  
03. ...Mainly for family use  
04. ...Only for family use  

**ASK IF LDB_1B = 4–19, 21, 24–32, 41**

**LDB_6 [OPTIONAL FOR COUNTRIES]**
Who did you mainly do [LDB_1B] for?  
**CONSTRAIN: SELECT ONE ONLY (MAIN BENEFICIARY)**  
[FOR SECOND LOOP OF LDB_1B ONWARDS: 99. NO CHANGE SINCE PRIOR ACTIVITY]  
01. SELF  
02. HOUSEHOLD AS A WHOLE (INCLUDES SELF AND ALL HH MEMBERS)  
03. SPOUSE  
04. OTHER ADULT HOUSEHOLD OR FAMILY MEMBER  
05. OTHER ADULTS (E.G., FRIENDS / NEIGHBOURS / COLLEAGUES / STRANGERS)  
06. OWN CHILD(REN)  
07. GRANDCHILD(REN)  
08. OTHER FAMILY CHILDREN
09. OTHER CHILDREN
10. WAGED OR SALARIED JOB
11. OWN-BUSINESS OR HOUSEHOLD/FAMILY BUSINESS OR OTHER INCOME GENERATION
12. FOR A CHARITY, COMMUNITY GROUP, OR ORGANISATION
13. HOUSEHOLD OR FAMILY LIVESTOCK
14. HOUSEHOLD OR FAMILY PET
15. WILD OR STREET ANIMALS / NATURAL ENVIRONMENT
16. OTHER: SPECIFY

ASK IF LDB_6 = 06 – 08
LBB_6A [OPTIONAL FOR COUNTRIES]
How old [is/are] [she / he / they]?
01. UNDER 3 YEARS OLD
02. 3 YEARS OLD TO 6 YEARS OLD
03. 7 YEARS OLD TO 12 YEARS OLD
04. 13 YEARS OLD TO 17 YEARS OLD
05. 18 YEARS OR OLDER

ASK IF LDB_1B = 5, 26–32, 41
LBB_7 [OPTIONAL FOR COUNTRIES]
Are the products from [LDB_1B] intended...?
01. ...only for sale
02. ...mainly for sale
03. ...mainly for family use
04. ...only for family use

END OF MODULE LDB_

OWN-USE PROVISION OF SERVICES, HYBRID LIGHT DIARY: MODULE RSB_ (RECOVERY OF SUPERVISORY CARE)

OBJECTIVES AND SCOPE
• To record persons' background supervisory and on-call care responsibilities over the 24-hour reference period

IMPLEMENTATION NOTES
• To be asked of all household members of working age. Proxy reporting is NOT permitted for module LDB_
• Administered on completion of module LDB_

RSB_0
INTERVIEWER TO READ INTRO TEXT:
“The next questions are about times when you were [supervising / minding / watching over] a child but not directly interacting with them. During these times you may have been doing other things, but you were available to respond if they needed hands-on care, guidance, or attention.”

RSB_1
Were there any times yesterday when you were [supervising / minding / watching over] a child aged under 18, staying close by – that is close enough to see or hear them – and ready to respond in case of need?
01. YES
02. NO

ASK IF RSB_1 = 1

RSB_2
When was that?
ALL THAT APPLY
➢ Drop down menu: Activities reported under LSB_1
Note: For CAPI implementation (drop-down with each activity reported as separate category – allow for multi-select)

ASK IF RSB_2 <> notappl

RSB_2A
When during [LDB_1] was that?
ALL THAT APPLY
[Select from drop-down list of 15-minute timeslots]
CONSTRAIN TO ONE RESPONSE ONLY IF CODE 97 “CONTINUOUS”
97. Continuously

*Note: For CAPI implementation, constrain time range based on [LDB_TSS] to [LDB_TSE] for LDB_1*

*Note: For CAPI implementation, separate roster to collect estimated time for RSB_2a*

**RSB_3**

What is their relationship to you?

*FOR SECOND LOOP OF LDB_1B ONWARDS: [99. NO CHANGE SINCE PRIOR ACTIVITY]*

**ALL THAT APPLY**

01. OWN CHILD(REN)
02. GRANDCHILD(REN)
03. OTHER FAMILY CHILDREN
04. OTHER CHILDREN

**IF RSB_3 NE 99**

**RSB_3A**

How old [is/are] they?

**ALL THAT APPLY**

01. UNDER 3 YEARS OLD
02. 3 YEARS OLD TO 6 YEARS OLD
03. 7 YEARS OLD TO 12 YEARS OLD
04. 13 YEARS OLD TO 17 YEARS OLD

**RSB_0**

**INTERVIEWER TO READ INTRO TEXT:**

“The next questions are about times when you were [supervising / minding / watching over] an adult household or family member who needs help with daily life - staying close by in case of need, but not directly interacting with them. During these times you may have been doing other things, but you were available to respond if they needed hands-on care or attention.”

**RSB_4**

Were there any times yesterday when you were [supervising / minding / watching over] an adult aged 18 or over who needs help with daily life, staying close by - *that is close enough to see or hear them* - and ready to respond in case of need?

01. YES
02. NO

**ASK IF RSB_4 = 1**

**RSB_5**

**When was that...?**

*Note: For CAPI implementation (drop-down with each activity reported as separate category - allow for multi-select)*

**RSB_5a**

When during [LDB_1] was that?

**ALL THAT APPLY**

[Select from drop-down list of 15-minute timeslots]

**CONSTRAIN TO ONE RESPONSE ONLY IF CODE 97 "CONTINUOUS"**

97. Continuously

*Note: For CAPI implementation, constrain time range based on [LDB_TSS] to [LDB_TSE] for LDB_1*

*Note: For CAPI implementation, separate roster to collect estimated time for RSB_5*

**RSB_6**

What is their relationship to you?

*FOR SECOND LOOP OF LDB_1B ONWARDS: [99. NO CHANGE SINCE PRIOR ACTIVITY]*

**ALL THAT APPLY**

01. HOUSEHOLD MEMBER(S)
02. FAMILY MEMBER(S) LIVING IN A SEPERATE HOUSEHOLD
03. EMPLOYER / LANDLORD
04. OTHER INDIVIDUALS / HOUSEHOLDS (FRIENDS / NEIGHBOURS / ACQUAINTENCES / STRANGERS)

**END OF MODULE RSB**
## OBJECTIVES AND SCOPE
- Identify potential explanations for atypical time-use (e.g., excessive day time sleep due to illness)

## IMPLEMENTATION NOTES
- Administered on completion of modules LDB_ and RSB_ and QDB_

### TPL_1A
Was yesterday unusual in any way, such as...?

**ALL THAT APPLY**
- 01. You worked more hours than normal in your paid job(s)
- 02. You worked fewer hours than normal in your paid job(s)
- 03. It was a festival day or the day of an event (e.g., public holiday, religious festival, wedding, christening, funeral)
- 04. It was a leave day / holiday from paid work (day-off / annual leave / other leave entitlement)
- 05. It was a school holiday for children in your care (EXCLUDE WEEKEND)
- 06. You were sick / unwell / injured
- 07. A household or family member was sick / unwell / injured
- 08. You experienced travel disruptions
- 10. OTHER: SPECIFY
- 11. NO

**IF TPL_1A = 7**

### TPL_1B
You mentioned that yesterday was unusual because a household or family member was sick / unwell / injured.

Who was that?

**ALL THAT APPLY**
- 01. SPOUSE
- 02. OTHER ADULT HOUSEHOLD OR FAMILY MEMBERS
- 03. CHILDREN AGED <=5 YEARS OLD
- 04. CHILDREN AGED 6 - 11 YEARS OLD
- 05. CHILDREN AGED 12 - 17 YEARS OLD

END OF MODULE TPL_
# OWN-USE PROVISION OF SERVICES: MODULE TAW_ (TIME AWARENESS)

## OBJECTIVES AND SCOPE
- To track variations in time awareness and availability / strategies for telling time
- Optional for countries

### TAW_1
Just before we finish, do you know what time it is now?
- HH:MM
- 97. DON'T KNOW

**Note: For CAPI implementation, programme time stamp for this item**

**ASK IF (TAW_1=97)**

### TAW_2
Do you know approximately?
- HH:MM
- 97. DON'T KNOW

**Note: For CAPI implementation, programme time stamp for this item**

**ASK IF (TAW_1 NE 97 OR TAW_2 NE 97)**

### TAW_3
**DO NOT READ: ENUMERATOR TO OBSERVE & CODE**
- 01. RESPONDENT CONSULTED WRISTWATCH OR POCKET WATCH
- 02. RESPONDENT CONSULTED MOBILE PHONE
- 03. RESPONDENT CONSULTED CLOCK
- 04. RESPONDENT ASKED SOMEONE
- 05. RESPONDENT ESTIMATED WITH REFERENCE TO WORK / SCHOOL / TEMPLE / TRANSPORT / RADIO/TV SCHEDULE, ETC.,
- 06. RESPONDENT ESTIMATED BY POSITION OF SUN / DAYLIGHT, ETC.,
- 07. OTHER, SPECIFY

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