

# Methodological considerations when conducting a time-use survey

Modular time-use measurement in labour force surveys

International Workshop on Time-Use Statistics Organized jointly by China NBS and UNSD 25<sup>th</sup> - 27<sup>th</sup> June 2024, Xi'an China

Samantha Watson, Senior Statistician International Labour Organisation watsons@ilo.org



# Methodological considerations: Modular time-use measurement in LFS

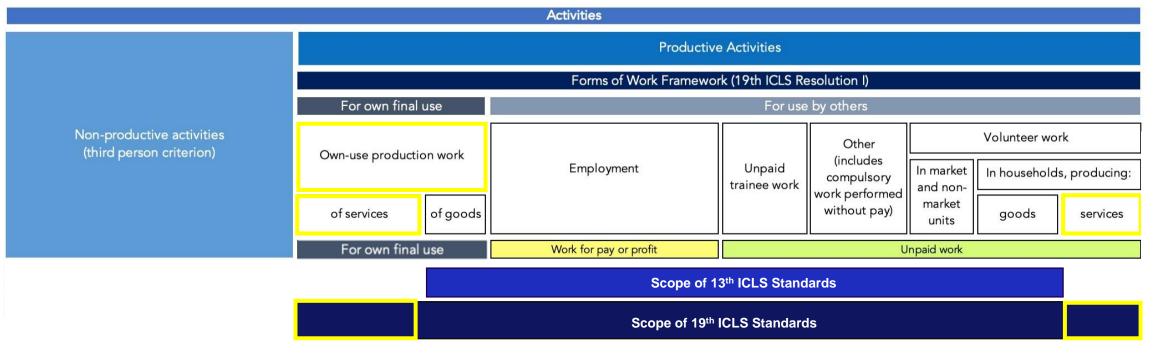
#### **Overview**

- Conceptual and methodological developments guiding measurement of OPS work
- Statistical indicators
- Module design, development, and testing
- Features of the new LFS add-on time-use modules
- Available support and resources



# Measurement of own-use provision of services work in national LFS

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



ilo.org

Advancing social justice, promoting decent work

ILO (2013) Resolution 1, 19th ICLS (2013, page 15, paragraphs 71, 74)



# Measurement of own-use provision of services work in national LFS

#### • Own-use production of goods

- (i) producing and/or processing for storage agricultural, fishing, hunting and gathering products;
- (ii) collecting and/or processing for storage mining and forestry products, including firewood and other fuels;
- (iii) fetching water from natural and other sources;
- (iv) manufacturing household goods (such as furniture, textiles, clothing, footwear, pottery or other durables, including boats and canoes);
- (v) building, or effecting major repairs to, one's own dwelling, farm buildings, etc.

**Reference period:** Four weeks or one calendar month (performed activity for at least one hour)

#### For own final use

...production where the intended destination of the output is **mainly** for final use...or final consumption by household members, **or by family members living in other households** 

Own-use provision of services

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

**Reference period:** One or more 24-hour days within a seven day or one week period.



## Measurement of own-use provision of services work in national LFS

	orms of work fram rovision of service	nework: es, Activity clusters	Corresponding ICATUS-16 Major Divisions and Divisions				
(i) Househ purchasing	9	nd/or serving meals	family memb ICATUS Divi 35: Housebo	isions at 2-digit d management ICATUS Major family members ICATUS Divisio 31: Food and m	t for own final use Division 3: Unpaid domestic services for house		
	own dwelling		nstruction, tra	ICATUS Major family members ICATUS Divisio 32: Cleaning ar 33: Do-it-yours	Division 3: Unpaid domestic services for house	dings services for ho d and family n persons relate amily member	nembers d to unpaid

In October 2023, the **21st ICLS** endorsed revisions to Resolution I of the 19th ICLS to remedy small but non-trivial differences with ICATUS-16 and to clarify the reference period for the measurement of OPS work.

- These important methodological updates are reflected in the LFS OPS modules

ILO (2023) Own-use provision of services measurement guide, ILO, Geneva, 2023: 25



## **Recommended statistical indicators (19th ICLS, Resolution I)**

#### Resolution

Resolution concerning statistics of work, employment and labour underutilization

Preamble

The 19th International Conference of Labour Statisticians, Having reviewed the relevant texts of the resolution concerning statistics of the economically active population, employment and underemployment adopted by the 13th International Conference of Labour Statisticss (1982) and the sumeshmest of its paragraph 5 adopted by the Link Conference of Collos, the resolution concerning the measurement of

adopted by the 18th Conference (2006); the resolution concerning the measurement of underemployment and andequate employment simutons adopted by the 16th Conference (1996), as well as the guidelines endorsed therein concerning treatment in employment and unemployment statistics of persons on estemated absence from work; and the guidelines on the implicitions or employment promotion schemes on the measurement of employment and unemployment, endorsed by the 14th Conference (1987).

Recalling the requirements of the Labour Statistics Convention, 1985 (No. 160), and the accomparing Labour Statistics Recommendation, 1985 (No. 170), and the need for coherence with other instrantical institution, particularly regregating the system of antonal accounts, working time, employment-telated income, child labour, status in employment and work in the informal eccounty.

Recognizing the need to revise and broaden the existing standards in order to enable better statistical measurement of participation of all persons in all directs or determs of the alcores of the economy of labour undermilization, and of interactions between different forms of work; as well as to provide malelism on a wider st of measures than previously defined interactionally, thereby enhancing the relevance and usefulness of the standards for countries and sentonies<sup>1</sup> at all stages of devidgment.

Calling attention to the usefulness of these standards to enhance the international comparability of the statistics, to their combination to the measurement of decent work and of wellbeing of households and society in general, thereby supporting and facilitating the post-2015 development agenda, as well as to the achievement of gender justice.

Acknowledging that the relevance of measures of work in a given country will depend on the nature of its society, labour markets and all user needs, and that their implementation will therefore, to a certain extent, be determined by national circumstances, and

Adopts this 11th day of October 2013 the following resolution in substitution for the resolutions of 1982 and of 2008, and for paragraphs 8(1) and 9(1) of the resolution of 1998, as well as for the guidelines from 1997 and 1998 cited above.

#### Objectives and scope

 This resolution aims to set standards for work statistics to guide countries in updating and integrating their existing statistical programmes in this field. It defines the statistical concept of work for reference purposes and provides operational concept, definitions and guidelines for:

(a) distinct subsets of work activities, referred to as forms of work;

(b) related classifications of the population according to their labour force status and main form of work

(c) measures of labour underutilization

<sup>1</sup> Hereinafter referred to as "countries".

71. A set of indicators that serves the principal objectives of the statistics should be selected by countries for dissemination according to the relevant reporting periodicities, as recommended in paragraph 56. Indicators should be computed for the population as a whole and disaggregated by sex, specified age groups (including separate categories for youth), level of educational attainment, geographic region, urban and rural areas, and other relevant characteristics taking account of the statistical precision of the estimates.

- 74. Indicators for the population of working age in own-use production work, in unpaid trainee work and in volunteer work include:
  - (a) headcounts, participation rates and volume measures by activity cluster of own-use producers of goods;
  - (b) headcounts, participation rates and volume measures by activity cluster of own-use providers of services;
  - (c) headcounts, participation rates and volume measures by programme type of unpaid trainees;
  - (d) headcounts, participation rates and volume measures by type of economic unit (market units/non-market units/households) of volunteer workers.

6

ilo.ora

Advancing social justice, promoting decent work



## **Recommended topics for data collection**

- The LFS add-on modules measure OPS within a full accounting of daily time-use, to guard against known measurement issues encountered when data collection is restricted by domain(s)
- Recommended topics for data collection using the LFS add-on module include:
- Time use activities (comprehensive domain coverage, aligned to ICATUS-16)
  - > Recommended, but optional for countries: Simultaneous activities (comprehensive domain coverage)
- Duration of activities in minutes and hours
- Contextual data (conditioned by activity)
  - ✓ Location / travel purpose
  - ✓ Co-presence
  - ✓ Beneficiary type
  - ✓ Market orientation
  - > Countries may wish to consider additional items: ICT use, affect / wellbeing, mode of transport (for reported travel episodes)
- Direct questions on passive/supervisory care for household and family members

Advancing social justice, promoting decent work



## **Recommended sampling and field operations approach**

#### Bar on proxy response for the OPS module

- > Probabilistically sampled individual(s) *must* respond directly for the OPS module (wide variation in country practices for core LFS)
- May increase the number of re-visits required to obtain a response

#### Inclusion of "time dimension" in the sample design for the time use module

- Probabilistic assignment of response units to a designated "diary" day to:
- i. Achieve a representative sample of days of the week
- ii. Avoid selection bias ("convenient-day" may systematically differ from other days)
- iii. Permit probabilities of selection to be calculated
- Probabilistic sampling of respondent(s) within households (as relevant)
  - Minimum of one respondent per [selected] household probabilistically selected to respond to the OPS module
  - May increase the number of re-visits required to obtain response
  - Balance between analytical goals, survey costs, and statistical efficiency of the survey desig
- Strict adherence pits high response rates against inflated survey costs and complexity
- Strategies for the recovery of pending interviews can resolve this tension (together with weights)



## LFS add-on modules: Key features

		Summary	/ details		
		Hybrid light diary			
Target pop	pulation		ith population for labour force survey (working age population, 15 and above), no limitations imposed on labour force status or other stics		
Mode		Face-to-fa	ce interviewer administered		
Administra	Activity timing		Fixed episodes (96 x 15-minute episodes)		
Reference			<ul> <li>Respondent narrates diary day verbatim. Interviewer selects from 4I pre-coded activities + "other, specify". Codes aligned to the UN International Classification of Activities for Time Use Statistics 2016 (ICATUS-16) coding scheme.</li> <li>Four <i>conditionally activated</i> contextual items (location, co-presence, beneficiary, market orientation) to support assignment to forms of work / ICATUS-16 major divisions</li> </ul>		
	Contextual items				
Responde	Treatment of supervisory / pas	sive care	Dedicated recovery series activated on completion of the diary day. Separate items target supervision / passive care of children and adults		
	Treatment of simultaneity / mu	lti-tasking	Optional fields to record multiple activities as occurring simultaneously (i.e., during one or more of the same 15-minute episodes).		

▶ ilo.org

Advancing social justice, promoting decent work

ILO (2023) Own-use provision of services measurement guide, ILO, Geneva, 2023:17



### LFS add-on modules: time-use diary (core)

		OPS_1: Activi	-	[OPT	"NOTHING ELSE" DPS_1B: Activity Two IONAL FOR COUNTRIES]		IF OPS_1 NE 41 "TRAVEL" OPS_2: Location	IF OPS_1 = 41 "TRAVEL" OPS_2A: Travel reason
slot	Closed episodes	Thinking back to yesterday, what were you doing at 4am? Subsequent loops: What did you do next?	Until when?	Were you doing anything else at the same time as [OPS_1]?		Until when?	Where were you when you were [LDB_1]? [FLAG ACTIVATES f location changes from one iteration of LDB_1 to another, in the absence of "Travel" episode]	What was the <u>main</u> reason for this travel?
		CODE LIST DROP DOWN MENU: pre-coded activities	DROP DOWN ROSTER: [15 minute closed episodes]	CODE LIST DROP DOWN MENU: pre-coded activities	CODE LIST DROP DOWN MENU: pre-coded activities	DROP DOWN ROSTER: [15 minute closed episodes]	CODE LIST DROP DOWN MENU	CODE LIST DROP DOWN MENU
1	04:00 - 04:15							
 96	-            03:45         -         04:00							

Items recording simultaneity, optional for countries

#### Advancing social justice, promoting decent work

Key features

- 24-hour reference (=>1 'diary days')
- 41 pre-coded activities aligned to ICATUS
- Closed time slots
- Accommodates simultaneity
- Accommodates context
- Designed for interviewer administration
- Filled retrospectively (diary day +1)
- CAPI routing streamlines navigation
- Minimises respondent burden
- Minimises processing time



## LFS add-on modules: time-use diary (recovery of supervisory care time)

			IF RSC_1 = 01 (YES)			IF RSB_C = 01 (YES)			
		Supervis	ory care, children		Supervisory care, adults				
		RSC_1	RSC_2	<b>RSC_3</b> What was their relationship to you?	RSC_4	RSC_5	RSC_6		
Но	ur	Were there any times yesterday when you were [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?	When was that?		Were there any times yesterday when you were [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?		What was their relationship to you?		
CLOS	SED	CODES:	DROP DOWN ROSTER:	CODE LIST	CODES:	DROP DOWN ROSTER:	CODE LIST		
EPISO	DES:	01: YES	[15 Minute	DROP DOWN MENU	01: YES	[15 Minute	DROP DOWN MENU		
96 x	15	02: NO	closed episodes <u>within</u>	(Multiple responses	02: NO	closed episodes <u>within</u>	(Multiple responses		
minute	e slots	97: DON'T KNOW	OPS 1 Activity Blocks]	permitted)	97: DON'T KNOW	OPS 1 Activity Blocks]	permitted)		
04:00 -	04:15								
03:45 -	04:00								

Advancing social justice, promoting decent work

ILO (2023) Own-use provision of services measurement guide, ILO, Geneva, 2023



# LFS add-on modules: Pre-coded activity listing

OPS_1 [OPS_1B]	АСТ	Ίνιτγ	LISTI	NG					
1	Slee	Sleeping or napping [OPS_1 ONLY]							
2	Pers	Personal hygiene and health							
3	Eatir	ng or d	l <mark>rinkin</mark>	g					
4	Coo	king / k	paking	g / prepa	ring / serving food or drinks / cleaning dishes)				
5	Man	ufactu	ring /	processi	ng foods, beverages, herbs, medicines, tobacco				
		aning a	nd tid	ying indo	ors				
	O	O 20 Waged or salaried employment / self-employment / paid traineeship							
8	P€	Pe 21 Helping without pay in a family or household business							
9	De	22	22 Looking for paid work or setting up a new business						
10	La	23	Unp	34	Socializing, visiting with, talking to friends / family / neighbours				
	Sł	24	Volu	35	eligious practice (individual or collective)				
	P٤		Stuc		Participating in community festivals, celebrations				
	Pr		Gro		Attending cultural / entertainment / sports events				
	Τe		Ten		Playing sports or doing exercise				
	PI		Gatl	00	Watching tv shows, movies, online media / Reading for leisure / Listening to music, radio, podcasts, online and				
	At			40 Hobbies, games, pass-times (includes resting / relaxing, "doing nothing")					
	[N		Fish	41	Travelling or commuting / Transporting or accompanying people or goods [OPS_1 ONLY]				
	Pi		Fore	42	Other: Specify				
19	[N		Con	43	NOTHING ELSE [OPS_1B ONLY]				
		33	Wea	97	DON'T KNOW				

▶ ilo.org



1 OWN HOME

2 OTHER PEI

3 WORKPLA(

4 SCHOOL O

**5 RELIGIOUS** 

6 OTHER OU

7 OTHER INC

8 IN TRANSIT

9 OTHER, SP

## LFS add-on modules: Context items (location or reason for travel)

#### OPS\_2 ACTIVITY LOCATION, CONSTRAINED TO ONE RESPONSE (DEACTIVATED IF OPS\_1 ==41 OR OPS\_2 ==8)

#### 99 [FOR SECC OPS\_2A REASON FOR TRAVEL, CONSTRAINED TO ONE RESPONSE (ACTIVATED IF OPS\_1 ==41 OR OPS\_2 ==8)

#### 1 COMMUTING FOR WAGED OR SALARIED JOB, OWN/HOUSEHOLD BUSINESS

- 2 OTHER TRAVEL FOR WAGED OR SALARIED JOB, OWN/HOUSEHOLD BUSINESS
- 3 TRAVEL RELATED TO UNPAID TRAINEESHIP, VOLUNTEER WORK
- 4 TRAVEL RELATED TO STUDIES
- 5 TRAVEL RELATED TO GROWING CROPS/TENDING LIVESTOCK
- 6 TRAVEL RELATED TO FETCHING WATER / GATHERING FIREWOOD, FUEL
- 7 TRAVEL RELATED TO OTHER PRODUCTION OF GOODS ACTIVITIES
- 8 TRAVEL RELATED TO HOUSEHOLD SERVICES (SHOPPING, DOING LAUNDRY, PAYING BILLS, RUNNING ERRANDS...)

- 9 DROPPING OFF / COLLECTING / ACCOMPANYING HOUSEHOLD OR FAMILY CHILDREN
- 10 DROPPING OFF / COLLECTING / ACCOMPANYING ADULT HOUSEHOLD OR FAMILY MEMBERS
- 11 TRAVEL RELATED TO SELF-CARE (MEAL BREAK, MEDICAL APPOINTMENT, HAIRDRESSER / SALON VISIT...)
- 12 TRAVEL RELATED TO SOCIALISING
- 13 TRAVEL RELATED TO COMMUNITY PARTICIPATION
- 14 TRAVEL RELATED TO CULTURE / LEISURE / SPORTS OR EXERCISE
- 15 TRAVEL RELATED TO RELIGIOUS PRACTICE
- 16 OTHER TRAVEL, SPECIFY



# LFS add-on modules: Context items (with whom, for whom, destination)

	WITH WHOM	OPS_4 [OPS_6]	FOR WHOM (MAIN BENEFICIARY), CONSTRAINED TO ONE RESPONSE			
			[FOR SECON	OPS_5	MARKET ORIENTATION (DESTINATION OF PRODUCT) CONSTRAINED TO ONE RESPONSE	
	ALONE (INCL		SELF	[OPS_7]	MARKET ORIENTATION (DESTINATION OF PRODUCT), CONSTRAINED TO ONE RESPONSE	
,	SPOUSE		HOUSEHOLD	1	Only for sale	
,	OTHER ADUL		SPOUSE		Mainly for sale	
,	OTHER ADUL		OTHER ADUL	0	Mainly for family use	
e)	OWN CHILD(F		OTHER ADUL	4	Only for family use	
f)	GRANDCHILD				NONE OF THE ABOVE	
g)	OTHER FAMIL		OWN CHILD(	•		
h)	OTHER CHILE		GRANDCHILI			
		8	OTHER FAMI			
		9	OTHER CHIL			
		10	WAGED OR §			
		11	OWN-BUSINE			
		12	FOR A CHAR			
		13	HOUSEHOLD			
		14	HOUSEHOLD			
		15	WILD OR STF			
		16	OTHER, SPE			

ilo.ora

ILO (2023) Own-use provision of services measurement guide, ILO, Geneva, 2023: 53 - 55



# ILO resources for OPS measurement in national LFS



International Labour Organization

#### Own-use provision of services: Measurement guide

Guidance on implementing the ILO add-on module for own-use provision of services in national labour force surveys.

ILO Department of Statistics

November 2023



#### Introducing the ILO light time-use module: a new tool to measure UDCW

Save time. Reduce costs. Report better.

Meets current standards and guidance on time-use statistics:

Deployment ready

ICLS SNA UNICATUS UNSD

Subjected to extensive field piloting

Tried and tested

- Comprehensive domain coverage
- Pre-coded activity listings, records multi-tasking
- Flexible reporting Easily adapts to new contexts and diverse subjects
- Better data capture

Embedded quality controls, recall aids and recovery sections for hard-to-capture domains

Improved accuracy

24-hour 'yesterday recall' with 15-minute time slots

Measurement guide - Guidance on implementing the ILO light time-use module

Based on our pilot project Learn more



Advancing social justice, promoting decent work