



International  
Labour  
Organization

# 1

STATISTICAL METHODOLOGY SERIES

## ILO LFS PILOT STUDIES IN FOLLOW UP TO THE 19TH ICLS:

Background, objectives and methodology

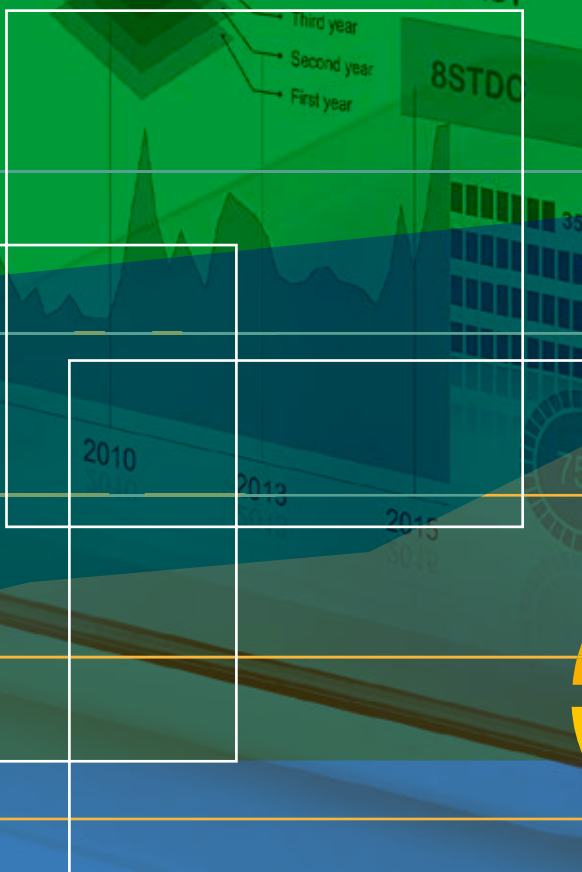
Elisa M. Benes, Kieran Walsh

May 2018

STC2K	20,24%
TWFBL	30,01%
SNC5H	16,05%
EVRST	9,5%
BSTDC	50,2%

- This year
- Fifth year
- Fourth year
- Third year
- Second year
- First year

40  
30  
20  
10  
0



STATISTICS  
Department  
of Statistics

---

INTERNATIONAL LABOUR ORGANIZATION

# **ILO LFS pilot studies in follow up to the 19<sup>th</sup> ICLS:**

## **Background, objectives and methodology<sup>1</sup>**

ILO Department of Statistics –Geneva, Switzerland

---

<sup>1</sup> This document is being reproduced without formal editing.

Copyright © International Labour Organization 2018  
First published 2018

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: [rights@ilo.org](mailto:rights@ilo.org). The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit [www.ifrro.org](http://www.ifrro.org) to find the reproduction rights organization in your country.

---

ILO LFS pilot studies in follow-up to the 19th ICLS: Background, objectives and methodology

ISBN: 978-92-2-131680-0 (web pdf)

---

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: [www.ilo.org/publns](http://www.ilo.org/publns).

---

Printed in Switzerland

## TABLE OF CONTENTS

<b>I.</b>	<b>Background .....</b>	<b>8</b>
<b>II.</b>	<b>From employment and unemployment to work and labour underutilization.....</b>	<b>9</b>
	A. Review of the international standards on employment and unemployment statistics.....	9
	B. Major changes introduced by the 19 <sup>th</sup> ICLS standards .....	10
	C. Impact on data collection and dissemination practices .....	11
<b>III.</b>	<b>ILO LFS pilot study project.....</b>	<b>12</b>
	A. Objectives and scope.....	12
	B. Pilot project design and country coverage .....	12
	C. Model questionnaires developed for testing .....	13
	D. Project methodology .....	17
<b>IV.</b>	<b>Project timelines and Dissemination of results.....</b>	<b>18</b>
<b>V.</b>	<b>References.....</b>	<b>21</b>

## LIST OF FIGURES

<b>Figure 1.</b> Forms of Work framework .....	10
<b>Figure 2.</b> Components of labour underutilization to monitor unmet need for employment.....	11
<b>Figure 3.</b> Differences in the order of sections between the model LFS questionnaires developed for testing.....	14
<b>Figure 4.</b> Differences between models M3, M4 and M5 in the approach taken to identify the employed and establish the boundary with own-use production work .....	16

## LIST OF TABLES

<b>Table 1.</b> Allocation of topic versions for testing by model questionnaire.....	14
<b>Table 2.</b> Model questionnaire assignment by approach, country and region .....	16
<b>Table 3.</b> ILO LFS pilot study project implementation calendar.....	18

## LIST OF ANNEXES

<b>Annex 1.</b> Full list of topics included in the ILO model questionnaires tested.....	20
--	----

## ACRONYMS

<b>ICLS</b>	International Conference of Labour Statisticians
<b>UNSC</b>	United Nations Statistical Commission
<b>LFS</b>	Labour Force Survey
<b>WG</b>	Working Group
<b>NSO</b>	National Statistical Office
<b>M1</b>	Model 1 (Industry-based)
<b>M2</b>	Model 2 (Main activity approach)
<b>M3</b>	Model 3 (Work for pay or profit approach)
<b>M4</b>	Model 4 (Employment type approach)
<b>M5</b>	Model 5 (Job-based approach)
<b>CI</b>	Cognitive interviewing

## ACKNOWLEDGEMENT

---

The completion of the pilot studies and the preparation of the publications has been supported by many colleagues both within and outside the ILO.

Numerous staff in each of the 10 pilot study countries provided technical expertise and logistical support over a period of years to ensure the studies proceeded as planned. The authors would like to express their gratitude for the dedication and expertise they offered at all stages of the process. In addition to the in-kind contribution of staff time and expertise, the National Statistical Offices of Namibia, Peru and Vietnam provided financial support for some or all of the field activities in those countries.

The Pilot Study Programme was organised with the technical leadership of ILO Department of Statistics supported by the ILO's network of regional statisticians including: Africa: Yacouba Diallo, Coffi Agossou and Honoré Djerma; Asia Pacific: Tite Habiyakare; Latin America and the Caribbean: David Glejberman. In the case of the pilot study in Kyrgyzstan, additional technical support was provided by Vladimir Ganta and Igor Chernyshev.

Within the ILO Department of Statistics, a small dedicated team of professional staff and interns were responsible for processing and analysing the pilot study data and providing ongoing support for documentation, planning and implementation of the studies. The authors would like to acknowledge the contributions of Molka Abassi, Estefania Alaminos Aguilera, Anna Belianska, Umberto Cattaneo, Francisco Guerreiro, Jacob Inganas, Carlos de Porres Ortiz de Urbina and Alina Rodríguez de Vuille, all of whom were involved in different phases of the work. Many thanks are also due to Yves Perardel, who provided substantial technical support during the implementation phase of the studies.

Logistical support was provided by a number of colleagues within the Management Support Unit of ILO Department of Statistics including Ritash Sarna, Catherine Jensen, Michelle de Chaumont, Agnes Kalinga and Virginie Woest.

Funding for the pilot studies and related activities was provided by ILO, Data2x and African Development Bank.

Without the support, expertise and commitment of all those listed above this work would not have been possible.

## *FOREWORD*

---

In October 2013 the International Conference of Labour Statisticians (ICLS) agreed a ground-breaking set of new standards on work and labour statistics. Those standards established a new framework for work and labour statistics in replacement of the standards from the 13<sup>th</sup> ICLS, which have been used since 1982 as a reference point for the measurement of employment, unemployment and the economically active population.

The updated standards promise to substantially enhance our understanding of women's and men's participation in labour markets and their contributions, through unpaid work, to their households, communities and the economy. However, they have major implications for the production and communication of key statistics both nationally and internationally. Recognising the challenges this has created, the ICLS called on the ILO to develop guidance to support countries in the implementation of the standards. In 2015, the ILO embarked on a major project for the implementation of a global Labour Force Survey Pilot Studies Project to provide the evidence upon which guidance could be built.

It is my belief that the project has indeed achieved this goal through the reports of the pilot studies which are now being made available. The reports contain a diverse set of findings and evidence across many topics relevant to the design of LFS. They are being made available on a themed basis for accessibility purposes.

I hope and expect that these reports can be a major contribution to the work of practitioners of labour force surveys in particular, but also those interested in household survey design and testing.

While I am confident that these reports are in themselves of high value, I note that they are only one step on the path towards the provision of comprehensive support and guidance, which is in high demand from ILO constituents. The ILO Department of Statistics is fully committed to meeting this demand through the incremental release through 2018 and 2019 of further reports, guides, model questionnaires and other tools which will ultimately form a toolkit for LFS practitioners.

I cannot finish without thanking the many people who have supported the pilot studies. Firstly, I must acknowledge the tireless work put in by Elisa Benes and Kieran Walsh who have provided the technical leadership and expertise throughout the implementation of the pilot studies and been the chief authors of the reports. They have been ably and extensively supported by many others within the ILO and in the 10 partner countries. Further, we have been lucky to count on the financial support of external agencies including Data2x and African Development Bank who have supplemented the funding and resources contributed by the ILO and participant countries.

Rafael Diez de Medina  
Director  
Department of Statistics  
International Labour Organization



# I. BACKGROUND

---

1. The latest international recommendations on how to measure some of the key headline labour market indicators, including the labour force participation rate, employment-to-population ratio and unemployment rate, are contained in the Resolution I *concerning statistics of work, employment and labour underutilization* adopted in 2013 by the 19<sup>th</sup> International Conference of Labour Statisticians (ICLS). These standards introduced a number of important revisions that will impact the way work and labour force statistics are collected and disseminated by countries around the world in the years to come. To support their wide implementation, the 19<sup>th</sup> ICLS called on the ILO to “conduct further conceptual and methodological work including testing” and develop “technical manuals and model data collection instruments” aligned with the latest standards.
2. As follow-up, in 2015, the ILO launched a global project of labour force survey (LFS) pilot studies. The Project had as main aim to develop and test alternative survey questionnaires to collect statistics to produce headline indicators on employment, labour underutilization (comprising time-related underemployment, unemployment and the potential labour force), and own-use production work, in line with the 19<sup>th</sup> ICLS standards. The findings from the ILO pilot studies will serve to develop evidence-based guidance to support countries in adopting and adapting the new standards in to suit their national context.
3. This report describes the main features of Resolution I of the 19<sup>th</sup> ICLS and the process by which it was developed. It goes on to describe the objectives chosen for the ILO LFS pilot study project arising from the changes introduced through the new standards and the overall testing approach and methodology adopted in the pilot studies. The report is part of the ILO methodological series “*Identifying good practices in labour force survey design*” that describe in detail the main findings of the Project. The description of the methodology in this report is at a high level and is supplemented by more detailed descriptions in other reports in the series. This report and others in this series are available in the website of the ILO Department of Statistics.<sup>2</sup>
4. The report is structured as follows: Section II starts with an overview of the main conceptual changes introduced by the new standards. Section III describes the overall scope and coverage of the ILO LFS pilot study project as well as providing a high-level description of the methodology. The final section outlines the project timelines and reporting strategy implemented to disseminate the good practices and lessons learned through the Project.

---

<sup>2</sup> See: [http://www.ilo.org/stat/Areasofwork/Standards/lfs/WCMS\\_484981/lang--en/index.htm](http://www.ilo.org/stat/Areasofwork/Standards/lfs/WCMS_484981/lang--en/index.htm)

## II. FROM EMPLOYMENT AND UNEMPLOYMENT TO WORK AND LABOUR UNDERUTILIZATION

### A. Review of the international standards on employment and unemployment statistics

5. In 2013, the 19th ICLS adopted a new resolution on statistics of work, employment and labour underutilization (ILO, 2013a).<sup>3</sup> This resolution updated the previous international standards on the economically active population, employment, unemployment and underemployment (ILO, 1982) and related guidelines used by most countries as basis to produce their official labour force statistics.
6. Work to update these standards began in 2008 following recommendations by the 18<sup>th</sup> ICLS and the 39<sup>th</sup> Session United Nations Statistical Commission (UNSC) – the two main fora where the international statistical community comes together to decide on priority areas of work to arrive at common standards and methods to guide the development of official statistics at national and global levels (ILO, 2008, United Nations, 2008a, United Nations, 2008b). Main concerns raised at the time regarding the existing body of international standards in labour statistics included the perceived limitations of the unemployment rate as the single headline indicator to monitor labour market pressure across different contexts; the need for more refined indicators to inform policies on employment creation and to address various problems of labour underutilization; and the growing recognition that unpaid forms of work contribute to socio-economic development and wellbeing and thus should be regularly measured as part of official statistics.
7. To address these concerns, between 2008 and 2013, the ILO Department of Statistics embarked on a thorough review of the 1982 standards. The process started with a comprehensive review of country practices on the implementation of the 1982 standards in household surveys, particularly LFS, in population censuses, and in agricultural censuses (ILO, 2013b). In addition, an extensive consultation process was launched to review and propose a new set of recommendations based on the identified good practices and addressing the concerns raised by the ICLS and UNSC.
8. The main mechanism for consultation established by the ILO was a Working Group on the “*Advancement of Employment and Unemployment Statistics*” comprising labour force experts from National Statistical Offices (NSO) from around 40 countries from all world regions. The WG’s mandate was to provide substantive and practical input to the ILO during the review process. It operated through meetings held annually between 2009 and 2012. Furthermore, during 2012, regional consultation meetings were held in Africa, Asia, Europe, Latin America and the Middle East to ensure wide coverage of regional perspectives. Finally, a Tripartite Meeting of Experts attended by representatives from Governments, Employers and Workers Groups discussed the proposals in early 2013 and made recommendations to the ILO in preparation for the 19<sup>th</sup> ICLS.
9. Revised recommendations were presented for discussion by the 19<sup>th</sup> ICLS in October 2013. Present at the Conference were delegates from 106 member States, Employers and Workers, as well as representatives of international governmental and non-governmental organizations (ILO, 2013c). The Conference adopted the new recommendations which were subsequently approved by the ILO Governing Body in March 2014 as the new international statistical standards on statistics of work, employment and labour underutilization.

---

<sup>3</sup> See: [http://ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS\\_230304/lang--en/index.htm](http://ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS_230304/lang--en/index.htm)

## B. Major changes introduced by the 19<sup>th</sup> ICLS standards

10. The standards adopted by the 19<sup>th</sup> ICLS introduced a number of important revisions to the previous international recommendations with a view to address some of the main concerns that led to their updating. Most noteworthy, the new standards greatly expanded the scope of labour statistics by recognizing the need to collect data on different forms of work, paid and unpaid, on a regular basis. This was achieved through the introduction of the first internationally agreed statistical definition of “work” aligned with the general production boundary, and a framework that distinguishes different forms of work to support their separate measurement (see Figure 1).
11. An important feature of the Forms of Work framework is that, while the different forms of work are mutually exclusive, persons may be engaged in one or several forms of work over a particular reference period. This means that, unlike in the previous standards, it is possible to fully capture the participation, contributions and working conditions of persons in, for example, employment, volunteer work and own-use production work. Likewise, it will be possible to evaluate how participation in one form of work impacts participation in another form of work.

**Figure 1.** Forms of Work framework

<i>Intended destination of production</i>	<i>for own final use</i>		<i>for use by others</i>				
	<i>Forms of work</i>	<b>Own-use production work</b>		<b>Employment</b> (work for pay or profit)	<b>Other*</b>	<b>Unpaid trainee work</b>	<b>Volunteer work</b>
of services		of goods	in market & non-market units				in households producing goods    services
<i>Relation to 2008 SNA</i>			within SNA production boundary				
			inside SNA General production boundary				

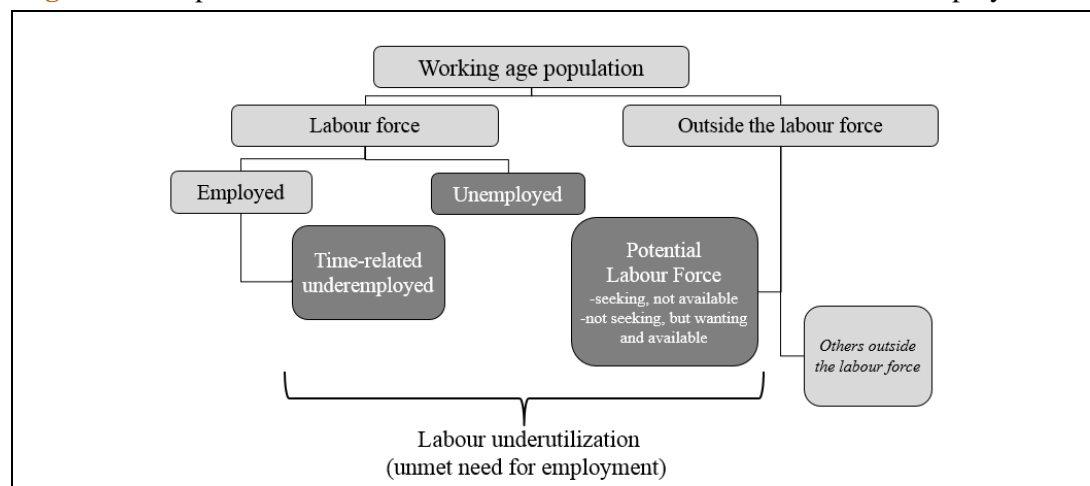
*\*Includes compulsory work performed without pay for others, not covered in the draft resolution.*

12. The introduction of the *Forms of Work framework* is expected to have important implications for the production of labour force statistics especially in countries where a part of the population is engaged in subsistence agriculture or fishing. This is because *employment* in the new framework is more narrowly defined as work performed in the context of transactions for pay or profit. Activities that contribute to production, but are not done in exchange for remuneration, such as own-use production work, volunteer work and unpaid trainee work are no longer included within the concept of employment. Instead the new standards introduced definitions and guidelines for their comprehensive measurement as separate forms of work, providing more flexibility to meet the demand for data to inform a wider range of employment, economic and social policies than was possible before (ILO, 2013a).
13. For example, in the case of employment, the narrower definition is expected to enable better monitoring of access to employment opportunities that generate an income and to support the formulation of policies on job creation, entrepreneurship, etc. In the case of own-use production work, a new range of indicators have been introduced, such as the rate of “subsistence foodstuff

producers” for high level monitoring and policymaking in contexts where a part of the population is engaged in activities such as subsistence agriculture, fishing, hunting and gathering, etc.<sup>4</sup>

14. In the case of *unemployment*, while the underlying concept and operational criteria were not changed, the new standards have placed its measurement within a broader context of labour underutilization. This new development is very important because it recognizes that as a single measure, unemployment does not fully capture the different reactions that labour markets may have to changing economic conditions in different contexts. Rather, the new standards underscore the need to see *unemployment* as part of a range of measures of labour underutilization that also include *time-related underemployment* and the newly introduced concept and measure of *potential labour force* (see Figure 2). Together these three measures are recommended to more broadly monitor insufficient labour absorption, or from a social perspective, unmet need for employment. For dissemination purposes, a range of indicators, LU1-LU4, based on different combinations of the three measures have been further recommended.

**Figure 2.** Components of labour underutilization to monitor unmet need for employment



### C. Impact on data collection and dissemination practices

15. The changes introduced are expected to impact the way countries conduct their national LFS. The new definition of employment and measures of labour underutilization will need to be reflected in survey questionnaires, data collection, processing, dissemination, and communication practices.
16. In countries where a part of the population engages in subsistence agriculture and/or fishing, whether as a primary or secondary activity, new question sequences will need to be developed and integrated in the survey to ensure their full identification. The new headline indicator for “subsistence foodstuff producers” will need to be disseminated together with the employment-to-population ratio to monitor their situation and inform the development of targeted policies for this group of workers.
17. In addition, national household survey programmes will need to be reviewed to produce, on a less frequent but regular basis, key statistics and indicators on volunteer work and own-use production work, in particular own-use provision of services, including unpaid domestic work and unpaid care work.

<sup>4</sup> See (ILO, 2013a), paragraphs: 24, 73b.

### III. ILO LFS PILOT STUDY PROJECT

#### A. Objectives and scope

18. To support the wide implementation of the new standards, in 2015 the ILO launched a global pilot LFS project<sup>5</sup> focused on developing and testing survey questions aligned with the new standards. However, not all forms of work were covered. Given the particular relevance for labour force statistics, the pilot project centred on the measurement of:
  - a. Employment defined more narrowly as work for pay or profit.
  - b. Labour underutilization, covering unemployment, time-related underemployment and the newly introduced potential labour force.
  - c. Participation in own-use production work, including production of goods and services.
  - d. Main activity as self-declared.
19. A main objective is to assess how well alternative LFS questionnaires performed in different languages, cultures and socioeconomic contexts, and whether they were equivalent in terms of classifying persons as employed, underemployed, unemployed, potential labour force and/or own-use producers. At this early stage of the testing it was decided not to focus on whether the questionnaires yielded comparable estimates or on assessing the potential impact of the changes on key labour market indicators. Rather emphasis was placed on questionnaire design with a focus on approaches suitable for paper and pencil implementations (PAPI), questionnaire adaptation and equivalence issues across contexts and population groups.
20. Ultimately, the main aim of the pilot project is to develop evidence on the most appropriate approaches to implement the new standards in countries from different regions and with different socioeconomic contexts. The findings will form the basis for practical guidance and training materials on LFS design and methodology to be made widely available by the ILO as online publications and through the ILO's project of technical assistance and capacity building on LFS.

#### B. Pilot project design and country coverage

21. The ILO LFS pilot studies were implemented between 2015 and 2016 with the participation of 10 countries from different world regions. This included in Africa: Cameroon, Ivory Coast, Namibia and Tunisia; in the Americas: Ecuador and Peru; in Asia: Philippines and Vietnam; and in Central Asia and Eastern Europe: Kyrgyzstan and the Republic of Moldova.
22. The selection of pilot countries was informed by the key objectives of the pilot studies. Key criteria considered included the country's socioeconomic context, in particular the existence of mixed and subsistence agriculture, animal husbandry and/or fishing; prior experience in implementing national LFS and expressed interest by the NSO to test the newly adopted standards. Nevertheless, care was also taken to ensure inclusion of countries from different world regions or sub-regions and language groups.
23. The pilot study project methodology was developed by the ILO Department of Statistics. The project rollout was led by Senior Statisticians from the Department's Statistical Standards and Methods Unit, in collaboration with the ILO Regional Labour Statisticians for Africa, Asia and the

---

<sup>5</sup> See: <http://www.ilo.org/stat/Areasofwork/Standards/lfs/lang--en/index.htm>

Pacific Islands and Latin America and the Caribbean, and the Labour Statistics Specialist for Southern Africa. In addition to extensive LFS experience, the ILO team included English, French and Spanish native-speakers.

24. Funding for the project implementation was provided by the ILO, and in some cases, by the participating countries. The NSO of the pilot countries were directly responsible for the national planning and conduct of the pilot studies, in consultation with the ILO, and provided substantial technical input and human resources throughout the process.
25. The African Development Bank and Data 2X<sup>6</sup> further supported activities to promote knowledge sharing among pilot countries and to communicate the project and findings with a wider audience.

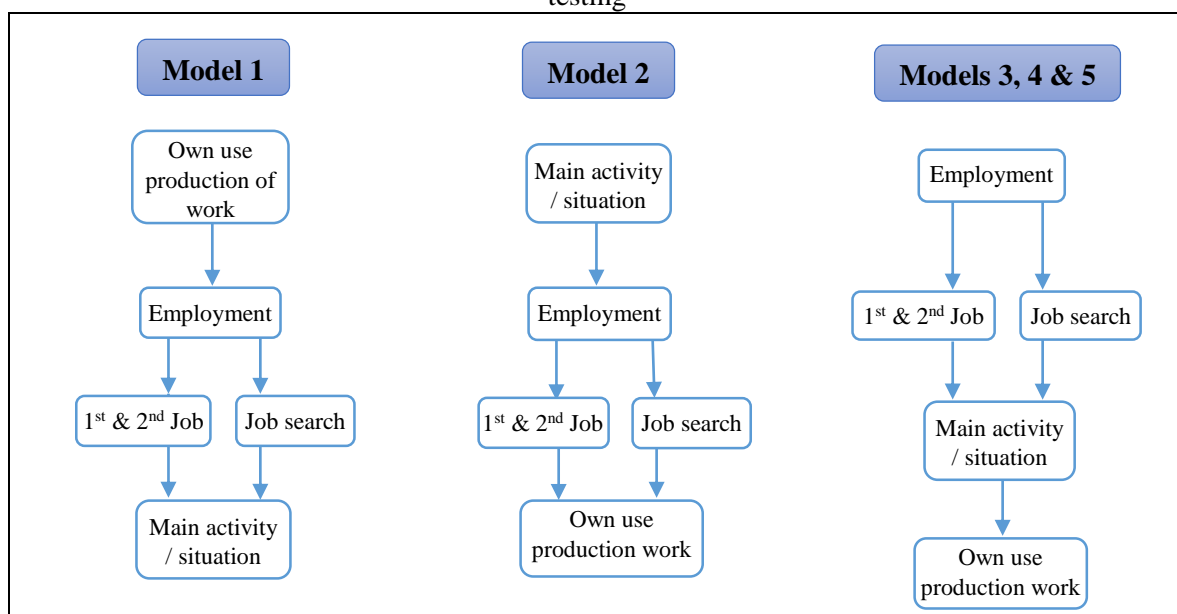
### **C. Model questionnaires developed for testing**

26. Given that many countries around the world have long established LFS for collecting statistics on employment and unemployment, a main interest of the pilot project was to develop and test approaches based on the existing questionnaire sequences but aligned with the new definitions. The ILO review of country practices in LFS and population censuses revealed a few approaches that are commonly used across countries (ILO, 2013b). These were used as basis to develop five alternative questionnaires for testing.
27. The five model questionnaires were designed to measure the same core topics: employment, time-related underemployment, unemployment, the potential labour force, own-use production of goods, own-use provision of services and main activity. Additional topics relevant to the interview flow or to support analysis were also included, such as basic household characteristics (main source of water, energy, sources of livelihood), demographic characteristics of household members (age, sex, marital status, educational attainment), characteristics of main and second jobs (occupation, industry, status in employment), and working time in employment and in own-use production work. However, the model questionnaires did not cover all topics typically included in a national LFS. Rather, only those topics essential to the tests or necessary for interview flow and to support analysis were included (see [Annex 1](#) for a full list of the topics included in the model questionnaires).
28. Although covering the same topics, the models included a number of differences that were the focus of the tests. These included differences in question wording and order, the way response options were meant to be implemented and, in some cases, the structure and order of different sections. Overall, the biggest differences related to the section order and wording of questions to separately identify employed persons and own-use producers of goods (see [Figure 3](#)). Indeed, as described in the next section, each of the five model approaches reflected a different strategy to capture employment and, thus, to establish the new boundary with own-use production work.

---

<sup>6</sup> <http://www.data2x.org/partnerships/womens-work-employment/>

**Figure 3.** Differences in the order of sections between the model LFS questionnaires developed for testing



29. For topics such as time-related underemployment, unemployment, the potential labour force and main activity the differences focused particularly on selected new criteria introduced by the standards, such as the measurement of “desire to work” and the interpretation of key concepts such as “availability to work” and “main activity”. For each of these topics only two alternative module versions were tested (A, B).
30. As illustrated in Table 1, the full model LFS questionnaires were built by combining different versions of the topic modules so as to maximize possible comparisons during the testing. Overall, the name given to each model questionnaire reflected the approach taken to identify the employed, given its centrality to the structure and flow of the full questionnaire, as described below.

**Table 1.** Allocation of topic versions for testing by model questionnaire.

Model approach	Employment					Main intended destination		Main job		Working Time		Job search		Main Activity		Own use production of				
						A	B	A	B	A	B	A	B	A	B	C	A	B	C	
	1	2	3	4	5															
<b>M1</b> Industry-based	X							X		X		X		X			X*		X*	
<b>M2</b> Main activity		X							X*		X*	X		X*				X		X
<b>M3</b> Work for pay/profit			X			X		X		X		X		X			X		X	
<b>M4</b> Employment type				X			X	X		X		X		X			X		X	
<b>M5</b> Job-based					X			X		X		X		X			X		X*	

\*Additional selected variations introduced for testing.

### Model questionnaire differences

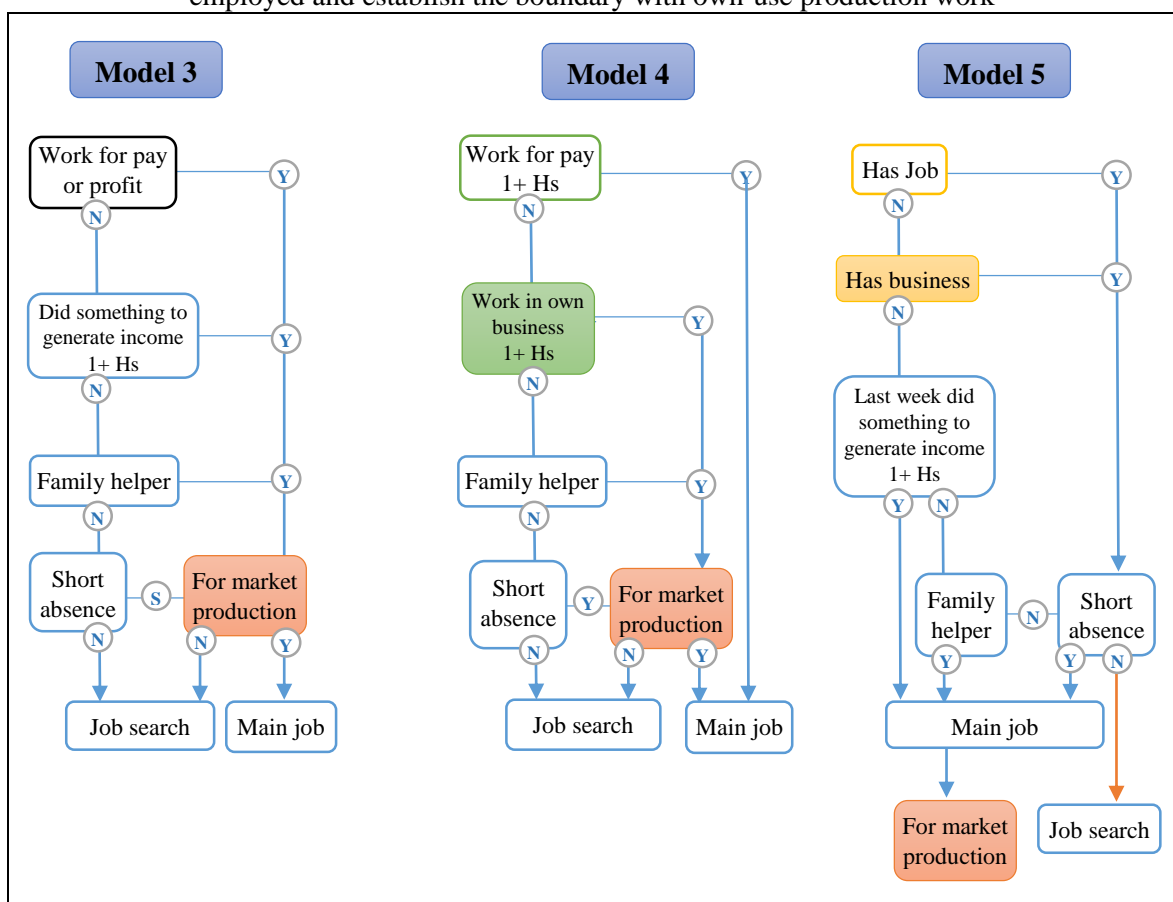
31. The “Industry-based” model (M1) was developed for use in contexts where an important share of the population is engaged in mixed or subsistence agriculture, animal husbandry and/or fishing. It was based on survey approaches used by some countries in West Africa and extended to be aligned with the new standards. As shown in Figure 3, in its initial design, M1 started with a section on “Own-use production work” that aimed at capturing activities to produce goods and services mainly

intended for final use by the household or family. This section was then followed by a section aimed at capturing “work for pay or profit” using the same approach as the start of M3 (see below).

32. The “Main activity” model (M2) used an approach that allowed participants initially to report their main activity as self-perceived. This starting point is very different from a typical LFS. It is assumed by some to fit more closely with participants’ subjective view of their own status and thus be more participant friendly. Follow-up questions are used to establish the labour force status of the participant in line with the latest standards. For example, persons who do not initially self-identify as employed are asked follow-up questions to find out if they did any work for pay or profit, using the same approach as the start of M3 (see below). The approach was based on sequences commonly applied in population censuses as well as in multi-topic surveys used by Pacific island countries. It was the shortest sequence tested and was developed for use in questionnaires where space is an important constraint.
33. The “Work for pay or profit” model (M3) was based on the most common sequence used by countries in LFS across different regions of the world, particularly among high- and middle-income countries. It starts with a core question that asks participants if they did any work for pay or profit in the short reference period (see [Figure 4](#)). To align this approach with the 19<sup>th</sup> ICLS standards, a new module (“for market production”) was introduced to establish the main intended destination of the production for persons who indicated working in agriculture or fishing. Given its widespread use, M3 served as a reference during the analysis phase.
34. The “Employment type” model (M4) draws from sequences used in LFS by some countries, particularly in Southern Africa and Asia. This approach uses a similar overall structure as M3. The main differences are that the starting question is split into two, as shown in [Figure 4](#). The first question in M4 focuses on “work for pay” aimed at capturing persons working for someone else (i.e. employees, paid apprentices) and the second on “work for profit” aimed at capturing persons working in their own business (i.e. employers, own-account workers). As with M3, M4 also included a new module (“for market production”) to establish the main intended destination of the production for persons who indicated working in agriculture or fishing.
35. The “Job-based” model (M5) was developed to address some concerns raised with the complex language used in the traditional “Work for pay or profit” model (M3). Instead, as shown in [Figure 4](#), M5 starts with a core set of questions that ask participants if they “have a paid job” or if they “have a business.” Given the wording used in the starting approach, no dedicated module to establish the main intended destination of the production was included in M5. Nevertheless, a single question to confirm the main intended destination of production was included within the section on main job characteristics to assess the possible inclusion of cases not matching the new concept of employment as “work for pay or profit”.



**Figure 4.** Differences between models M3, M4 and M5 in the approach taken to identify the employed and establish the boundary with own-use production work



### Model questionnaire assignment

36. To facilitate comparisons, the pilot countries were each assigned to test two model questionnaires. One was chosen to be closest to their current practice while the second was to serve as contrast and to maximise testing across regions as deemed relevant. As shown in Table 2, the M3 approach was the most tested, in 8 out of 10 countries, reflecting the wide use of this approach in national practice. The M1 approach was tested only in countries in Africa, given its particular emphasis on capturing work in agriculture. The remaining approaches, M2, M4 and M5, were tested by three countries each belonging to a different world region.

**Table 2.** Model questionnaire assignment by approach, country and region

Model approach	Region / Country									
	Africa				Americas		Asia-Pacific		Eastern Europe &	
	CMR	CIV	NAM	TUN	ECU	PER	PHL	VNM	MDA	KGZ
<b>M1</b> Industry-based	X	X	X							
<b>M2</b> Main activity				X			X			X
<b>M3</b> Work for pay or profit		X		X	X	X	X	X	X	X
<b>M4</b> Employment type			X			X		X		
<b>M5</b> Job-based	X				X				X	

## **D. Project methodology**

37. Given the primary objective of the pilot study project to inform LFS questionnaire design, a methodology that combined both qualitative and quantitative survey testing methods was developed. Likewise, given the particular focus on testing the new boundary between employment and own-use production work and the new measures of labour underutilization, the testing methodology required the selection of suitable target area(s) with urban and rural populations engaged in mixed and subsistence agriculture and/or fishing.
38. During the qualitative phase, cognitive interviewing (CI) was used to evaluate how participants understood selected survey questions, how they recalled the information, and how they decided and formulated their answers. A total of 40 CI (20 per model questionnaire) were targeted for completion in each country. Only one round of CI in each pilot country was planned. The five model questionnaires were revised based on the results of the CI to address a number of issues identified.
39. The revised questionnaires were then further tested using small-scale field tests. The field tests were designed as a test-retest study with a split sample design targeting a total of 800 households in each country (400 per model questionnaire) interviewed twice during the agricultural cycle (waves 1 and 2). The samples, while not representative, were designed and selected using standard survey sampling procedures that oversampled rural areas compared to urban areas in the target location(s) selected for the study. The split sample design aimed at ensuring adequate independent testing of the two model questionnaires assigned to each country, while at the same time allowing comparisons due to the common sampling approach used. The test-retest approach was adopted to allow assessments of reliability (i.e. stability in measurement) of each questionnaire over time.

## IV. PROJECT TIMELINES AND DISSEMINATION OF RESULTS

40. The full project cycle has taken close to 4 years to complete, from initial design to dissemination of the main results and practical guidance. [Table 3](#) shows the overall Project implementation calendar. Initial planning and material development was completed within a 4-month period. This stage included design of the overall pilot study methodology and drafting of the model materials as well as identification of pilot countries and establishment of collaboration agreements.
41. After this initial planning stage, pilot countries were invited to a Training of Trainers Workshop (May 2015) where the overall project methodology, timelines and activities were presented and discussed. The project methodology and materials were refined based on feedback received during the Training of Trainers Workshop.

**Table 3.** ILO LFS pilot study project implementation calendar

2015	
Jan-Apr	Pilot project design and material development
May	Training of Trainers Workshop
Jun	Adaptation of model materials
Jul-Sep	Phase I country implementation: Cognitive tests
Oct	Revision of model materials
Nov-Dec	Phase II country implementation: Field tests
2016	
Jan-Sep	Phase II country implementation: Field tests
Nov	Pilot Studies Analysis Planning Workshop
2017	
Jan-Jun	Consolidation of results for comparative analysis
Jul-Dec	Main analysis of qualitative and quantitative results
2018	
Jan-Mar	Drafting and publication of main reports with findings
Apr-Sep	Preparation of practical LFS tools and main guidance
Oct	Dissemination of findings and tools at 20 <sup>th</sup> ICLS

42. Country-level activities began at this stage with the adaptation and translation of the model materials, planning of tests and training. Implementation of the cognitive tests in the 10 pilot countries was completed within an intensive 3-month period from July to September 2015. Results from the cognitive tests were analysed on a progressive basis as received by the ILO and consolidated upon completion of the tests in the 10 pilot countries. This allowed the revision of the model materials within a one-month period, in preparation for the field tests.
43. Phase II of the project comprising the field tests was completed within an 11-month period, from Nov 2015 through September 2016. This phase involved country-level planning, training and conduct of waves 1 and 2 of the field tests each targeting a different phase of the agricultural cycle as per the country context. Upon completion of the tests, the 10 pilot countries were invited to an Analysis Planning Workshop (November 2016) where the overall analysis strategy and preliminary findings were presented for discussion and feedback.

44. The results of the cognitive and field tests and related metadata, together with field observation reports both by technical staff from the pilot countries and the ILO were reviewed, cleaned and consolidated to enable comparative analysis. The analysis was structured by topic with a view to identify good practices and lessons learned with respect to the design of survey questions suitable for LFS to measure each given topic. Both qualitative and quantitative analysis techniques were used.
45. The Project implementation practices and main findings are summarized in a series of methodological reports, accessible in the website of the ILO Department of Statistics, covering the following topics:
  - a. Cognitive interview tests: methodology, process and outcomes
  - b. Experimental field tests: methodology, process and outcomes
  - c. Measuring employment in LFS
  - d. Measuring working time and time-related underemployment in LFS
  - e. Measuring unemployment and the potential labour force in LFS
  - f. Measuring main activity in LFS
  - g. Measuring own-use production work in LFS
46. Additional reports highlighting cross-cutting issues such as: capturing work in agriculture, capturing contributing family work, and gender issues in LFS questionnaire design will also be published as part of the methodological series.
47. Ultimately, the good practices identified and lessons learned will serve as basis to prepare updated guidance and practical tools to support LFS design aligned with the new standards on statistics of work, employment and labour underutilization adopted by the 19<sup>th</sup> ICLS in 2013. The LFS practical guidance is expected to be made available through the website of the ILO Department of Statistics and disseminated on the occasion of the 20<sup>th</sup> ICLS to take place in October 2018.

**Annex 1.** Full list of topics included in the ILO model questionnaires tested

**Household roster (all usual residents of household)**

*A. Basic demographic characteristics*

- Name
- Relationship to reference person
- Sex
- Age
- Current school enrolment
- Educational attainment

**Household questionnaire (household head or reference person)**

*B. Resources and sources of livelihood*

- Main source of water
- Main source of energy
- All income sources
- Main source of income

**Individual questionnaire (household members aged n+ years)**

*C. Identification of persons employed (in short reference period)\**

- Persons employed, at work
- Persons on temporary absence from employment
- Main intended destination of production

*D. Characteristics of main job*

- Multiple job holding status
- Occupation
- Industry
- Institutional sector
- Place of work
- Size of establishment
- Status in employment
- Form of pay and frequency

*E. Working time and underemployment*

- Hours usually worked
- Hours actually worked
- Reason for different actual and usual hours worked
- Search for additional or other job
- Desire to work additional hours
- Availability to work additional hours
- Number of additional hours available/wanted
- Desire to change employment situation

- Reasons for wanting to change employment situation

*F. Search for employment*

- Job search
- Methods used to seek employment
- Duration of job search
- Reasons for not seeking employment
- Availability to take up employment
- Desire for employment
- *Need for employment (optional)*
- Reasons for not being available to take up employment
- *Main activity (optional)*

*G. Main activity*

- All activities at present
- Main activity at present
- Main activity in the last 12 months

*H. Own use production of goods\**

- Working time
  - Agriculture, fishing, hunting and gathering
    - Main intended destination of production
    - Regular sale/barter
    - Proportion sold/bartered regularly
  - Manufacturing of other household goods
  - Fetching water
  - Collecting firewood, dung and other fuels
  - Construction or major repair of own dwelling

*I. Own use provision of services\**

- Working time
- Housework and household management
- Care for dependent adults
- Care for children

*\*Variable section order as per test model sequence*

## V. REFERENCES

---

- ILO. (1982). 13th International Conference of Labour Statisticians. *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*. Geneva: ILO.
- ILO. (2008). 18th International Conference of Labour Statisticians. *Report on the 18th ICLS*. Geneva: ILO.
- ILO. (2013a). 19th International Conference of Labour Statisticians. *Resolution I concerning statistics of work, employment and labour underutilization*. Geneva: ILO.
- ILO. (2013b). 19th International Conference of Labour Statisticians . *National practices in the measurement of the economically active population, employment, unemployment and time-related underemployment: Household-based sources. Room document 12*. Geneva: ILO.
- ILO. (2013c). 19th International Conference of Labour Statisticians . *Report II Statistics of work, employment and labour underutilization*. Geneva.
- ILO. (2018). *LFS Pilot Study Programme*. (ILO, Producer) Retrieved from ILO: [http://www.ilo.org/stat/Areasofwork/Standards/lfs/WCMS\\_484981/lang--en/index.htm](http://www.ilo.org/stat/Areasofwork/Standards/lfs/WCMS_484981/lang--en/index.htm)
- United Nations. (2008a). United Nations Statistical Commission. *Report on the 39th Session*. New York. Retrieved from <https://unstats.un.org/unsd/statcom/39th-session/documents/statcom-2008-39th-report-E.pdf>
- United Nations. (2008b). *Report on labour statistics*. Office for National Statistics, United Kingdom of Great Britain and Northern Ireland . New York: United Nations. Retrieved from <https://unstats.un.org/unsd/statcom/39th-session/documents/2008-2-employment-E.pdf>
- Women's work and employment*. (2017). Retrieved March 2018, from Data2X: <http://www.data2x.org/partnerships/womens-work-employment/>